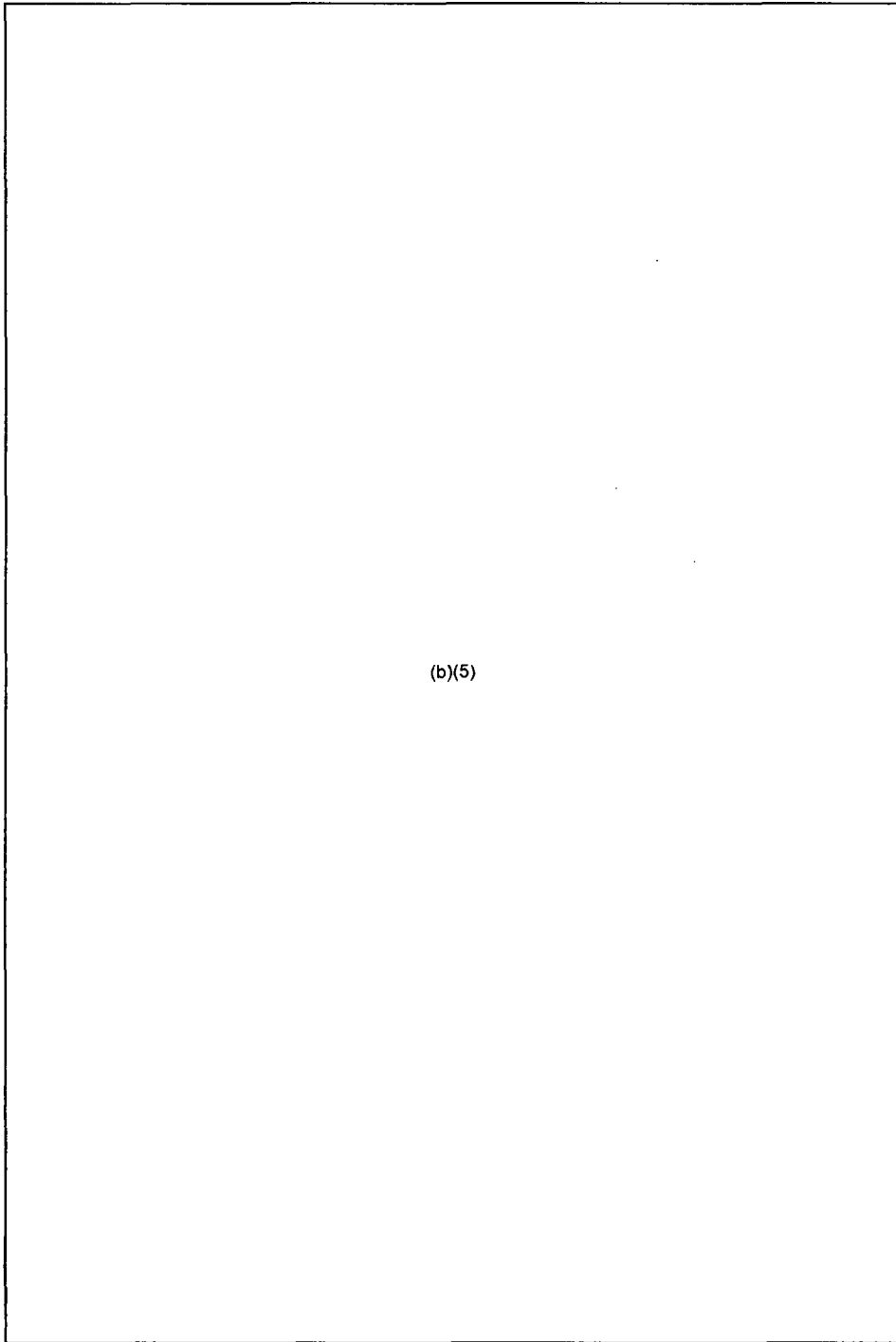


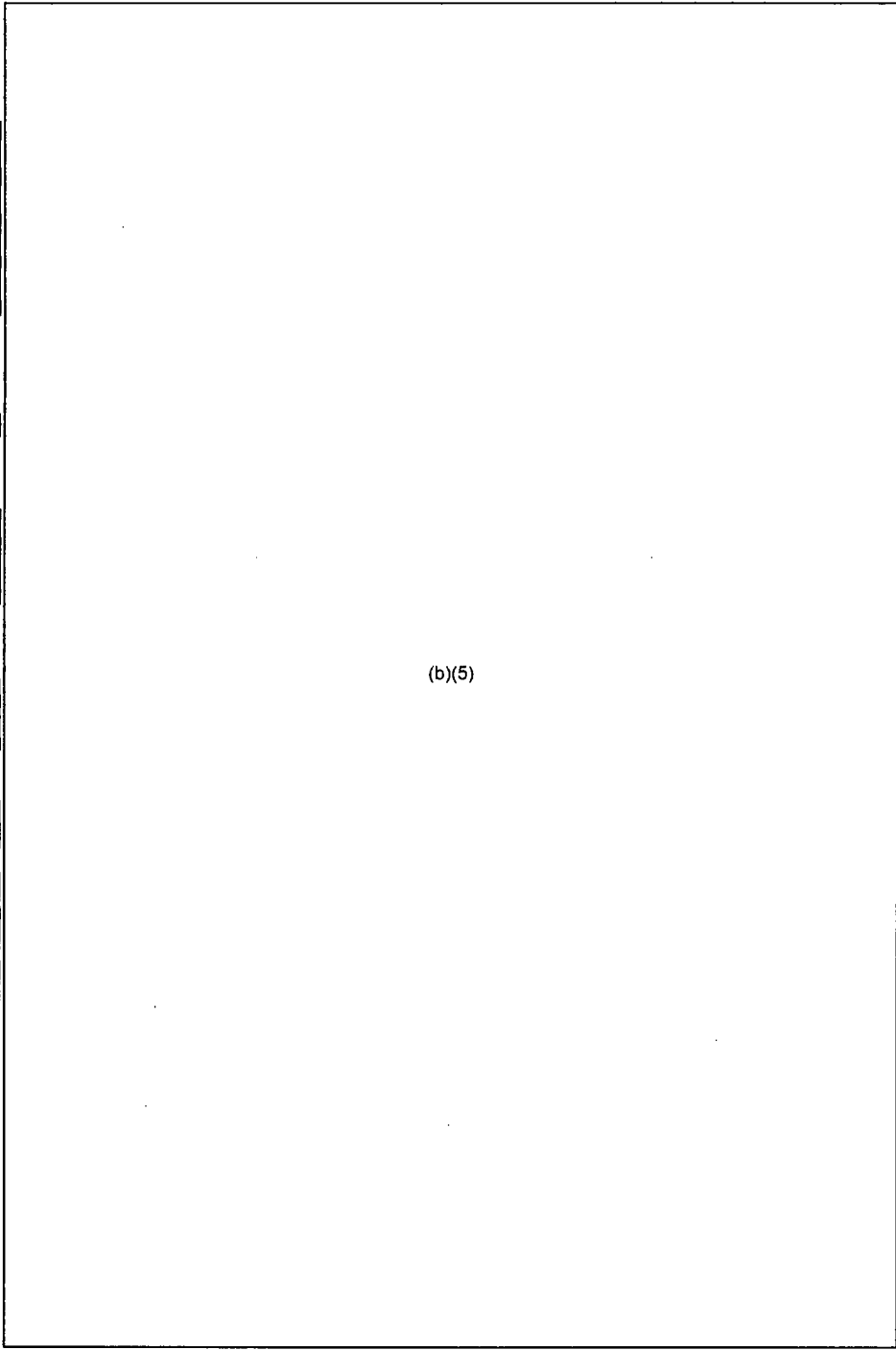
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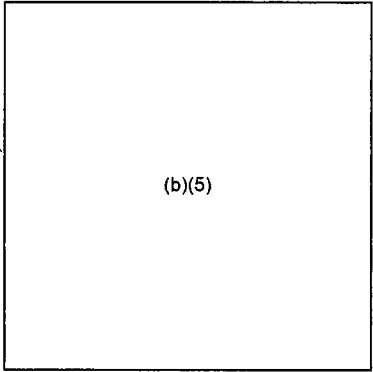
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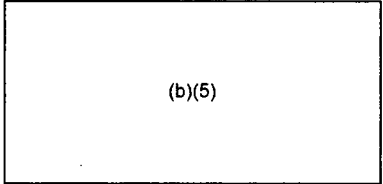
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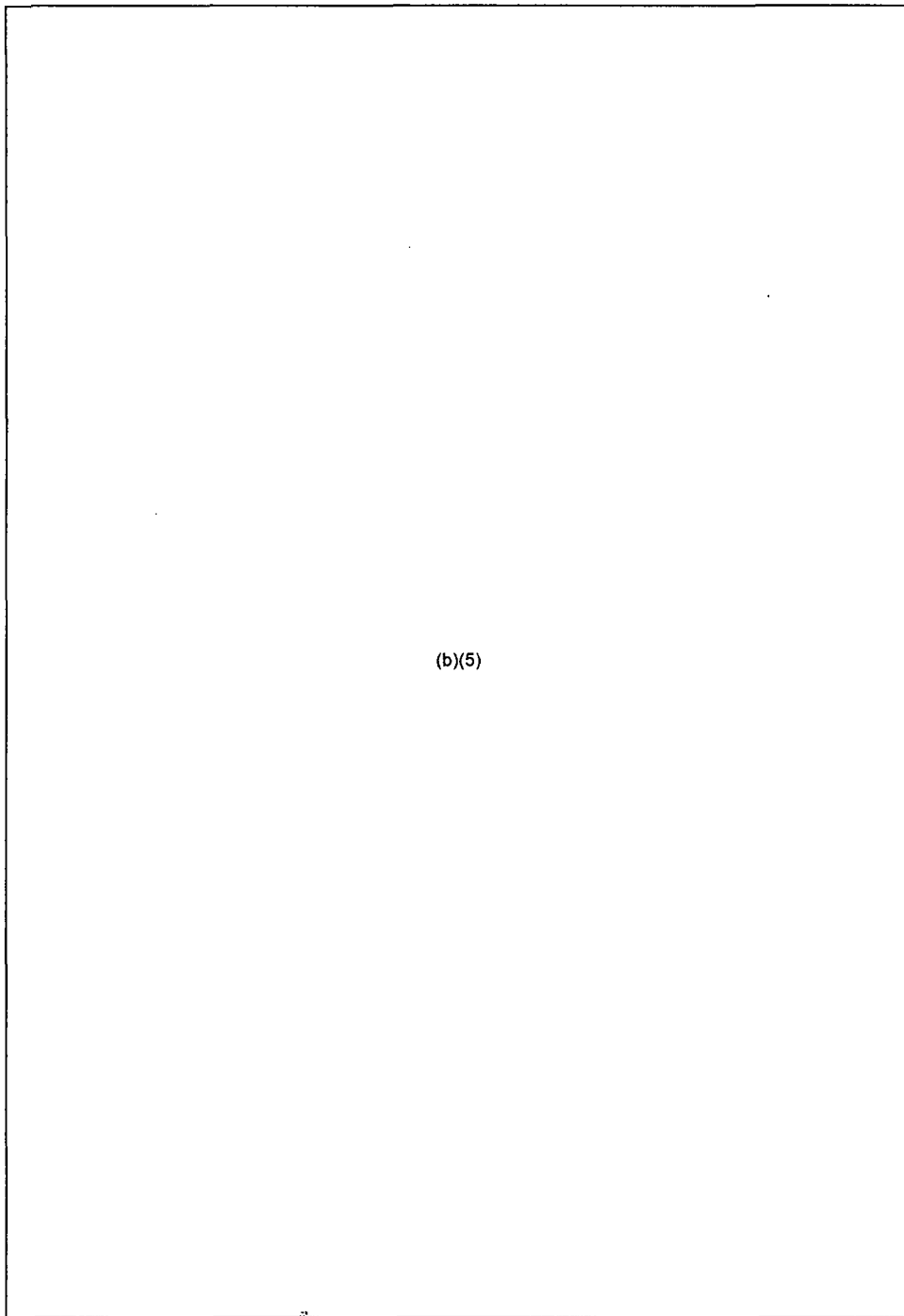
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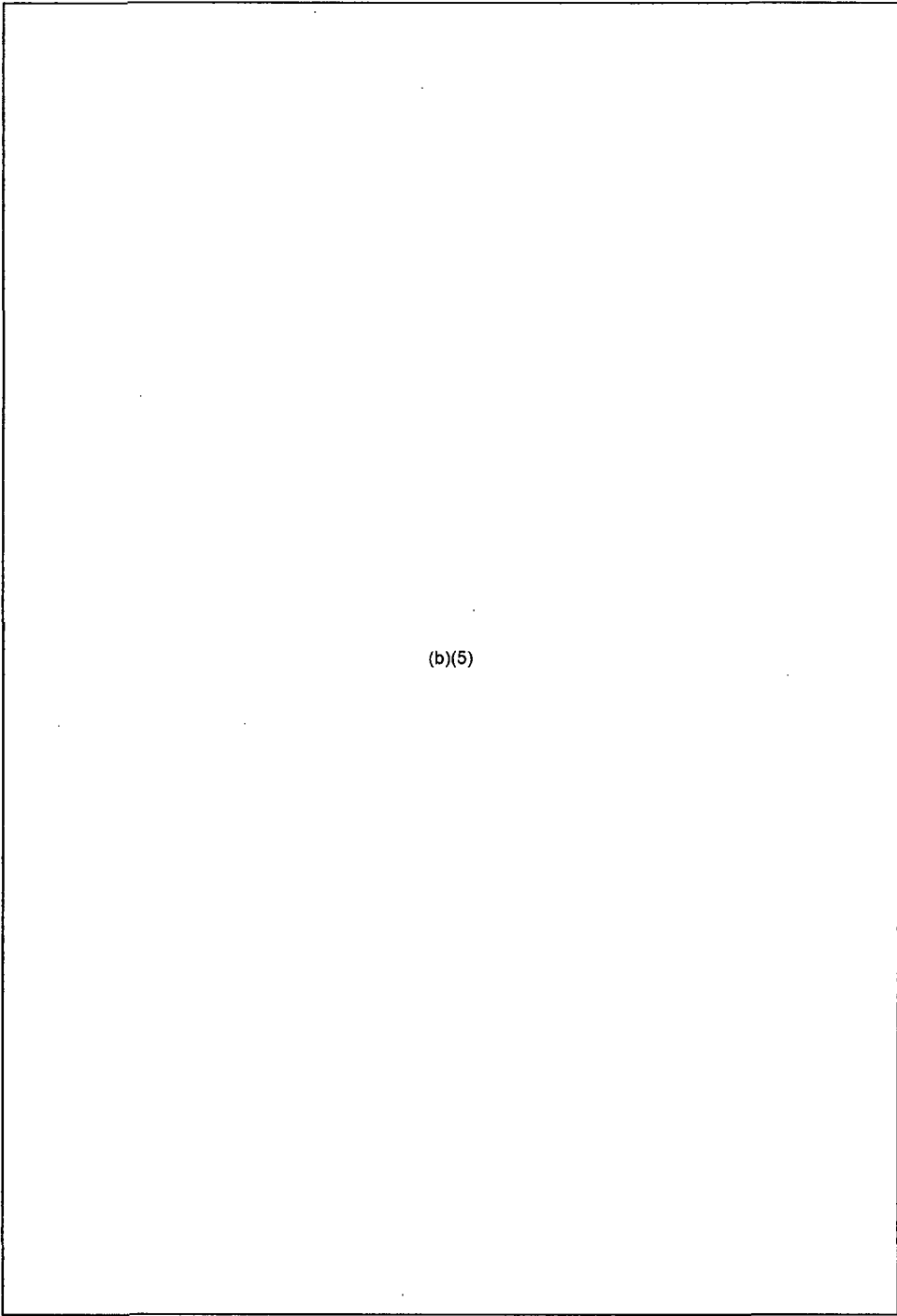


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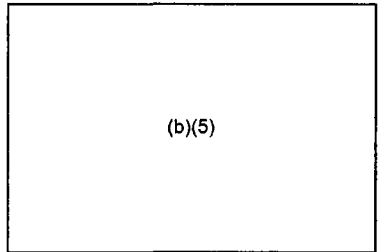
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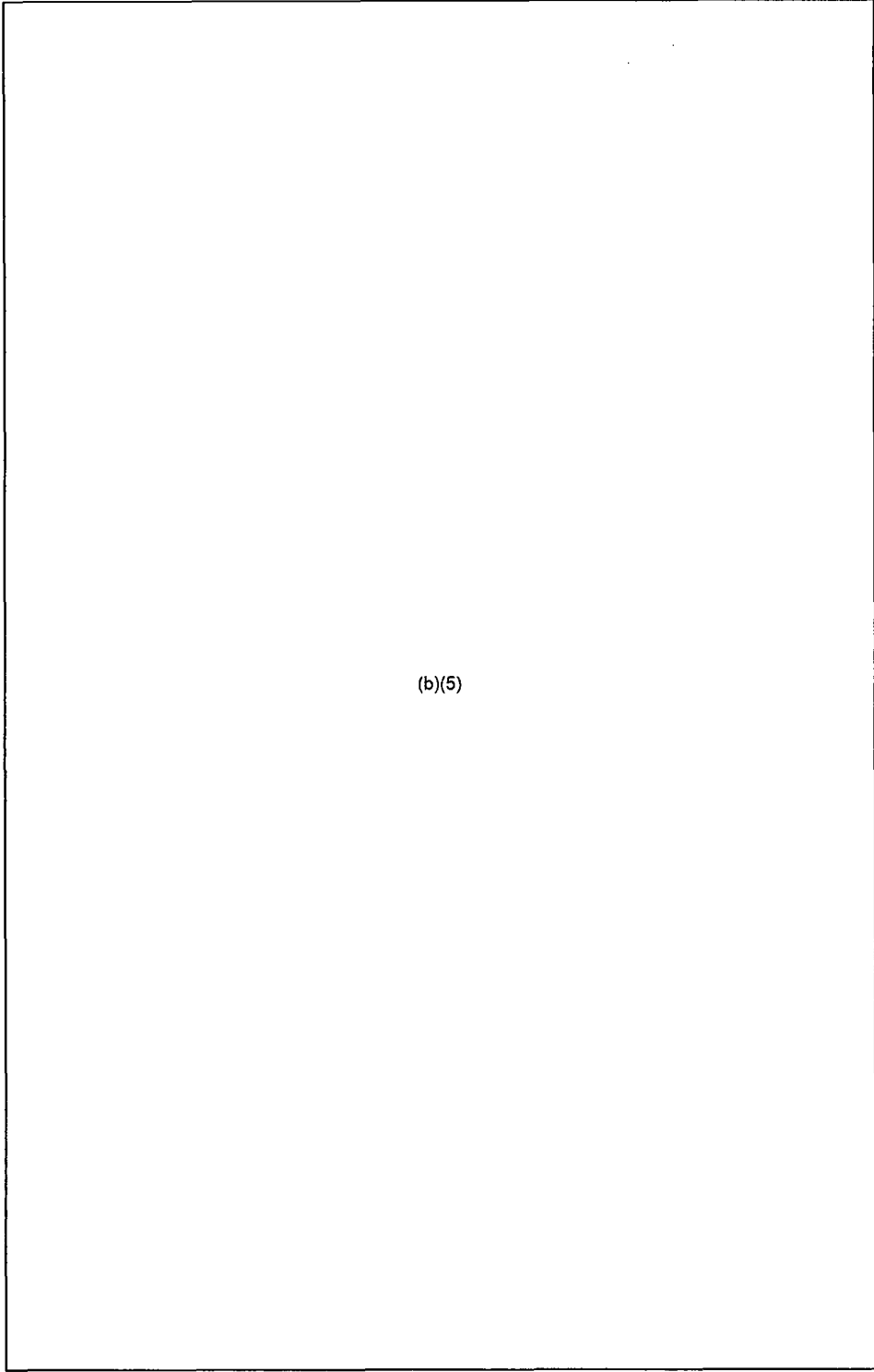


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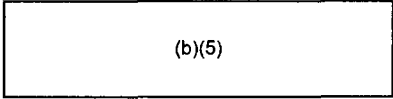
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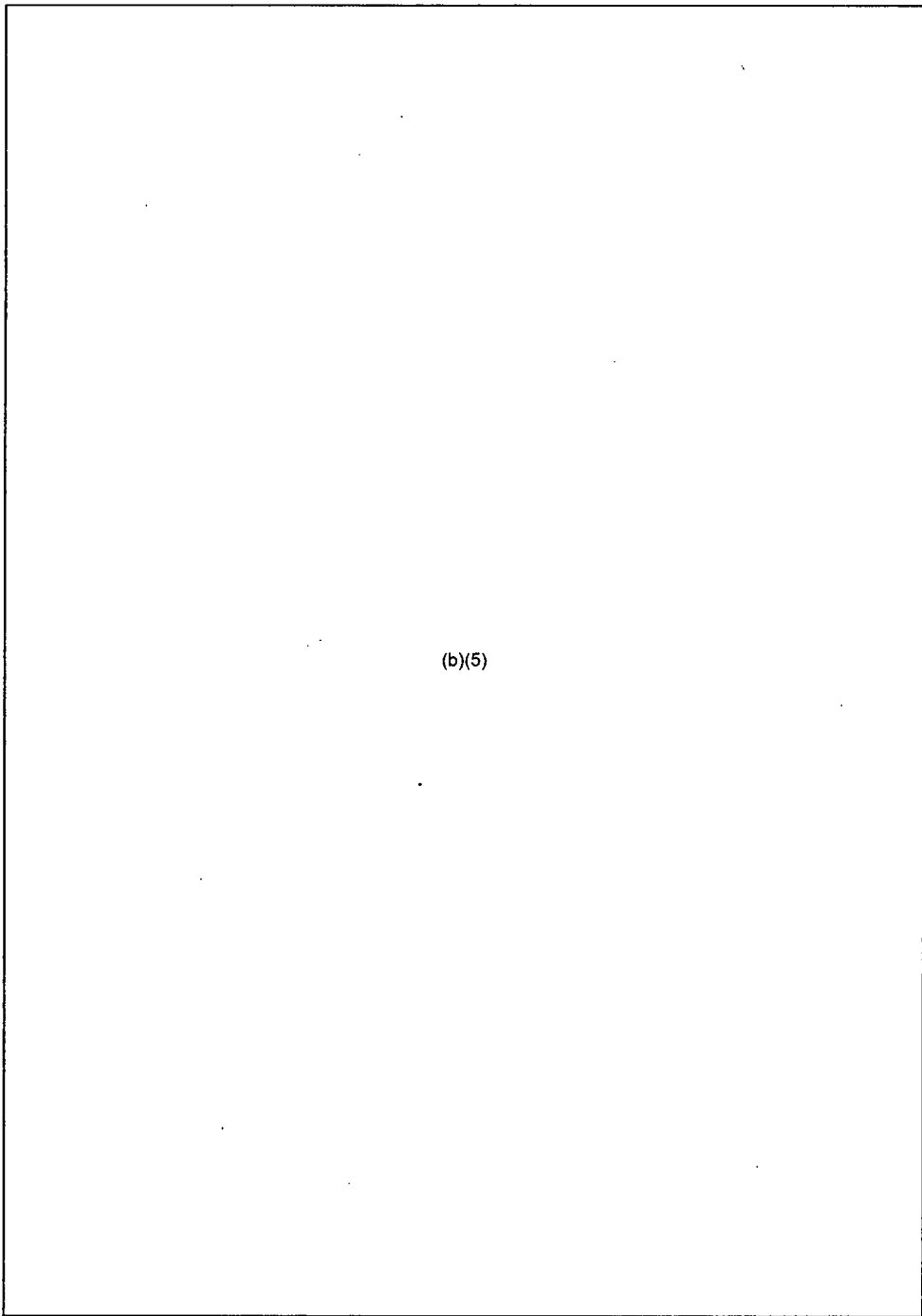


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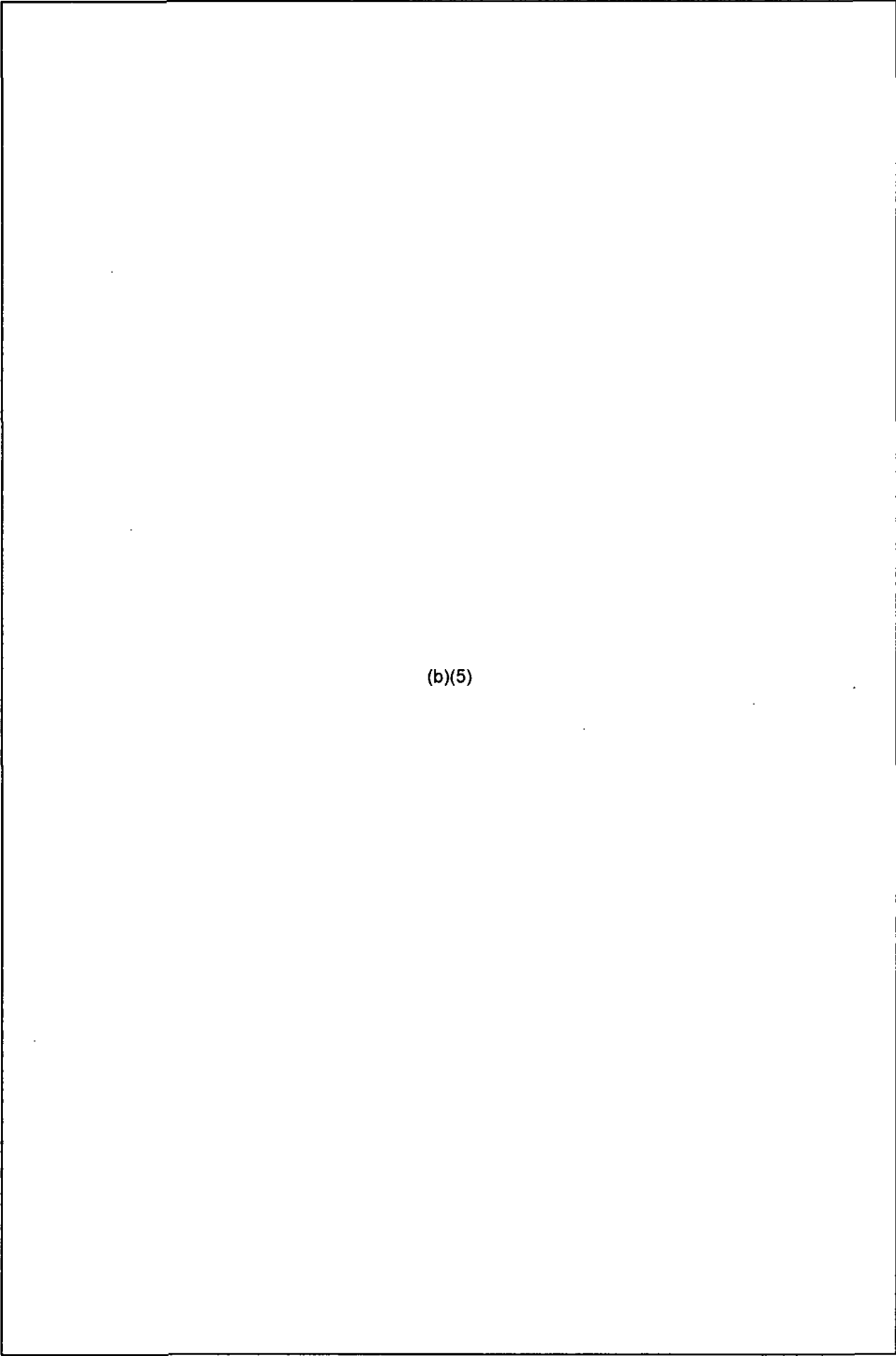
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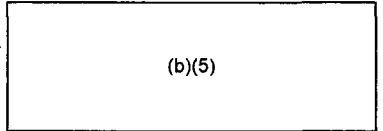
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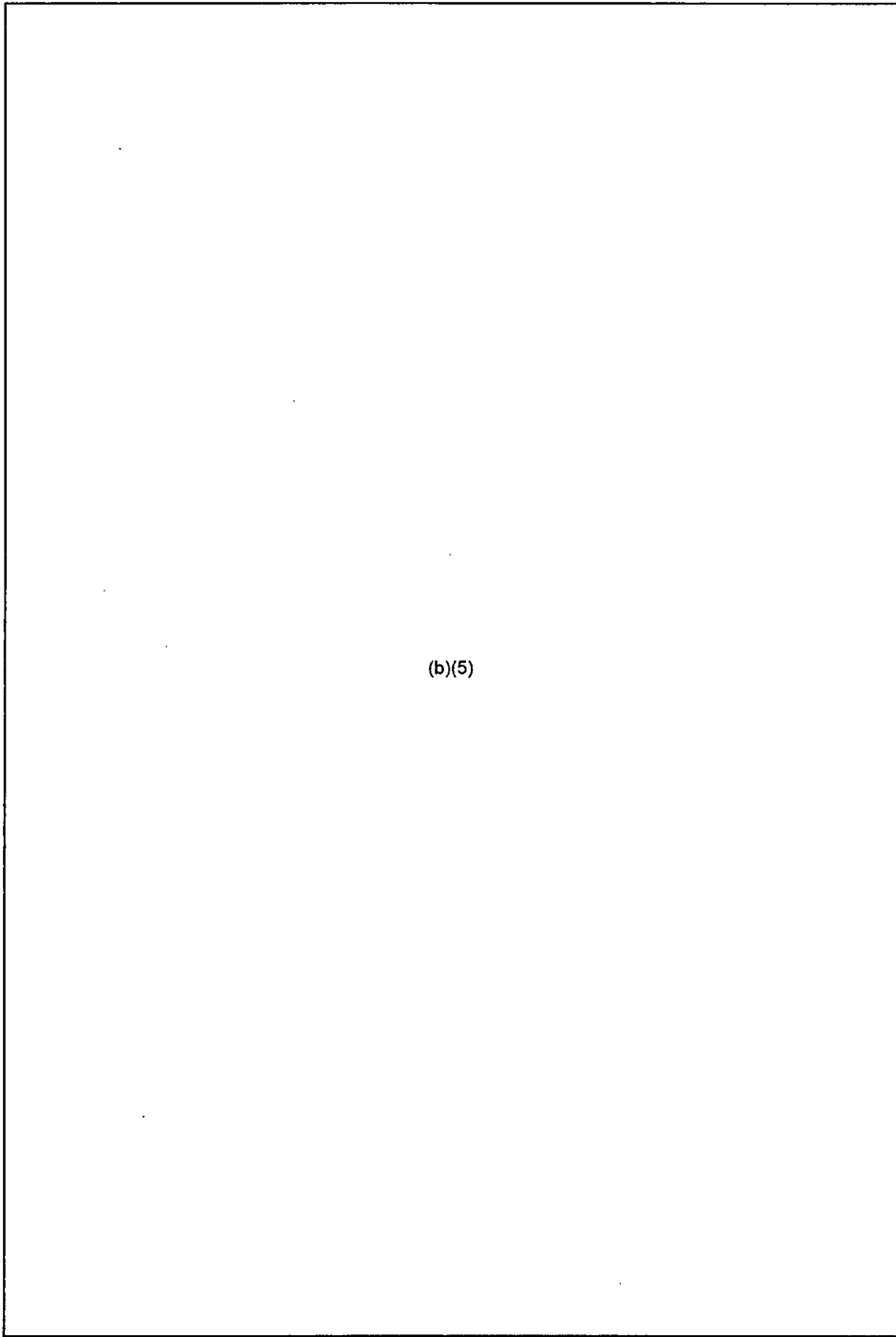
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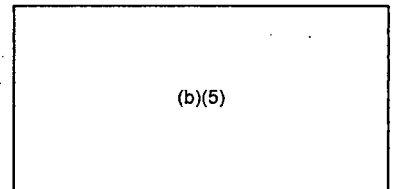
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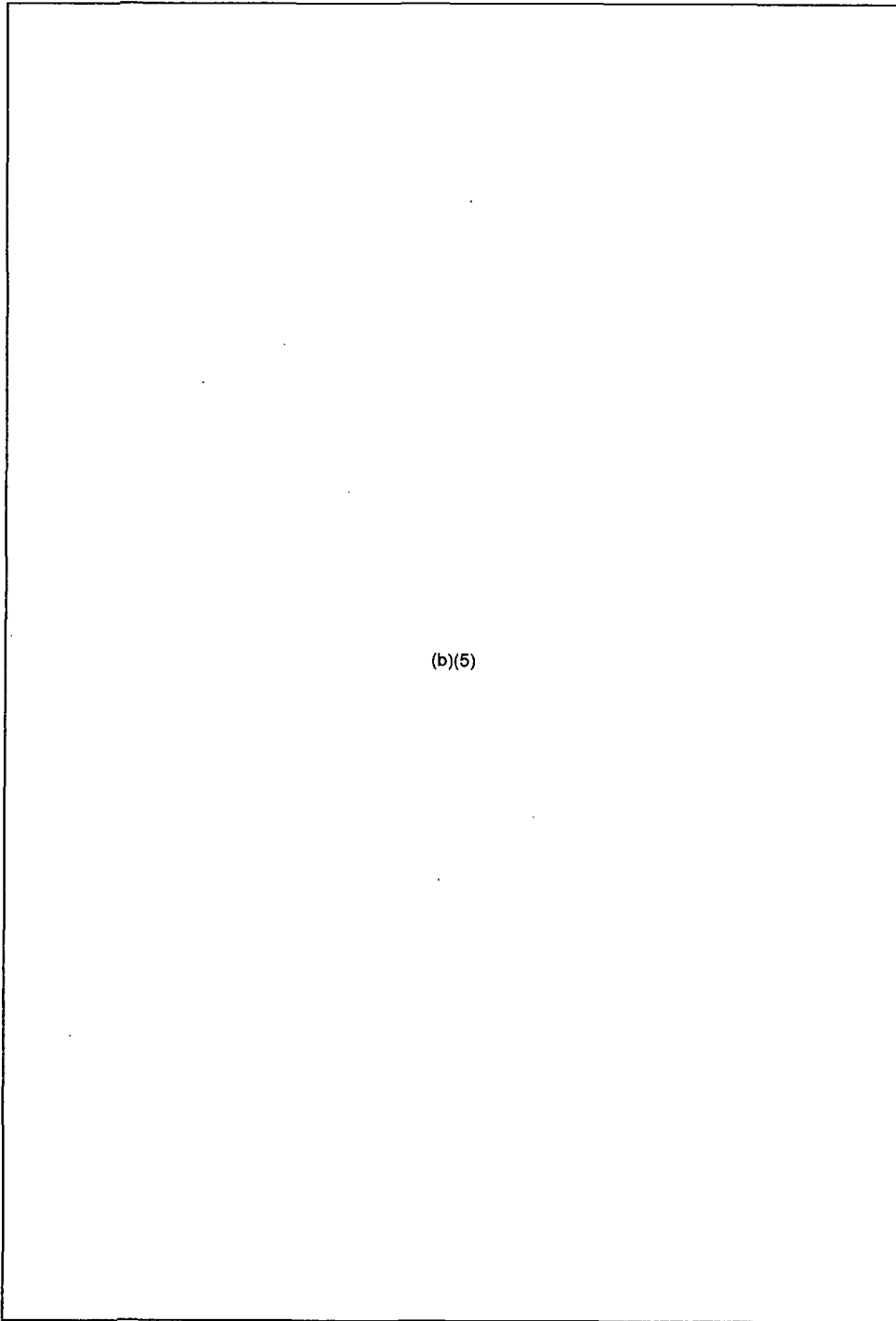
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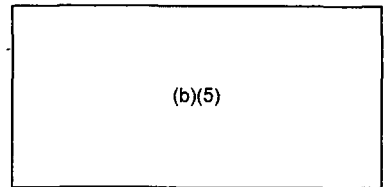
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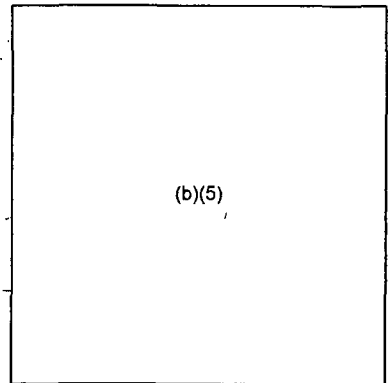
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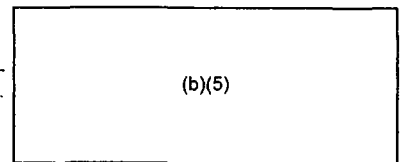
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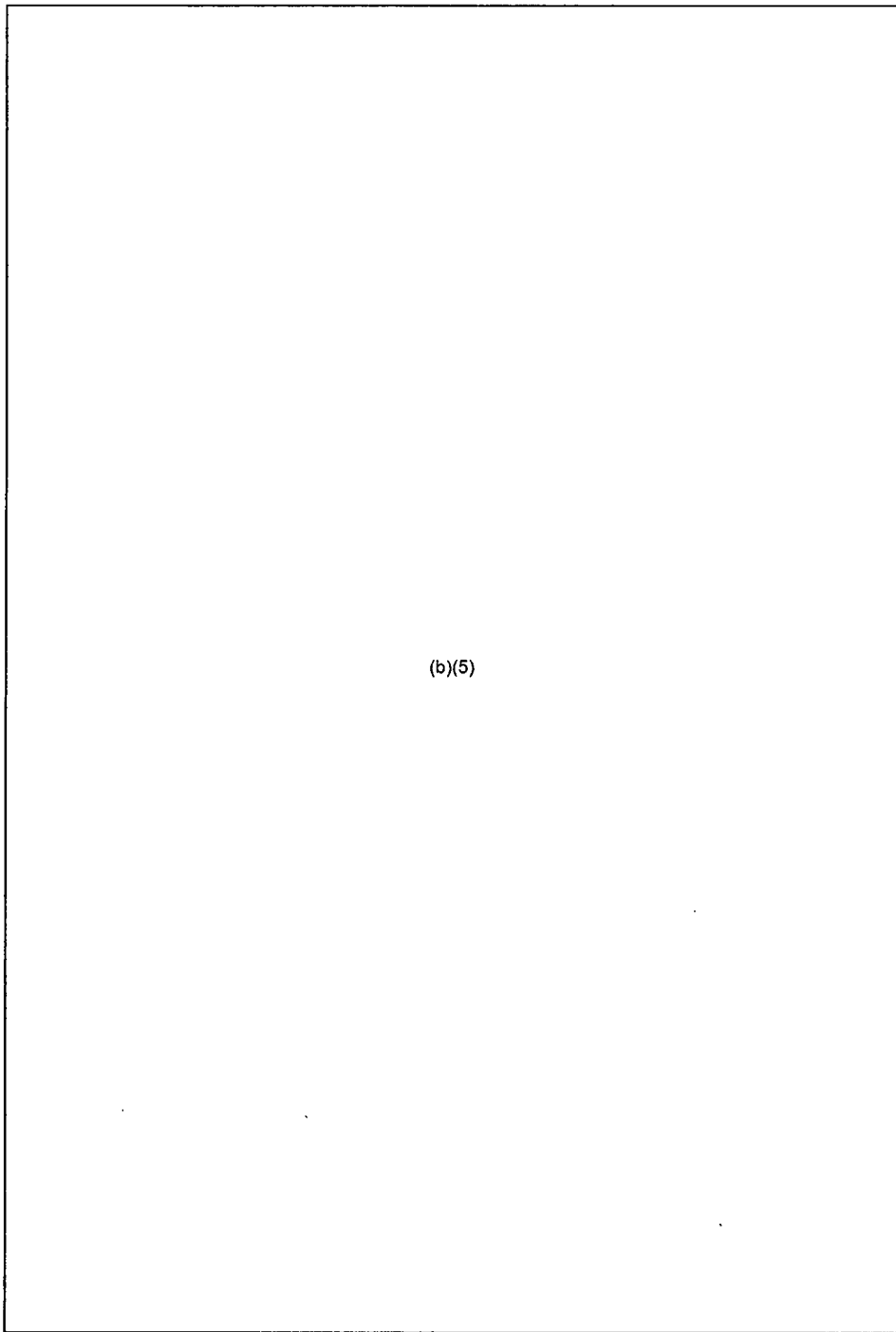
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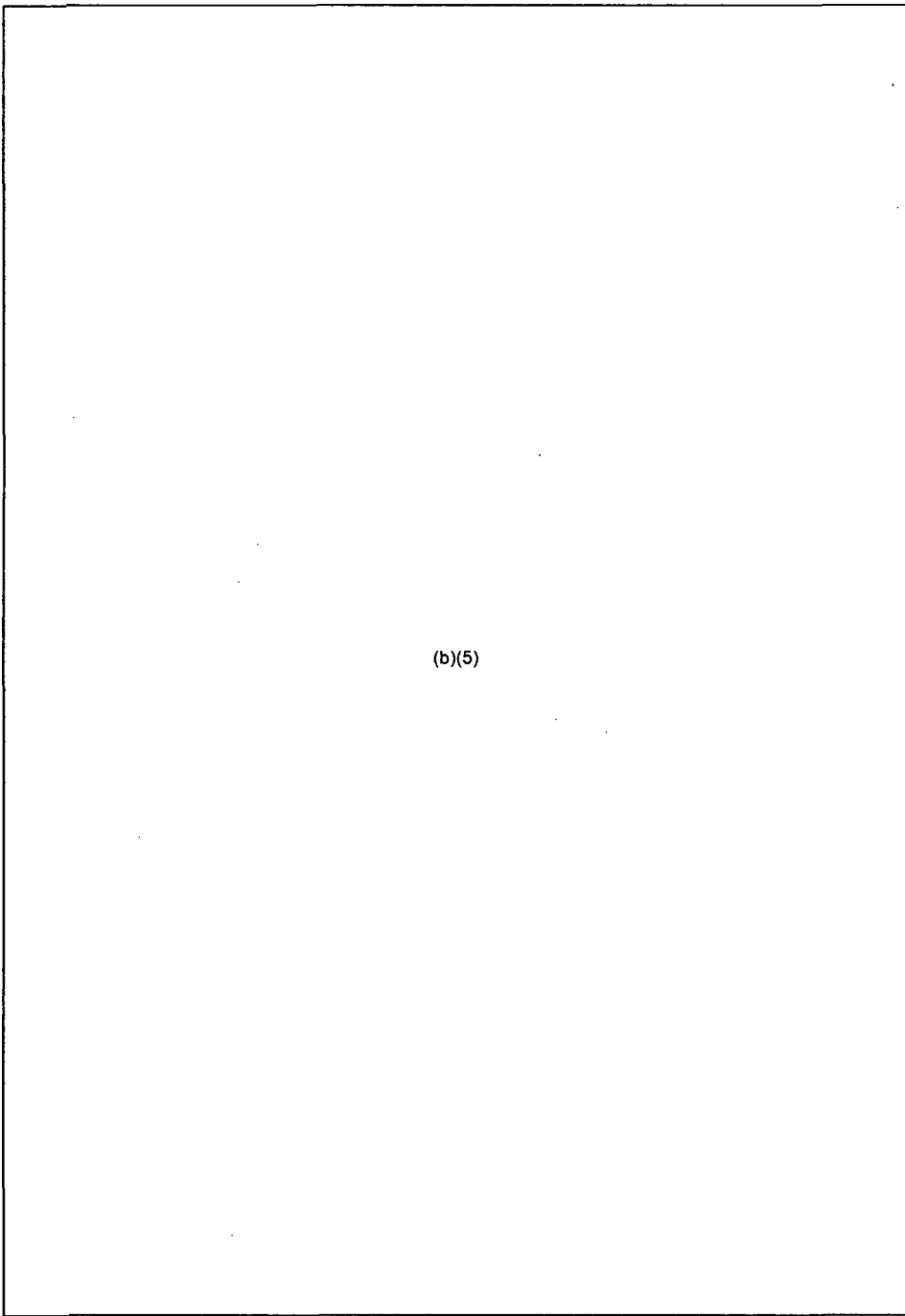
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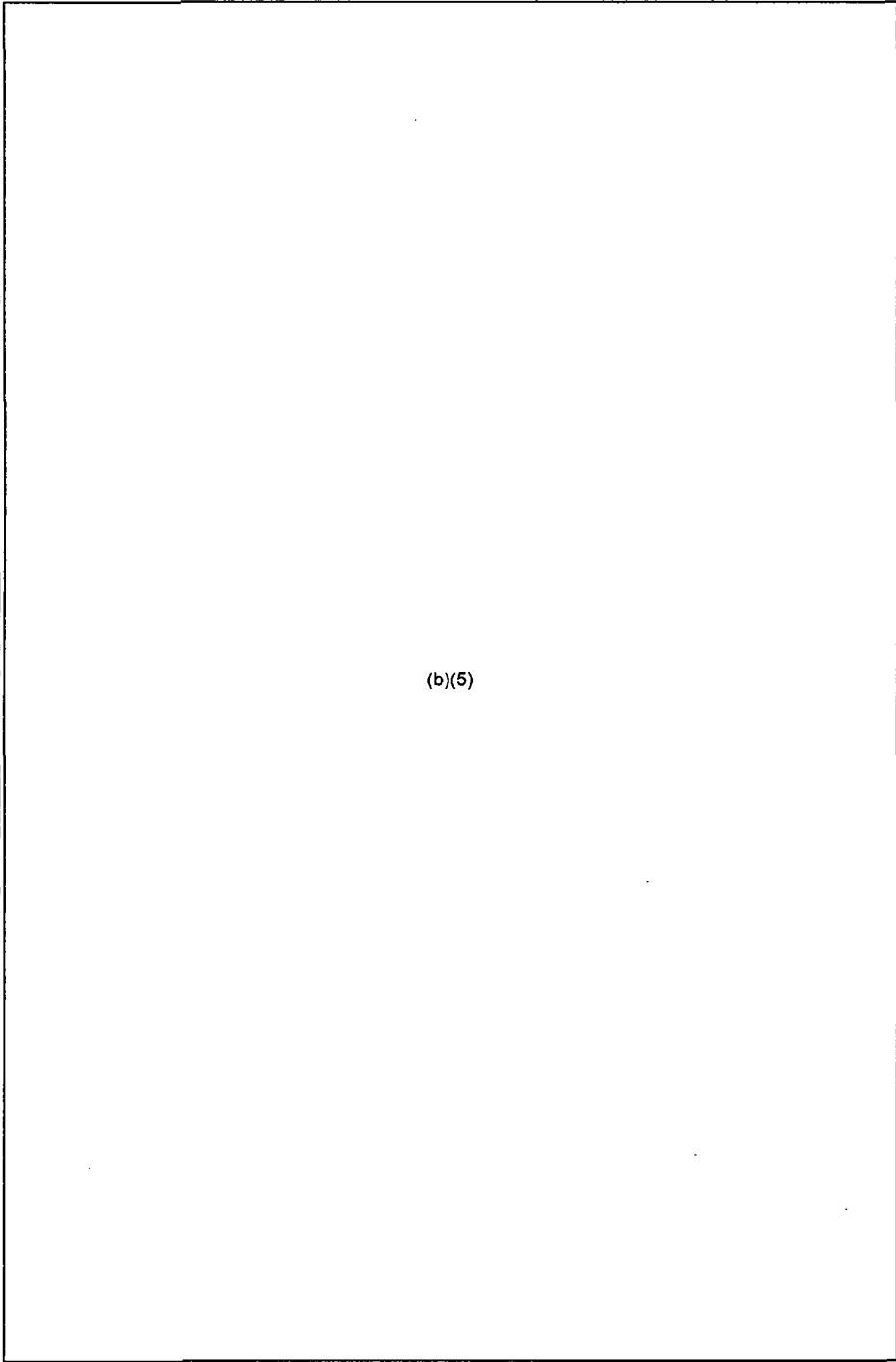


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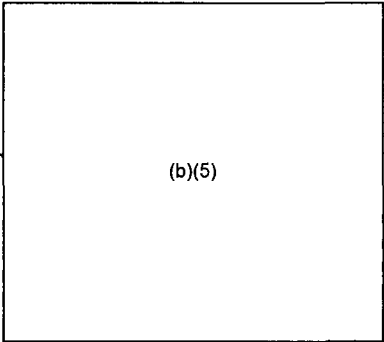
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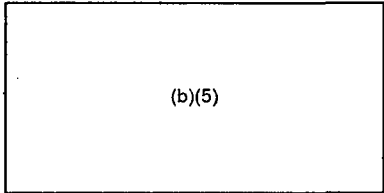
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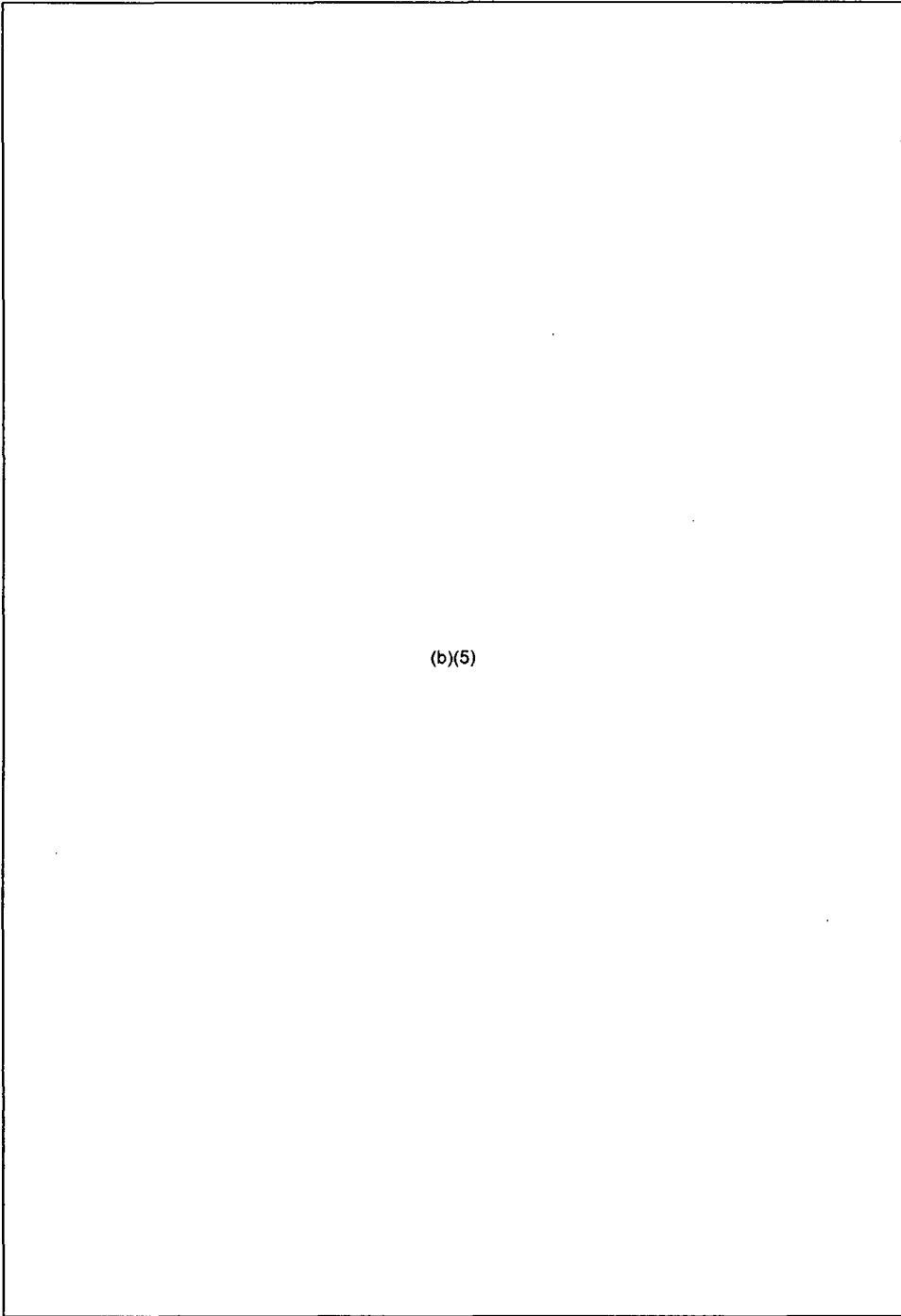
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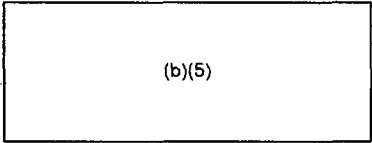
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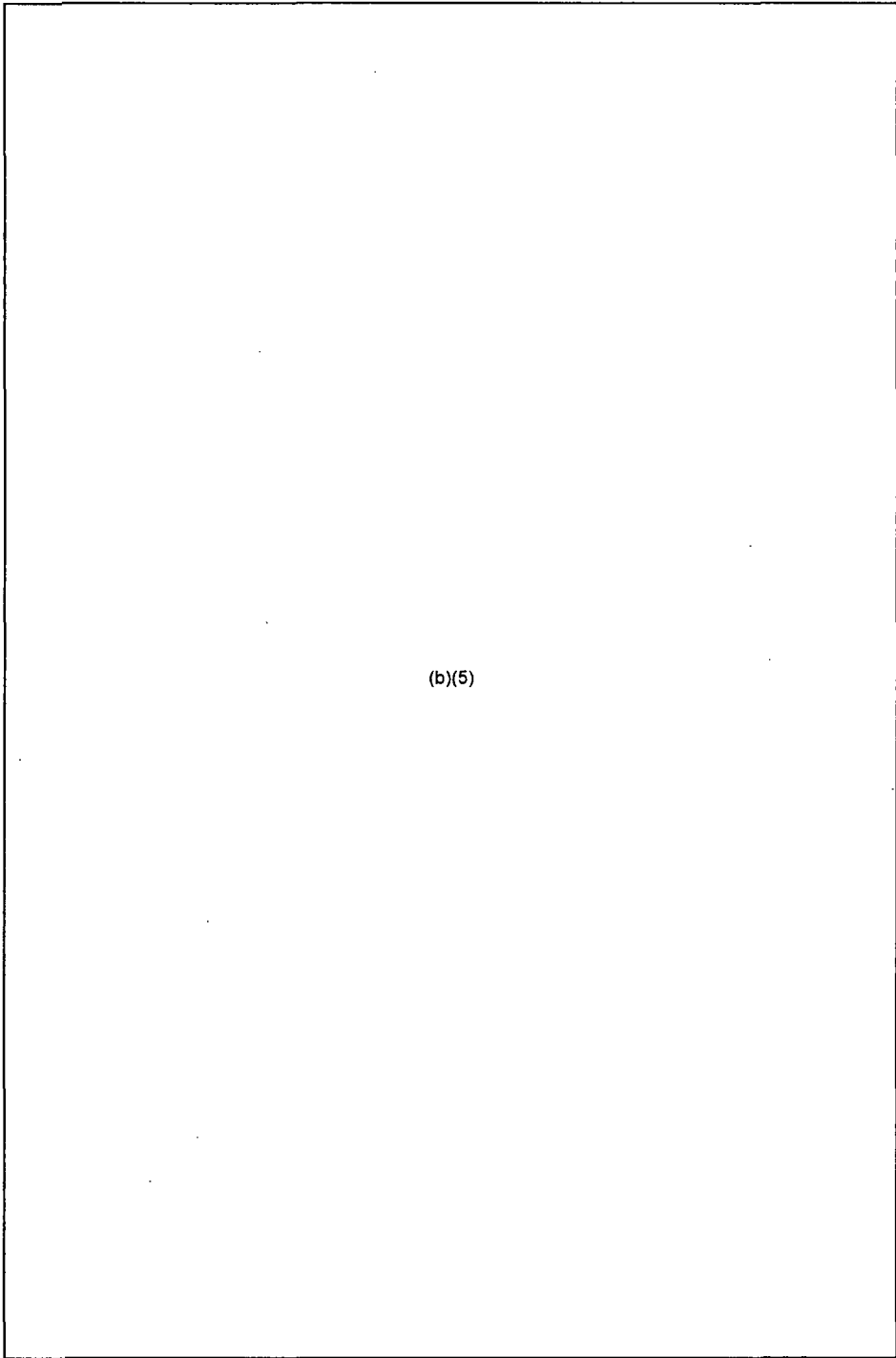
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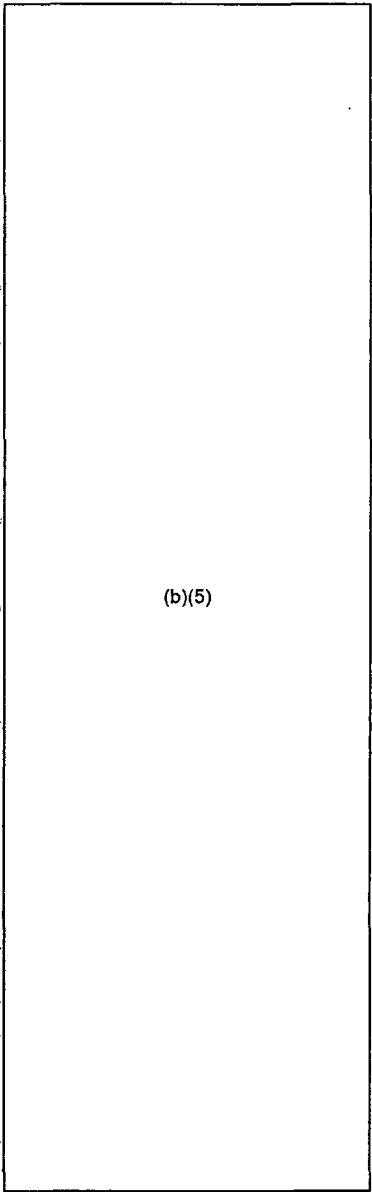
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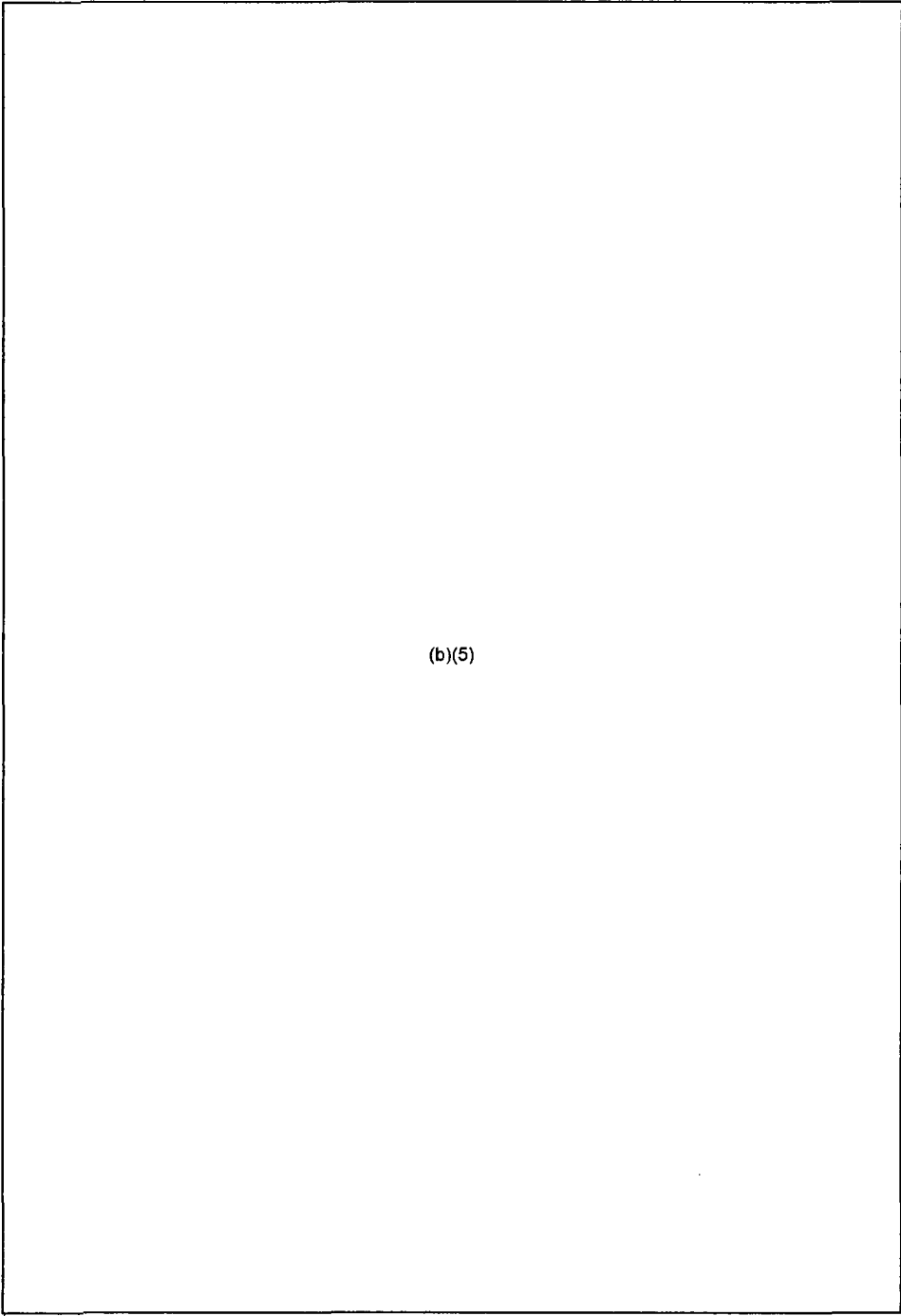
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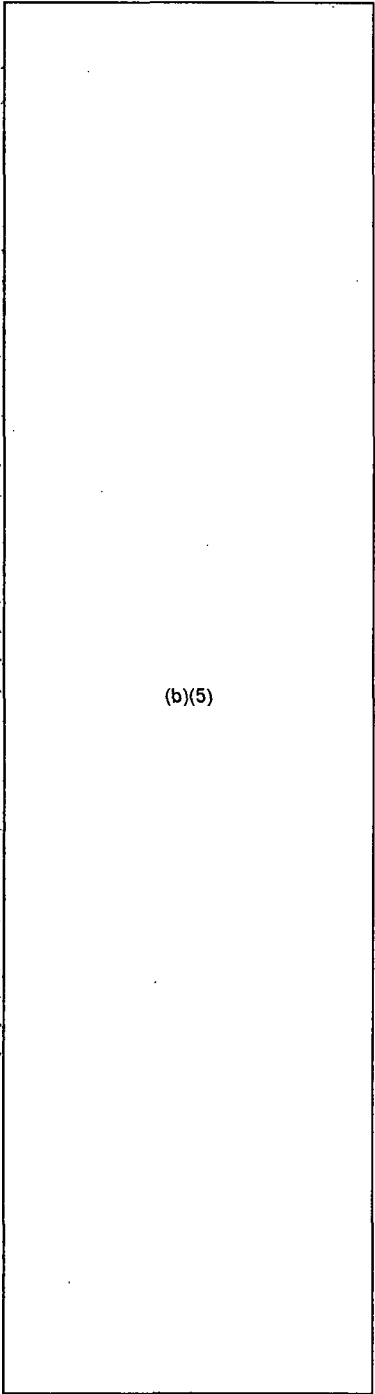
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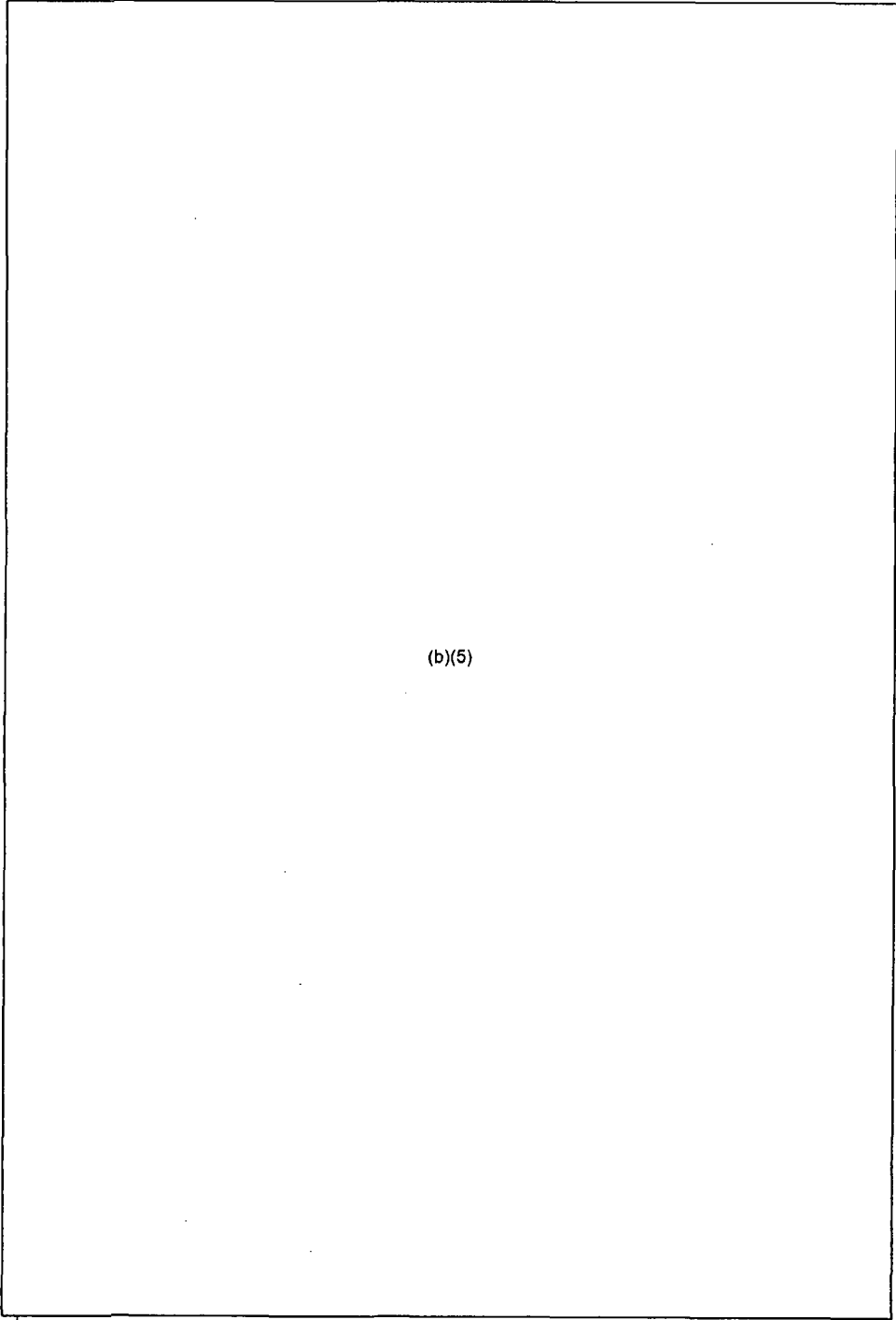
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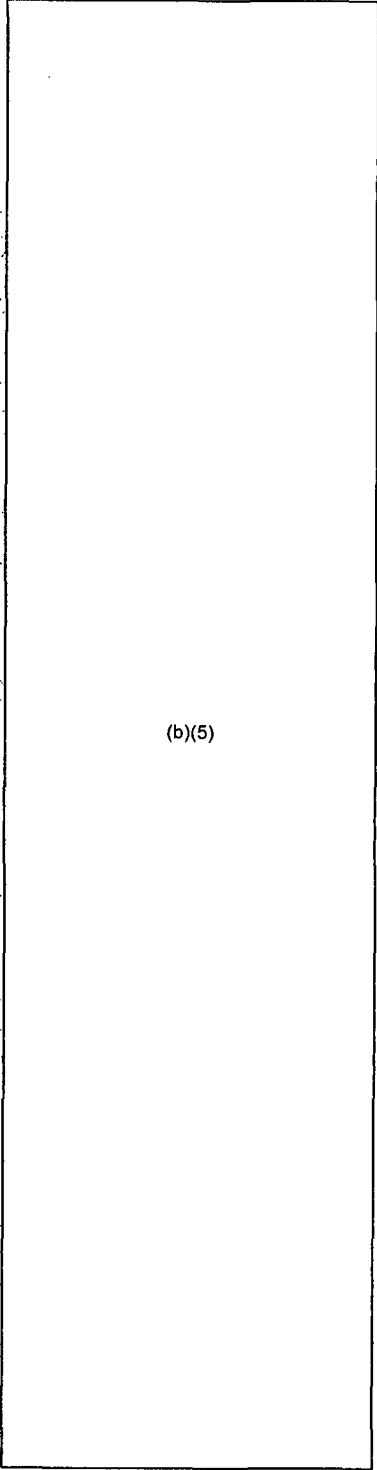
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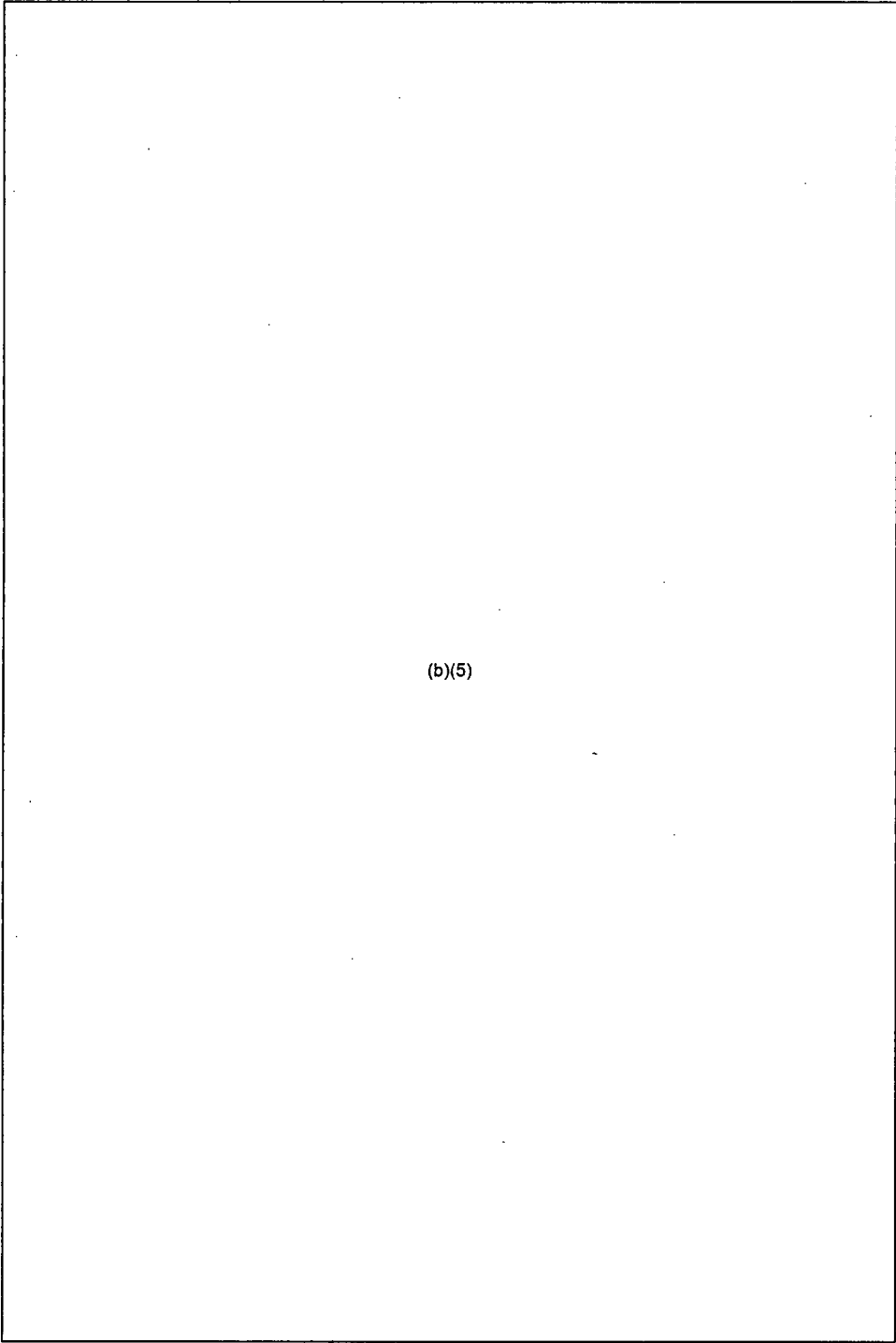
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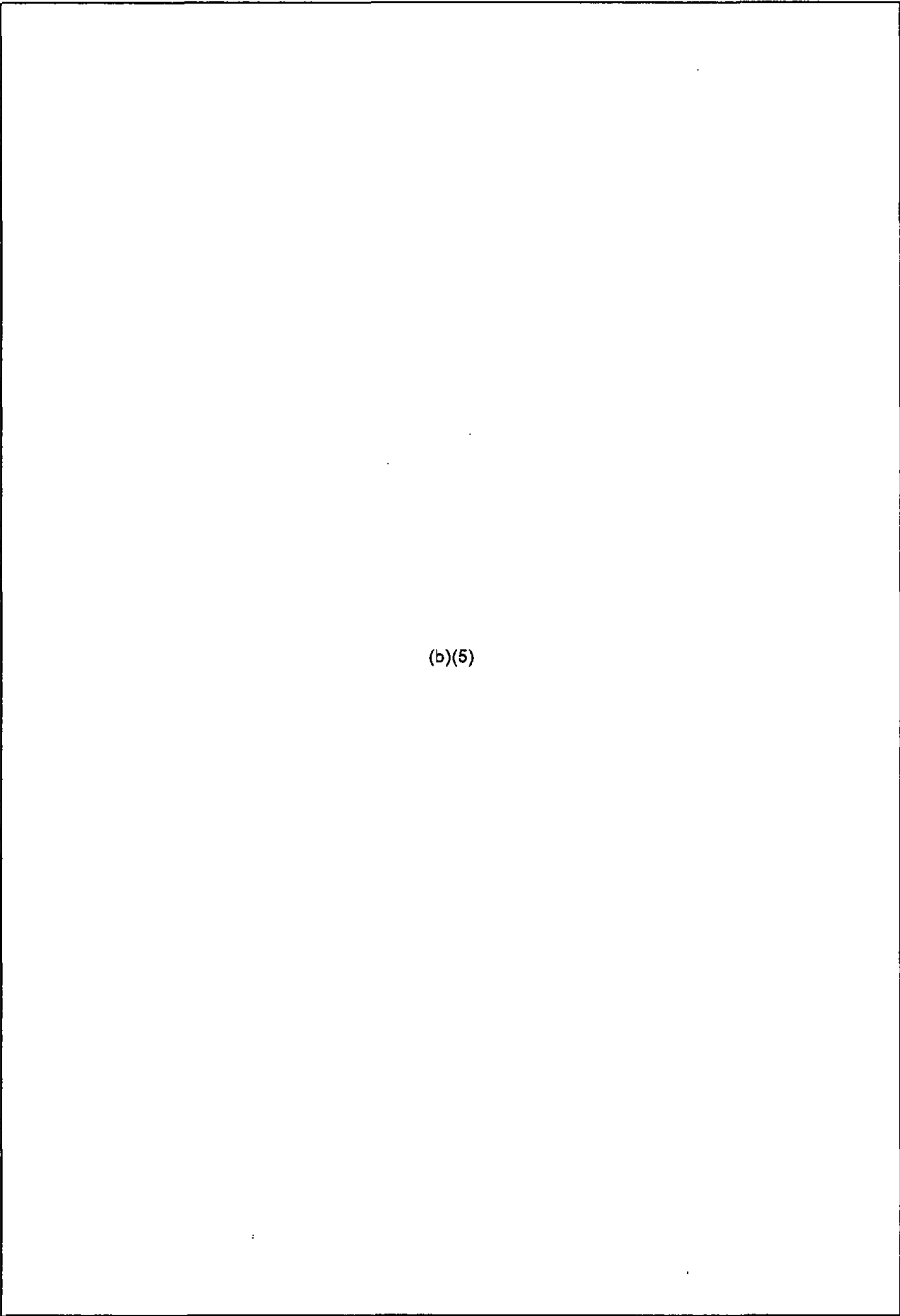
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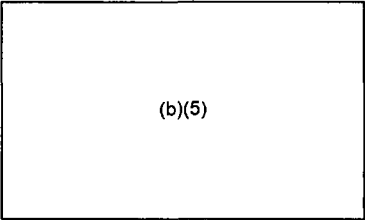
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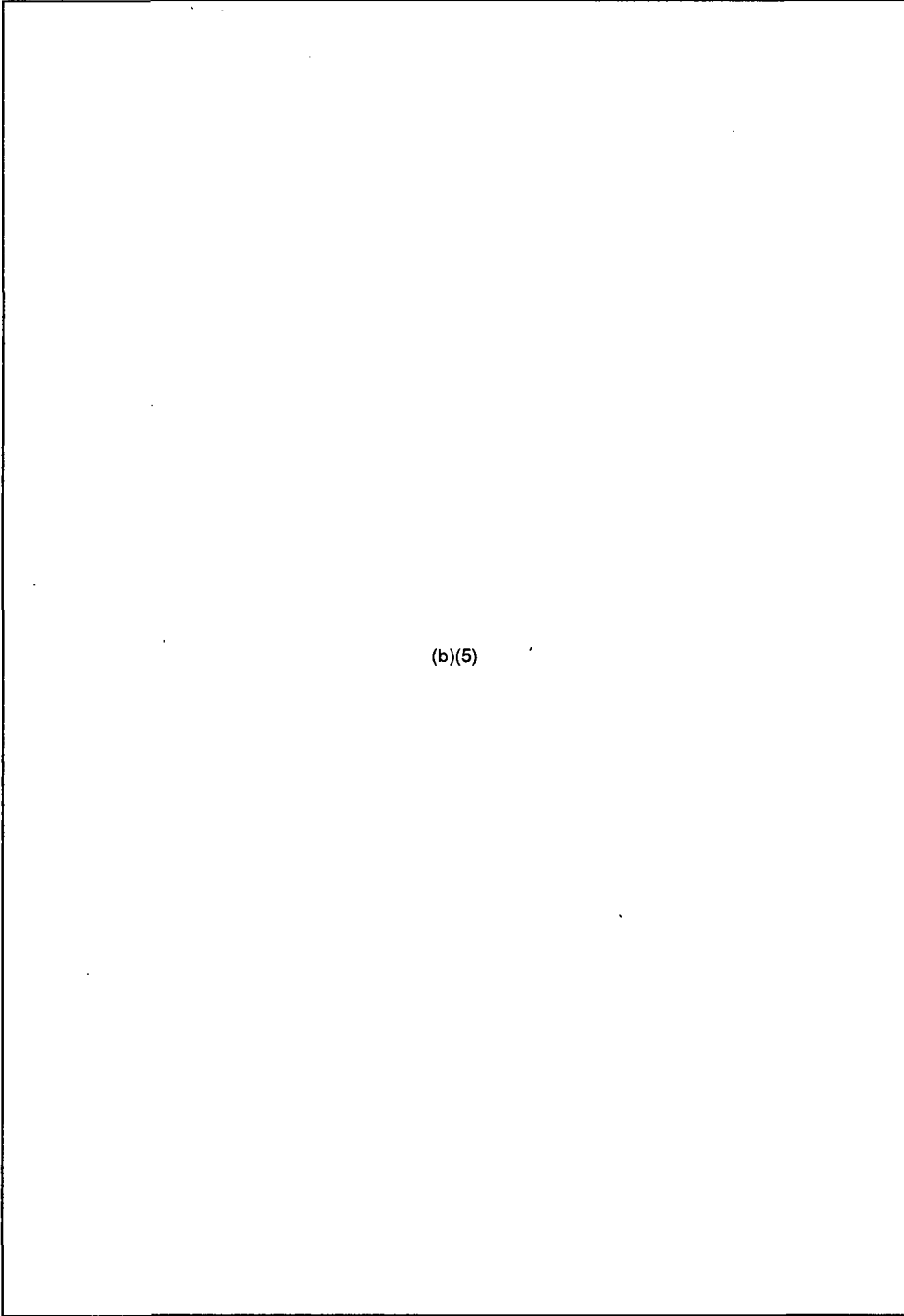
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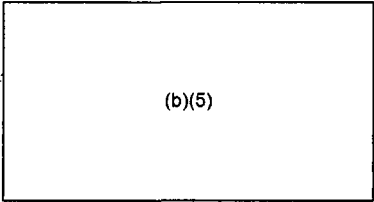
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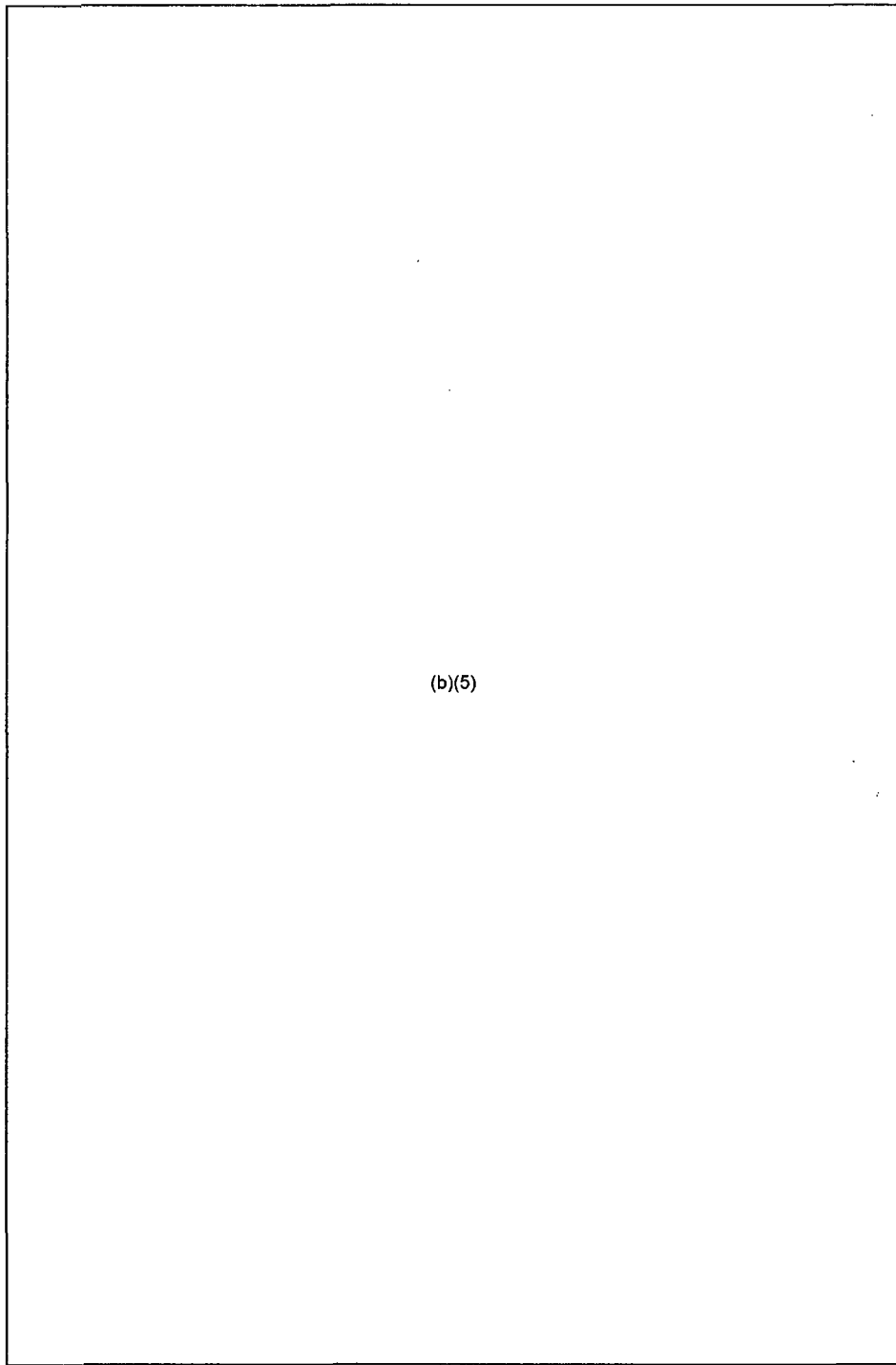
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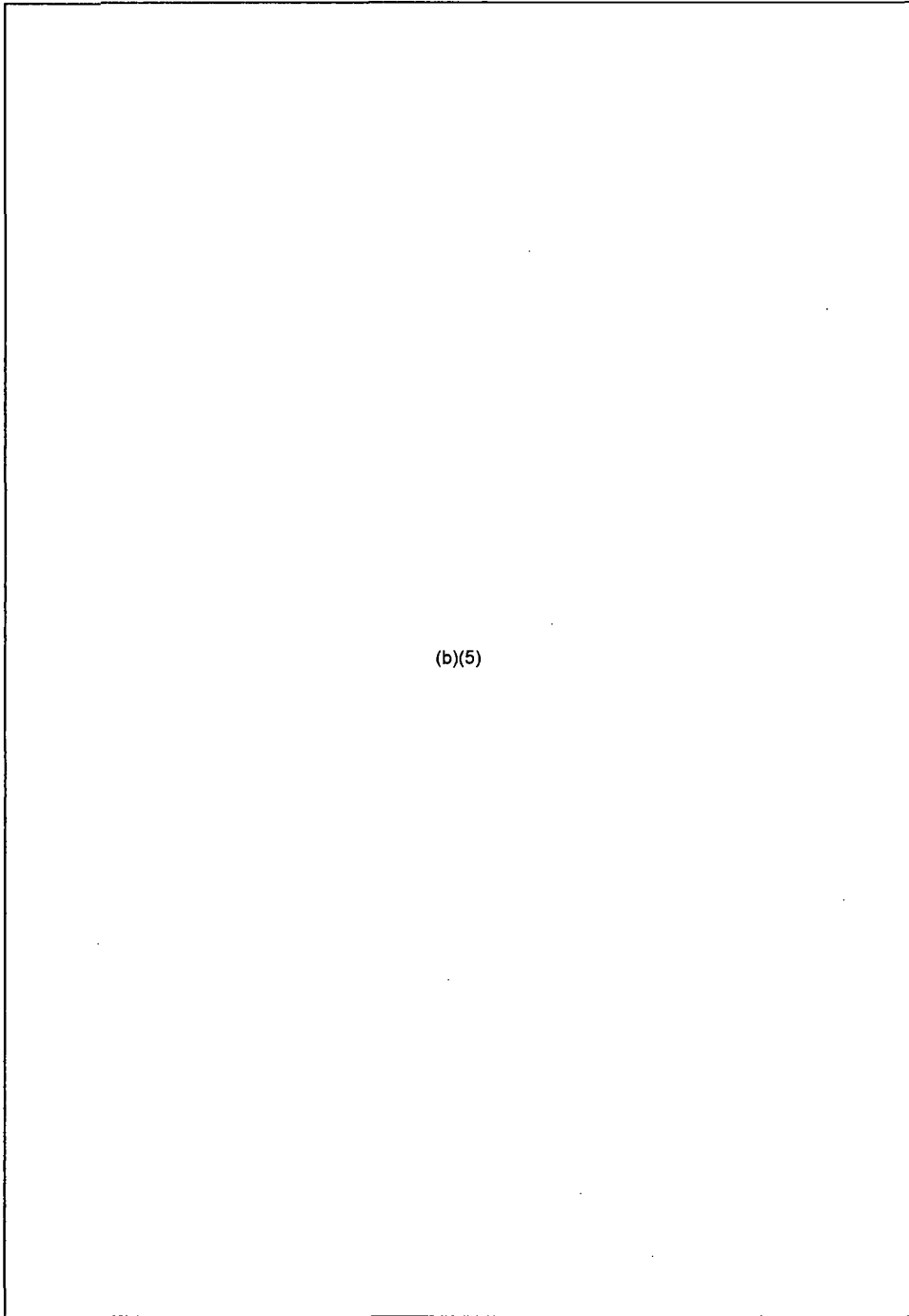
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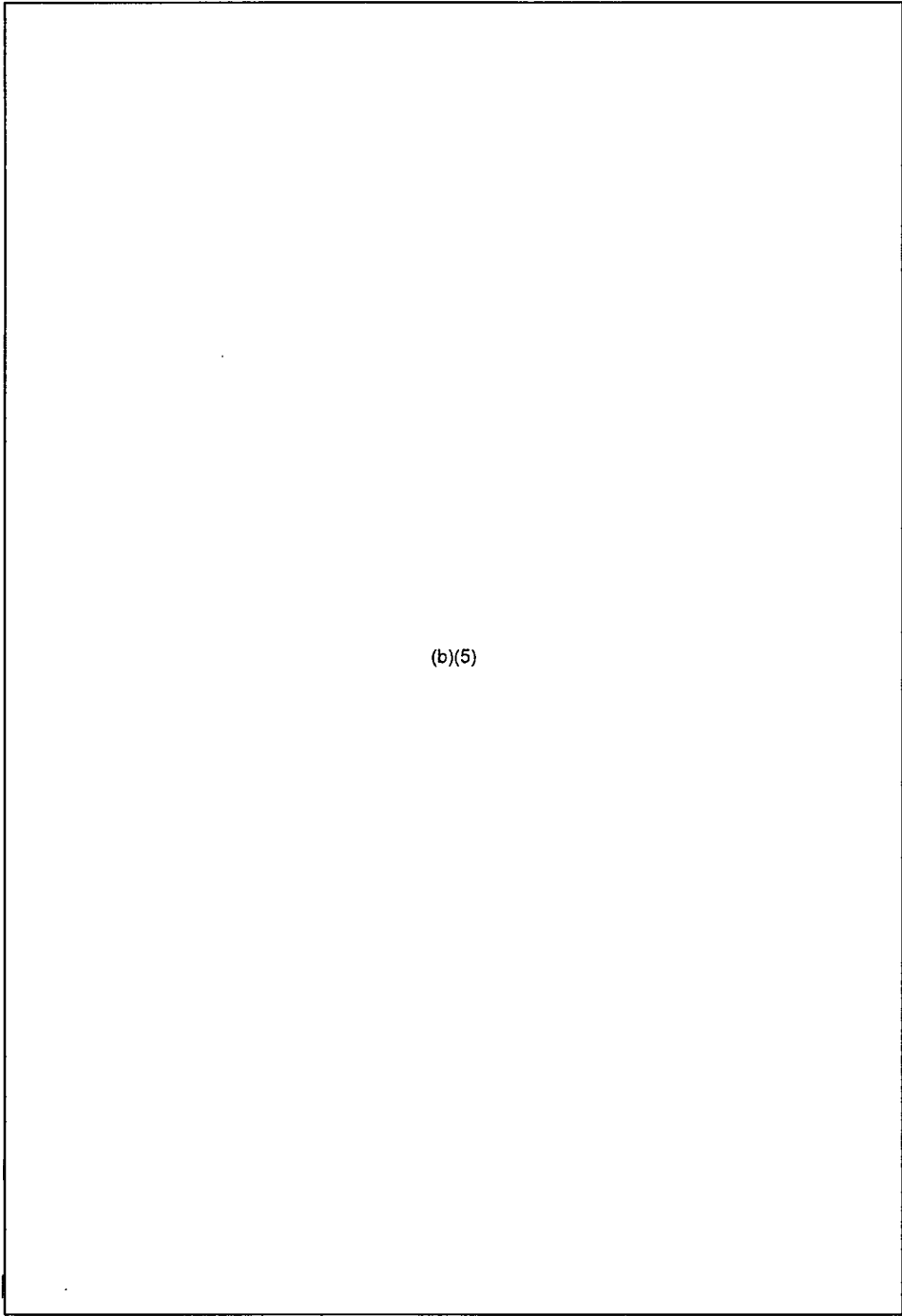
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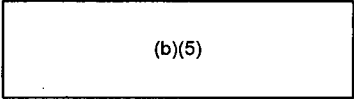


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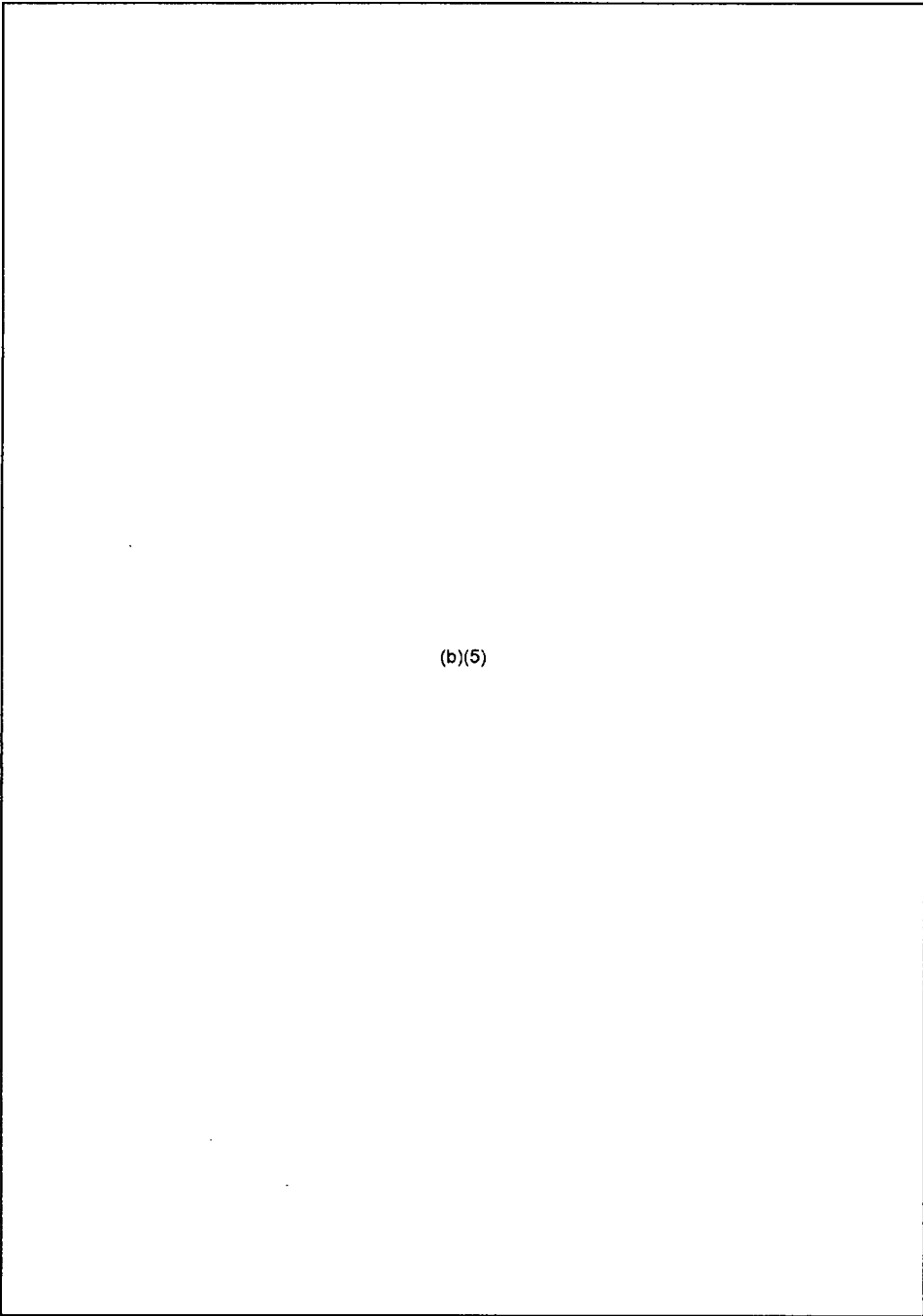
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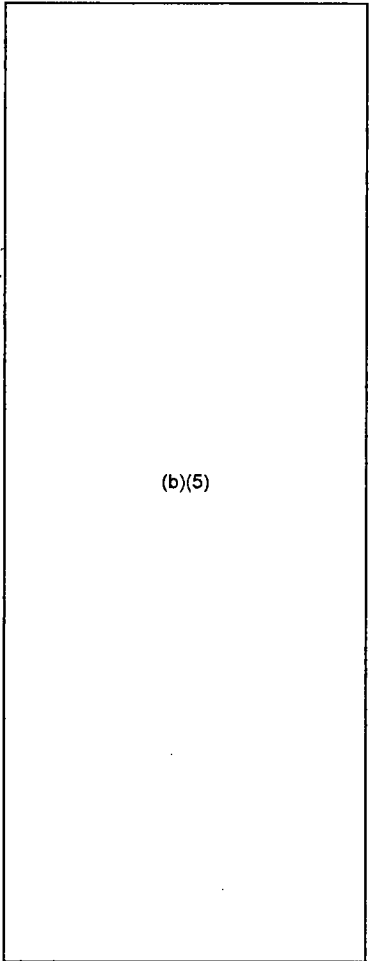
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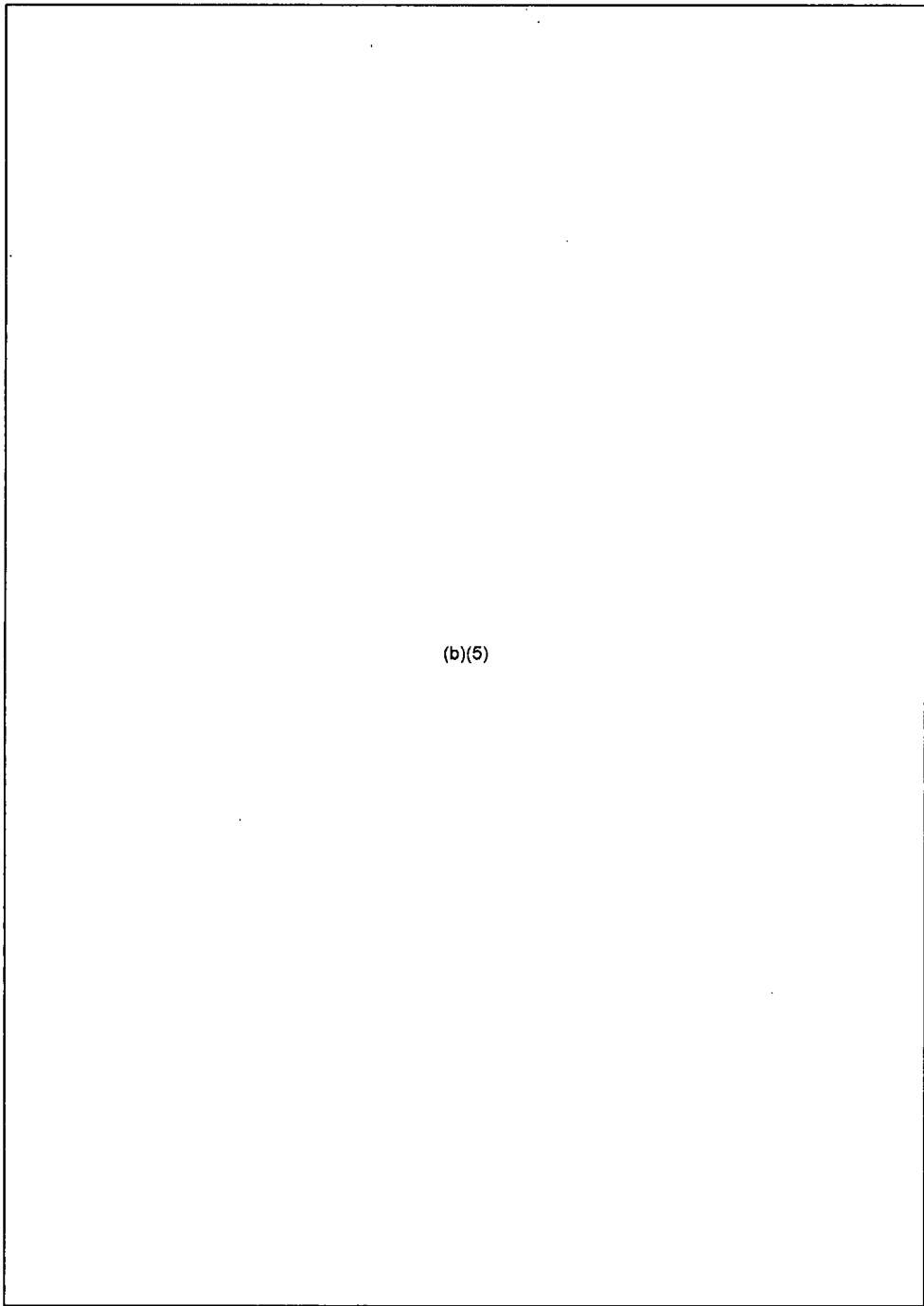
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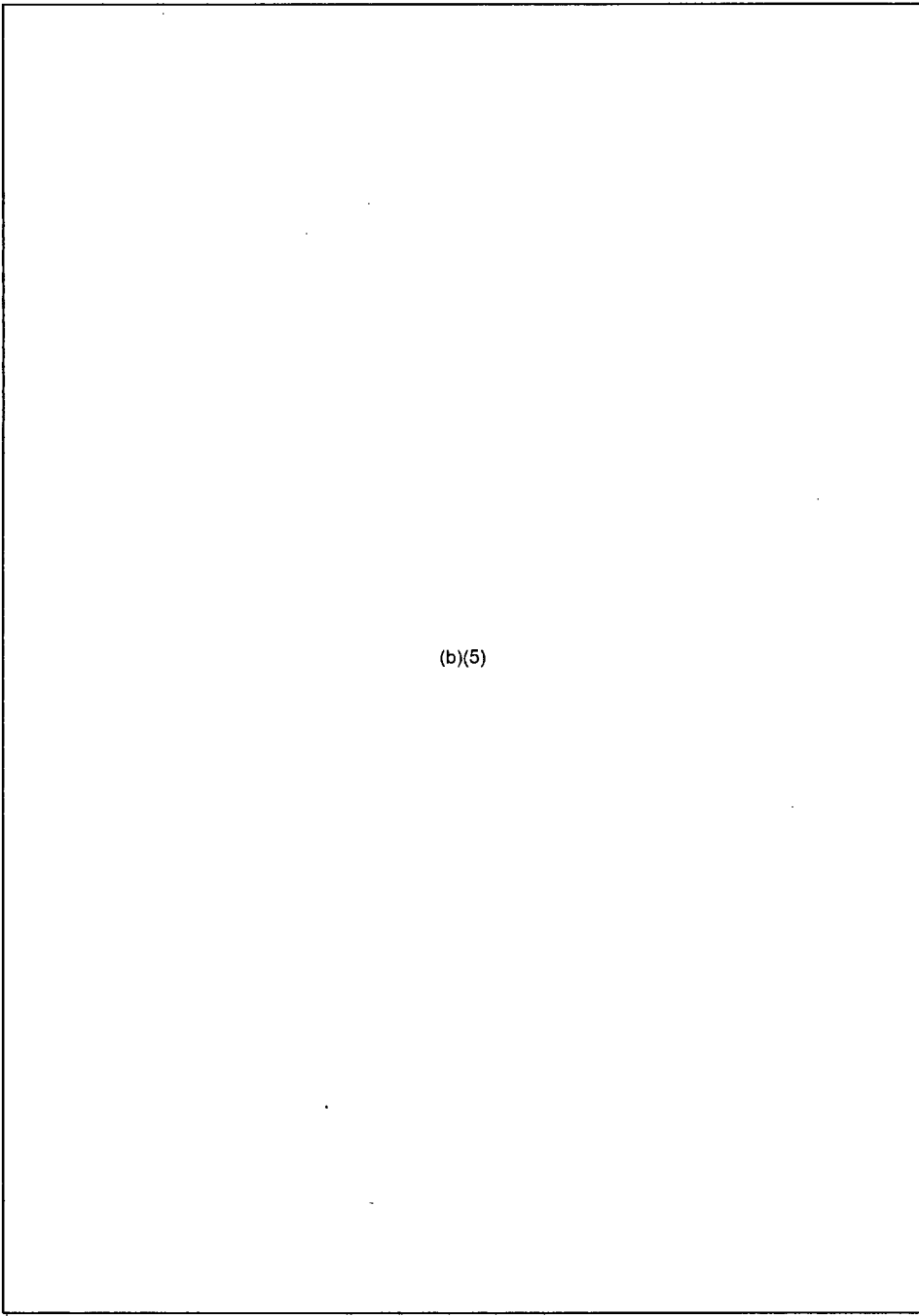
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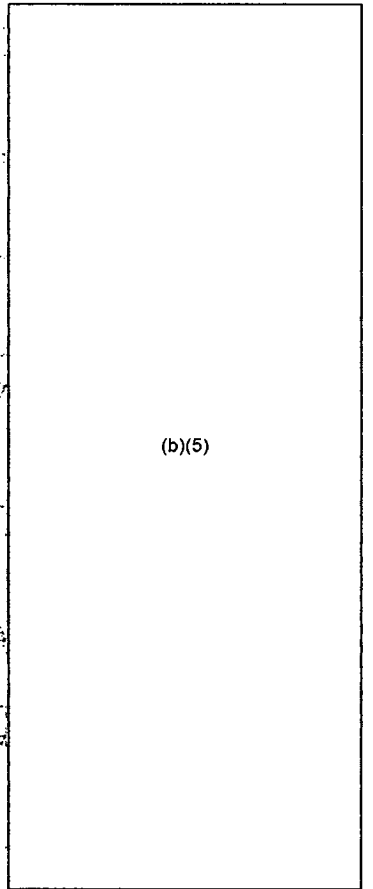
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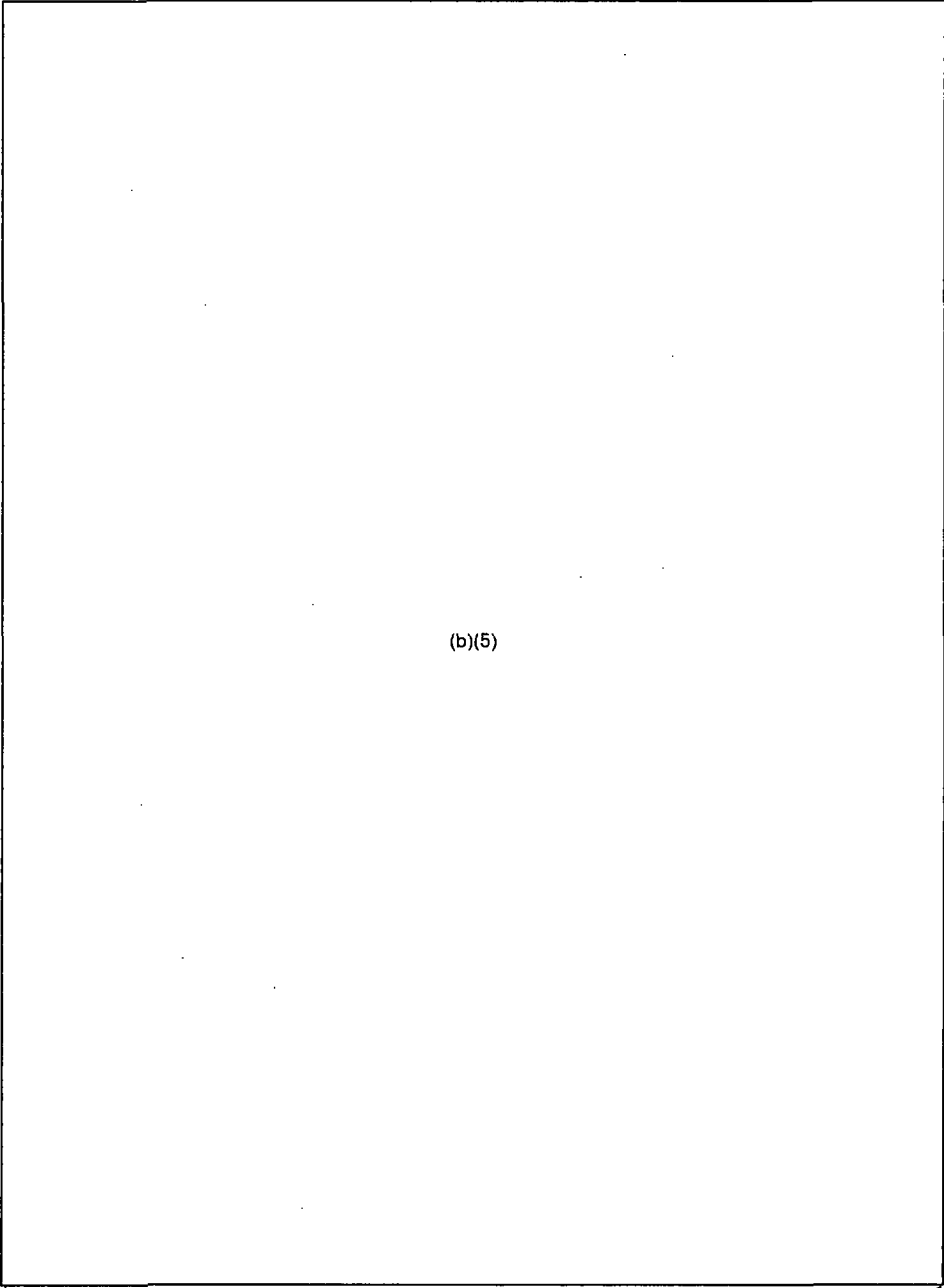
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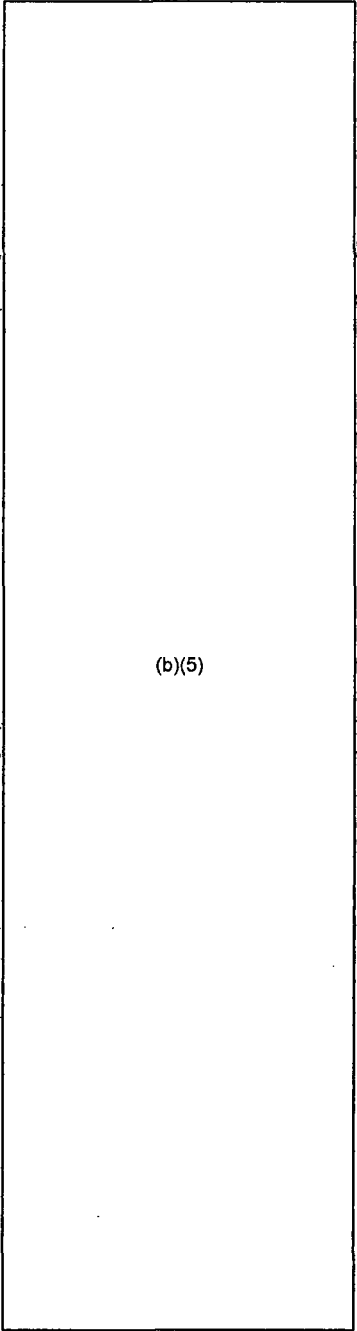
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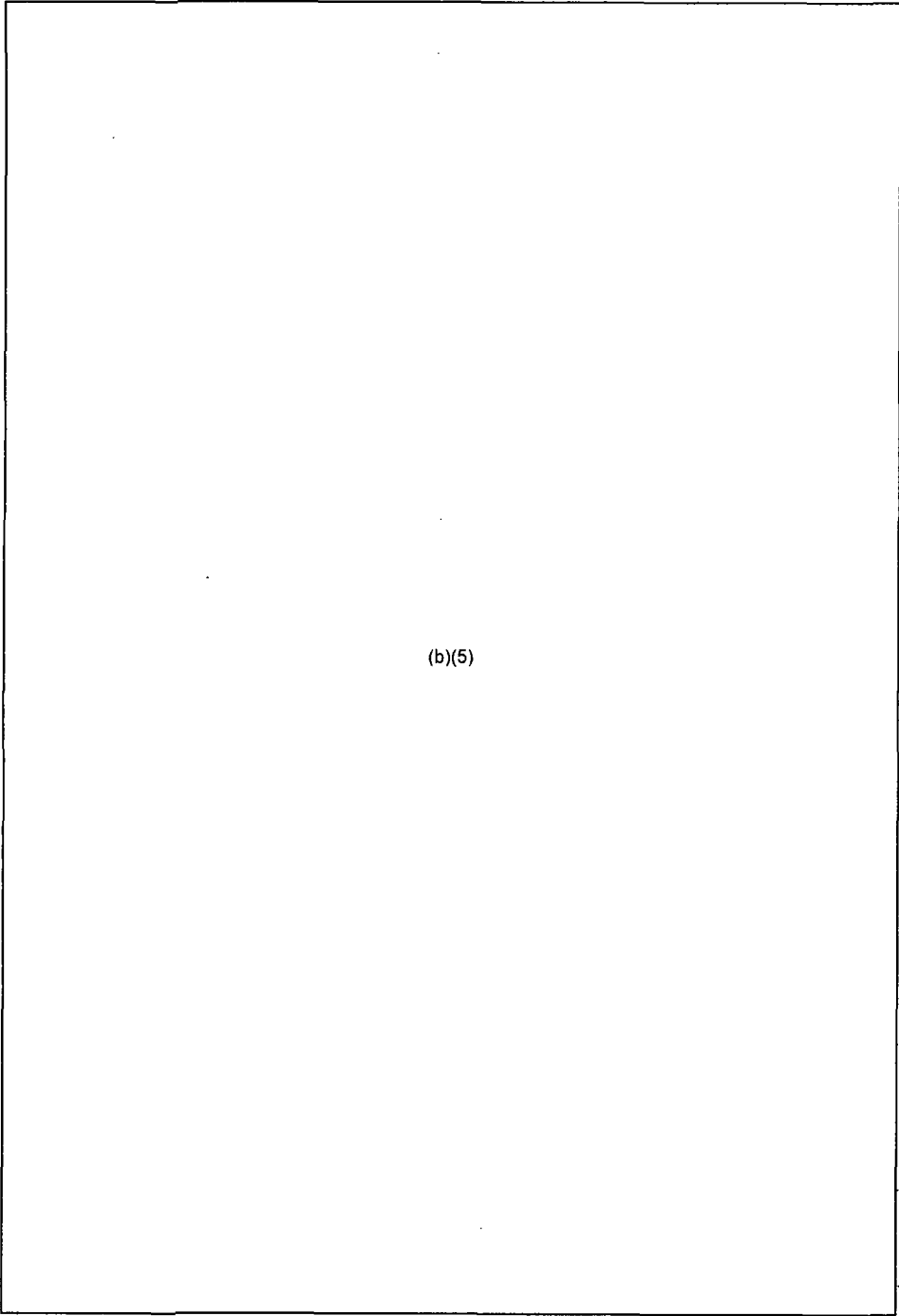
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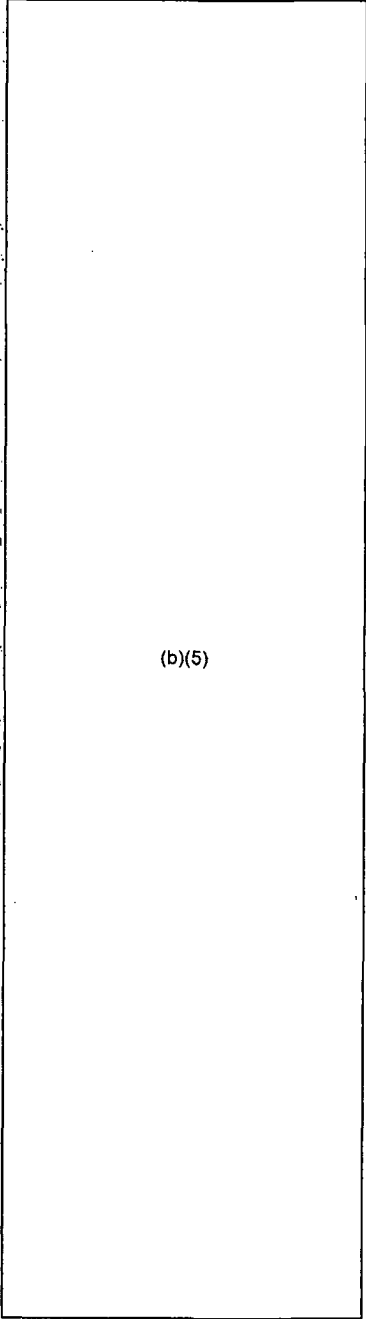
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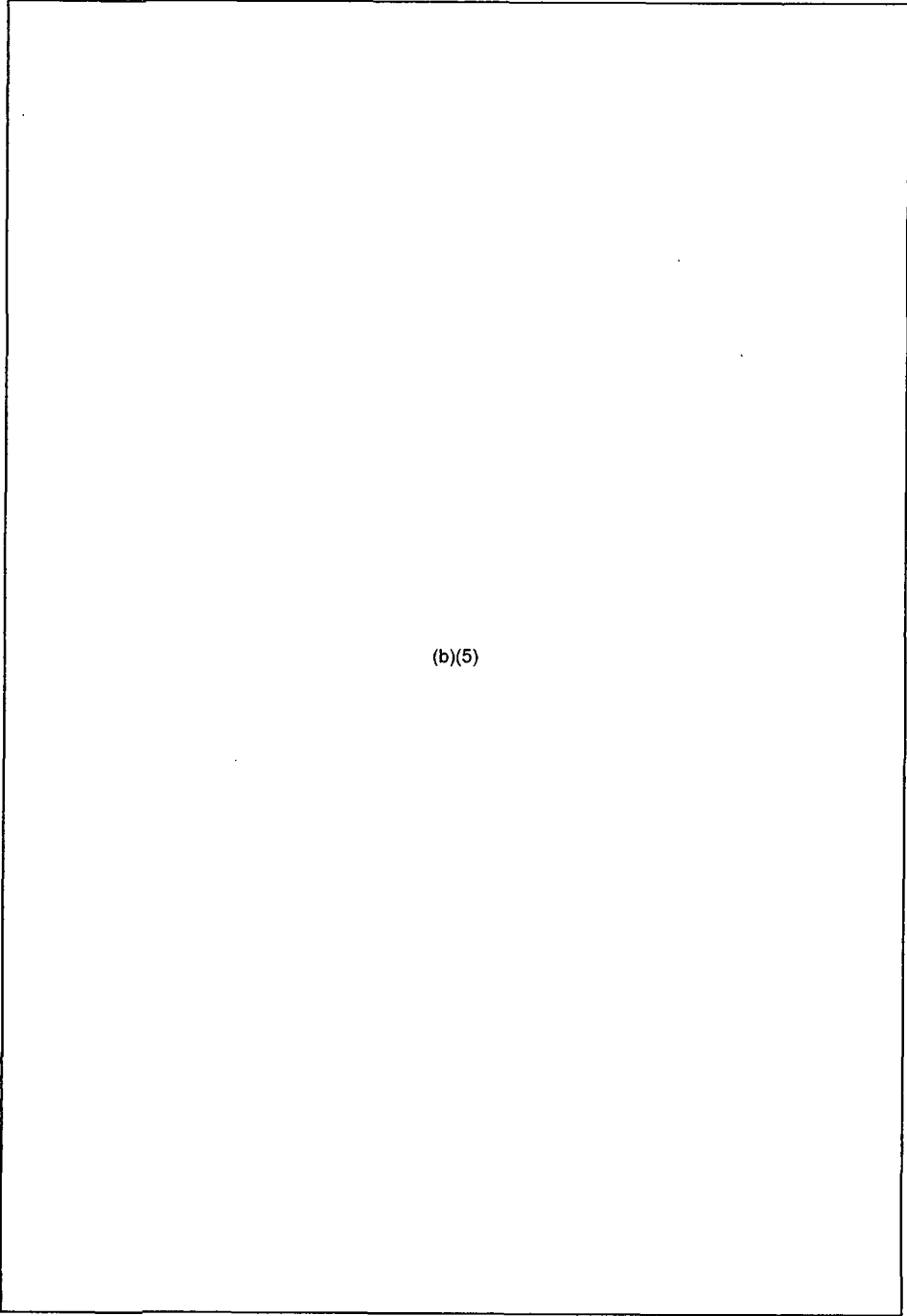
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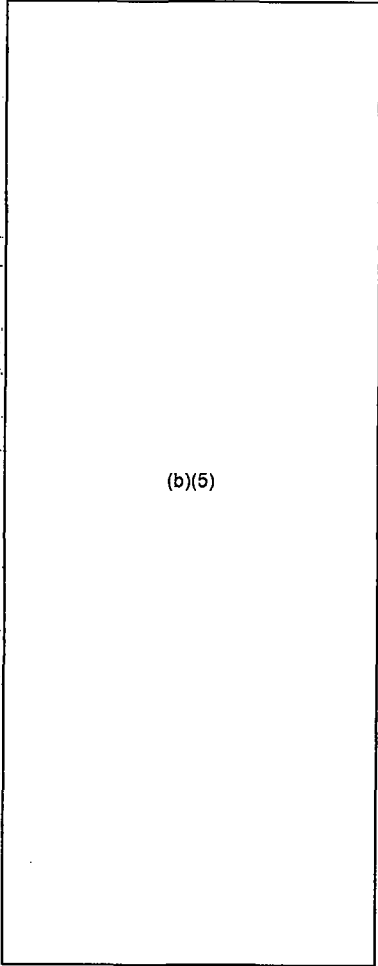
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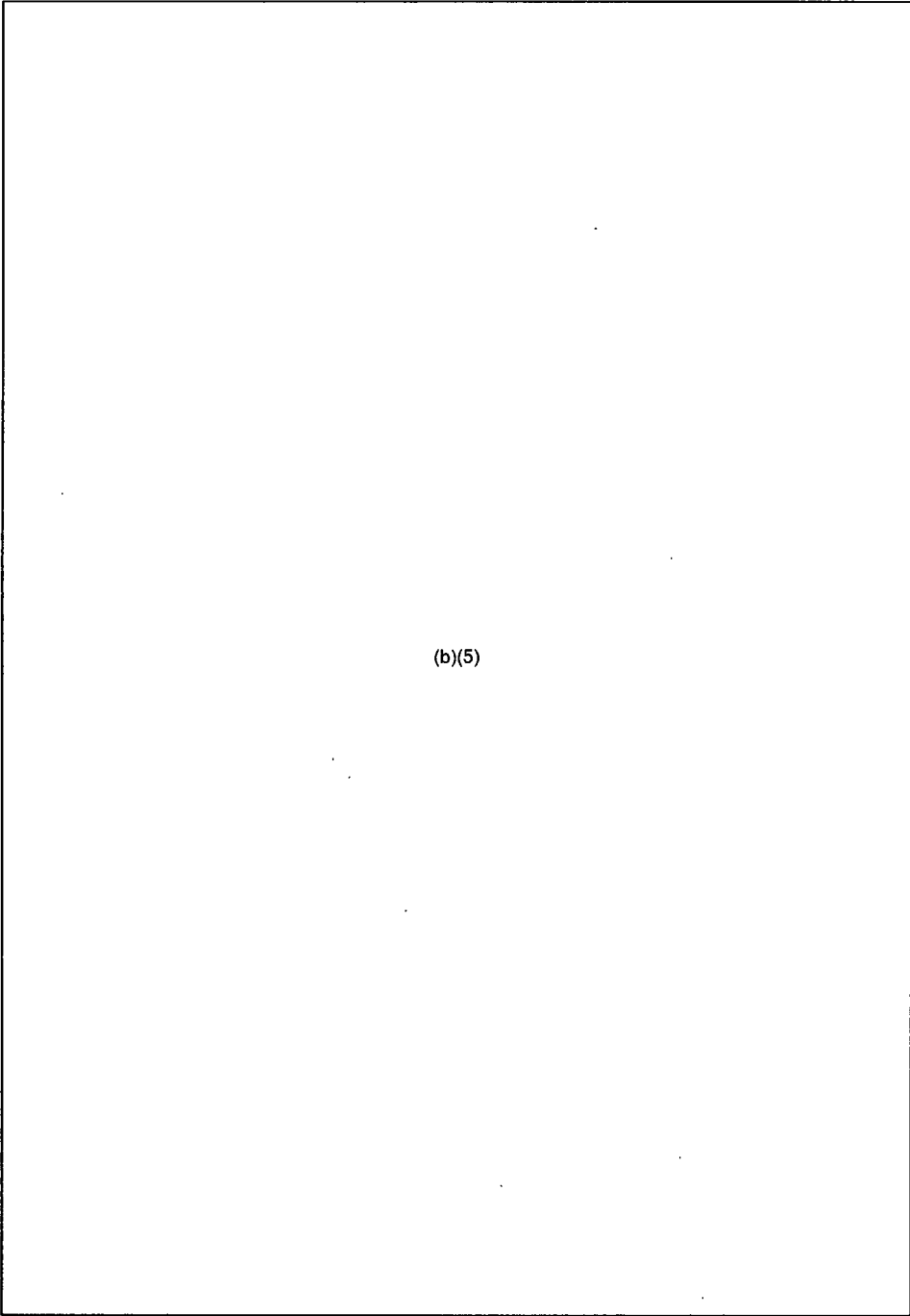
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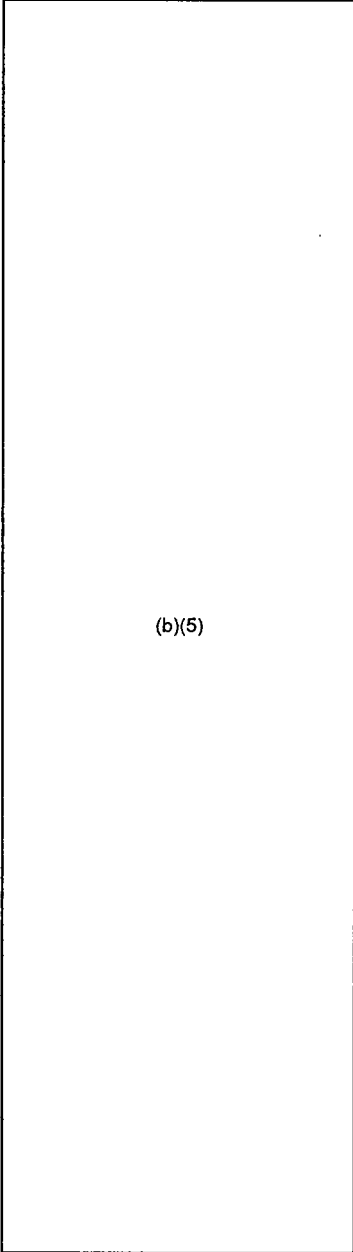
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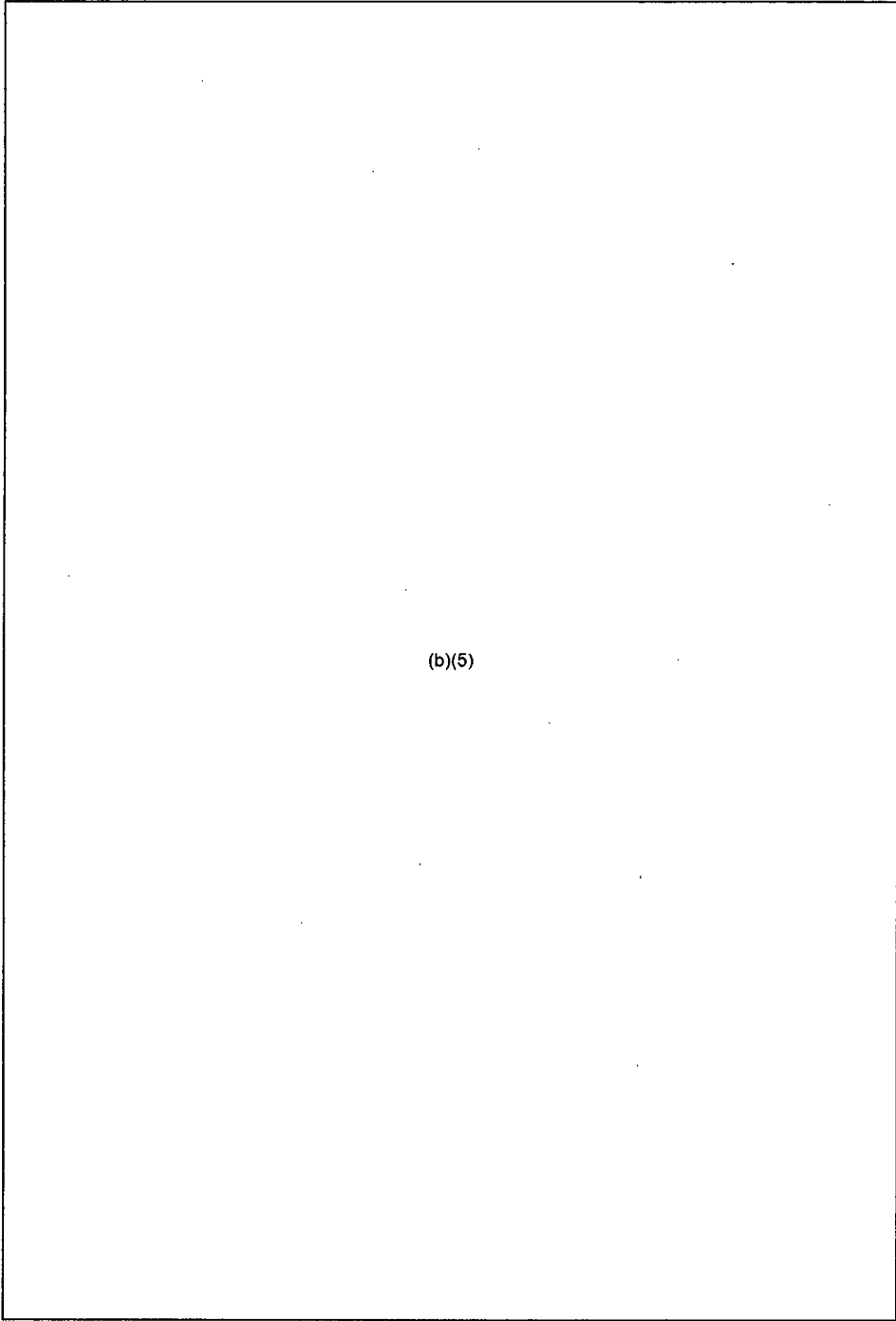
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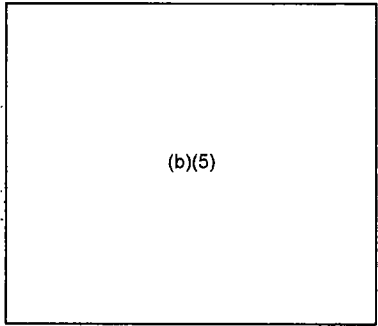
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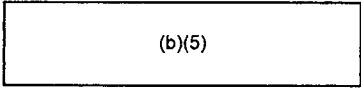
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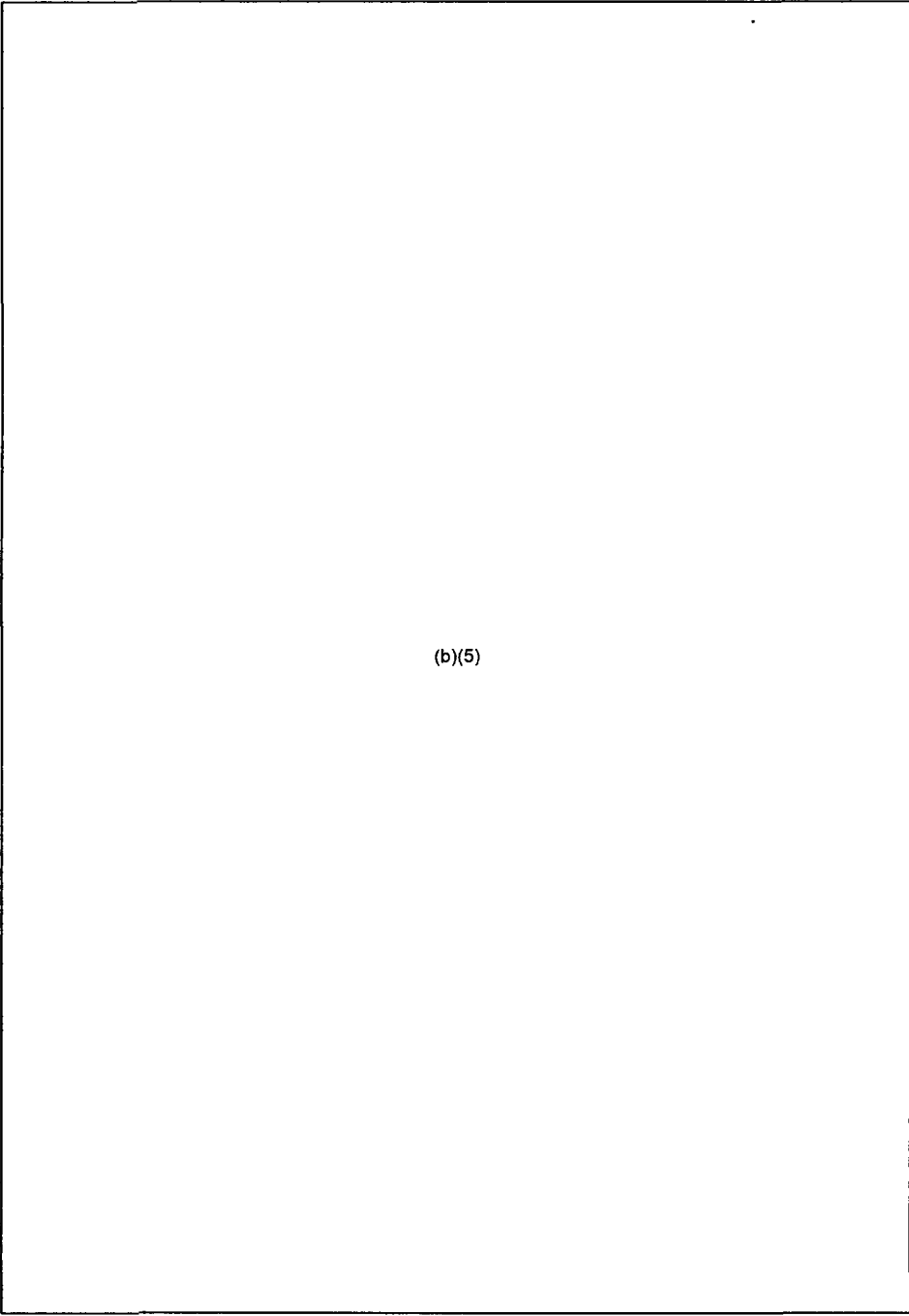
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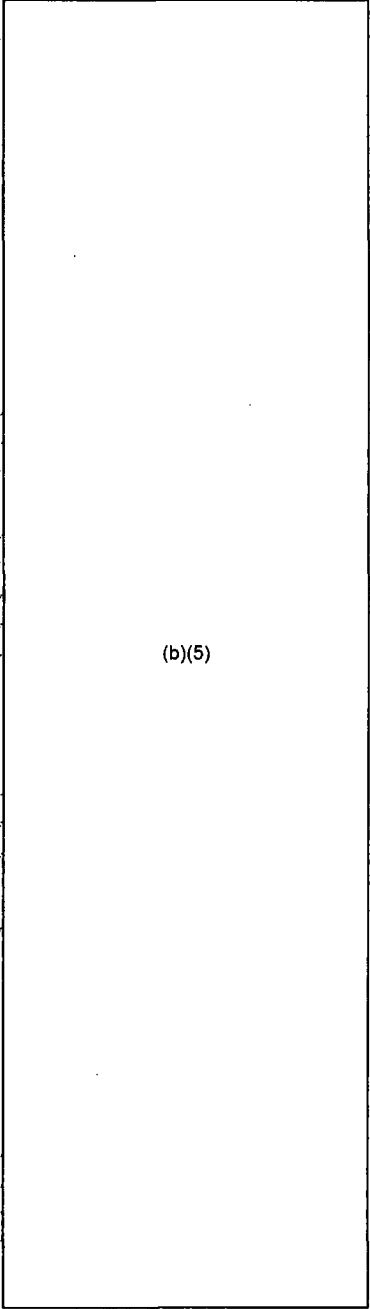
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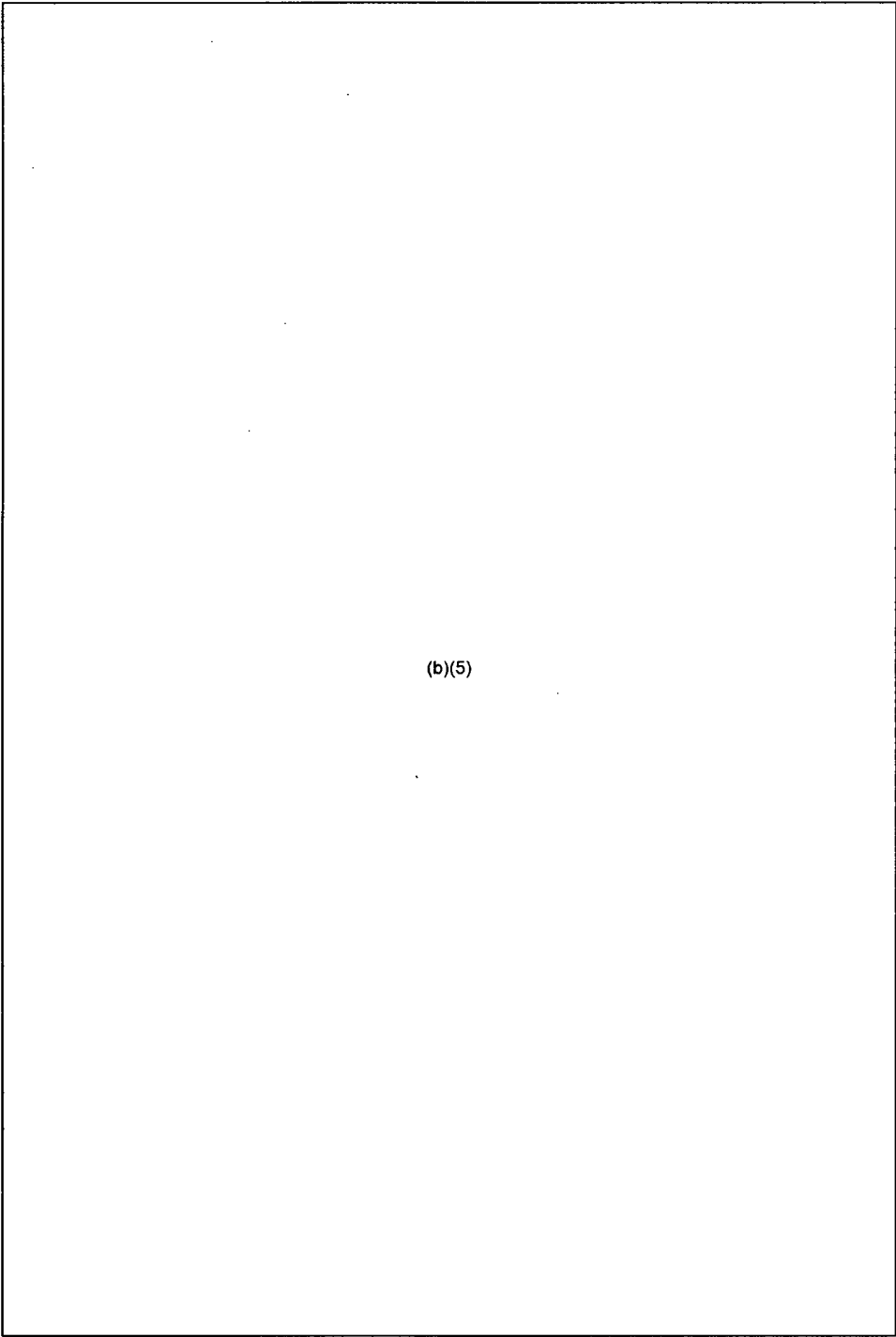
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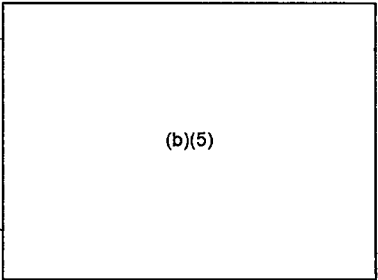
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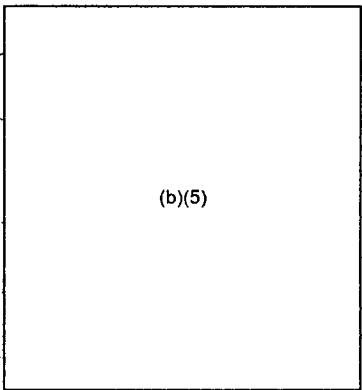
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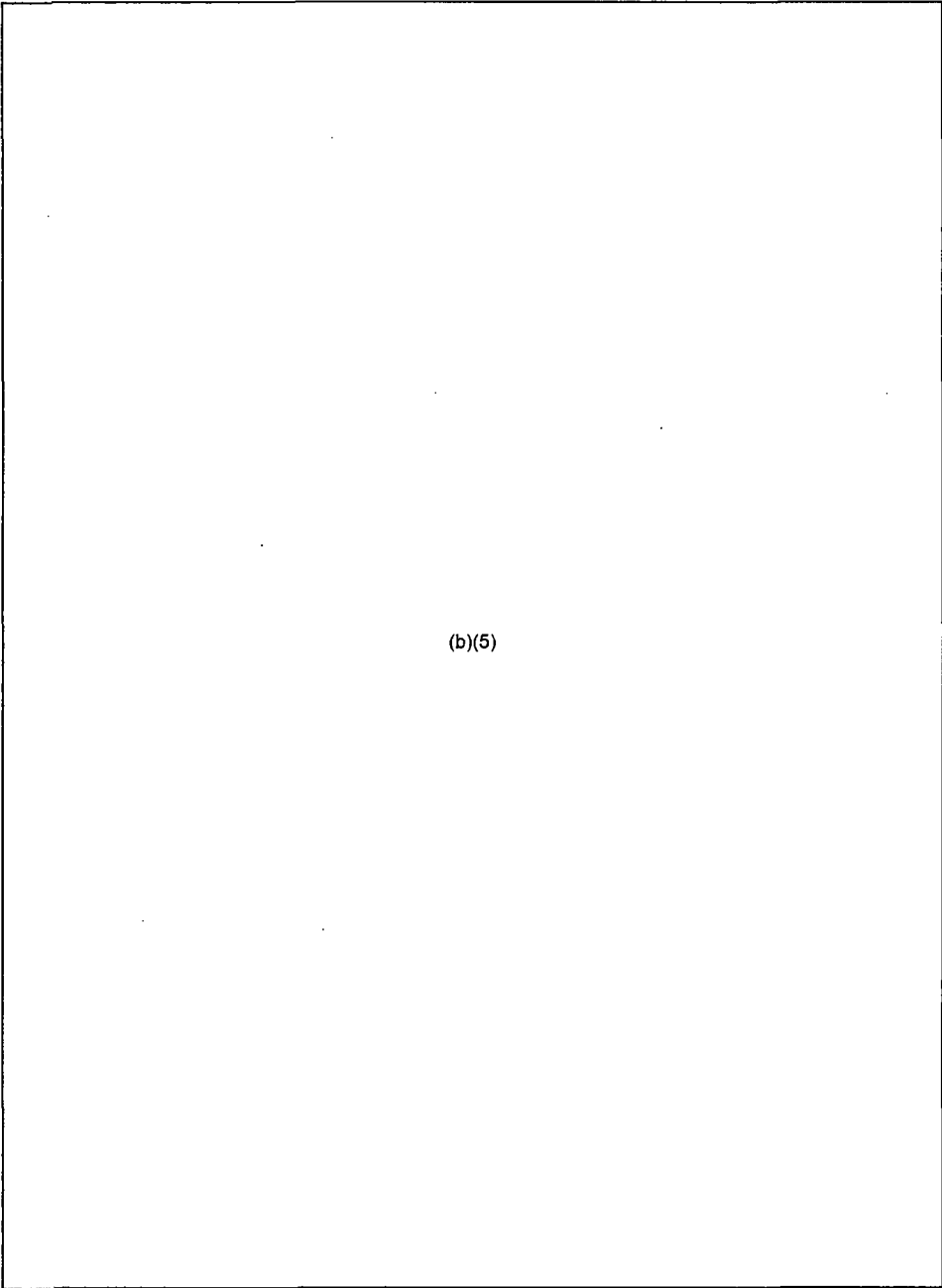


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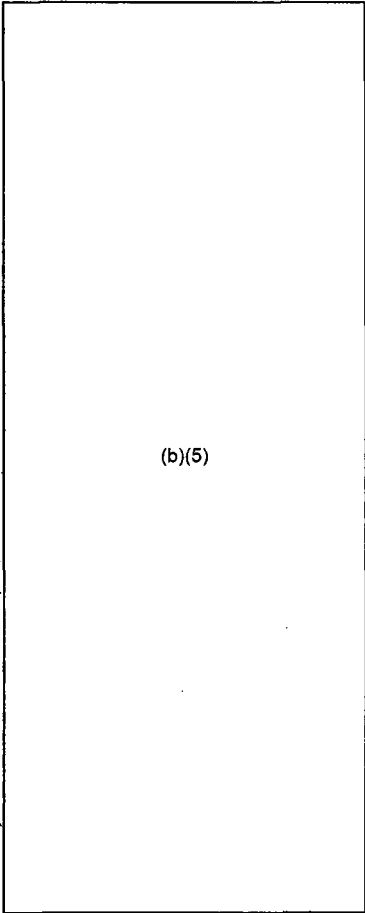
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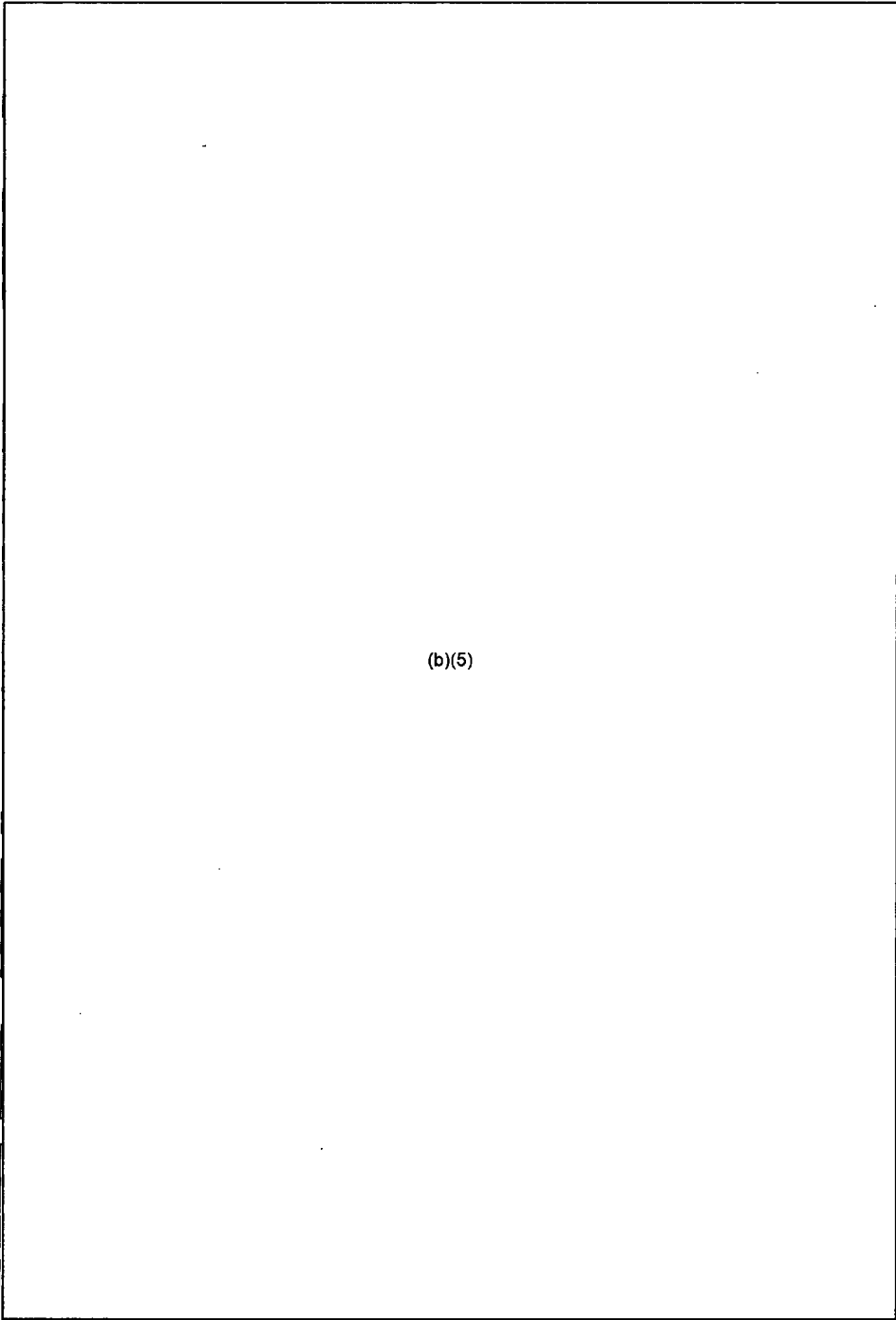
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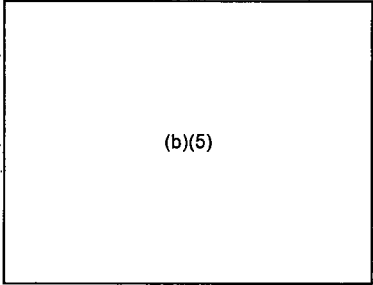
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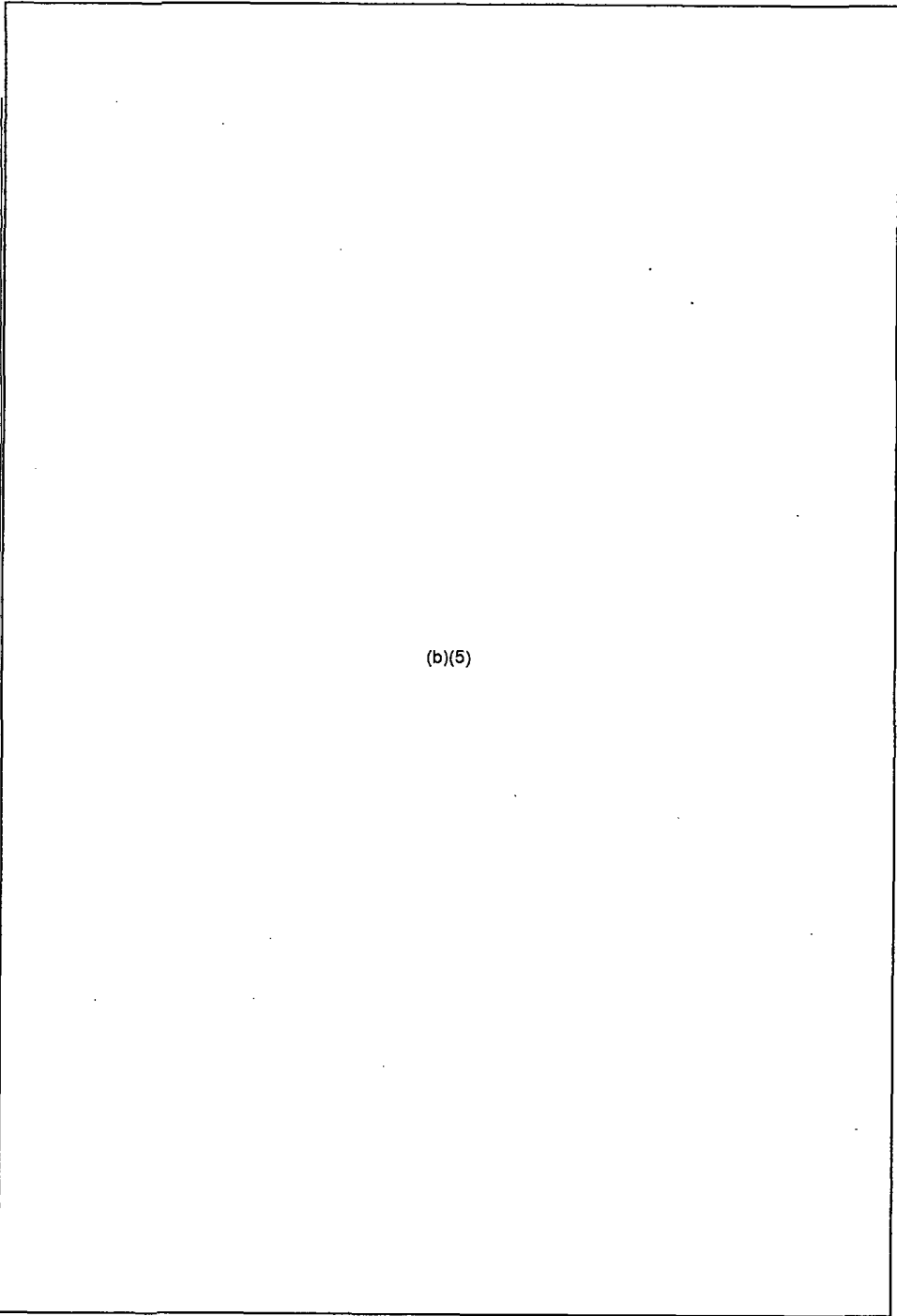


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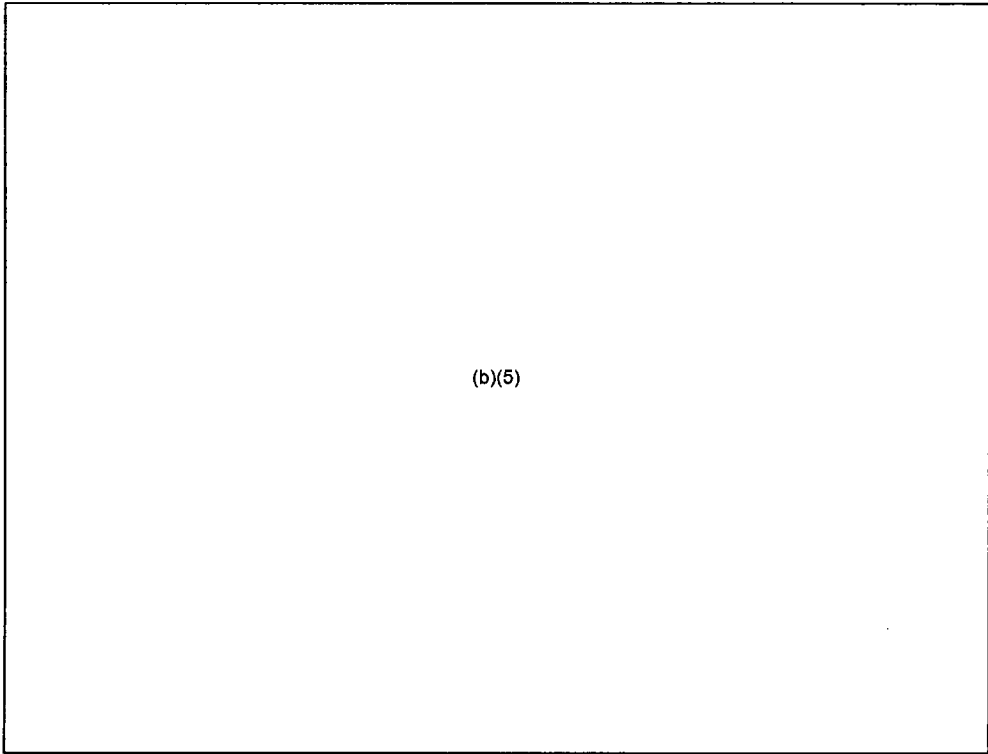
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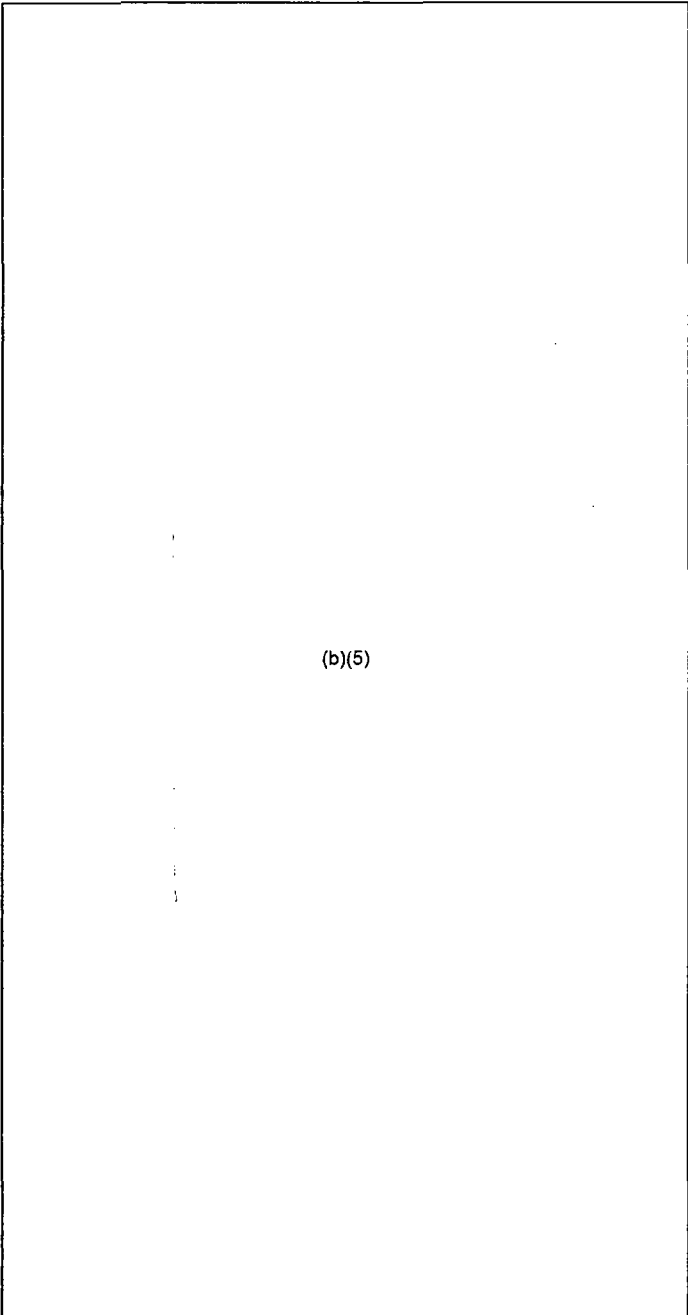
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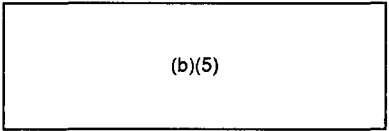
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From: [Hatchett, Gregory](#)
To: [Flanders, Scott](#); [Chokshi, Niles](#)
Subject: Fw: FRN on Vogtle FSEIS?
Date: Friday, March 25, 2011 8:39:49 AM

It was published today by the EPA. Scott Burnell is getting the press release out today.

From: Burnell, Scott
To: Hatchett, Gregory
Sent: Fri Mar 25 08:33:57 2011
Subject: RE: FRN on Vogtle FSEIS?

So it did – I was looking under EPA. I'll get the press release issued. Thanks.

From: Hatchett, Gregory
Sent: Friday, March 25, 2011 8:32 AM
To: Burnell, Scott
Subject: Re: FRN on Vogtle FSEIS?

It should be there. The NRCs notice of availability went out yesterday.

From: Burnell, Scott
To: Sutton, Mallecia; Hatchett, Gregory
Sent: Fri Mar 25 08:08:11 2011
Subject: FRN on Vogtle FSEIS?

Folks;

Not seeing anything in the Register today. Did I miss something?

Scott

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 4:36 AM
To: Courts, Tonya
Subject: FW: CAP and EPR draft Rev 1.pptx

From: Jackson, Christopher
Sent: Thursday, March 17, 2011 8:49 PM
To: Ashley, Clinton
Subject: RE: CAP and EPR draft Rev 1.pptx

Sounds good. I thought we asked a practicability question and they responded. It may have been the US APWR.

Good job.

CJ

From: Ashley, Clinton
Sent: Thursday, March 17, 2011 8:17 PM
To: Jackson, Christopher; McKirgan, John
Subject: RE: CAP and EPR draft Rev 1.pptx

Chris thanks for the excellent feedback.
I made slight adjustments. I removed any mention of practicability.

Clint

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 10:59 AM
To: Ashley, Clinton; McKirgan, John
Subject: RE: CAP and EPR draft Rev 1.pptx

Clint,

I liked these slides. I am not sure that I am pushing you in the correct direction but here is what I suggest.

(b)(5)

What do you think?

CJ

From: Ashley, Clinton
Sent: Friday, March 11, 2011 10:14 PM
To: Jackson, Christopher
Cc: McKirgan, John
Subject: CAP and EPR draft Rev 1.pptx

Rough draft rev 1. I think I adjusted tone...I added RAI detail and risk...Improved figure. It is not where I want it to be but I think it's close. Still need to add speaker notes.

Clint

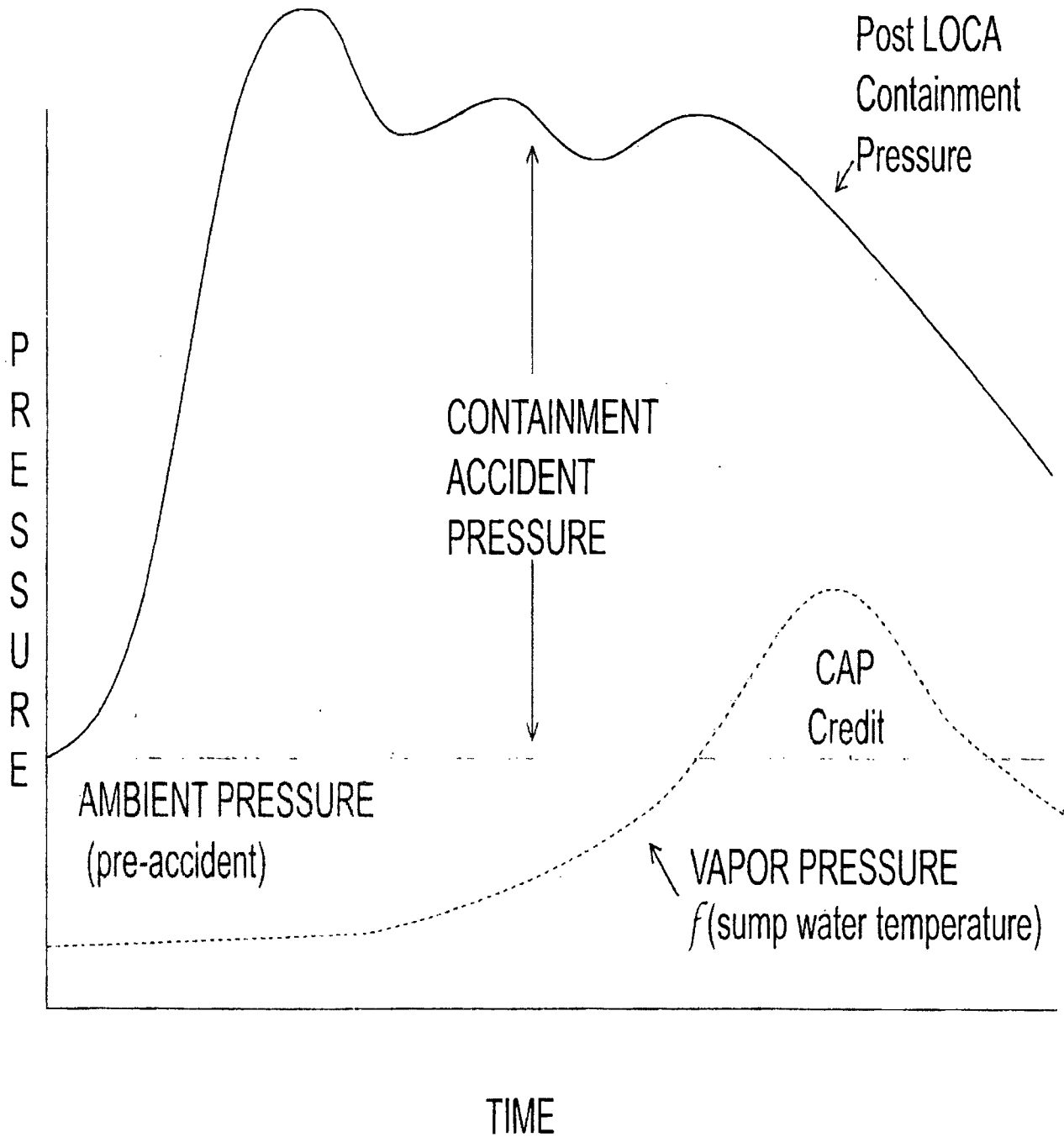
AGENDA

- Containment Accident Pressure (CAP)
use in Net Positive Suction Head (NPSH)
analysis for US EPR
- Staff Review
- Summary

US EPR NPSHa and CAP

- US EPR uses containment pressure greater than what is present before the accident for calculating NPSH available (NPSHa).
- US EPR assumes containment pressure is equal to the IRWST saturation pressure for a given IRWST temperature ($> 212^{\circ}\text{F}$) and considers this to be a conservatively low, bounding pressure.

$$NPSH_a = H_{\text{containment}} + H_{\text{static}} - H_{\text{loss}} - H_{\text{vapor}}$$



Staff Review

- Staff has issued an RAI to determine if the deviation from regulatory guidance (RG 1.1 and RG 1.82) is acceptable (RAI 416, question 06.03-15).
 - Staff plans to perform confirmatory containment analysis on CAP credit (saturation pressure) to support a safety finding for available NPSH.
 - Staff recognizes that for a given IRWST temperature greater than 212F, in order for the water to exist as a liquid, a corresponding pressure must be present at least equal to the saturation pressure for the given temperature.

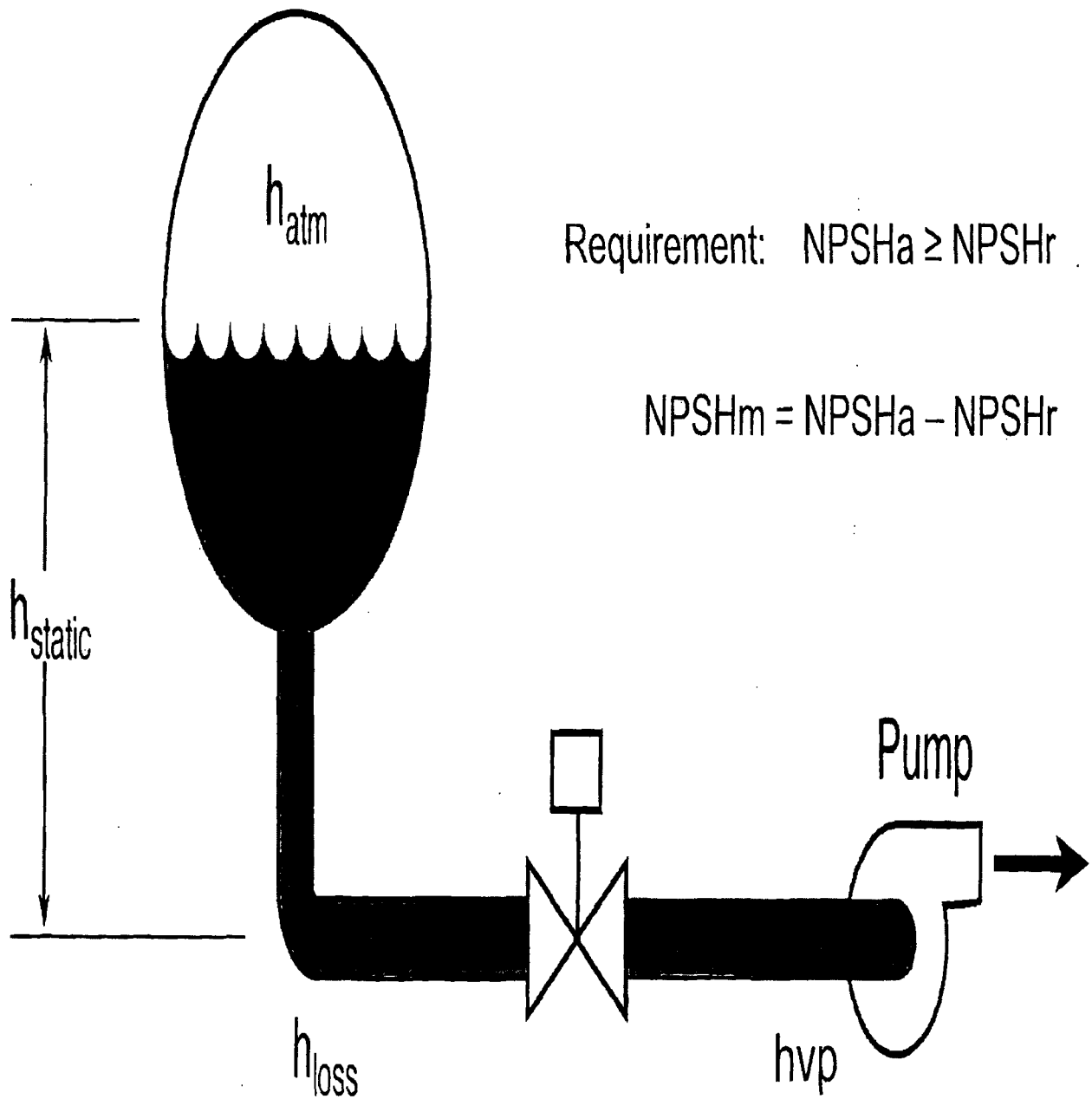
Staff Review

- Staff issued an RAI requesting AREVA perform a risk assessment of NPSH CAP credit (RAI 457 question 06.02.02-81).
 - Risk information to address:
 - Plant accident conditions where CAP credit is used to demonstrate reliable operation of the ECCS (SIS) pumps.
 - Operator actions (if any).
 - Impaired containment integrity.

Summary

- Staff requesting additional information concerning AREVAs use of CAP credit – includes risk information.
- Limiting use of NPSH CAP credit to the saturation pressure for a given IRWST temperature is consistent with most operating PWRs and appears to be bounding for the EPR .

$$\text{Available NPSH} = h_{\text{atm}} + h_{\text{static}} - h_{\text{loss}} - h_{\text{vp}}$$



Requirement: $\text{NPSH}_a \geq \text{NPSH}_r$

$$\text{NPSH}_m = \text{NPSH}_a - \text{NPSH}_r$$

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 4:19 AM
To: Courts, Tonya
Subject: FW: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

From: Jackson, Christopher
Sent: Thursday, March 17, 2011 5:49 PM
To: McKirgan, John
Subject: RE: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

John,

Just this week I approved an SER without this RAI and no open item.

I don't know what occurred.

I will talk with him.

CJ

From: McKirgan, John
Sent: Thursday, March 17, 2011 5:35 PM
To: Nold, David; Jackson, Christopher
Subject: RE: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

(b)(5)

From: Nold, David
Sent: Thursday, March 17, 2011 12:30 PM
To: Jackson, Christopher
Cc: McKirgan, John
Subject: FW: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

Chris:

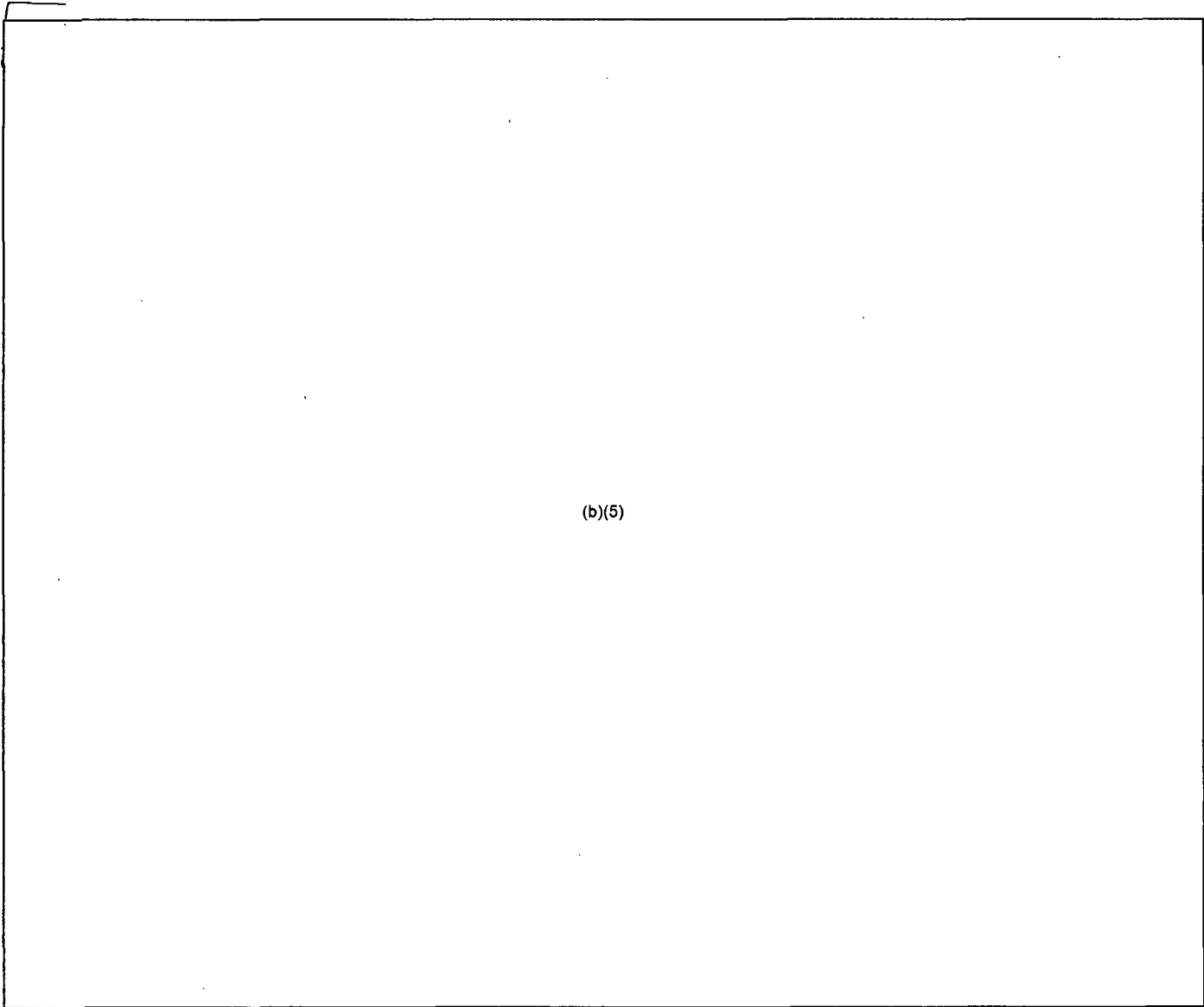
(b)(5)

David Nold, PE
Reactor Systems Engineer

"It's not whether you get knocked down, it's whether you get up." ... Vince Lombardi

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852



(b)(5)

(b)(5)

From: Nold, David
Sent: Thursday, March 17, 2011 10:00 AM
To: Jackson, Christopher
Cc: McKirgan, John
Subject: Electronic Reading Room Errors in Calcs.

Chris

(b)(5)

Dave

From: Nold, David
Sent: Wednesday, March 16, 2011 4:18 PM
To: Reyes, Ruth
Subject: FW: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth:

(b)(5)

Dave

From: Nold, David
Sent: Wednesday, March 16, 2011 1:37 PM
To: Reyes, Ruth
Cc: Monarque, Stephen; McKirgan, John; Jackson, Christopher
Subject: FW: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth

(b)(5)

David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 8:58 AM
To: Nold, David
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

(b)(5)

Talk with Steve. I expect that he is drafting an audit report with audit observations. You can provide him inupt.

CJ

From: Nold, David
Sent: Wednesday, March 16, 2011 1:44 PM
To: Jackson, Christopher
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Chris

(b)(5)

David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 6:24 AM
To: Nold, David
Cc: McKirgan, John
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Dave,

The SER for 6.4 looks good. Attached are some edits.

I know the RAI has already been issued. Can you check to see if the RAI in this SER is consistent with the RAI that was issued?

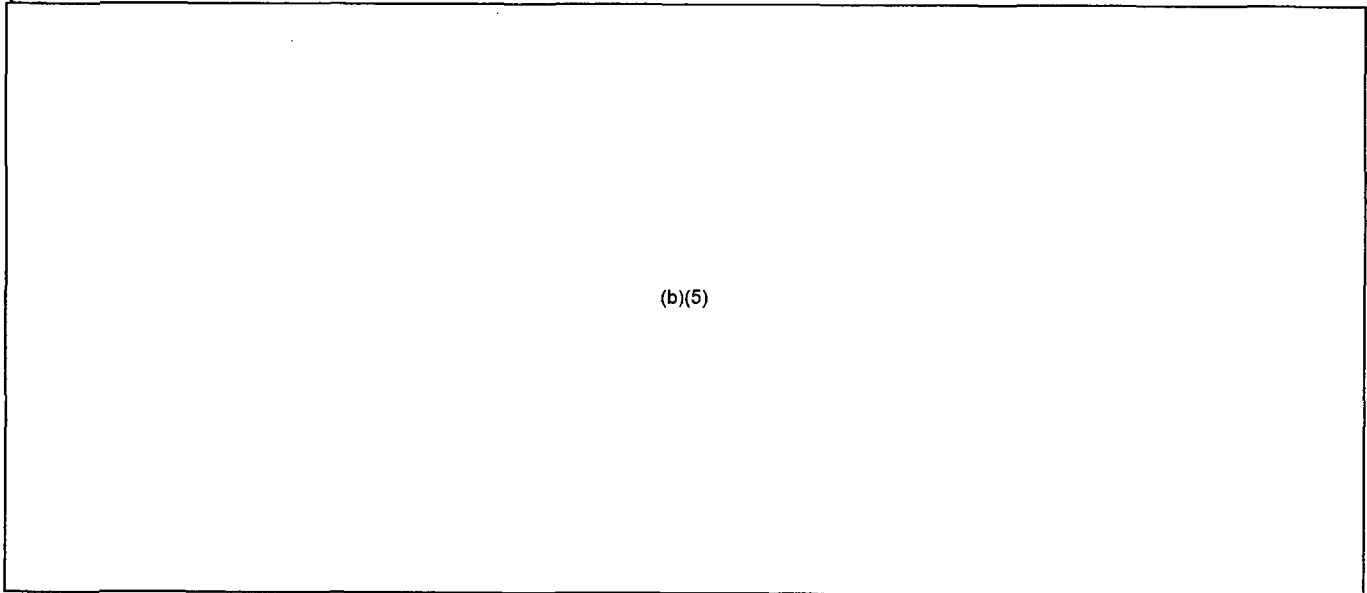
Please issue this SER. Use this e-mail as my concurrence

Pease remind me what the next highest priority is? I believe my notes show CP 9.4.5 is next. Is that correct?

Thanks,
CJ

From: Nold, David
Sent: Tuesday, March 15, 2011 10:33 PM
To: Reyes, Ruth
Cc: Jackson, Christopher; McKirgan, John; Monarque, Stephen
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth



David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Reyes, Ruth
Sent: Tuesday, March 15, 2011 3:43 PM
To: ODriscoll, James; Ashley, Clinton; Hart, Michelle; Nold, David; Peng, Shie-Jeng
Cc: Monarque, Stephen
Subject: FW: Comanche Peak COL chapters 6 and 9

All

Last week at our weekly call with Luminant, they expressed interest on having a conference call to discuss the status of the staff's review of sections 6.2 and 6.4. Please let me know if you are available this week (Wednesday or Thursday) and preference on date/time.

Thanks,
Ruth

From: Monarque, Stephen
Sent: Wednesday, March 09, 2011 10:37 AM
To: Reyes, Ruth
Subject: RE: Comanche Peak COL chapters 6 and 9

Status of the staff's review.

steve

From: Reyes, Ruth
Sent: Wednesday, March 09, 2011 10:36 AM
To: Monarque, Stephen
Subject: RE: Comanche Peak COL chapters 6 and 9

Steve,
What does Luminant want to discuss?

Thanks,
Ruth

From: Monarque, Stephen
Sent: Wednesday, March 09, 2011 10:20 AM
To: Reyes, Ruth; Kallan, Paul
Subject: Comanche Peak COL chapters 6 and 9
Importance: High

We had our weekly call today with Luminant.

Paul – please set up a conference call with the reviewers for sections 9.4.1 and 9.4.5. Luminant wants to know if there are any site specific issues.

Ruth – Please set up a call with chapter 6 reviewers. We can focus on 6.2 ODriscoll and Ashley Clinton and 6.4.

Thanks,

Stephen Monarque
U. S. Nuclear Regulatory Commission
NRO/DNRL/NMIP
301-415-1544

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 5:52 AM
To: Courts, Tonya
Subject: FW: New OpE Forum COMM Posting - DAVIS-BESSE - Radio Frequency Interference from Walkie Talkie Causes Licensee to Declare a Loss of Emergency Feedwater

From: Haskell, Russell
Sent: Friday, March 18, 2011 10:08 PM
Subject: New OpE Forum COMM Posting - DAVIS-BESSE - Radio Frequency Interference from Walkie Talkie Causes Licensee to Declare a Loss of Emergency Feedwater

This e-mail is being sent to notify recipients of a new posting on the @Operating Experience Community Forum. Recipients are expected to review the posting for applicability to their areas of regulatory responsibility and consider appropriate actions. However, information contained in the posting is not tasking; therefore, no specific action or written response is required.

Information Security Reminder: this link is on NRC's Internal Web site and may contain sensitive information. Please check with the information owner before distributing outside the agency.

The posting may be reviewed at:

(b)(5)

It is being provided to the following groups and individuals: ***All Communications, Auxiliary Feedwater, Control Room Habitability, Cyber Security, ECCS, Electrical Power Systems, Emergency Diesel Generators, Fire Protection, Human Performance, HVAC, Instrumentation and Controls, Main Steam & Condensate/Feed Systems, Pump and Valve Performance, Safety Culture, Shutdown Risk, Station Service Water Systems & Ultimate Heat Sink***

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For more information on the Reactor OpE Program, please visit our OpE Gateway at: <http://nrr10.nrc.gov/ope-info-gateway/index.html>

Russell S. Haskell II

United States Nuclear Regulatory Commission (NRC)
Reactor Systems Engineer (NRR/DIRS/TOE.B)

Russell.Haskell@nrc.gov | 301.415.1129 | O-7H23

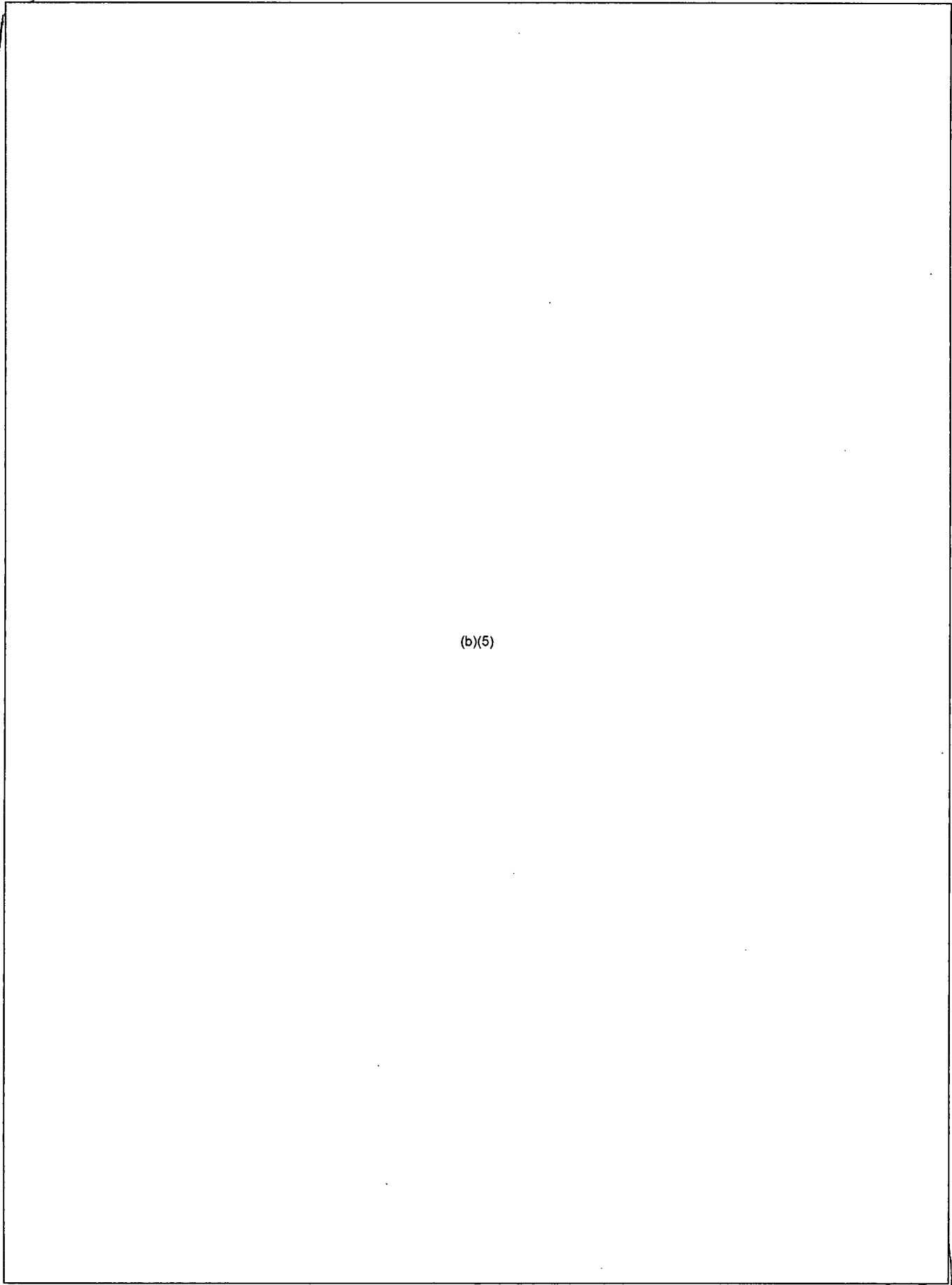
Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 10:40 AM
To: Courts, Tonya
Subject: FW: US APWR and debris allocation

-----Original Message-----

From: Ashley, Clinton
Sent: Monday, March 21, 2011 8:07 PM
To: Jackson, Christopher
Subject: US APWR and debris allocation

(b)(5)



(b)(5)

(b)(5)

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 5:48 AM
To: Courts, Tonya
Subject: FW: MDEP EPRWG MEETING INVITATION
Attachments: Input to AREVA EDF for May 2011 meeting.doc

From: Lawrence.BURKHART@oecd.org [mailto:Lawrence.BURKHART@oecd.org]
Sent: Friday, March 18, 2011 4:38 PM
To: adeline.clos@asn.fr; petteri.tiippana@stuk.fi; Jensen, Walton; Robert.Lojk@cncs-ccsn.gc.ca; Karine.HERVIOU@irsn.fr; yindejian@tsinghua.org.cn; Ian.Streatfield@environment-agency.gov.uk; Dave.Watson@hse.gsi.gov.uk; marie.segaud@asn.fr; ari.julin@stuk.fi; Douglass.Miller@cncs-ccsn.gc.ca; Steve.ND.Graham@hse.gsi.gov.uk; gerard.cenerino@irsn.fr; Donoghue, Joseph; (b)(6); grant.cherkas@cncs-ccsn.gc.ca; Lawrence.Burkhart@oecd.org; Rosales-Cooper, Cindy; Colaccino, Joseph; stephanie.peiro@asn.fr; geoff.grint@hse.gsi.gov.uk; (b)(6); Philippe.Gress@oecd.org; emmanuelle.arial@irsn.fr; Alex.Viktorov@cncs-ccsn.gc.ca; yujun@sepa.gov.cn; mika.johansson@stuk.fi; robert.exley@hse.gsi.gov.uk; robert.moscrop@hse.gsi.gov.uk; Tesfaye, Getachew; (b)(6); Stephanie.HUGON@asn.fr; jacques.devos@asn.fr; David.Newland@cncs-ccsn.gc.ca; Bob.Yates@hse.gsi.gov.uk; Jackson, Terry; Hayes(NRO), Michelle; Jackson, Christopher; tapani.virolainen@stuk.fi; (b)(6); Guillaume.WACK@asn.fr; Marcel.deVos@cncs-ccsn.gc.ca; Williams, Donna; keijo.valtonen@stuk.fi; Curran, Gordon
Subject: FW: MDEP EPRWG MEETING INVITATION

Dear MDEP EPRWG members,

Greetings. Please see below confirmations from Mr Francois Bouteille (AREVA) and Mr Xavier Pouget-Abadie (EDF) on their attending the next ERPWG meeting (and all subgroup meetings) 16 – 19 May 2011 at NEA Headquarters. I have forwarded a rough agenda via email previously and will shortly forward to Petteri another to document how we would like the meeting to run. The idea is to conduct the meeting much like we did in China...start off with only the EPRWG (and whoever wants to come from the subgroups) to do the initial administrative things and the status of reviews in each country. Then AREVA/EDF reps will join to provide a presentation to all on big picture differences – then we breach into the subgroups at which technical experts from EDF/AREVA will give additional presentations. Then we reconvene wrap up the EPRWG on the last day.

(b)(5)

Also attached are the questions I sent to the AREVA/EDF reps from the EPRWG and the subgroups.

Best Regards. Larry

From: BURKHART Lawrence, NEA/SURN
Sent: Wednesday, March 02, 2011 10:25
To: 'BOUTEILLE Francois (AREVA)'; 'xavier.pouget-abadie@edf.fr'
Cc: Petteri.Tiippana@stuk.fi; Guillaume.WACK@asn.fr; Adeline.CLOS@asn.fr; thomas.houdre@asn.fr; REIG Javier, NEA/SURN; Donna.Williams@nrc.gov; gerard.cenerino@irsn.fr; Terry.Jackson@nrc.gov; ari.julin@stuk.fi; Alexandre.Viktorov@cncs-ccsn.gc.ca; xavier.pouget-abadie@edf.fr; Christian CLEMENT
Subject: RE: MDEP EPRWG MEETING INVITATION

Dear Francois and Xavier,

Bonjour! Thank you for accepting our invitation to the next EPRWG meeting. Finalizing the agenda for your portion by the end of March should work very well. If you could send a proposed agenda on what you plan to present to the general EPRWG (which will include EPRWG members and most if not all of the subgroup members also) – that would be great. A list of AREVA/EDF personnel who will attend will also help facilitate getting access to the NEA Headquarters. I think that letting the subgroups interact freely with your subject experts is probably the best way to proceed for the subgroups, although your experts should be ready to address the questions/issues that were documented in the input I sent you.

(b)(5)

(b)(5)

(b)(5)

Very Best Regards.

Larry

From: BOUTEILLE Francois (AREVA) [mailto:francois.bouteille@areva.com]

Sent: Wednesday, March 02, 2011 09:02

To: BURKHART Lawrence, NEA/SURN

Cc: Petteri.Tiippana@stuk.fi; Guillaume.WACK@asn.fr; Adeline.CLOS@asn.fr; thomas.houdre@asn.fr; REIG Javier, NEA/SURN; Donna.Williams@nrc.gov; gerard.cenerino@irsn.fr; Terry.Jackson@nrc.gov; ari.julin@stuk.fi; Alexandre.Viktorov@cnsccsn.gc.ca; xavier.pouget-abadie@edf.fr; Christian CLEMENT

Subject: RE: MDEP EPRWG MEETING INVITATION

Dear Mr. Burkhart,

We wish to thank you for your invitation. We will participate and prepare ourselves to contribute according to the general agenda you sent us. This effort will be coordinated with EDF. I assume that the other Operators which are involved in EPR construction or licensing projects are also invited.

With our best regards.

François Bouteille

Reactor & Services Business Group - Products & Technology

Senior Vice President Safety & Licensing

+33134968464 GSM +33610455646

francois.bouteille@areva.com

De : Lawrence.BURKHART@oecd.org [mailto:Lawrence.BURKHART@oecd.org]

Envoyé : lundi 28 février 2011 15:13

À : BOUTEILLE Francois (RS/PT); xavier.pouget-abadie@edf.fr

Cc : Petteri.Tiippana@stuk.fi; Guillaume.WACK@asn.fr; Adeline.CLOS@asn.fr; thomas.houdre@asn.fr; Javier.REIG@oecd.org; Donna.Williams@nrc.gov; gerard.cenerino@irsn.fr; Terry.Jackson@nrc.gov; ari.julin@stuk.fi; Alexandre.Viktorov@cnsccsn.gc.ca

Objet : RE: MDEP EPRWG MEETING INVITATION

Dear Mr Bouteille and Mr Pouget-Abadie,

Bonjour! Just to followup on last week's email. Please find attached some input to inform your presentations to the EPRWG (and technical expert subgroups) for the EPRWG meeting that is being held 16 – 19 May at NEA Headquarters. WE are inviting you for the 17 and 18 May portions (and perhaps the two of you for part of the 19th) to give presentations and participate in discussions focusing on differences among the various EPR designs and how these differences may affect the safety cases. There is specific input from each subgroup also regarding what they would like to discuss with your experts. (I have copied our EPRWG chair and co-chair and technical expert subgroup chairs to keep them updates also).

Also attached is the AREVA presentation that was given to the MDEP EPRWG in November 2008 on the differences among the designs in Finland, France, and the U.S.

We look forward to meeting with you in May (Let's stay in touch to refine the agenda).

Best Regards. Larry

From: BURKHART Lawrence, NEA/SURN
Sent: Wednesday, February 23, 2011 12:07
To: BOUTEILLE Francois (AREVA); 'xavier.pouget-abadie@edf.fr'
Cc: 'Petteri.Tiippana@stuk.fi'; WACK Guillaume; 'CLOS Adeline'; 'thomas.houdre@asn.fr'; REIG Javier, NEA/SURN; 'Williams, Donna'
Subject: MDEP EPRWG MEETING INVITATION

Dear Mr. Bouteille and Mr. Pouget-Abadie,

Bonjour! I am following up for the MDEP EPRWG regarding inviting you to portions of our next EPRWG meeting scheduled at NEA Headquarters 16 – 19 May 2011. I will forward to you shortly more details about what the EPRWG and the subgroups on Accidents and Transients, PSA, DI&C, and Severe Accidents would like to hear from you. But, in general, we would like to invite you to provide a follow-up presentation to the one you have about 2 yrs ago on the differences among the designs that are being licenses in each country (Canada, China, Finland, France, U.K., and the U.S. – we know that the EPR review in Canada is on hold but if there is anything worth mentioning please let us know) and the bases for those differences and impacts on the safety cases.

So the idea is that the EPRWG members will start their meeting on Monday afternoon 16 May 2011 (this will only be the EPRWG members and subgroup members and include normal administrative issues)

We would like to invite you to attend the meeting on Tuesday morning (probably around 09h00) to meet everyone and provide a presentation on the overall high level design differences. I will provide more info on what we would like to hear about soon. The MDEP attendees will be all of the EPRWG members and most of the 4 subgroups members – probably 30 – 35 people in total on our end. We have reserved a room large enough to accommodate (I will need to know the names of persons from your organizations to provide access to the building).

On Tuesday afternoon, the group will break into the 4 subgroups to start their meetings at which we invite your representatives to attend portions of these meetings to address the issues each subgroup would like to heard about (again I will provide more info/questions from each subgroup on this topic very shortly). Note that the subgroup meetings are planned to be conducted simultaneously – 4 meetings going on at the same time. Is that something that you can support?

The subgroup meetings will continue into Wed (I believe that your representatives will be invited also). There may be portions of the meeting that are appropriate for only MDEP representatives due to administrative nature of some tasks.

On Wed afternoon or Thursday morning (more likely Thursday morning) the EPRWG will reconvene to get reports from each subgroup. We may ask that you be there so we can give any feedback that is necessary and hear from you also about the usefulness of the meetings. But we will invite you just for a portion of that day's meeting (most likely the morning) as there are other administrative things that we need to do also prior to adjourning the meeting.

The EPRWG will adjourn the meeting by Thursday afternoon.

Please let me know your and your subject expert's availability for Tuesday, Wed, and Thursday morning.

Again, I will provide you more details regarding issues and questions from the subgroups very soon.

Thank you for accepting our invitation to join portions of this meeting and we look forward to meeting with you again.

Best Regards.

Larry Burkhart
Project Officer - Multinational Design Evaluation Programme
OECD Nuclear Energy Agency

Multinational Design Evaluation Programme
EPRWG Meeting – 16 – 19 May 2011

MDEP EPRWG Meeting 16 – 19 May 2011

MDEP EPRWG Meeting 16 – 19 May 2011

Input to AREVA/EDF on issues surrounding EPR designs being licensing in Canada, China, Finland, France, the U.K., and the U.S.

EPRWG MEETING 16 - 19 MAY 2011

Input for AREVA/EDF regarding topics EPRWG members would like to discuss

Purpose

- To fully understand the differences among the EPR designs that are being licensed in Canada, China, Finland, France, the U.K., and the U.S. especially those differences that are significant to the safety reviews

Discussion

At the November 2008 MDEP EPRWG meeting, AREVA representatives gave a presentation to the working group about differences among the designs that were being licensed in Finland (OL3), France (FA3), and the U.S. (US EPR). The intent of AREVA/EDF involvement in the May 2011 meeting is to get an update on the differences among the designs that are currently being reviewed in Canada (review suspended - but we understand the design is the same as the US EPR), China (Taishan units), Finland (OL3), France (FA3), the U.K. (UK EPR), and the U.S. (US EPR). A focus on the differences, basis of differences, and corresponding effect on the safety case and review should be a priority.

AREVA/EDF representatives are invited to provide presentations to the EPRWG and to the four technical expert subgroups on (1) Accidents and Transients, (2) Probabilistic Safety Assessment, (3) Severe Accidents, and (4) Digital Instrumentation and Control. Specific questions/issues are presented below for each of these groups. It is envisioned that the high level differences will be discussed at the EPRWG level and more detailed discussions will be undertaken with each technical expert subgroup.

The EPRWG meeting is being held at NEA Headquarters 16 - 19 May 2011. AREVA/EDF is invited to take part in the EPRWG meeting starting on 17 May 2011 through 18 May 2011. This will include a portion with the entire group in the morning of 17 May and then experts invited to the technical expert subgroups in the afternoon of 17 May and 18 May 2011. Some representatives of AREVA/EDF may be invited to attend 19 May 2011.

EPRWG INTERESTS

The EPRWG invites AREVA/EDF to provide a presentation on the overall differences among the different designs that are being licensed in each MDEP EPRWG country to include summaries of the differences in the following design aspects:

- (1) Design of systems, structures, and components
- (2) Reason for differences
- (3) Impact of differences on safety case and evaluation
- (4) Mechanical and electrical (and other – construction) codes and standards
- (5) Analyses and evaluation methodologies of SSC's performance, accidents, and transients, etc.
- (6) Site issues (where it affects differences in designs)
- (7) Safety Classification scheme differences and how it impacts design/evaluation/etc.
- (8) Areas where the designs have converged since the November 2008 presentation
- (9) Areas where the designs have diverged since the November 2008 presentation
- (10) Other countries in which the EPR is being licensed or will be offered for licensing

There are specific questions/issues that the technical expert subgroups would like to discuss with experts from AREVA/EDF. These may be touched upon in the general EPRWG meeting but detailed discussion should be left to the subgroup portions of the meetings.

ACCIDENTS AND TRANSIENTS TECHNICAL EXPERT SUBGROUP

- (1) Design differences and underlying reasons, and their impact on safety analysis
 - Differences in control rod design
 - Differences in equilibrium loading patterns and power distributions (12-, 18-, 24-month cycles), base load versus load following
 - Sump design, insulation, testing, chemical effects
 - Justification of criticality control during fuel loading
- (2) List of analyzed events (included in Preliminary Safety Evaluation Report [PSAR]/Final Safety Evaluation Report [FSAR] or equivalent) for each country. The list should include design basis

accidents (DBA) as well as risk reduction categories (RRC), design extension cases (DEC), beyond design basis accidents (BDBA) events, and special events.

(3) Differences in Analysis of large break loss of coolant accident (LB LOCA)

(4) Use of Probabilistic Safety Assessment/Probabilistic Risk Assessment (PSA/PRA) results in accident and transient analysis, and influence of differences in designs and regulatory requirements on selections of events in

- RRC- A (B?)
- DEC 1 (2?)
- BDBA (Severe Accidents?)

PROBABILISTIC SAFETY ASSESSMENT TECHNICAL EXPERT SUBGROUP

The EPRWG PSA Subgroup will perform a comparison of EPR PSAs in the near future (One of the issues to discuss is that authorization is needed for sharing the input data for PSA comparison from the EDF and AREVA). To support the production of this comparison, the following information would be valuable:

(1) Main design differences affecting the risk

- SSCs, layout, operation, etc.

(2) Main differences in PSA modelling (Level 1)

- Scope
- IE grouping and frequencies
- Modelling of accident progression
- Modelling of support system dependencies (cooling, electrical, ventilation, etc.)
- Modelling of Internal and external hazards
- Assumption and definitions
- Regulatory requirements

(3) (Potential) Reasons for differences

SEVERE ACCIDENT TECHNICAL EXPERT SUBGROUP

- (1) Regarding the Core catcher (from cavity pit to spreading room), please describe the similarities and differences among the configurations and design of the core catcher and the deployment of the associated instrumentation.
- (2) Regarding the containment heat removal system (CHRS), please describe the similarities and differences among the configurations, design and deployment strategies of CHRS/SAHRS (severe accident heat removal system) during severe accident conditions and design basis accident.
- (3) Regarding the PDS, please describe the similarities and differences among the configurations, design and deployment strategies of PDS during severe accident conditions and design basis accident.
- (4) In addressing containment venting management, please describe the similarities and differences among the containment venting strategies to mitigate severe accident consequences.
- (5) Regarding the 2-room concept, Please describe the similarities and differences among the concepts of hydrogen concentration control and provide the set points for opening hydrogen mixing dampers and rupture/convection foils.
- (6) Regarding Equipment/Instrumentation Qualification, please describe the key Equipment/Instrumentation Qualification criteria dedicated to the Severe Accident conditions adopted for the plant and whether there are any differences between the proposed criteria for the different countries.

DIGITAL INSTRUMENTATION AND CONTROLS

Since the Digital Instrumentation and Controls systems of the EPR have been of interest to almost every MDEP regulator, the DI&C technical expert subgroup would like to discuss similarities and differences in the DI&C safety systems among the various designs. Of interest would be to hear AREVA/EDF's perspective about convergence of this aspect of the designs since the November 2008 presentation. Specifically, the following systems are of interest to the DI&C subgroup:

Top Priority

- Backup Systems (Backup Systems include the Hard Kernel System (FA3/Taishan), the Non-Computer based Safety System (UK-EPR), the Hard-wired Backup System (OI.3), and the Diverse Backup System (US-EPR)
 - Technology – platform used
 - Architecture
 - Functional scope
 - Interface with other systems

Multinational Design Evaluation Programme
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- Human-machine interface
- Service Unit connections
- SICS design (architecture, functions, operational status – standby or continuous operation, interface with other systems)

Lower Priority

- PICS and safety system data links
- Data communication links (plant network, SAS bus, terminal bus, QDS bus)
- SPPA-T2000
 - Monitoring operation – life signal
 - Qualification
 - Quality demonstration
 - Classification (Class 2 or 3 / F1B or F2)
- Reliability claims for I&C systems
- PACS (design, technology, interfaces)
- Severe Accident I&C (platform, interfaces, functions)
- Signal conditioning systems (i.e., PIPS)

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 5:34 AM
To: Courts, Tonya
Subject: FW: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

From: Nold, David
Sent: Thursday, March 17, 2011 6:30 PM
To: McKirgan, John; Jackson, Christopher
Subject: FW: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

The public version of Revision 2 of the FSAR has Table 2 2-214 with the gallons listed for the subject RAI chemicals. [REDACTED] (b)(5)

[REDACTED] (b)(5)

From: Nold, David
Sent: Thursday, March 17, 2011 1:14 PM
To: McKirgan, John
Cc: Jackson, Christopher
Subject: RE: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

[REDACTED] (b)(5)

From: McKirgan, John
Sent: Thursday, March 17, 2011 12:35 PM
To: Nold, David; Jackson, Christopher
Subject: RE: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

[REDACTED] (b)(5)

From: Nold, David
Sent: Thursday, March 17, 2011 12:30 PM
To: Jackson, Christopher
Cc: McKirgan, John
Subject: FW: Electronic Reading Room Errors in Calcs. -- Comanche Peak NEW RAI

Chris:

[REDACTED] (b)(5)

(b)(5)

David Nold, PE
Reactor Systems Engineer

"It's not whether you get knocked down, it's whether you get up." ... Vince Lombardi

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell) -
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

(b)(5)

(b)(5)

(b)(5)

From: Nold, David
Sent: Thursday, March 17, 2011 10:00 AM
To: Jackson, Christopher
Cc: McKirgan, John
Subject: Electronic Reading Room Errors in Calcs.

Chris

(b)(5)

Dave

From: Nold, David
Sent: Wednesday, March 16, 2011 4:18 PM
To: Reyes, Ruth
Subject: FW: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth:

Thanks for the rapid response! Steve Monarque called me back and suggested a different approach i.e. writing a RAI. **After talking it over with John McKirgan, our approach will be to issue an RAI as an Open Item**

against the SER for 6.4. Hopefully, Chris Jackson will agree with this approach and we can get the RAI to you before the end of the week.

Dave

From: Nold, David
Sent: Wednesday, March 16, 2011 1:37 PM
To: Reyes, Ruth
Cc: Monarque, Stephen; McKirgan, John; Jackson, Christopher
Subject: FW: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth

(b)(5)

David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 8:58 AM
To: Nold, David
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

(b)(5)

(b)(5)

Talk with Steve. I expect that he is drafting an audit report with audit observations. You can provide him inupt.

CJ

From: Nold, David
Sent: Wednesday, March 16, 2011 1:44 PM
To: Jackson, Christopher
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Chris

(b)(5)

David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 6:24 AM
To: Nold, David
Cc: McKirgan, John
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Dave.

The SER for 6.4 looks good. Attached are some edits.

I know the RAI has already been issued. Can you check to see if the RAI in this SER is consistent with the RAI that was issued?

Please issue this SER. Use this e-mail as my concurrence.

Pease remind me what the next highest priority is? I believe my notes show CP 9.4.5 is next. Is that correct?

Thanks,
CJ

From: Nold, David
Sent: Tuesday, March 15, 2011 10:33 PM
To: Reyes, Ruth
Cc: Jackson, Christopher; McKirgan, John; Monarque, Stephen
Subject: RE: Comanche Peak COL chapters 6 and 9 -- 6.4 Status Update

Ruth

(b)(5)

David Nold, PE
Reactor Systems Engineer

NRO/DSRA/SPCV
david.nold@nrc.gov
301-415-2273 (work)
(b)(6) (cell)
301-415-5062 (FAX)

U.S. NRC
Mail Stop: TWFN -- 10E50M
Work Location TWFN-10C05
11555 Rockville Pike
Rockville, MD 20852

From: Reyes, Ruth
Sent: Tuesday, March 15, 2011 3:43 PM
To: ODriscoll, James; Ashley, Clinton; Hart, Michelle; Nold, David; Peng, Shie-Jeng
Cc: Monarque, Stephen
Subject: FW: Comanche Peak COL chapters 6 and 9

All

Last week at our weekly call with Luminant, they expressed interest on having a conference call to discuss the status of the staff's review of sections 6.2 and 6.4. Please let me know if you are available this week (Wednesday or Thursday) and preference on date/time.

Thanks,
Ruth

From: Monarque, Stephen
Sent: Wednesday, March 09, 2011 10:37 AM
To: Reyes, Ruth
Subject: RE: Comanche Peak COL chapters 6 and 9

Status of the staff's review.

steve

From: Reyes, Ruth
Sent: Wednesday, March 09, 2011 10:36 AM
To: Monarque, Stephen
Subject: RE: Comanche Peak COL chapters 6 and 9

Steve,
What does Luminant want to discuss?

Thanks,
Ruth

From: Monarque, Stephen
Sent: Wednesday, March 09, 2011 10:20 AM
To: Reyes, Ruth; Kallan, Paul
Subject: Comanche Peak COL chapters 6 and 9
Importance: High

We had our weekly call today with Luminant.

Paul – please set up a conference call with the reviewers for sections 9.4.1 and 9.4.5. Luminant wants to know if there are any site specific issues.

Ruth – Please set up a call with chapter 6 reviewers. We can focus on 6.2 ODriscoll and Ashley Clinton and 6.4.

Thanks,

Stephen Monarque
U. S. Nuclear Regulatory Commission
NRO/DNRL/NMIP
301-415-1544

Courts, Tonya

From: Jackson, Christopher
Sent: Thursday, March 31, 2011 10:03 AM
To: Courts; Tonya
Subject: FW: Your password has been changed.

From: route@fedjobs.gov [mailto:route@fedjobs.gov]
Sent: Monday, March 21, 2011 10:01 AM
To: Jackson, Christopher
Subject: Your password has been changed.

This message is to inform you that the password for your USAJOBS account has been reset. Your username remains the same and is (b)(6). If you have any questions or issues, please feel free to contact us at mavday@fedjobs.gov. We wish you success in your career working as a part of the Federal government.

Sincerely,
The USAJOBS Support Team

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 5:00 AM
To: Courts, Tonya
Subject: FW: did you call? if not pls call (b)(6) eom

From: Jackson, Christopher
Sent: Friday, March 18, 2011 4:31 PM
To: 'Diane.JACKSON@oecd.org'
Subject: did you call? if not pls call (b)(6) eom

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 10:45 AM
To: Courts, Tonya
Subject: [REDACTED] (b)(6)

-----Original Message-----

From: [REDACTED] (b)(6)
Sent: Friday, March 11, 2011 1:41 PM
To: [REDACTED] (b)(6)
Cc: Jackson, Christopher
Subject: [REDACTED] (b)(6)

[REDACTED] (b)(6)

From: [REDACTED] (b)(6)
Sent: Thursday, March 10, 2011 8:57 AM
To: [REDACTED] (b)(6)
Subject: [REDACTED] (b)(6)

[REDACTED] (b)(6)

----- Message d'origine -----

De : [REDACTED] (b)(6)
À : [REDACTED] (b)(6)
Objet : [REDACTED] (b)(6)
Date : 11/01/2011 09:52:36 CET
Copie à : Christopher.Jackson@nrc.gov

[REDACTED] (b)(6)

(b)(6)

(b)(6)

From: (b)(6)
Sent: Monday, January 10, 2011 22:38
To: (b)(6)
Subject: (b)(6)

(b)(6)

--- Message d'origine ---

De : (b)(6)
À : (b)(6)
Objet : (b)(6)
Date : 10/01/2011 11:03:32 CET

(b)(6)

(b)(6)

From: (b)(6)
Sent: Monday, January 10, 2011 10:23
To: (b)(6)
Subject: (b)(6)

(b)(6)

----- Message d'origine -----

De: (b)(6)
À: (b)(6)
Objet: (b)(6)
Date: 10/01/2011 10:07:34 CET
Copie à : Christopher.Jackson@nrc.gov

(b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Monday, March 28, 2011 12:52 PM
To: Courts, Tonya
Subject: FW: (b)(6)

From: Jackson, Christopher
Sent: Tuesday, March 15, 2011 3:41 PM
To: Tammara, Seshagiri
Subject: (b)(6)

(b)(6)

CJ

From: (b)(6)
Sent: Tuesday, March 15, 2011 3:19 PM
To: Jackson, Christopher
Subject: (b)(6)

Chris:

(b)(6)

From: Jackson, Christopher
Sent: Tuesday, March 15, 2011 8:59 AM
To: (b)(6)
Subject: (b)(6)

(b)(6)

Thank you,
Christopher JACKSON

Courts, Tonya

From: Jackson, Christopher
Sent: Monday, March 28, 2011 12:50 PM
To: (b)(6)
Subject: (b)(6)

From: Jackson, Christopher
Sent: Tuesday, March 15, 2011 12:21 PM
To: (b)(6)
Subject: (b)(6)

(b)(6)

From: (b)(6)
Sent: Tuesday, March 15, 2011 10:11 AM
To: Jackson, Christopher
Subject: (b)(6)

(b)(6)

Update your bookmarks! On 1 December 2010, the NEA is moving to: www.oecd-nea.org

From: Jackson, Christopher [mailto:Christopher.Jackson@nrc.gov]
Sent: Tuesday, March 15, 2011 09:20
To: (b)(6)
Subject: (b)(6)

From: (b)(6)
Sent: Tuesday, March 15, 2011 9:02 AM
To: Jackson, Christopher
Subject: (b)(6)

(b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Monday, March 28, 2011 12:44 PM
To: [redacted]
Subject: [redacted] (b)(6)

From: Jackson, Christopher
Sent: Tuesday, March 15, 2011 12:20 PM

To: [redacted] (b)(6)
Subject: [redacted] (b)(6)

[redacted] (b)(5)

From: [redacted] (b)(6)
Sent: Tuesday, March 15, 2011 9:02 AM
To: Jackson, Christopher
Subject: [redacted] (b)(6)

[redacted] (b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 4:43 AM
To: Courts, Tonya
Subject: [Redacted] (b)(6)

From: [Redacted] (b)(6)
Sent: Wednesday, March 16, 2011 10:50 AM
To: [Redacted] (b)(6)
Subject: [Redacted] (b)(6)

[Redacted] (b)(6)

[Redacted] (b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 3:49 AM
To: (b)(6)
Subject: (b)(6)

From: Jackson, Christopher
Sent: Wednesday, March 16, 2011 9:40 AM

To: (b)(6)
Subject: (b)(6)

(b)(6)

From: (b)(6)
Sent: Wednesday, March 16, 2011 8:11 AM
To: (b)(6)
Subject: (b)(6)

(b)(6)

(b)(6)

> Message du 15/03/11 13:58

> De : "Jackson, Christopher"

> A : (b)(6)

> Copie à :

> Objet : (b)(6)

>
>
>
(b)(6)

Thank you,
Christopher JACKSON

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 5:43 AM
To: (b)(6)
Subject: (b)(6)
Attachments: (b)(6)

v2

From: (b)(6)
Sent: Friday, March 18, 2011 4:17 PM
To: (b)(6)
Cc: Jackson, Christopher
Subject: (b)(6)

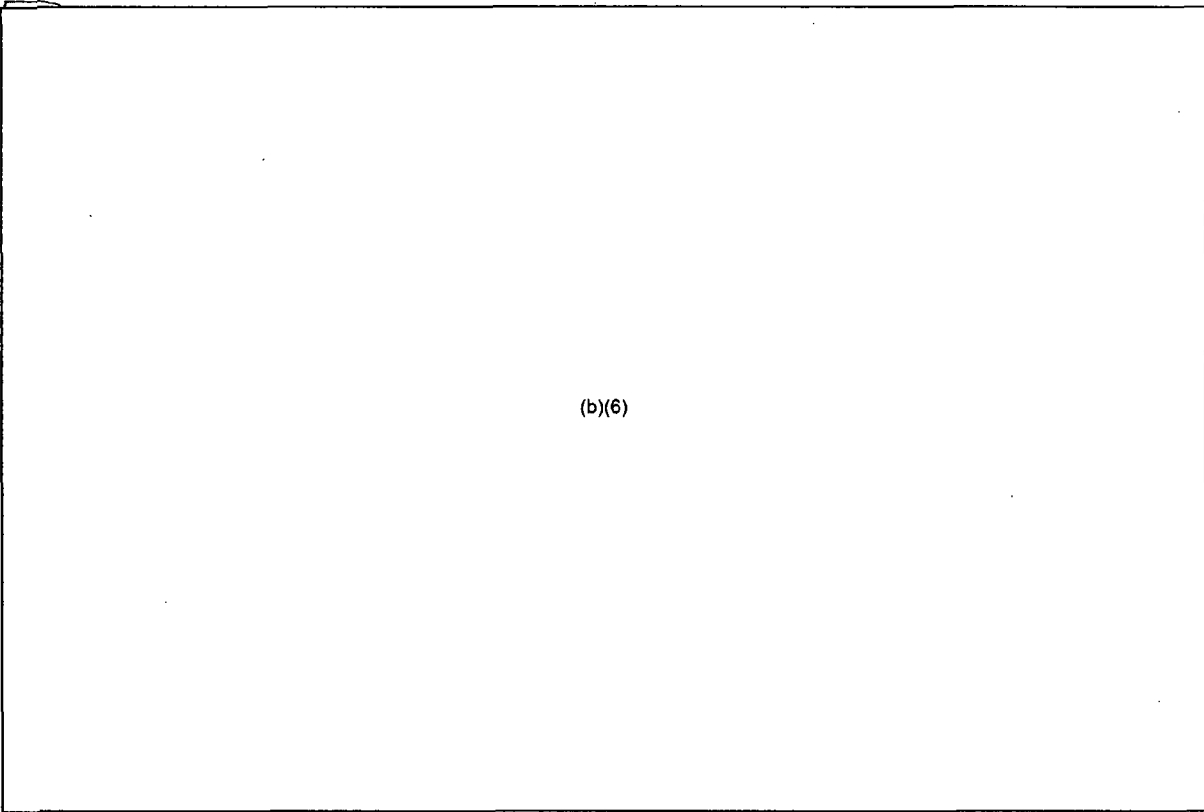
Dear Norman –

(b)(6)

Diane

(b)(6)

(b)(6)



(b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 5:00 AM
To: Courts, Tonya
Subject: (b)(6)

From: Jackson, Christopher
Sent: Monday, March 21, 2011 10:17 AM
To: (b)(6)
Subject: (b)(6)

(b)(6)

Chris

From: (b)(6)
Sent: Saturday, March 19, 2011 9:40 PM
To: (b)(6) Jackson, Christopher
Subject: (b)(6)

(b)(6)

(b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 5:07 AM
To: Courts, Tonya
Subject: FW: Kathy Haney in town..group NRC dinner tonight

From: Jackson, Christopher
Sent: Monday, March 21, 2011 1:16 PM
To: 'Diane.JACKSON@oecd.org'
Subject: RE: Kathy Haney in town..group NRC dinner tonight

I think you should go.


CJ

From: Diane.JACKSON@oecd.org [<mailto:Diane.JACKSON@oecd.org>]
Sent: Monday, March 21, 2011 12:22 PM
To: Jackson, Christopher
Subject: Kathy Haney in town..group NRC dinner tonight

CJ -

Kathy Haney is in town. Janice is arranging a dinner tonight at Café Constant. 7 or 7.30. One of us should go. Would you like to go?

Café Constant
139 Rue Saint-Dominique
75007 Paris

 **Diane Jackson**, Nuclear Safety Specialist
Nuclear Safety Division, OECD Nuclear Energy Agency (NEA)
Tel.: +33 (0)1 45 24 10 55, Diane.Jackson@oecd.org

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 5:08 AM
To: Courts, Tonya
Subject: [redacted] (b)(6)

From: Jackson, Christopher
Sent: Monday, March 21, 2011 10:24 AM
To: [redacted] (b)(6)
Subject: [redacted] (b)(6)


[redacted] (b)(6)

CJ

Courts, Tonya

From: Jackson, Christopher
Sent: Thursday, March 31, 2011 9:18 AM
To: Courts, Tonya
Subject: FW: Dinner Tonight
Attachments: image001.gif

From: Diane.JACKSON@oecd.org [mailto:Diane.JACKSON@oecd.org]
Sent: Monday, March 21, 2011 12:31 PM
To: Jackson, Christopher
Subject: FW: Dinner Tonight

 **Diane Jackson**, Nuclear Safety Specialist
Nuclear Safety Division, OECD Nuclear Energy Agency (NEA)
Tel.: +33 (0)1 45 24 10 55, Diane.Jackson@oecd.org


From: DUNN LEE Janice, NEA
Sent: Monday, March 21, 2011 12:30
To: Smith, Shawn; JACKSON Diane, NEA/SURN; NAKOSKI John, NEA/SURN; LEE Steven, IEA/SPT/ETP
Subject: Dinner Tonight

Bonjour everyone,

The dinner plan with Cathy Haney and Shawn Smith is confirmed for Monday, March 21 at Café Constant at 139 Rue Saint-Dominique 75007, Paris. Metro stop is Ecole Militaire.

The restaurant does not take reservations, but since we are Americans, we can show up earlier. I suggest we meet no later than 7:30 to ensure a table.

Diane and John, please confirm if you are available.

 **Janice Dunn Lee**
Deputy Director-General
OECD Nuclear Energy Agency (NEA)
Tel.: +33 (0)1 45 24 10 02
janice.dunnlee@oecd.org

Courts, Tonya

From: Jackson, Christopher
Sent: Wednesday, March 30, 2011 10:35 AM
To: Courts, Tonya
Subject: (b)(6)

From: Tracy, Glenn
Sent: Tuesday, March 22, 2011 6:55 PM
To: 'Diane.JACKSON@oecd.org'
Cc: Jackson, Christopher
Subject: (b)(6)

(b)(6)

From: Diane.JACKSON@oecd.org <Diane.JACKSON@oecd.org>
To: Tracy, Glenn
Cc: Jackson, Christopher
Sent: Tue Mar 22 06:43:07 2011
Subject: (b)(6)

(b)(6)

Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 9:43 AM
To: Courts, Tonya
Subject: [redacted] (b)(6)

From: Jackson, Christopher
Sent: Tuesday, March 22, 2011 10:32 AM
To: [redacted] (b)(6)
Subject: [redacted] (b)(6)

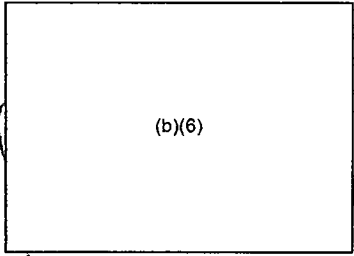
Chris,

[redacted] (b)(6)

Chris Jackson

From:
Sent: Tuesday, March 22, 2011 09:14
Cc: [redacted] (b)(6)
Subject: [redacted] (b)(6)

[redacted] (b)(6)



Courts, Tonya

From: Jackson, Christopher
Sent: Tuesday, March 29, 2011 10:40 AM
To: Courts, Tonya
Subject: [redacted] (b)(6)

From: Jackson, Christopher
Sent: Wednesday, March 23, 2011 4:34 PM
To: [redacted] (b)(6)
Subject: [redacted] (b)(6)

[redacted] (b)(6)

From: [redacted] (b)(6)
Sent: Wednesday, March 23, 2011 3:44 PM
To: Jackson, Christopher
Subject: [redacted] (b)(6)

[redacted] (b)(6)

[redacted] (b)(6)

From: Jackson, Christopher [<mailto:Christopher.Jackson@nrc.gov>]
Sent: Wednesday, March 23, 2011 5:02 AM
To: [redacted] (b)(6)
Subject: [redacted] (b)(6)

[redacted] (b)(6)

(b)(6)

Chris Jackson

From: [Shockley Honda](#)
To: [Munson, Clifford](#)
Subject: Don't Miss the Next Ladies Day at Shockley Honda!
Date: Friday, March 11, 2011 2:11:36 PM





Shockley Honda
7400 Shockley Dr Frederick, MD 21704
301-694-5400

If you no longer wish to receive email from Shockley Honda, please [click here](#) to unsubscribe.



Munson, Clifford

From: Vega, Frankie
Sent: Friday, March 11, 2011 5:07 PM
To: Cook, Christopher; Munson, Clifford
Cc: Xi, Zuhan; Martin, Karnisha
Subject: CPNPP Summary and Tech Eval for SER 2.5.4
Attachments: List of Reference.docx; CPNPP 254 - Summary (2)03_08_2011.docx; CPNPP 254-TEval1 (2)03_09_2011.docx

Hi all;

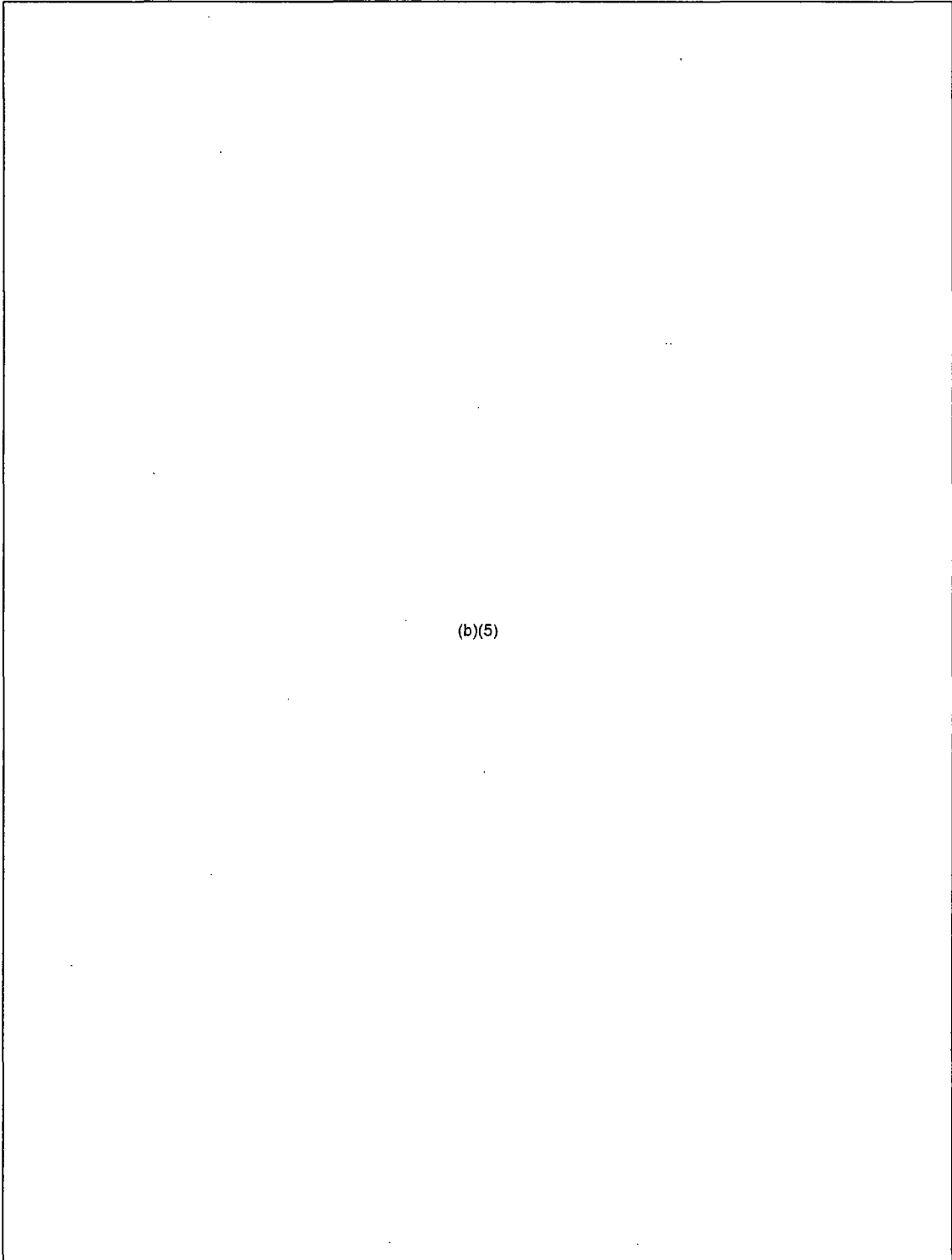
I've attached the latest version of the CPNPP Summary and Tech Eval for SER 2.5.4. Please note that we haven't received any feedback on SER 2.5.5.

Thanks



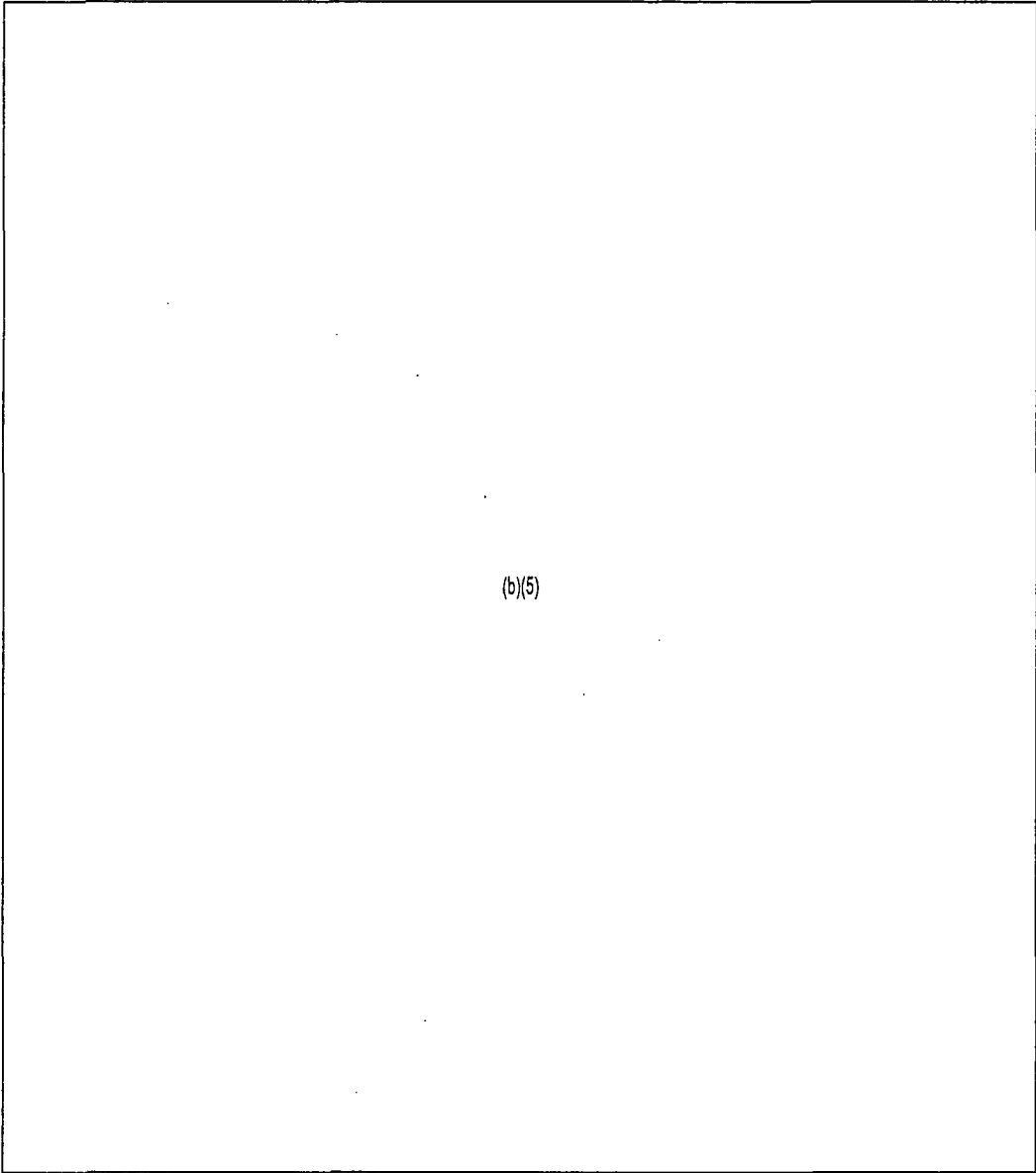
Frankie G. Vega
NRO/DSER/RGS1
301-415-1617
Location: T-7C04

CPNPP SER 2.5.4
List of Reference

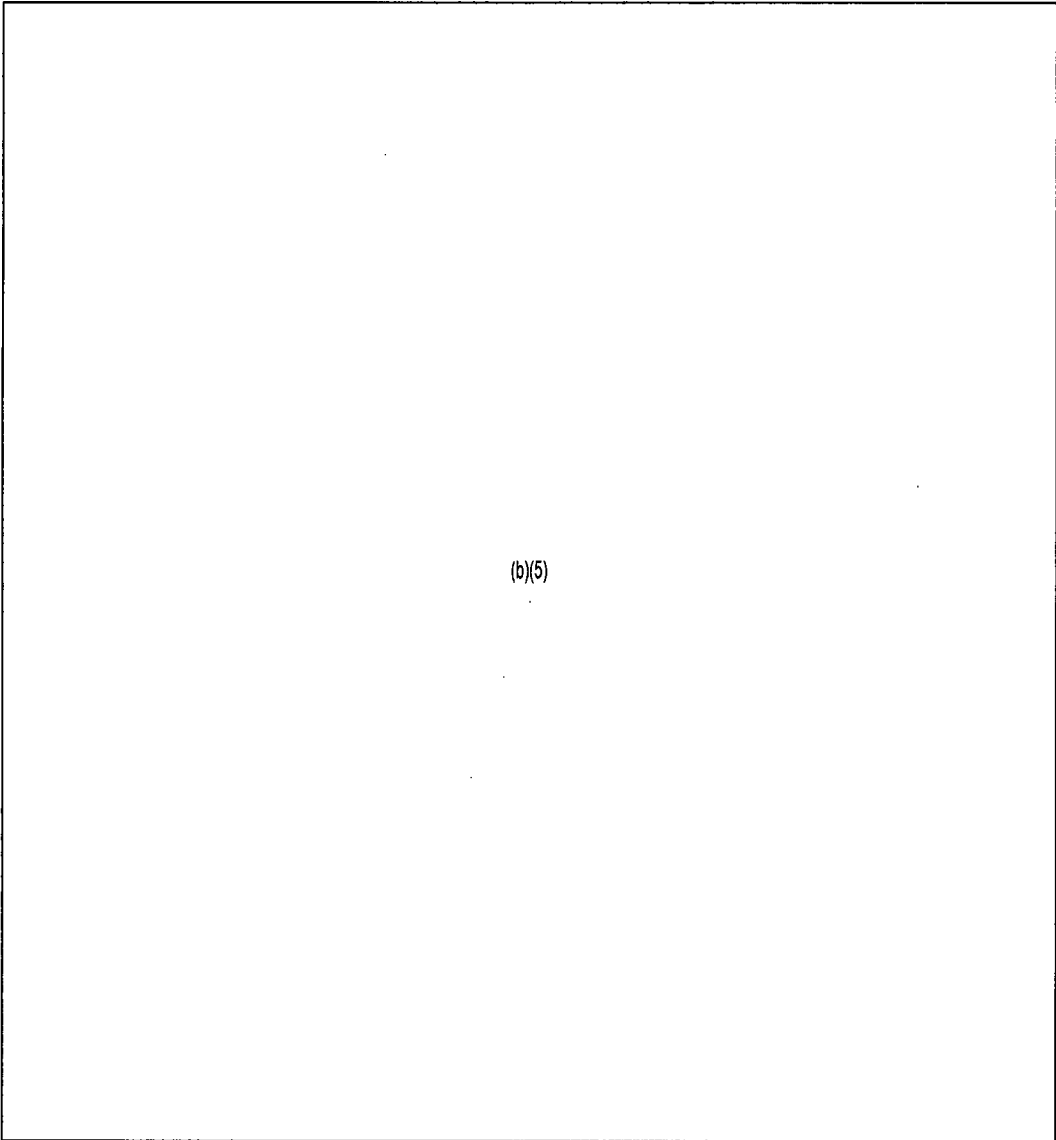


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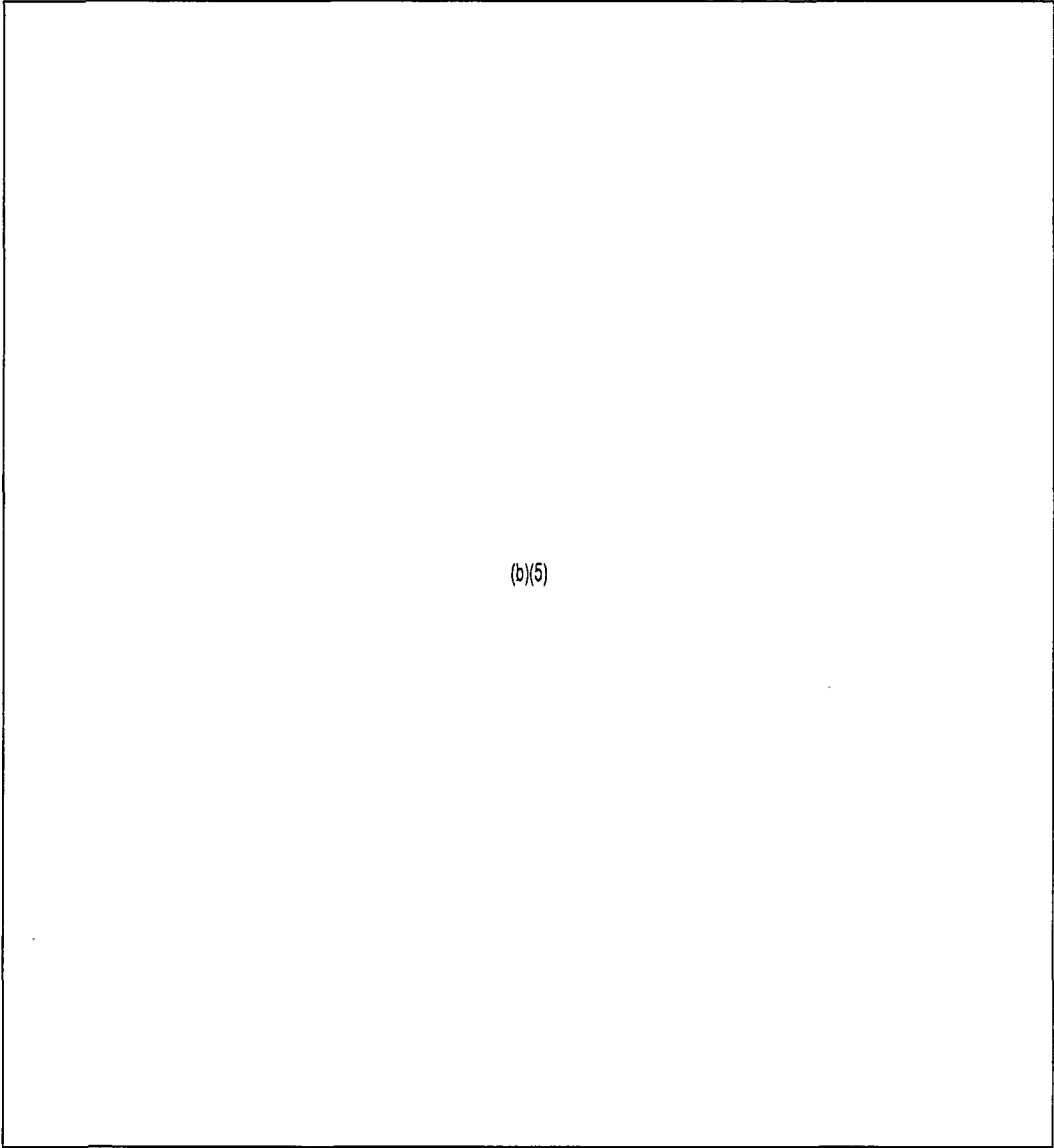
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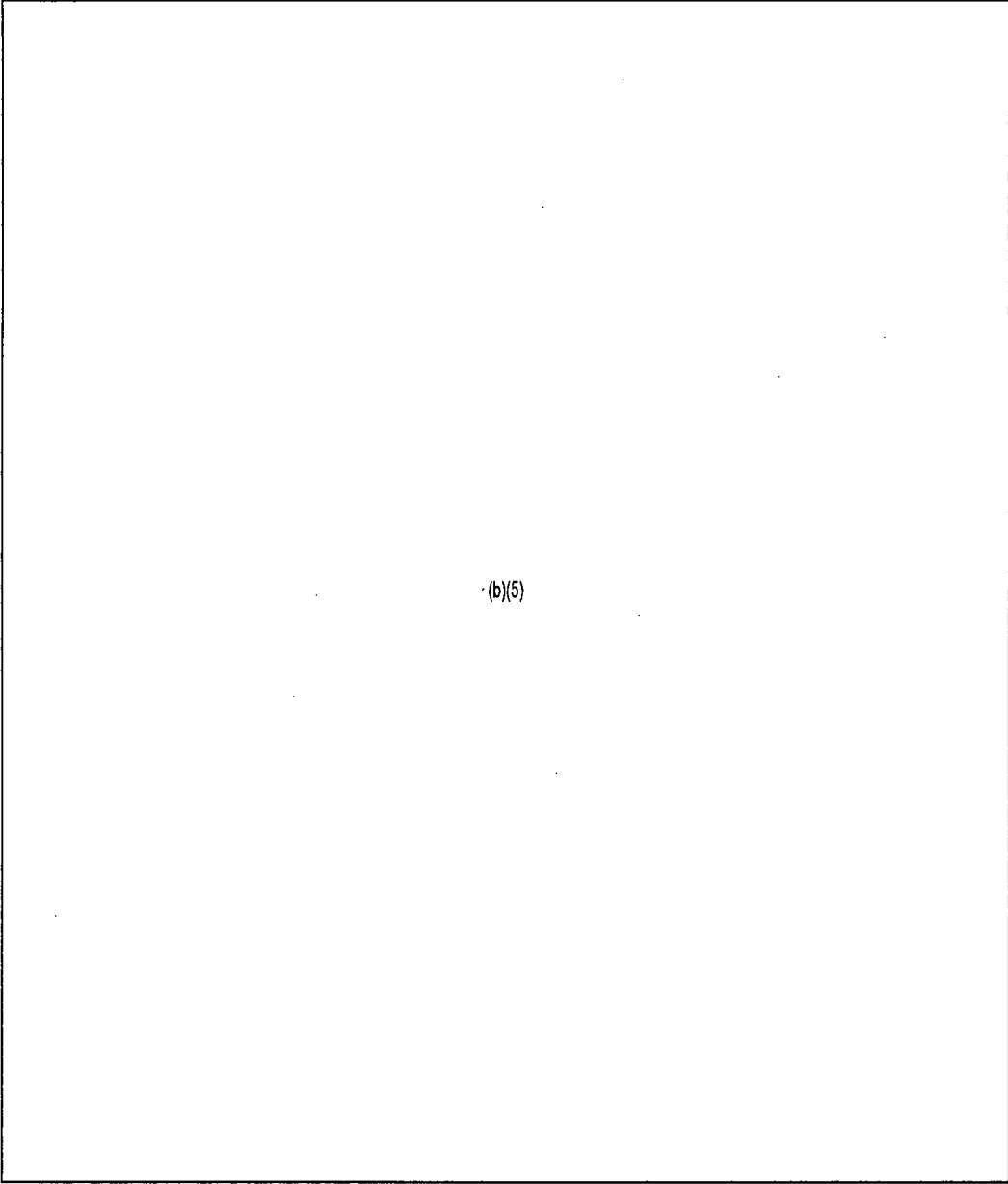
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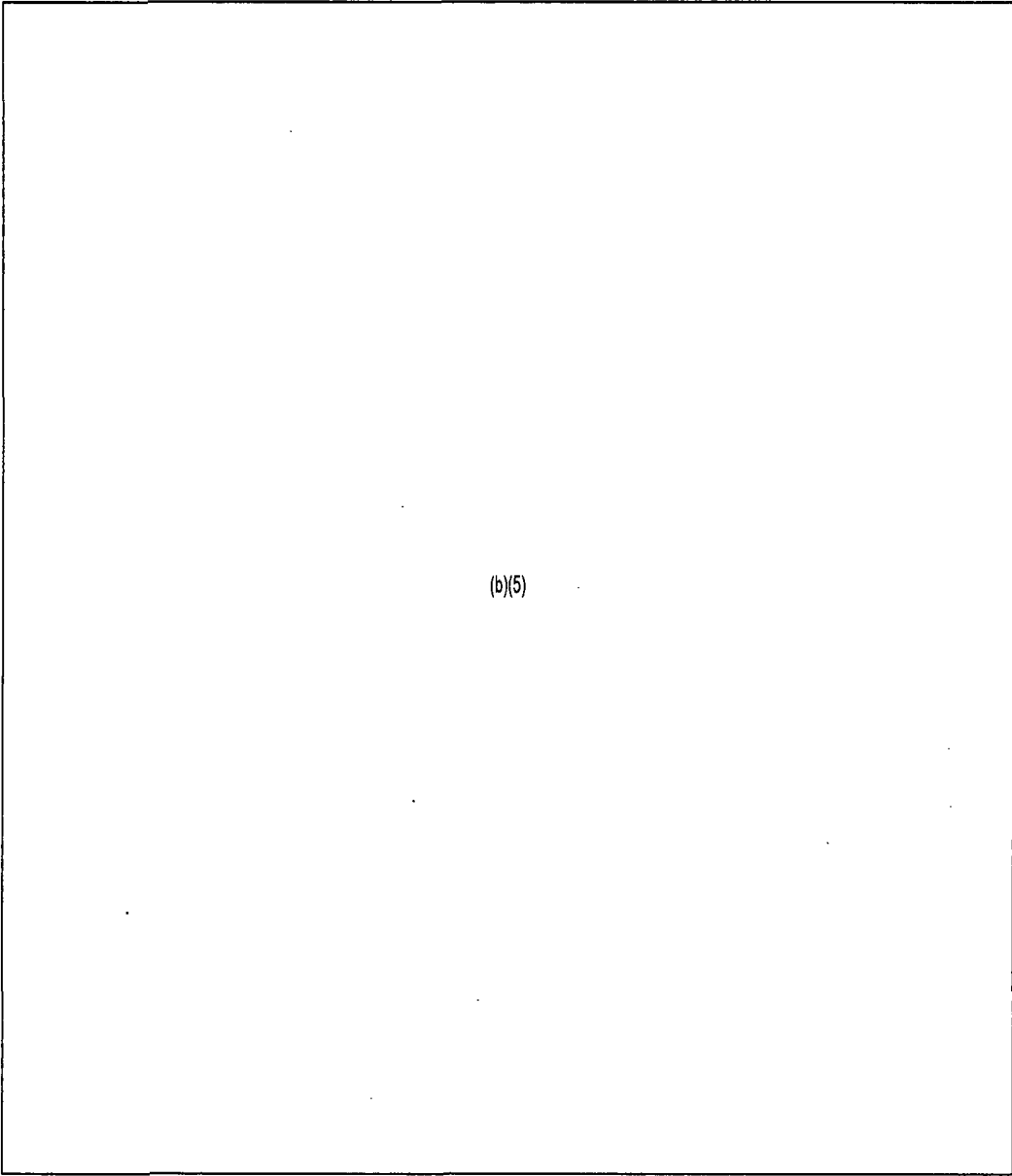
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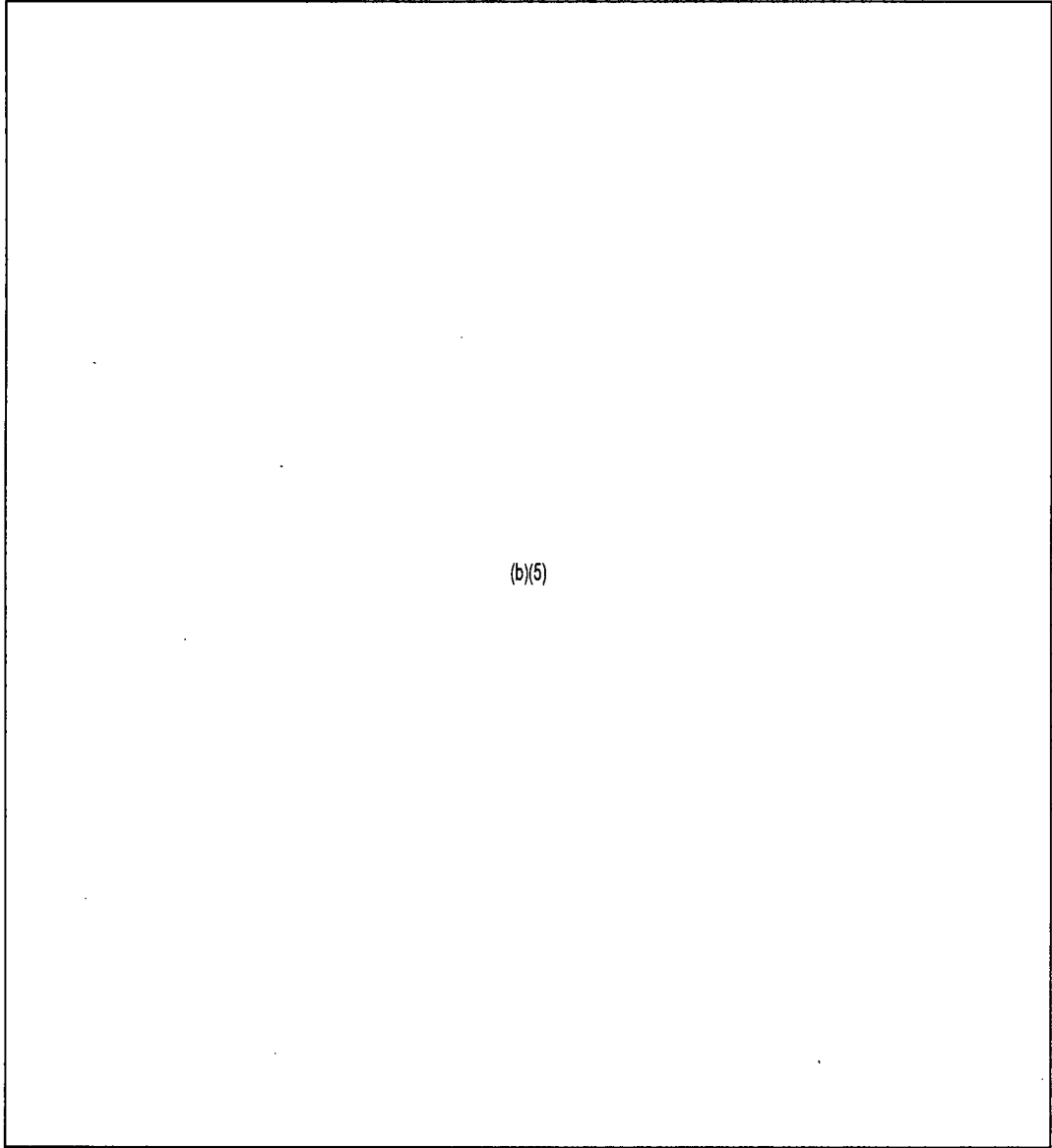
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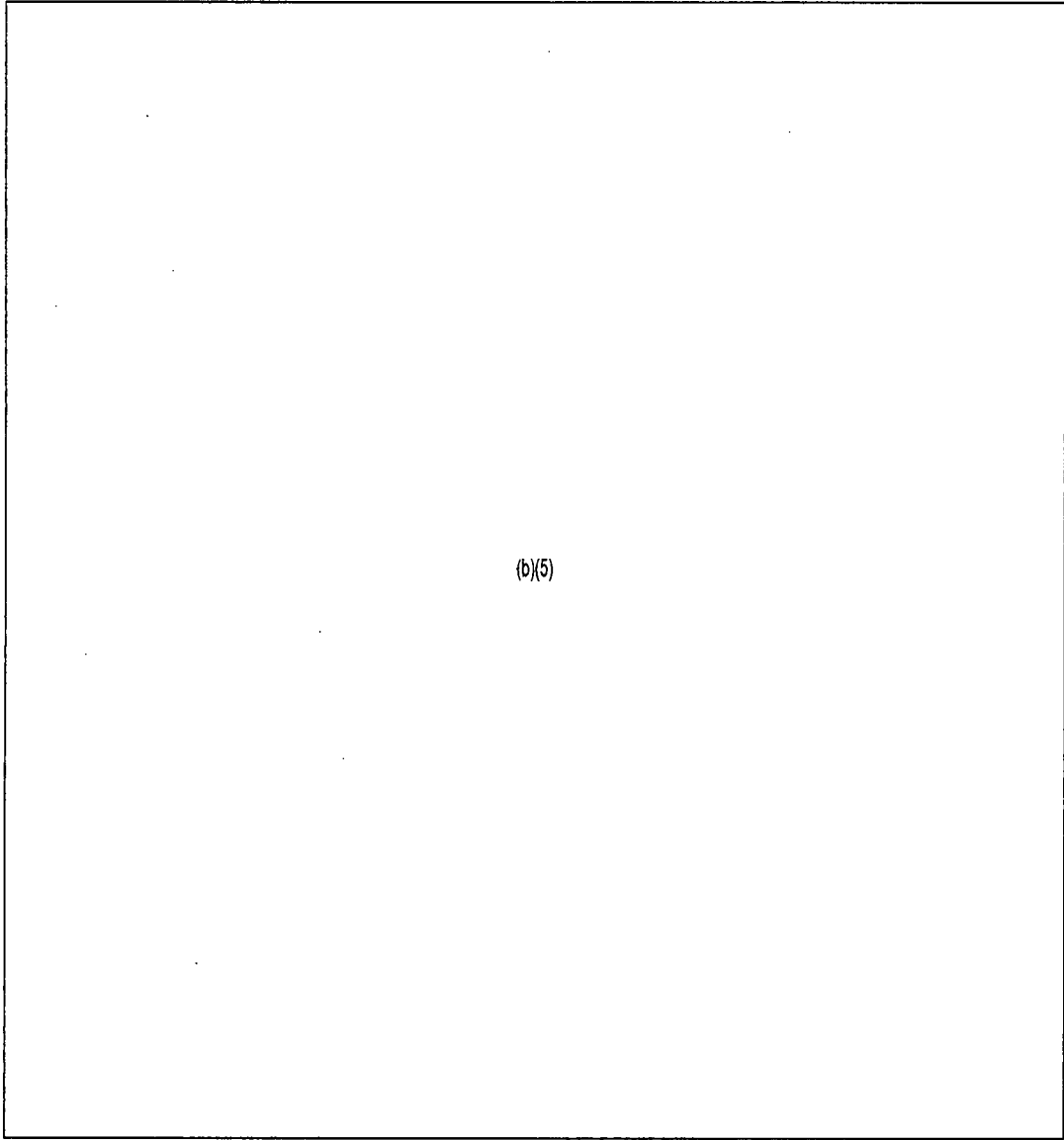
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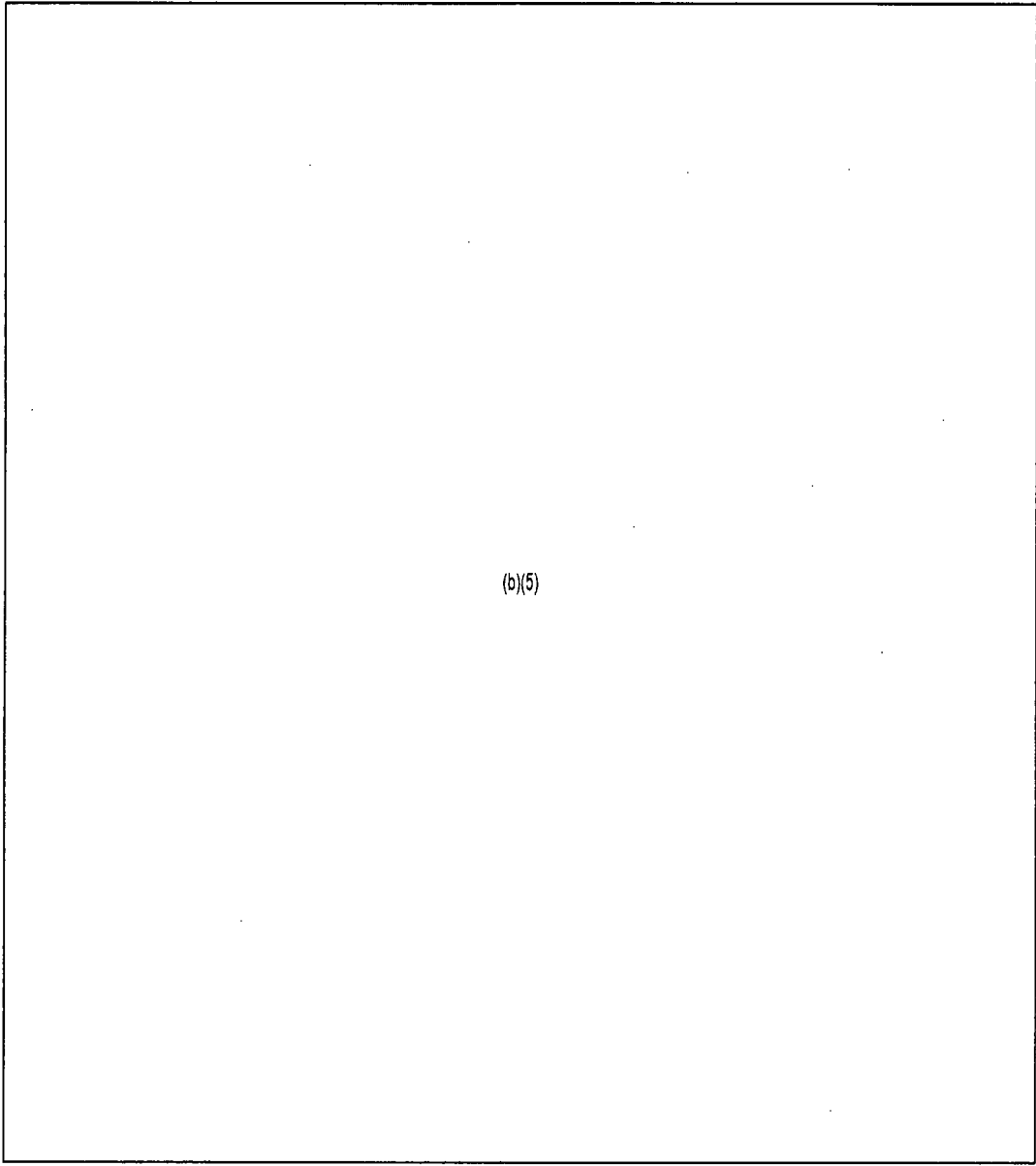
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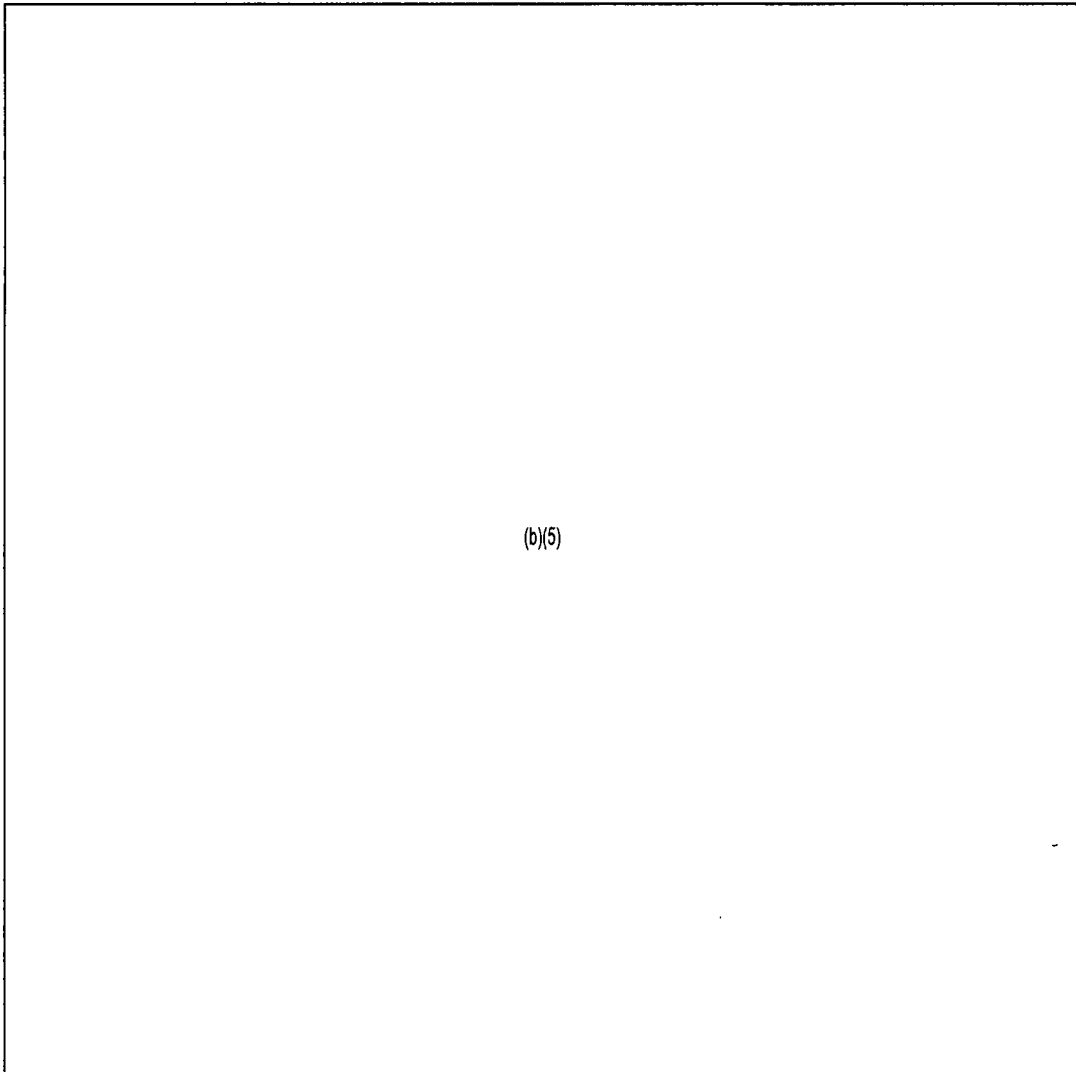
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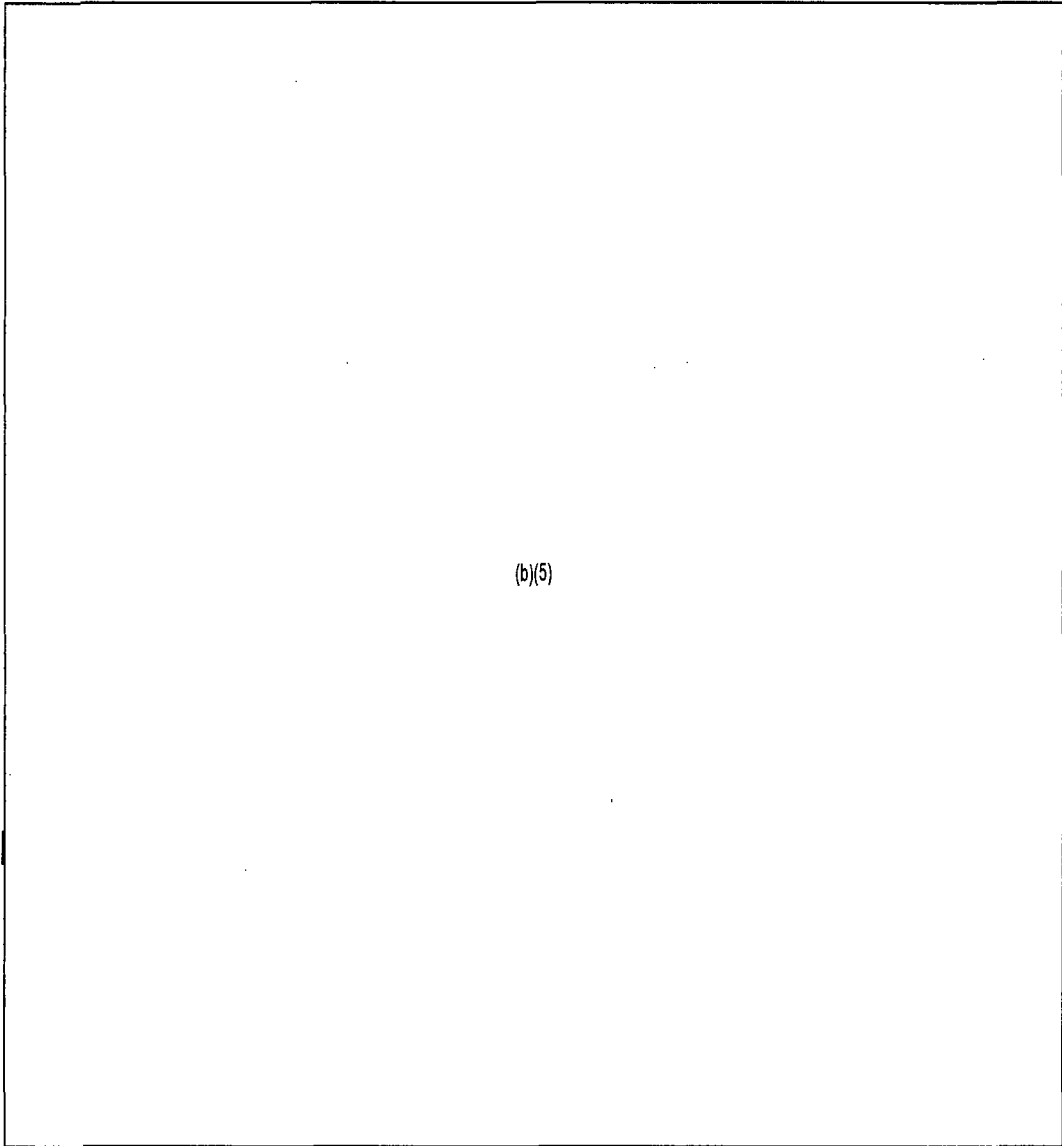
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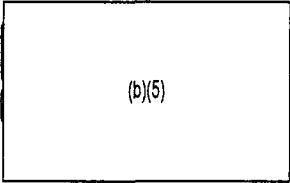
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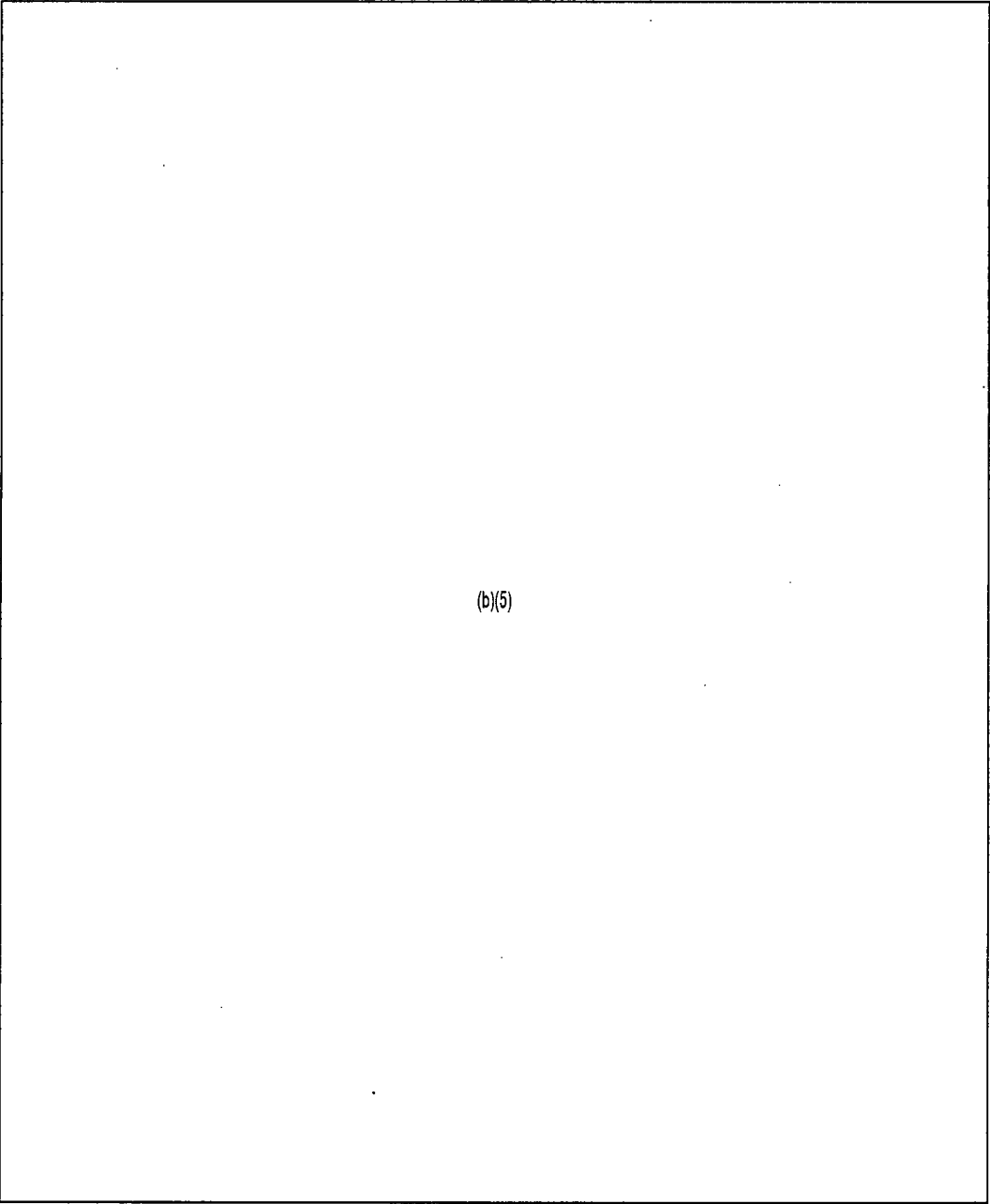
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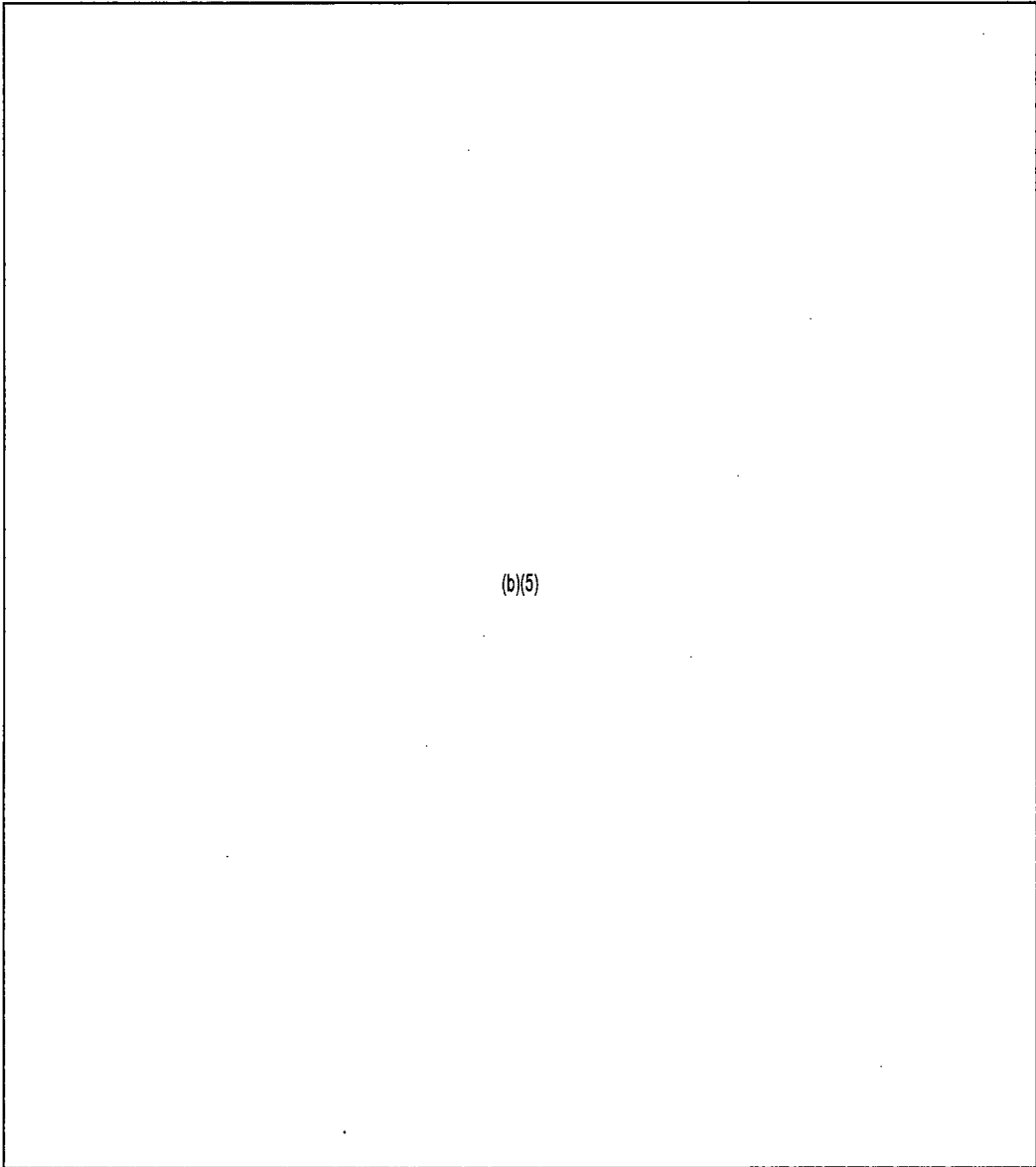
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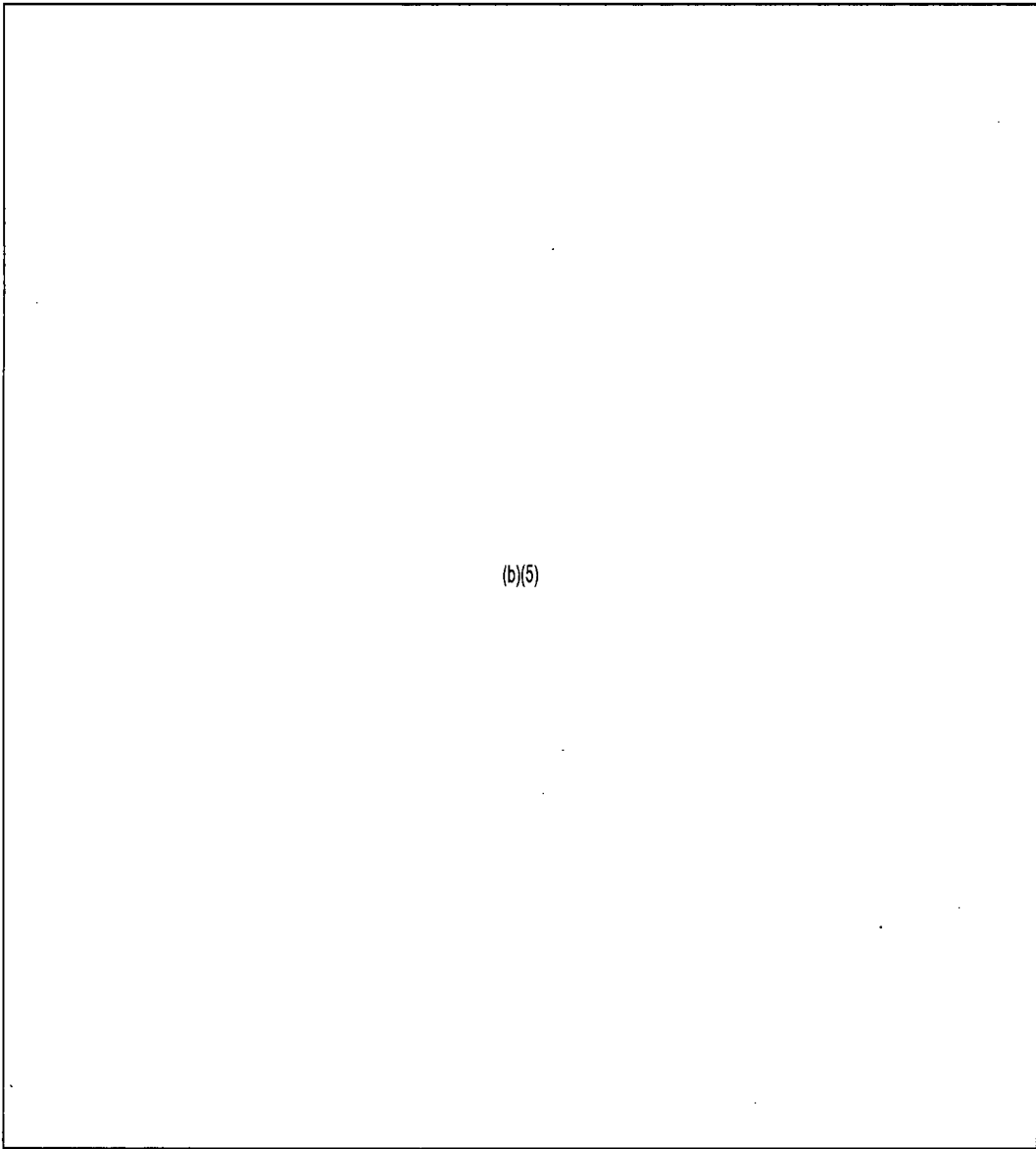
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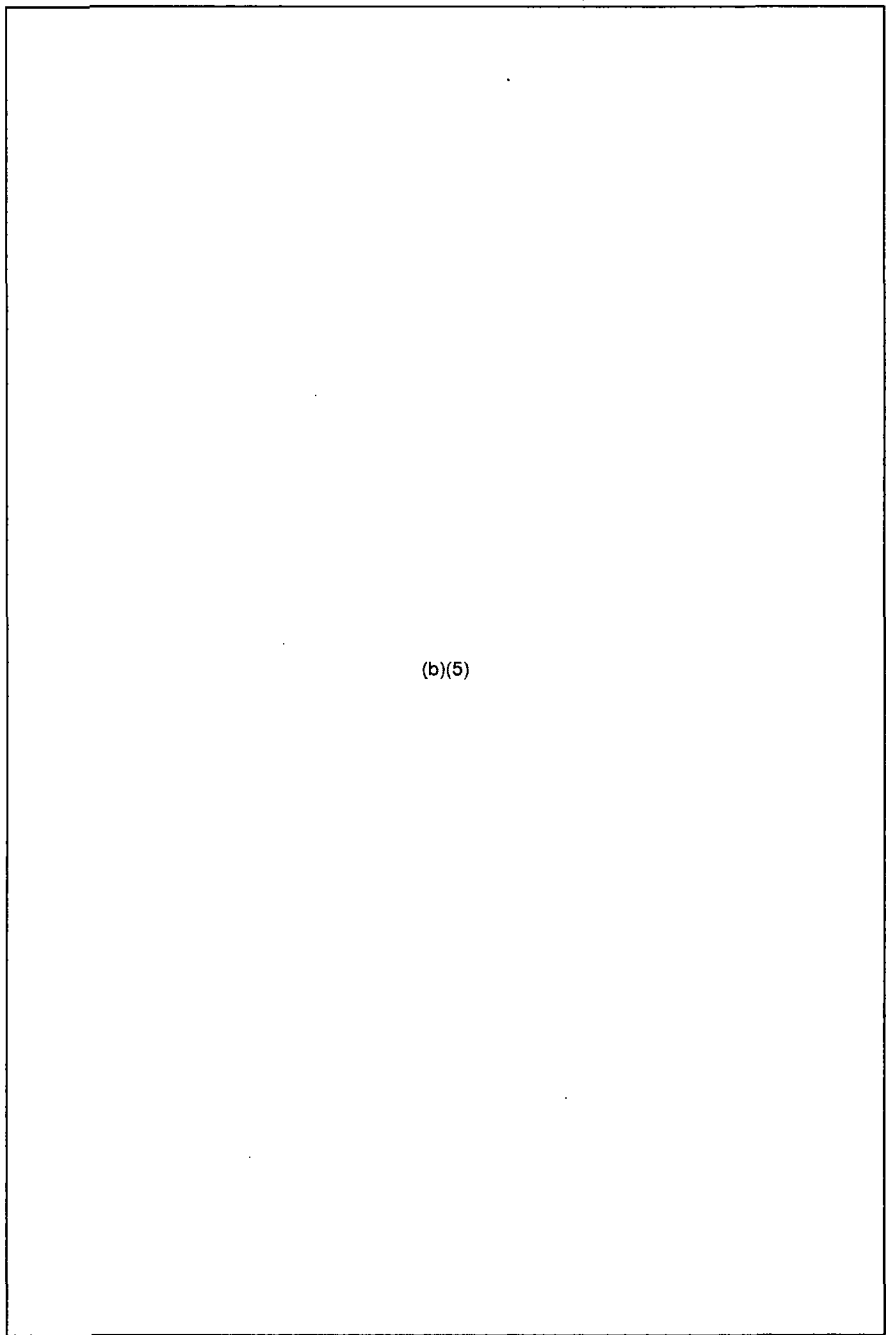
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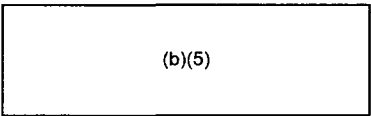
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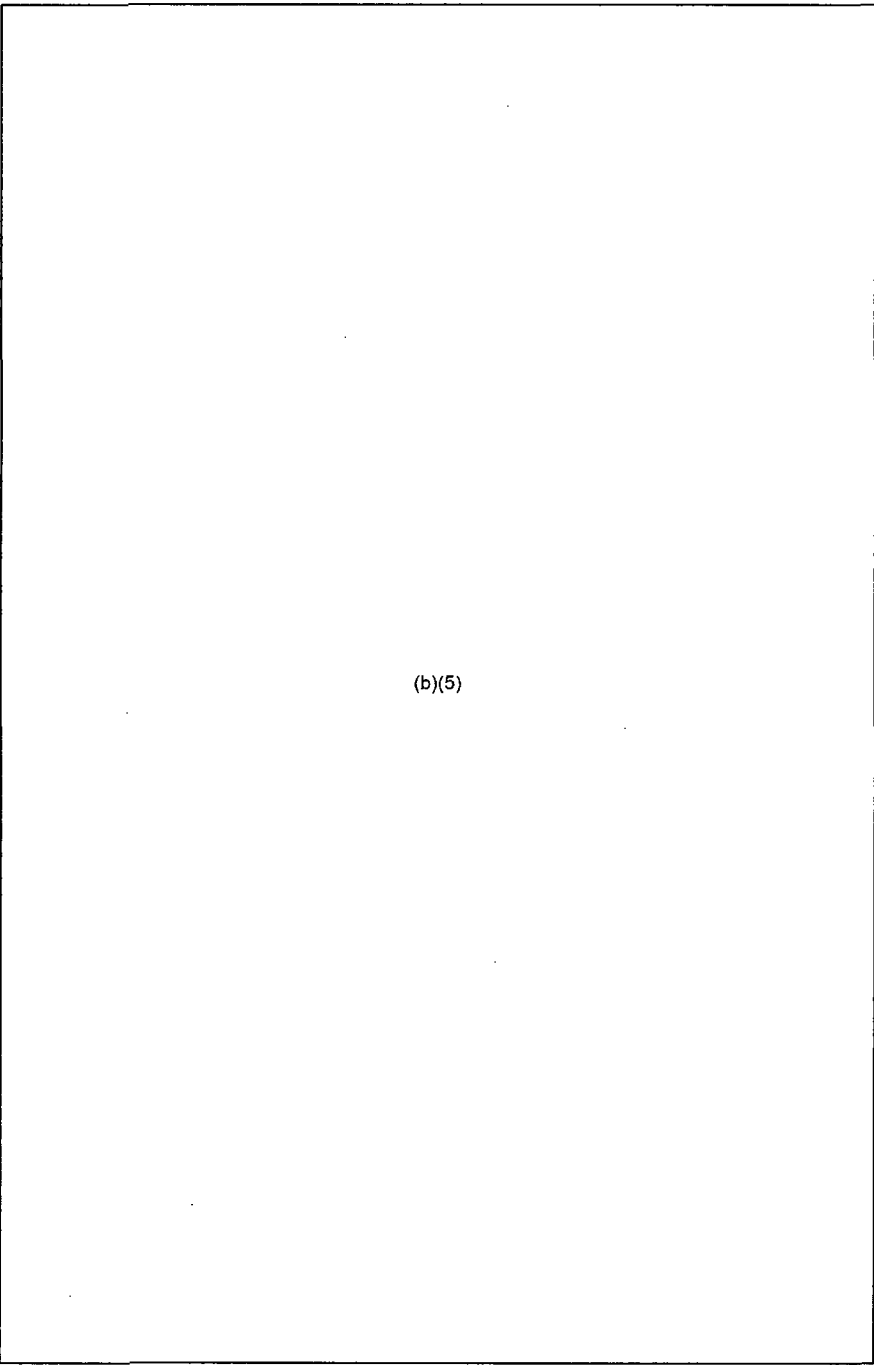
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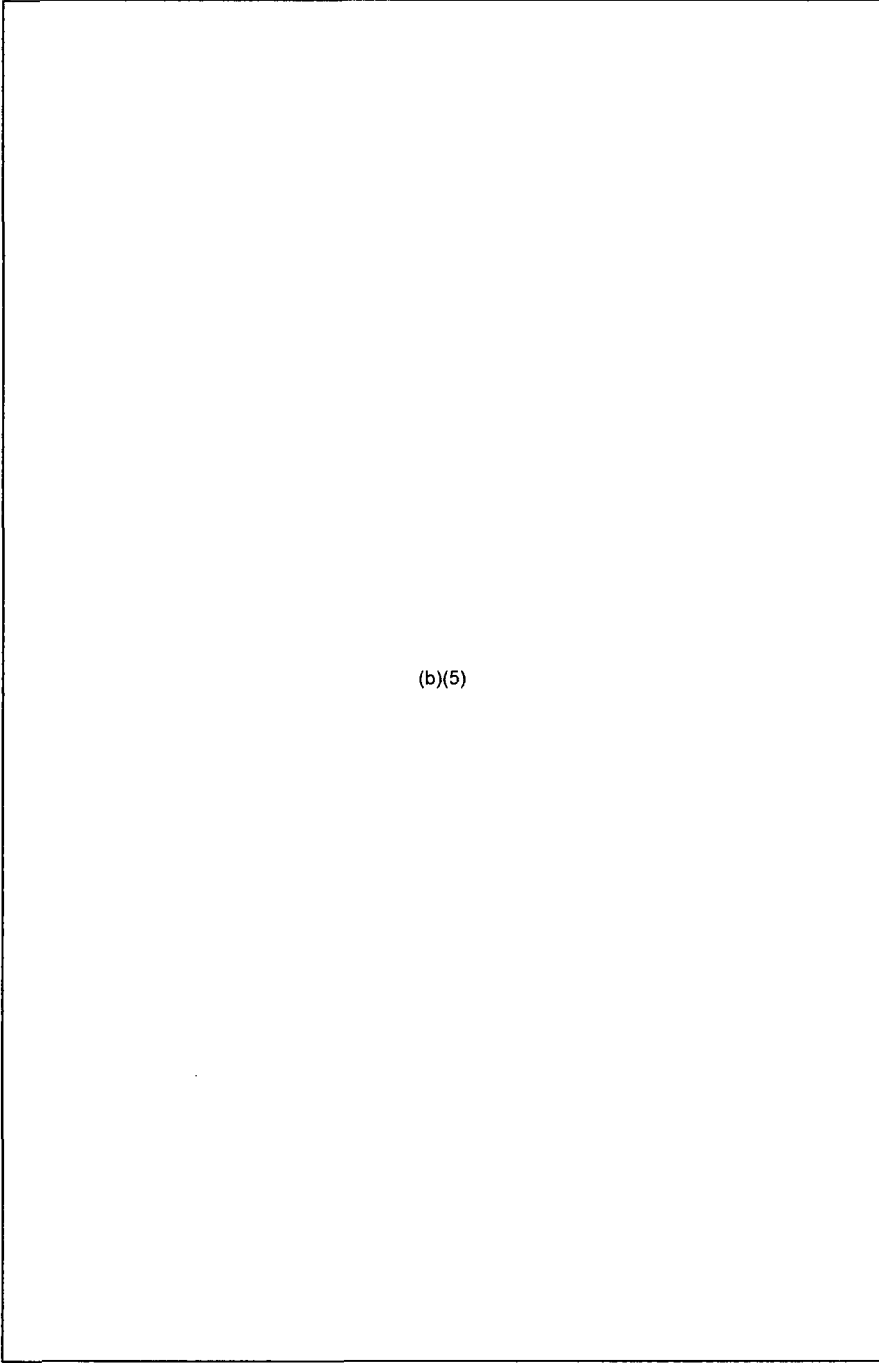
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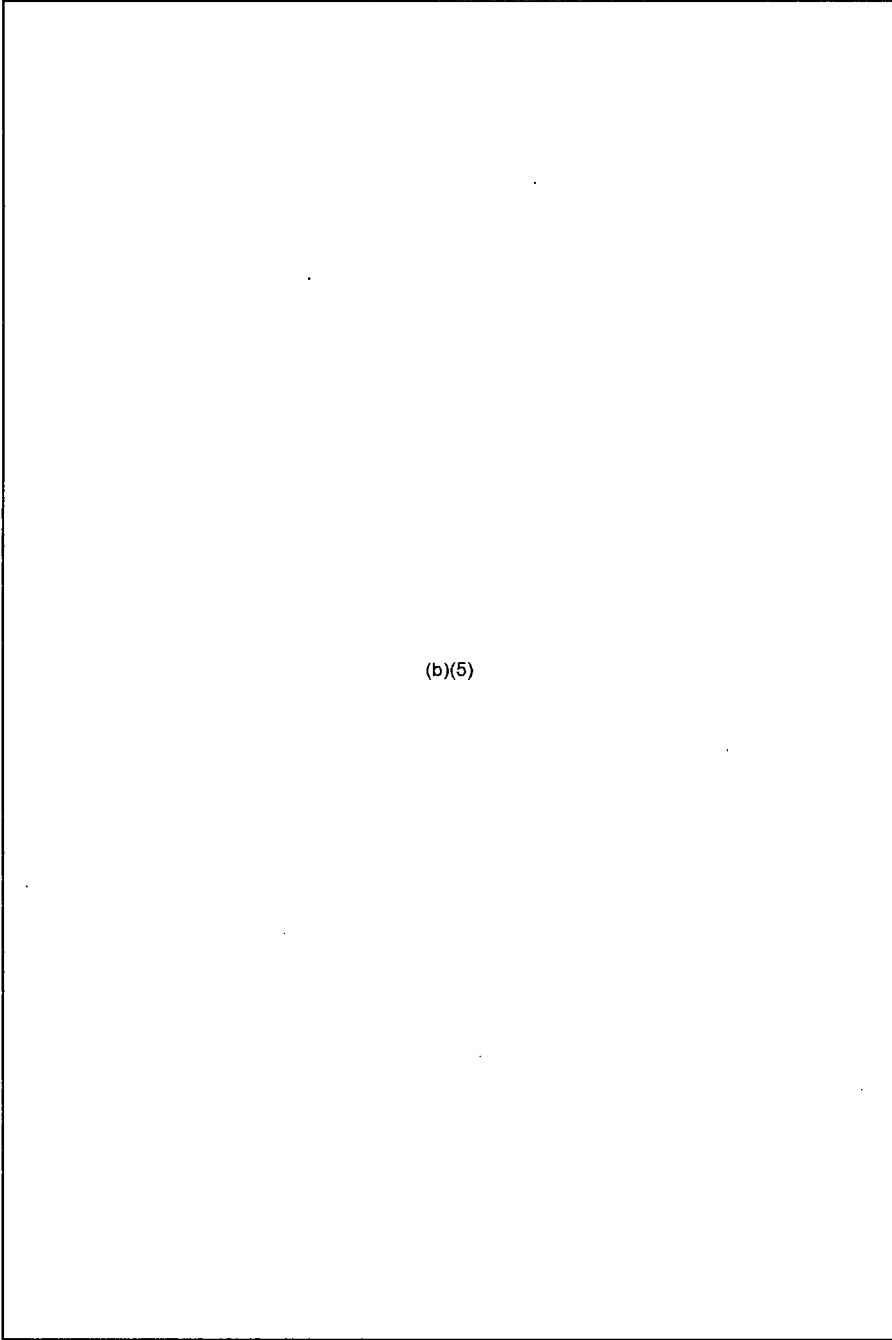


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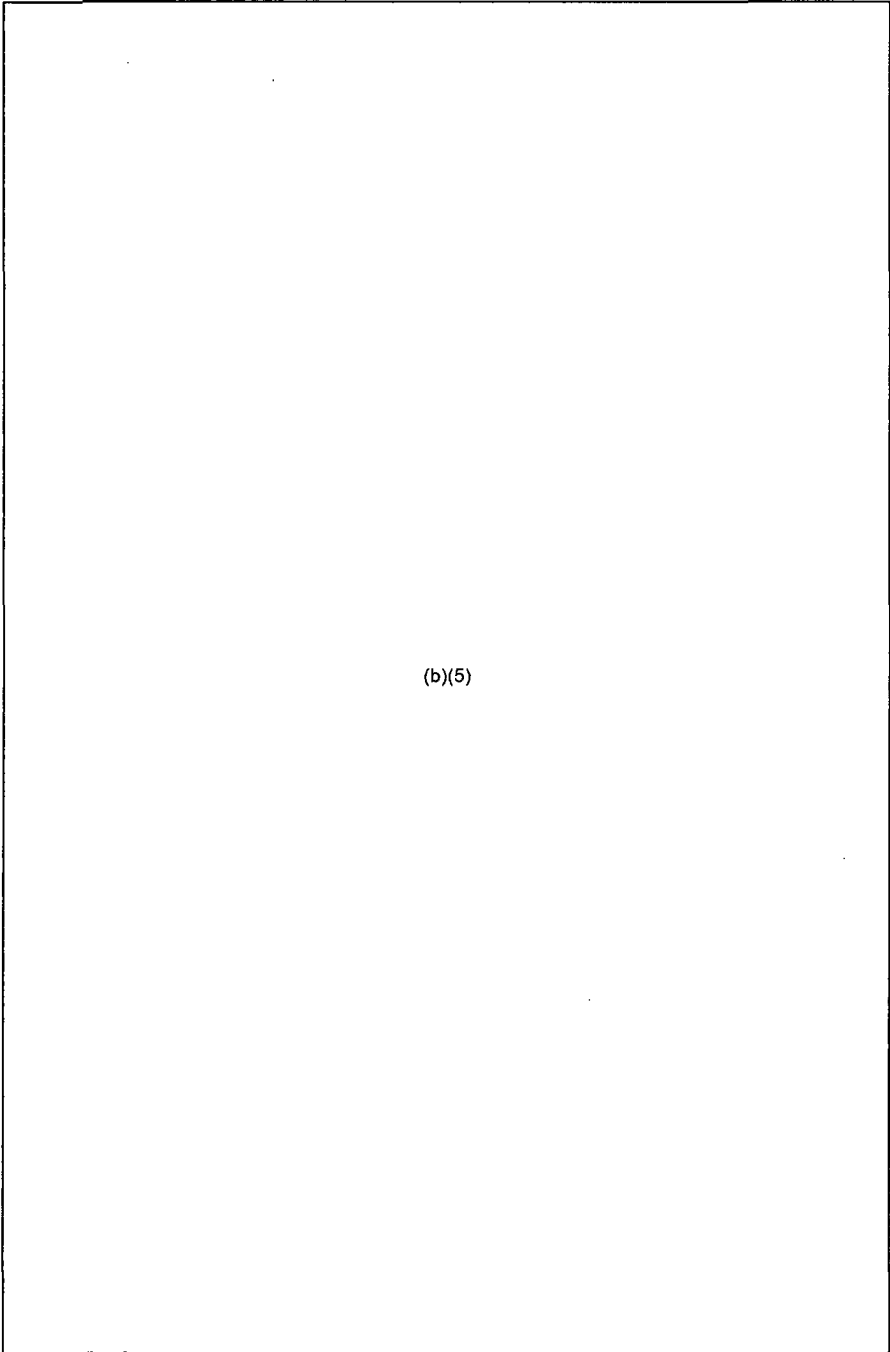
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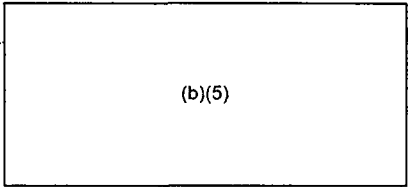


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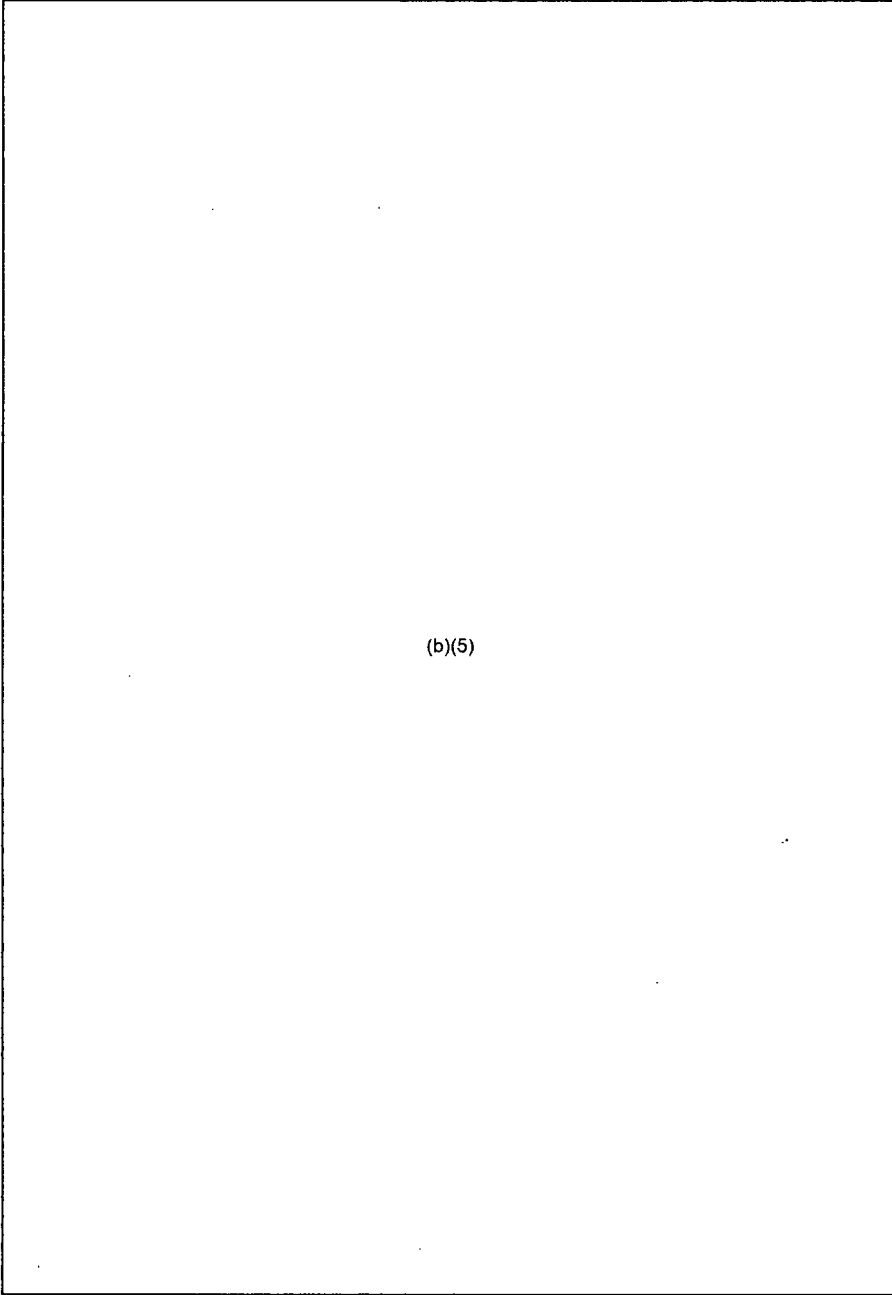
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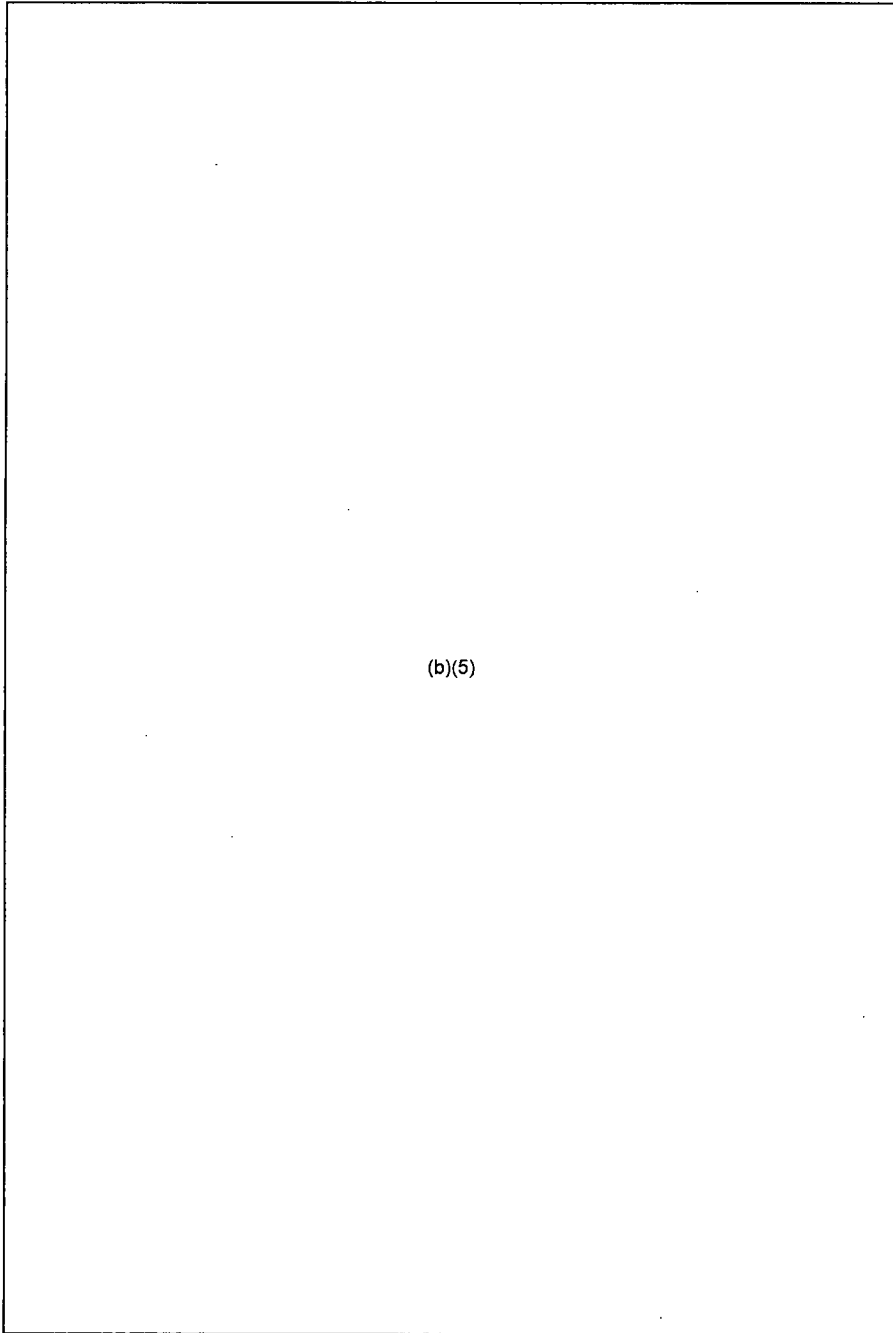
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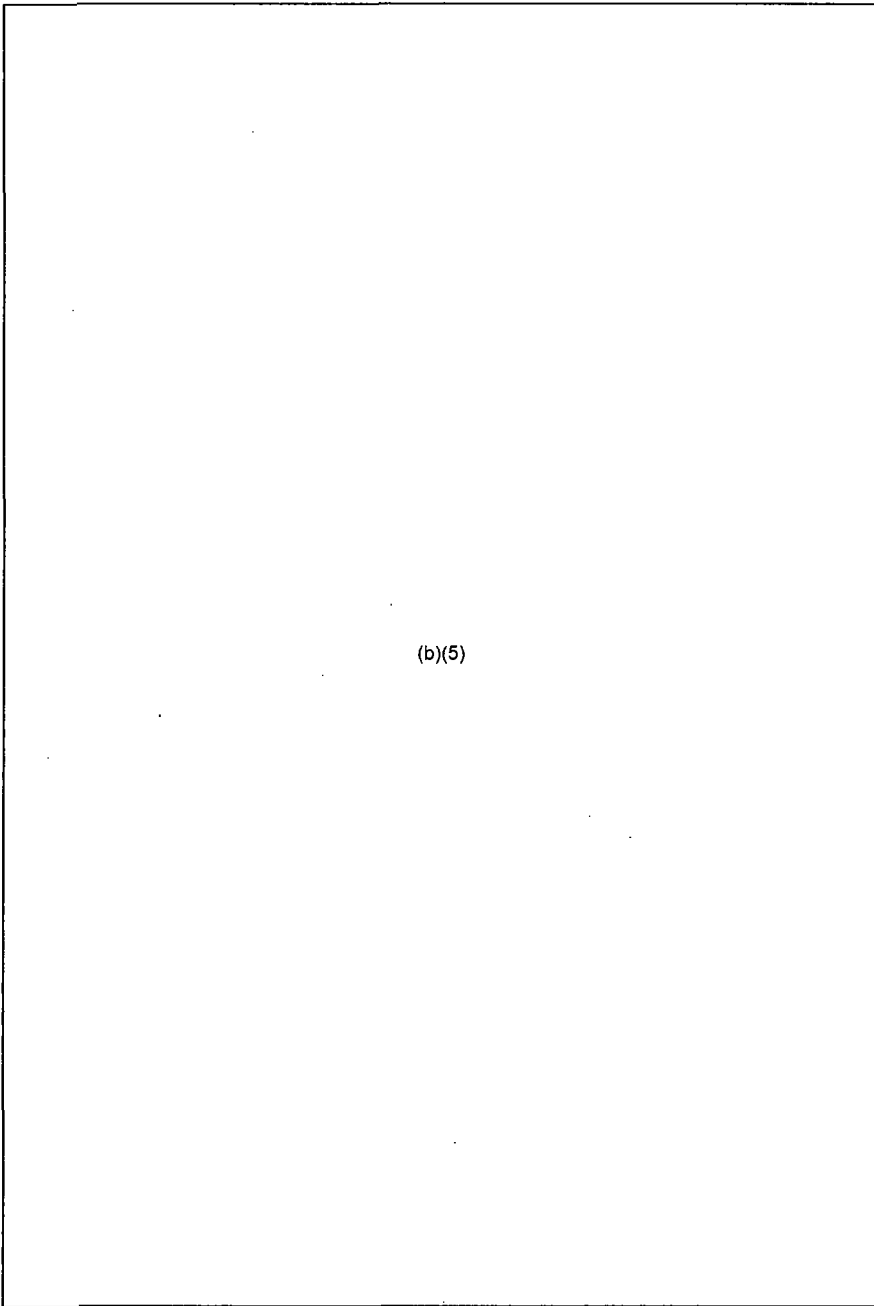
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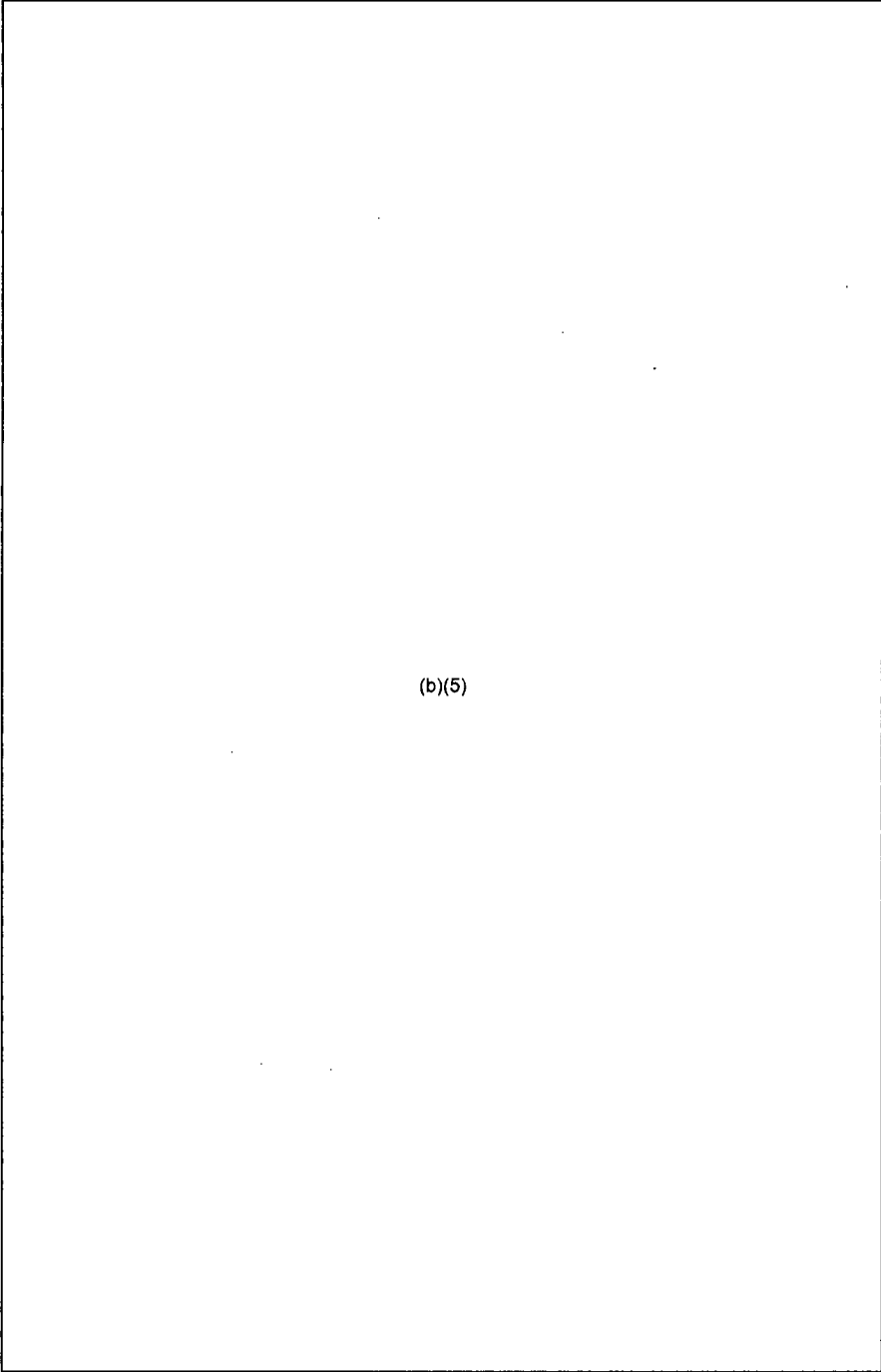
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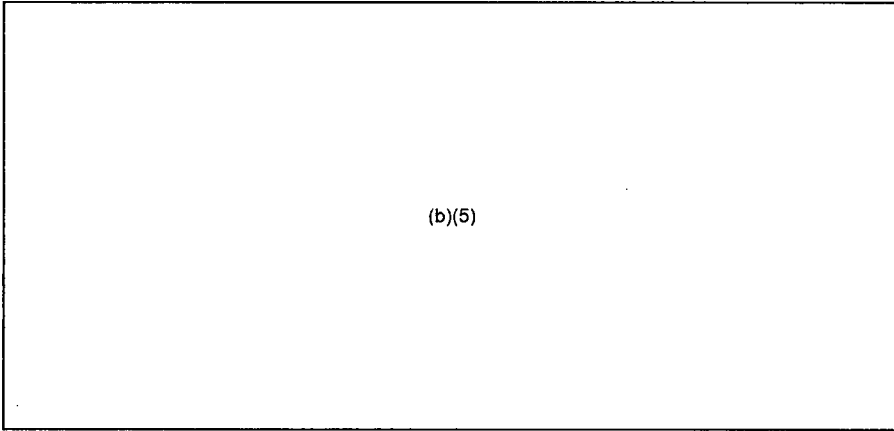
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From: [Newswatch](#)
To: [Munson, Clifford](#)
Subject: Choice of Business Entity - How Owners Can Limit Taxes and Liability April 14 Webinar
Date: Friday, March 11, 2011 2:35:45 PM

Advertisement

Choice of Business Entity - How Owners Can Limit Taxes and Liability

Sponsored by Park Avenue Presentations

Thursday, April 14, 2011

Time: 1:30 pm ET (12:30 am CT, 11:30 am MT, 10:30 am PT)

Length: 90 minutes

Registration - Session Only: \$219.00

Registration - Session Plus CD Recording: \$319.00

WEBINAR DESCRIPTION

Entrepreneurs and other business owners have a variety of choices when it comes to choosing the legal entity through which to implement a new venture. In choosing among the various choices of entities, there are several frequently asked questions that business owners and investors raise. What type of entity should I choose? What kind of protection do I need to shield my personal assets from the liabilities of the business? Do I need to protect the assets of one segment of the business from the liabilities of another segment of the business? How will I be taxed on the profits of the business? Will I be able to claim the tax benefits of any losses generated by the business?

There is no one size fits all answer to these questions. In choosing among the various types of entities, one must ask a number of additional questions. Who is expected to invest in the entity? How will the entity be capitalized? Will the entity borrow money from its owners or from third parties, such as a bank or other lender? The answers to each of these questions could affect the choice of entity.

Tax attorney Peter J. Guy presents an introduction to some of the more important considerations (tax and otherwise) related to various business entity choices. The choice of a particular business entity type can have immediate consequences and can also affect a company's long-term strategic options.

AGENDA

- * **Basic Considerations What Type of Business Entity?**
 - o Regular Corporation
 - o S Corporation
 - o Limited Liability Company (LLC)
 - o Limited Partnership (or other type of partnership)
 - o Others (including sole proprietorships and joint ownership of property)

UPCOMING TELECONFERENCES

Conflict Management Strategies

Mar. 15, 2011

Registration - Session Only: \$199.00

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How to Successfully Use Social Media for Hiring and Retention

Mar. 17, 2011

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Registration - Session Plus

* **Pass-Through Entity or Regular Corporation?**

- o Tax Savings
 - Single Layer of Tax on Profits
 - Loss Pass-Through
- o Which entities provide limited liability?

* **Differences between S Corporations and LLCs/Partnerships**

* **Other tax and nontax considerations**

- o How your exit strategy can influence choice of entity
- o Special entities such as real estate investment trusts (REITs)
- o Debt vs. equity considerations

WHO SHOULD ATTEND

Anyone who is starting a business or considering organizing an entity to conduct business activities or to hold investment assets such as real estate.

Investment bankers and similar investment advisers, accountants, lawyers, financial managers and other professional advisers who regularly advise on entity formation.

FACULTY

Peter J. Guy, Esq.

Of Counsel to Ellenoff Grossman & Schole LLP.

New York tax attorney Peter J. Guy specializes in federal income tax law. Mr. Guy has extensive experience providing federal income tax advice to public and private companies with a particular emphasis on mergers, acquisitions, securities offerings and divestitures. He advises real estate funds, private equity funds, hedge funds, limited liability companies, partnerships, S corporations and similar entities on tax issues relevant to the formation and operation of such entities. He has experience advising real estate investors and developers on tax issues arising out of the ownership and operation of real estate, including certain tax credit advice.

His experience includes advising domestic and international clients regarding cross border tax issues and certain New York state and local tax issues. Mr. Guy also has experience advising clients that have special tax considerations such as real estate investment trusts and tax-exempt entities. Prior to joining Ellenoff Grossman & Schole LLP, Mr. Guy was associated with the law firms of Paul, Weiss, Rifkind, Wharton & Garrison, LLP and Bryan Cave, LLP. Mr. Guy is admitted to practice in the state of New York and is a member of the American Bar Association's Section of Taxation. Mr. Guy received his Juris Doctorate from Harvard Law School where he graduated cum laude and his Bachelor of Science degree from Northeastern University where he graduated summa cum laude.

TELECONFERENCE OVERVIEW

- * 90-minute webinar (Travel-Free) delivered over the phone and Internet.
- * Unlimited listeners per connection - bring the entire department.
- * Q&A session with the expert.

This event will be presented live by phone together with a PowerPoint presentation to be viewed on your computer. Internet access is not required for phone-only participants.

The PowerPoint slides will be provided shortly before the event.

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Responding to an EEO Charge
Mar. 23, 2011
Registration - Session Only: \$198.00
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Learn More

MS Excel 2007 Tips, Tricks and Shortcuts That Save Time and Boost Productivity
Mar. 23, 2011
Registration: \$249.00
Registration - Session plus CD Recording: \$338.00

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(Not available outside the US or Canada)

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FMLA Intermittent Leave:
New Tools to Combat Abuse

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I-9 Crackdown- Will Your Company Be Next?
Mar. 29, 2011

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Munson, Clifford

From: ServiceMagic Snap [customerservice@mp.servicemagic.com]
Sent: Friday, March 11, 2011 3:07 PM
To: Munson, Clifford
Subject: Las Cucarachas...

mservicemagic

March 11, 2011

**YOUR WEEKLY
HOME IMPROVEMENT FIX**

...squash 'em dead!

Cockroaches rank up there with IRS auditors for annoyance. These little nasties come out under the cover of dark, and with the slightest amount of left-out food (and sometimes even if your house is thoroughly clean). Yes, we're still talking cockroaches.

You've tried putting your entire foodstuffs into airtight containers, and you clean like Howard Hughes, but yet they still come back. What's the average homeowner to do? Hopefully, the following tips help you get rid of the little buggers.

First, make doubly sure that all food is put in secure containers. Remember to keep an eye out for pizza crusts, crumbs, dog food and dirty dishes. Next, be sure that all your pipes are tight and not leaking. Cockroaches are attracted to moisture, so try not to bathe in your sink.

Your second step is to identify where they're hiding out. Look for cracks, holes and other dark places. Fill them with caulking. The last step you can take is to trap or poison them. Since they are cannibals, the poison eaten by one cockroach will be carried to the next, and so on.

If the steps above don't work, you may end up hiring an exterminator. These guys are pros, and can easily handle even the toughest infestation.

So that's about it - keep it clean, fill the holes, invest in some poisons, and as a last resort, hire a pro. Now if only it was that easy to handle the IRS!

Pest Control Pros



this month's top projects

- | | |
|---------------------|---------------------|
| 1 Kitchen Remodel | 6 Landscaping |
| 2 Hardwood Flooring | 7 Heating Systems |
| 3 Bathroom Remodel | 8 Cleaning Services |
| 4 Handyman Services | 9 Windows |
| 5 Roofing & Gutters | 10 Siding |

[See All Home Projects](#)

know any great pros?

We've launched new categories and need your recommendations!

Automotive	Videographer
Photographer	Bands/DJs
Event Planner	Senior Care

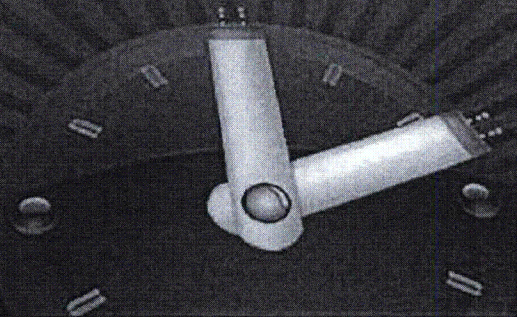


Own a
business?
We can help!

ServiceMagic can now provide you with prescreened pros for your business! [Find Pros](#)

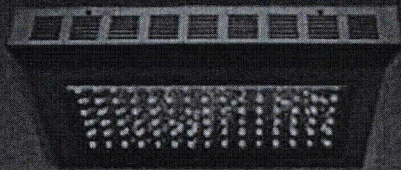
DAYLIGHT SAVINGS

SALE

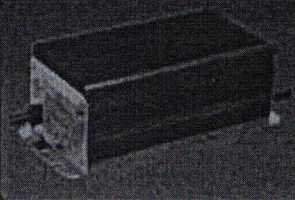


Sale ends on 3/28/2011

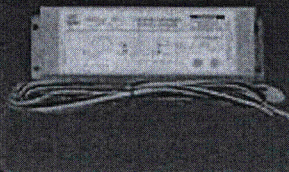
**Blue Moon Aquatics 5000 Lumen/
15000K (460nm) LED Pendant**
ON SALE \$424.99
SAVE \$75 + FREE SHIPPING!



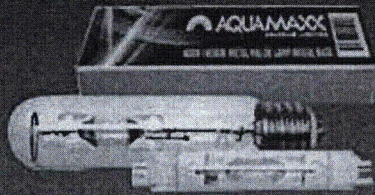
**CoralVue 250W Electronic
Metal Halide Ballast**
ON SALE \$119.99
SAVE \$20!



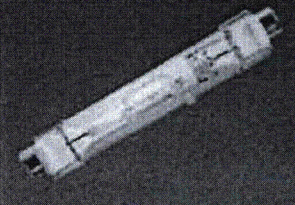
**IceCap 430 Electronic
Fluorescent Ballast**
ON SALE \$99.99
SAVE \$40!
Clearance. While supplies last.



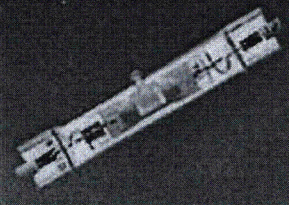
**AquaMaxx Metal Halide Bulbs
Double-Ended & Mogul Base**
ON SALE FROM \$47.99
SAVE 20%!



**Phoenix 150W & 250W
14000K HQI Bulbs**
ON SALE FROM \$49.99
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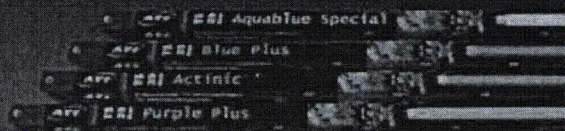
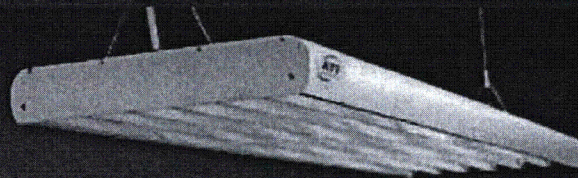


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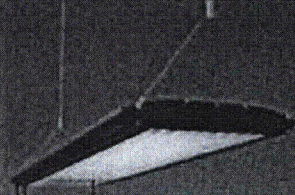
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From: [MarineDepot.com Update](#)
To: [Munson, Clifford](#)
Subject: Daylight Savings Lighting Sale
Date: Saturday, March 12, 2011 12:06:29 AM

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From: MarineDepot.com Update [newsletter=marinedepot.com@mail6.us2.mcsv.net] on behalf of MarineDepot.com Update [newsletter@marinedepot.com]
Sent: Saturday, March 12, 2011 12:06 AM
To: Munson, Clifford
Subject: Daylight Savings Lighting Sale

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Munson, Clifford

From: douglas (b)(6)
Sent: Sunday, March 13, 2011 8:55 AM
To: Bill Starr; Jay Wood; Munson, Clifford
Subject: Re: monday 14th

(b)(6)
Sent on the Sprint® Now Network from my BlackBerry®

From: Bill Starr <(b)(6)>
Date: Sun, 13 Mar 2011 07:58:32 -0400
To: Jay Wood <(b)(6)> ? Cliff Munson <clifford.munson@nrc.gov>
Cc: Doug Vann <(b)(6)>
Subject: FW: monday 14th

(b)(6)

Thanks,

Bill

From: (b)(6)
Date: Sat, 12 Mar 2011 13:58:48 -0500
Subject: monday 14th
To: (b)(6)
CC: (b)(6)

(b)(6)

=

Munson, Clifford

From: Bill Starr (b)(6)
Sent: Sunday, March 13, 2011 12:33 PM
To: (b)(6)
Subject: RE: monday 14th

(b)(6)

To: (b)(6)
Subject: Re: monday 14th
From: (b)(6)
Date: Sun, 13 Mar 2011 11:00:44 -0400

Bill,
(b)(6)

Jay

-----Original Message-----

From: (b)(6)
To: Jay Wood (b)(6); Cliff Munson <clifford.munson@nrc.gov>
Cc: Doug Vann (b)(6)
Sent: Sun, Mar 13, 2011 7:58 am
Subject: FW: monday 14th

Jay and Cliff,

(b)(6)

Thanks,

Bill

From: (b)(6)
Date: Sat, 12 Mar 2011 13:58:48 -0500
Subject: monday 14th
To: (b)(6)
CC: (b)(6)

(b)(6)

Munson, Clifford

From: Munson, Clifford
Sent: Monday, March 14, 2011 2:17 PM
To: (b)(6)
Subject: RE: monday 14th

I am going to need to pop some also pretty soon.

From: douglas [mailto:(b)(6)]
Sent: Monday, March 14, 2011 1:56 PM
To: Munson, Clifford
Subject: Re: monday 14th

If not I ll pop some advils .
Stop the meltdown cliff !

Sent on the Sprint® Now Network from my BlackBerry®

From: "Munson, Clifford" <Clifford.Munson@nrc.gov>
Date: Mon, 14 Mar 2011 13:39:01 -0400
To: (b)(6)
Subject: RE: monday 14th

I am swamped with dealing with the Japanese earthquake/ Nuclear disaster and will likely be working overtime. Can you get someone else?
Cliff

From: douglas [mailto:(b)(6)]
Sent: Monday, March 14, 2011 10:15 AM
To: Munson, Clifford
Subject: Re: monday 14th

Can you take my spot tonight ? I o u 1 .
Sent on the Sprint® Now Network from my BlackBerry®

From: Bill Starr <(b)(6)>
Date: Sun, 13 Mar 2011 07:58:32 -0400
To: Jay Wood <jwood68995@aol.com>; Clifford Munson <clifford.munson@nrc.gov>
Cc: Doug Vann <(b)(6)>
Subject: FW: monday 14th

Jay and Cliff,

Can one of you play for me tomorrow? My are is very sore.

Doug - I do not have Cliff's other e-mail address (I think it is verizon).

Thanks,

Bill

From: douglas
To: Bill Starr; Jay Wood; Munson, Clifford
Subject: Re: monday 14th
Date: Sunday, March 13, 2011 8:56:00 AM

(b)(6)

Sent on the Sprint® Now Network from my BlackBerry®

From: Bill Starr <(b)(6)>
Date: Sun, 13 Mar 2011 07:58:32 -0400
To: Jay Wood <(b)(6)>; Cliff Munson <clifford.munson@nrc.gov>
Cc: Doug Vann <(b)(6)>
Subject: FW: monday 14th

Jay and Cliff,

Can one of you play for me tomorrow? My are is very sore.

Doug - I do not have Cliff's other e-mail address (I think it is verizon).

Thanks,

Bill

From: (b)(6)
Date: Sat, 12 Mar 2011 13:58:48 -0500
Subject: monday 14th
To: (b)(6)
CC: (b)(6)

(b)(6)

=

From: (b)(6)
To: Munson, Clifford
Subject: (b)(6)
Date: Wednesday, March 23, 2011 10:55:24 AM

(b)(6)

On Wed, Mar 23, 2011 at 7:35 AM, Munson, Clifford

<Clifford.Munson@nrc.gov> wrote:

> Lets trade 4/11 for 4/18. Cliff

> -----Original Message-----

> From: (b)(6) [mailto:(b)(6)]

> Sent: Tuesday, March 22, 2011 8:37 PM

> To: Munson, Clifford

> Subject: (b)(6)

>

> Hi Cliff

(b)(6)

From: Bill Starr
To: [redacted] (b)(6)
Subject: RE: monday 14th
Date: Sunday, March 13, 2011 12:32:58 PM

[redacted] (b)(6)

To: [redacted] (b)(6)
Subject: Re: monday 14th
From: [redacted] (b)(6)
Date: Sun, 13 Mar 2011 11:00:44 -0400

Bill,

I can play

Jay

-----Original Message-----

From: Bill Starr [redacted] (b)(6)
To: Jay Wood [redacted] (b)(6) Cliff Munson <clifford.munson@nrc.gov>
Cc: Doug Vann [redacted] (b)(6)
Sent: Sun, Mar 13, 2011 7:58 am
Subject: FW: monday 14th

Jay and Cliff,

[redacted] (b)(6)

Thanks,

Bill

From: [redacted] (b)(6)
Date: Sat, 12 Mar 2011 13:58:48 -0500
Subject: monday 14th
To: [redacted] (b)(6)
CC: [redacted]

[redacted] (b)(6) ???

Munson, Clifford

From: Martin, Karnisha
Sent: Monday, March 14, 2011 12:01 PM
To: Vega, Frankie; Xi, Zuhan
Cc: Cook, Christopher; Munson, Clifford; Seber, Dogan
Subject: ACTION: Track Changes of CPNPP 255
Attachments: CPNPP 255.docx

Good afternoon,

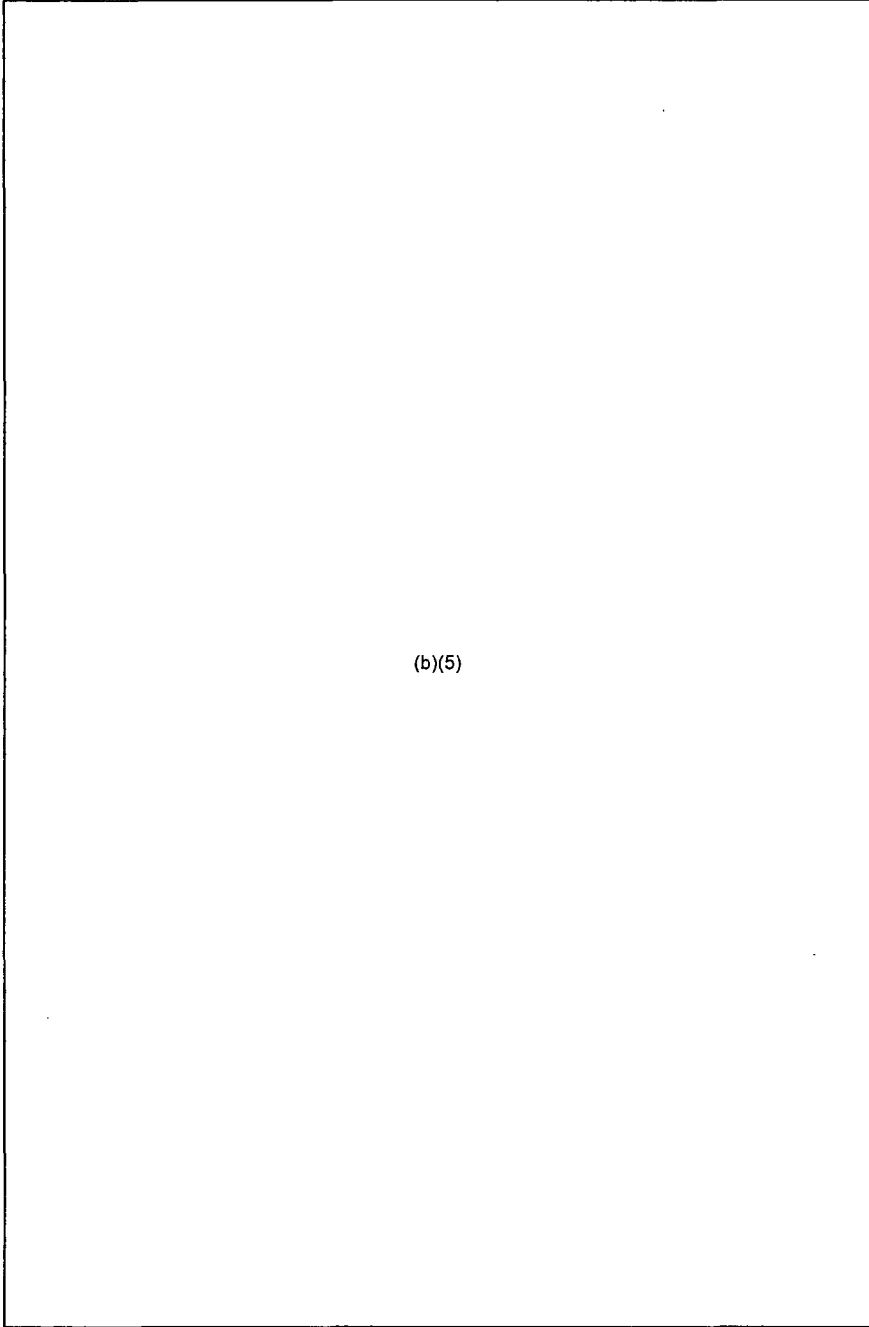
Attached is the track changes from Chris. Please review the comments and changes and let me know if there are any more changes that needs to be done.

•
•
•

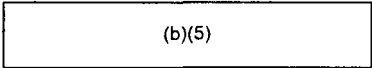
(b)(5)

Thank you.

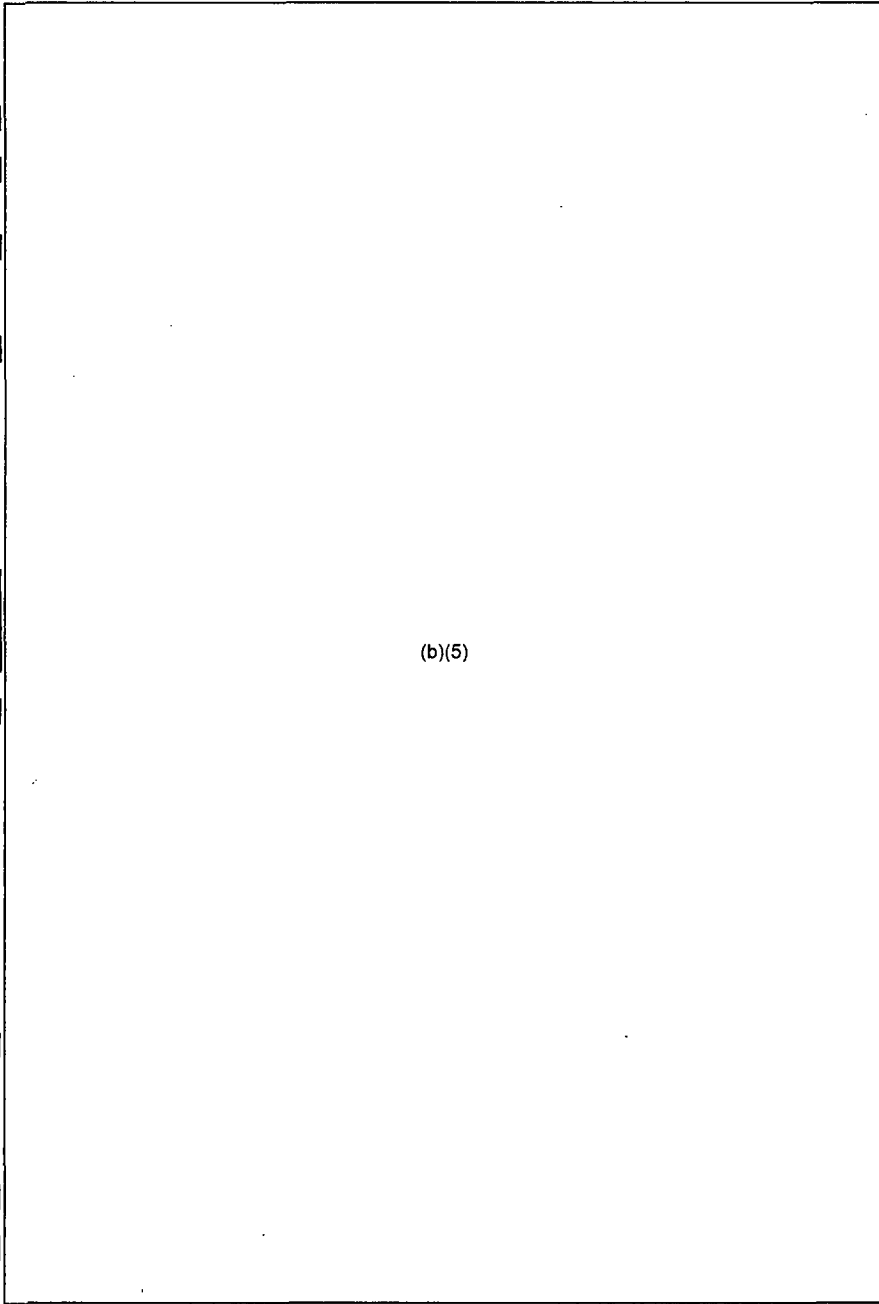
Karnisha L. Martin
Contractor Secretary
DSER
phone number- 301-415-6080
fax number- 301-415-5399
karnisha.martin@nrc.gov



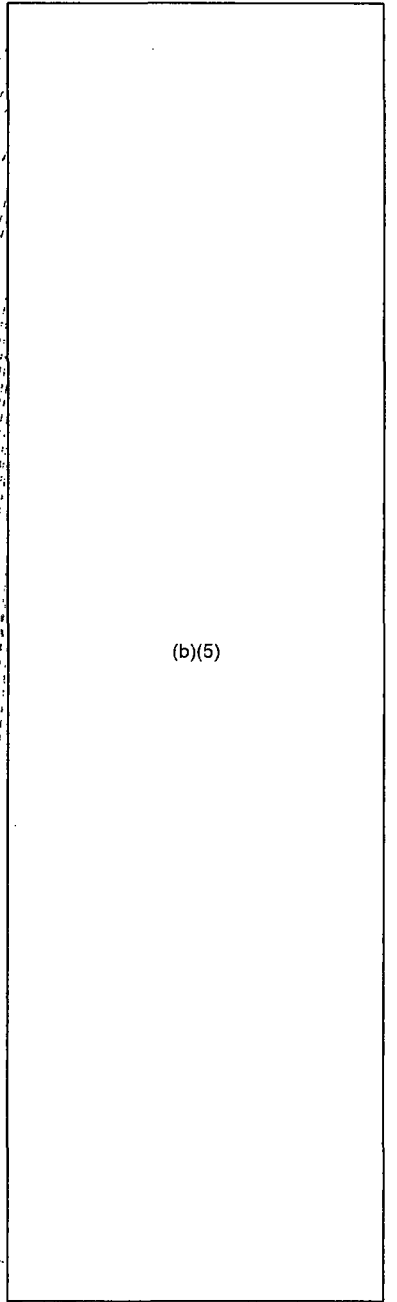
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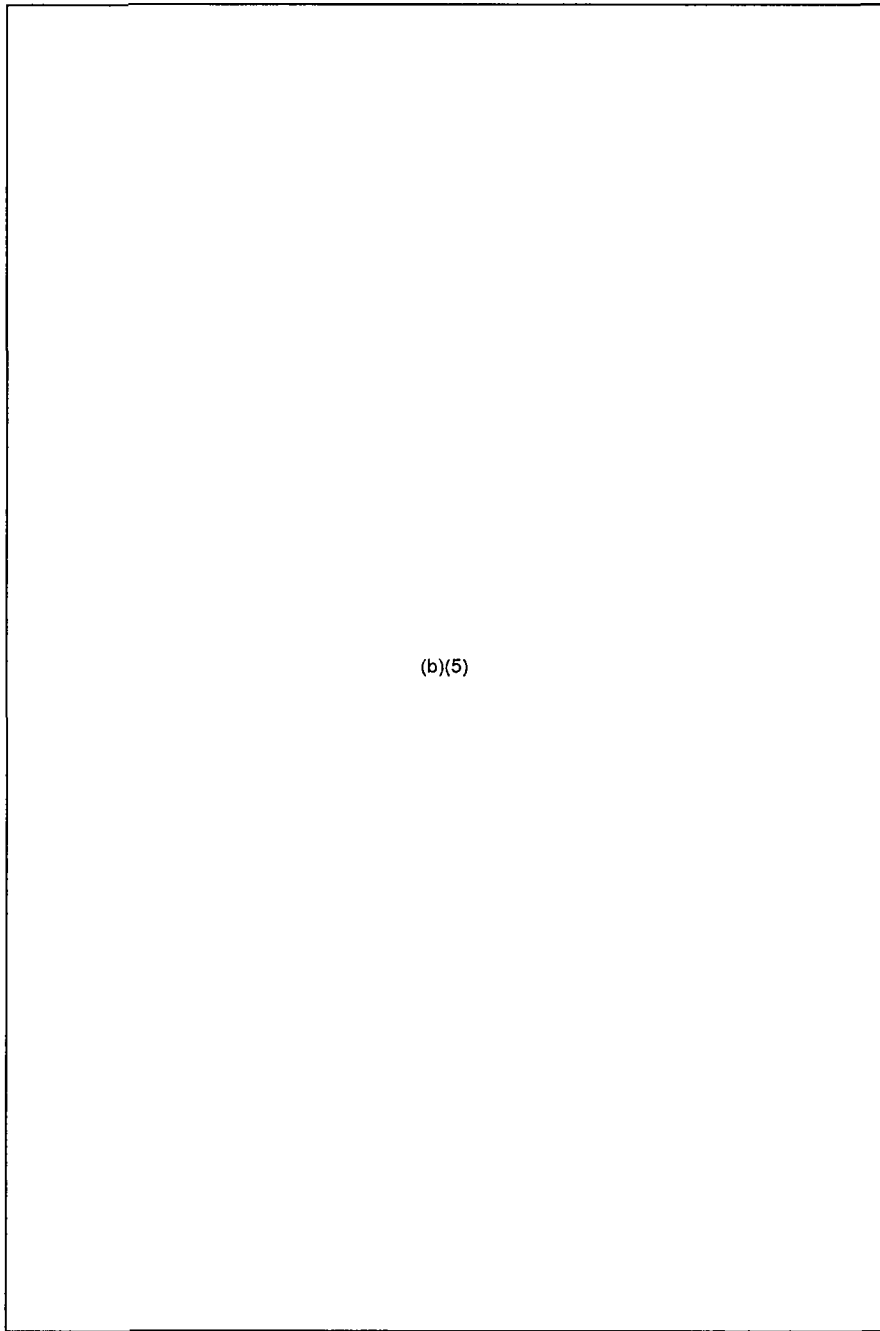
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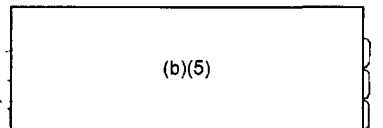
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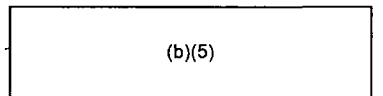
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(b)(5)



(b)(5)



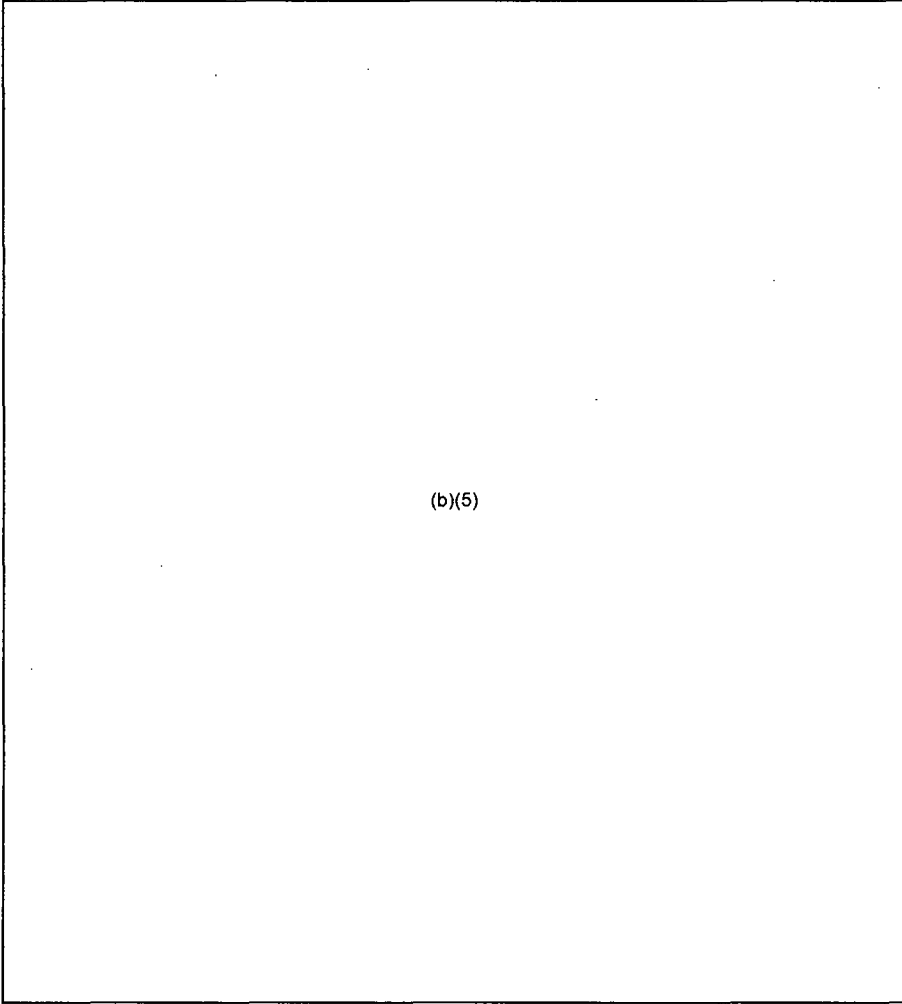
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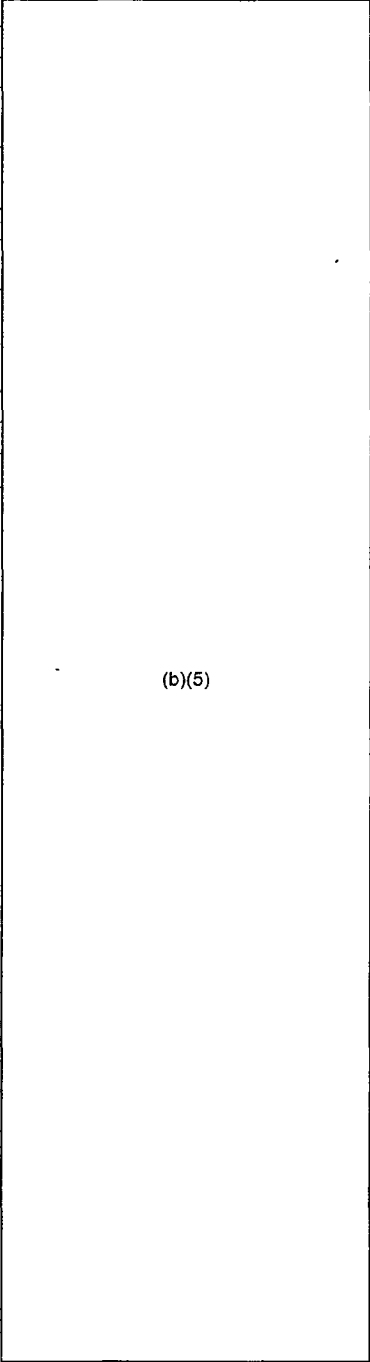
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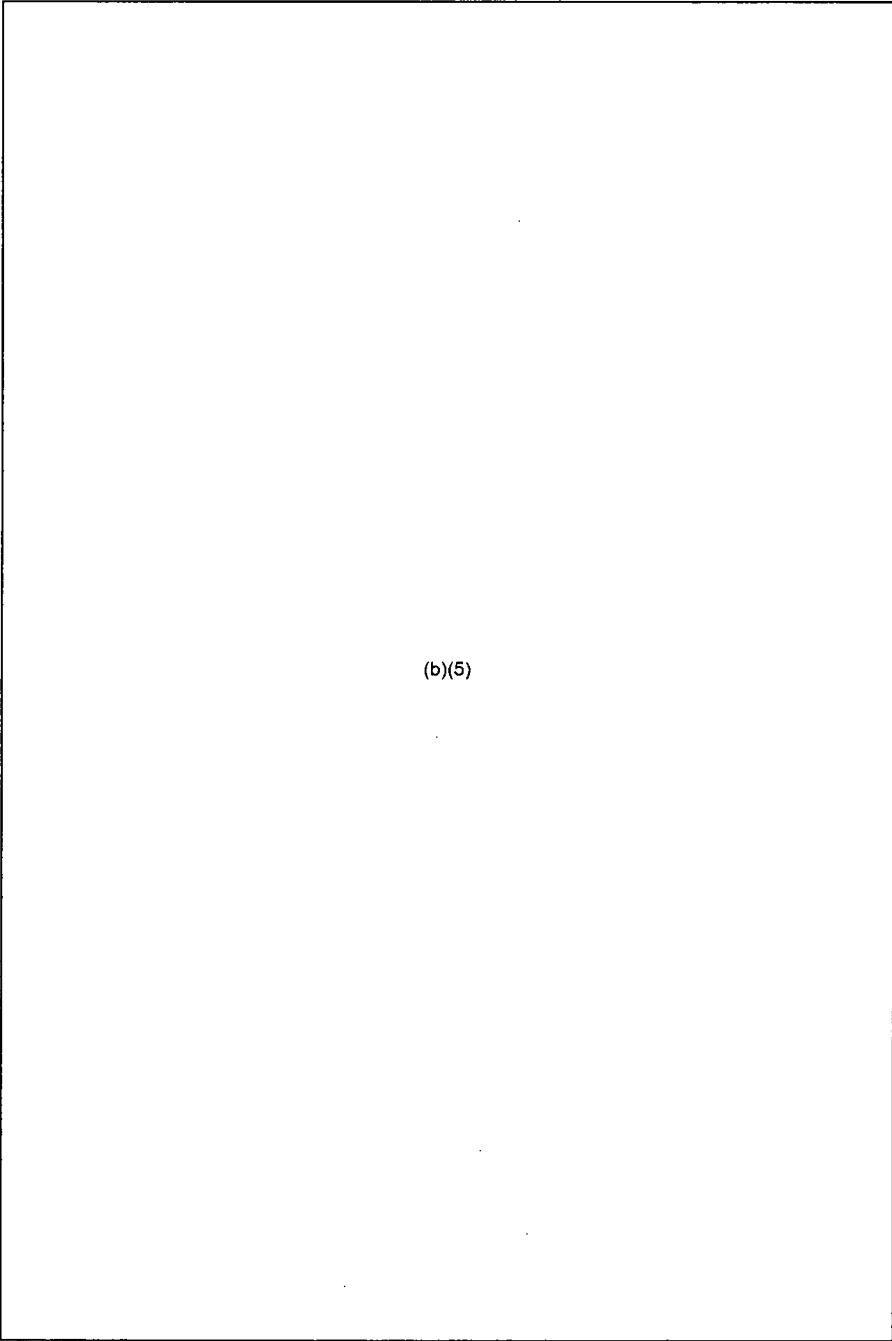
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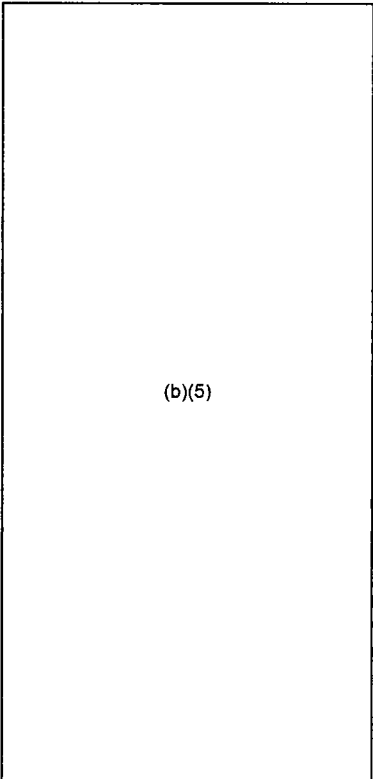
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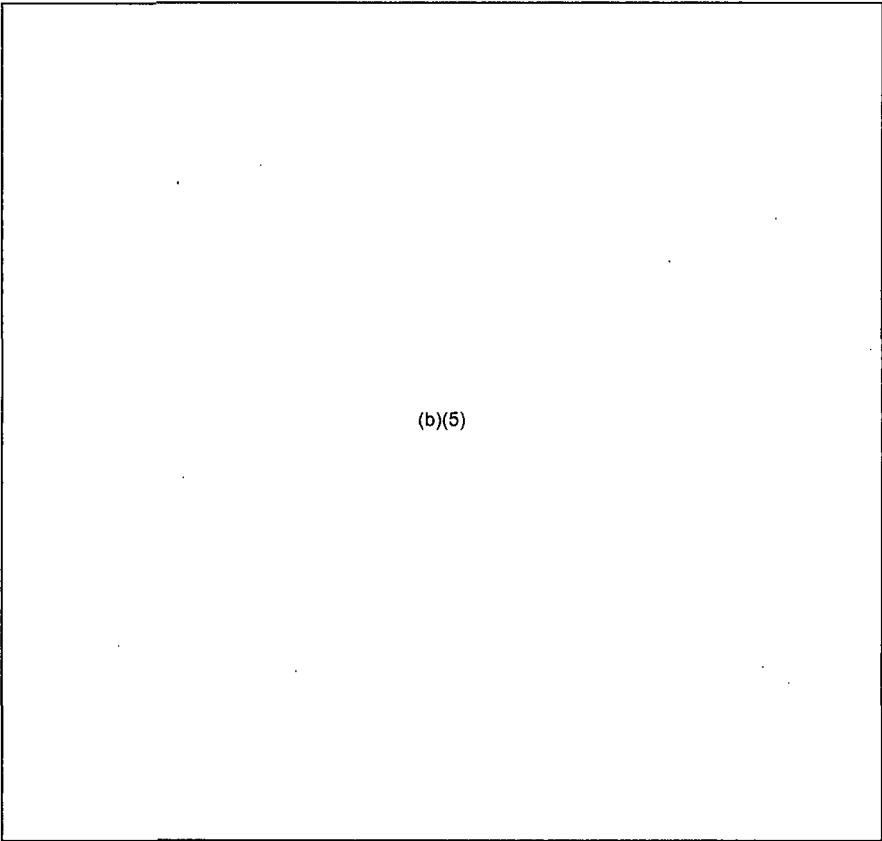
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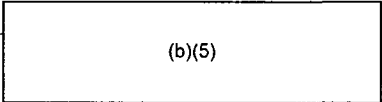
(b)(5)



(b)(5)



(b)(5)



(b)(5)

From: Adair, Loretta
To: Darla Munson; Munson, Cliff; Connie Griffin; Munson, Clifford
Subject: (b)(6)
Date: Monday, March 14, 2011 6:01:10 PM
Attachments: DSCF0698.JPG
DSCF0702.JPG
DSCF0703.JPG

From: (b)(6)
Sent: Monday, March 14, 2011 8:31 AM
To: (b)(6)
Subject: (b)(6)

----- Forwarded Message -----

From: (b)(6)
To: (b)(6)
Sent: Mon, March 14, 2011 9:18:06 AM
Subject: (b)(6)

(b)(6)

On Mon, Mar 14, 2011 at 12:31 AM,

(b)(6)

wrote:

(b)(6)

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(b)(6)

(b)(6)

(b)(6)

Munson, Clifford

From: James, Deonna
Sent: Monday, March 14, 2011 9:41 AM
To: Reckley, William; Magruder, Stewart; Mayfield, Michael; RidsNroArpArb1_2 Resource; RidsAcrsAcnw_MailCTR Resource; RidsOgcMailCenter Resource; RidsNroOd Resource; RidsOpaMail Resource; RidsNroDnrl Resource; RidsNroDser Resource; RidsNroDcip Resource; RidsNroDsra Resource; RidsNroDe Resource; NRO_Branch_Chiefs; RidsResOd Resource; RidsNsrDpr Resource
Subject: 3/23/11-Forthcoming Closed Meeting with B&W Regarding the Control ROD Drive Mechanism Design and Testing Program
Attachments: ADAMS Document.ADC

Date: March 10, 2011

To: Stewart L. Magruder, NRO
From: Ross P. Moore, NRO

Subject: 3/23/11-Forthcoming Closed Meeting with B&W Regarding the Control ROD Drive Mechanism Design and Testing Program

ADAMS Accession No.: ML110680643

Publicly Available

Deonna James

Secretary II
Location: T-9F27
U.S. Nuclear Regulatory Commission
301-415-5828

Munson, Clifford

From: Mazza, Jan
Sent: Monday, March 14, 2011 5:42 PM
To: Moore, Ross; Magruder, Stewart; Starefos, Joelle; Araguas, Christian; Cranston, Gregory; Jones (NRO), Mike; Malave, Yanelly; Smith, John; Shaikh, Samina; Kenyon, Thomas; Humberstone, Matthew; Ahmed, Sardar; Ahn, Hosung; Attard, Anthony; Bagchi, Goutam; Barnhurst, Daniel; Beardsley, James; Bielen, Andrew; Bongarra, James; Brown, David; Burton, William; Carlson, Donald; Caruso, Mark; Caverly, Jill; Chakrabarti, Samir; Chen, Pei-Ying; Chuang, Tze-Jer; Clayton, Brent; Coffin, Stephanie; Cook, Christopher; Costa, Arlon; Cozens, Ian; Cushing, Jack; Davis, Robert; Dehmel, Jean-Claude; Desaulniers, David; Diec, David; Dixon-Herrity, Jennifer; Donoghue, Joseph; Downey, Steven; Dreisbach, Jason; Drozd, Andrzej; Dube, Donald; Fitzpatrick, Robert; Ford, Tanya; Fuller, Edward; Galletti, Greg; Giacinto, Joseph; Gilmer, James; Grady, Anne-Marie; Haider, Syed; Harbuck, Craig; Hart, Michelle; Hatchett, Gregory; Hawkins, Kimberly; Hayes(NRO), Michelle; Held, Wesley; Hilsmeier, Todd; Hsia, Anthony; Hsu, Kaihua; Huang, Jason; Huyck, Doug; Jackson, Terry; Jacobson, Jeffrey; Jenkins, Joel; Jenkins, Ronaldo; Jones, Henry; Jung, Ian; Junge, Michael; Kavanagh, Kerri; Kazi, Abdul; Kellum, Jim; Kevern, Thomas; Kowal, Mark; Landry, Ralph; LaVera, Ronald; Le, Hien; Le, Tuan; Lee, Jay; Lee, Pete; Lee, Samuel; Li, Chang; Li, Hulbert; Li, Yong; Lintz, Mark; Lu, Shanlai; Marble, Julie; Martinez, Erick; McBride, Mark; McCann, Edward; McIntyre, Richard; McKirgan, John; McNally, Richard; Montague, Michael; Mrowca, Lynn; Munson, Clifford; Ng, Ching; ODriscoll, James; Park, Sunwoo; Patterson, Malcolm; Pelton, Rick; Peralta, Juan; Phan, Hanh; Pieringer, Paul; Pohida, Marie; Powell, Eric; Prescott, Peter; Raione, Richard; Rasmussen, Richard; Reckley, William; Roach, Edward; Saenz, Diego; Saltos, Nicholas; Schaaf, Robert; Schmidt, Jeffrey; Schroer, Suzanne; See, Kenneth; Segala, John; Shea, James; Shuaibi, Mohammed; Steingass, Timothy; Tello, Linda; Terao, David; Tetter, Keith; Thomas, Brian; Thomas, George; Tiruneh, Nebiyu; Tjader, Theodore; VanWert, Christopher; Wagner, Ryan; Walker, Jacqwan; Weber, Carl; Whited, Ryan; Williams, Joseph; Williams, Stephen; Williams, Vince; Wong, Yuken; Wu, Cheng-Ih; Norato, Michael; Ray, Neil

Cc: tkevern; Xing, Jing; Algama, Don; Armstrong, Kenneth; Bajorek, Stephen; Bernard, Matthew; Elkins, Scott; Hoxie, Chris; Hudson, Nathanael; Ireland, Andrew; Lee, Richard; Li, Yueh-Li; Lien, Peter; Madni, Imtiaz; Murray, Christopher; Ramirez, Annie; Skarda, Raymond; Staudenmeier, Joseph; Voglewede, John; Whitman, Josh; Clark, Theresa; Miller, Eric; Brian Thomas_SEB1_calendar Resource; Shams, Mohamed

Subject: mPower and NuScale Kick-Off Meeting Follow Up

Dear Colleagues,

The purpose of this email is for the Advanced Reactors Branch 2 (ARB2) to follow up with the Technical Branches that will be involved in Advanced Reactor review work including the SRP Updates (Design Specific Review Plans) for mPower and NuScale. ARB2 Chapter PMs will be scheduling meetings in the next few weeks with their assigned Primary Review Technical Branches to continue communications and outreach.

1. Responsibilities and Assignments (Technical Branches)

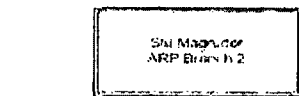
The following link connects to a file that displays the information that we have to date regarding the technical branches and technical reviewers assigned to this work. BCs- please review and provide updates or changes where appropriate.

[SRP Update Assignments](#)

2. Responsibilities and Assignments (ARP Projects Branches)

The chapter PMs and lead PMs for the ARB2 organization are as follows:

ARP iPWR Design-Center PM Assignments



mPower/TVA

Joelle Starobin
Lead SRM
SRP Group 1

Ross Moore
SRP Group 2

Jan Mazzo
SRP Group 3

Yanely Martinez
Backup LPM
SRP Group 4

NuScale

Greg Connor
Lead PM
SRP Group 1

Mia Jones
SRP Group 2

John Smith
Backup LPM
SRP Group 3

Samira Shaikh
SRP Group 4

SRP Chapter Groupings

GROUP 1

- 1 - Introduction & Interfaces
- 15 - Transient and Accident Analysis
- 19 - Severe Accidents

GROUP 2

- 3 - Design of Structures, Components and Systems
- 4 - Reactor
- 5 - Reactor Coolant System and Connected Systems
- 6 - Engineered Safety Features
- 8 - Electric Power
- 10 - Steam and Power Conversion System

GROUP 3

- 7 - Instrumentation and Controls
- 9 - Auxiliary Systems
- 13 - Human Factors Engineering

GROUP 4

- 2 - Site Characteristics and Site Parameters
- 11 - Radioactive Waste Management
- 12 - Radiation Protection
- 13 - Conduct of Operations
- 14 - Initial Test Program and ITAAC-Design Certification
- 16 - Technical Specifications
- 17 - Quality Assurance

3. SRP Update Database

The DOE labs have produced a database of anticipated changes and clarifications needed to facilitate the SRP update for mPower and NuScale. The database has been parsed into chapters and the reports have been uploaded to the Reference Documents Sections of the [mPower Chapter Workspace](#) and [NuScale Chapter Workspace](#). The .pdf document name is similar to "CHxx_SRP_MODS_LIST." Primary and Secondary Review Branches are requested to review these documents and provide comments to the ARP Chapter PMs by 4-29-11. Primary review branches are requested to facilitate interactions with secondary review branches – if you need support, please contact the Chapter PM. DOE labs will use the comments as a basis for the initial "red line strike out" of each SRP section. Schedules are NEGOTIABLE – if the due date doesn't fit with your other work, let's determine the best date that does – the Chapter PMs can work with you to do this.

Note: SRP updates can proceed on a chapter or even section level. It is not necessary for the entire document to be completed before proceeding to the concurrence/public comment period.

4. Outreach

ARP Chapter PMs will be setting up meetings in the next few weeks with their prospective Review Branches to make sure that reviewers have access to all of the information necessary for this undertaking and to review proposed schedules and milestone dates. If you're ready to go sooner, call your PM to schedule now.

5. SECY-11-0024 and NUREG-0800 Chapter 0 Introduction

ARP prepared SECY-11-0024 in response to Staff Requirements Memorandum (SRM)-COMGBJ-10-0004/COMGEA-10-0001, "Use of Risk Insights to Enhance Safety Focus of Small Modular Reactor Reviews" provides the risk-informed integrated review framework for SMRs. You can view these documents at: [ML110110688](#).

Thank you for your attention,

Advanced Reactors Branch 2
NuScale and mPower Project Teams

Munson, Clifford

From: Cranston, Gregory
Sent: Tuesday, March 22, 2011 9:40 AM
To: NRO_Distribution; Skarda, Raymond; Norman, Robert; Lee, Peter; Diec, David; Zaki, Tarek; Holahan, Patricia; Mendiola, Anthony
Subject: NuScale Suspension of Work

Unfortunately, NuScale's financial problems have not been resolved. Consequently, NuScale Power notified the NRC late Friday March 18, 2011, that all work is to be suspended indefinitely on the NuScale project.

Therefore, all fee billable work regarding NuScale is to be suspended in an orderly manner on the NuScale project commencing immediately, except for finishing up work associated with the QA Topical Report safety evaluation and the PRA Audit Report. You are requested not to charge time to any fee billable NuScale TACs, which include RN 6077, 6078, and 6086. These TACs will be suspended at the end of this pay period (end of this week). If you feel you need to charge any time to these fee billable TACs please contact me first.

Non fee billable work such as the IIRPs, general iPWR chapter work, and the iPWR LOCA PIRT by RES will continue.

Everyone working at NuScale Power, Inc., except for a few key personnel involved in trying to get the project refinanced and restarted, were let go last Friday. NuScale remains optimistic that they will obtain financing and be back sometime later this year. However, we need to proceed based on the latest information which is that they are suspending all work.

Munson, Clifford

From: Chokshi, Nilesh
Sent: Monday, March 14, 2011 11:28 AM
To: Jones, Henry; Flanders, Scott; Kammerer, Annie; Karas, Rebecca; Cook, Christopher; Munson, Clifford; Bagchi, Goutam
Subject: RE: Thanks, talking points and sensitivity

Thanks Henry, this is useful.

From: Jones, Henry
Sent: Monday, March 14, 2011 11:16 AM
To: Flanders, Scott; Chokshi, Nilesh; Kammerer, Annie; Karas, Rebecca; Cook, Christopher; Munson, Clifford; Bagchi, Goutam
Subject: FW: Thanks, talking points and sensitivity

Just to let you know that USGS (Menlo Park, tsunami) has already taken the initiative to brief their people regarding the press and nuclear issues:

“..... Please remember that we are not charged with nor have the expertise to comment on the vulnerability of structures like nuclear power plants. Please refer anything and everything related to nuclear energy to the U.S. Nuclear Regulatory Commission (USNRC)....”

USGS also sent us their talking points (attached). This may assist us in being consistent between the agencies.

Henry

From: Eric [mailto:egeist@usgs.gov]
Sent: Monday, March 14, 2011 10:07 AM
To: Jason Chaytor; Uri Ten Brink; Patrick Lynett; David C Twichell; Alex Apotsos
Cc: Jones, Henry
Subject: Fwd: Thanks, talking points and sensitivity

Note from David Applegate below. Short summary: be careful when talking to the press about nuclear issues...Eric

Begin forwarded message:

From: David Applegate <applegate@usgs.gov>
Date: March 13, 2011 10:30:05 PM PDT
To: Paul S Earle <pearle@usgs.gov>, Harley M Benz <benz@usgs.gov>, David J Wald <wald@usgs.gov>, Lisa A Wald <lisa@usgs.gov>, Gavin Hayes <ghayes@usgs.gov>, Eric L Geist <egeist@usgs.gov>, Uri Ten Brink <utenbrink@usgs.gov>, Robert E Kayen <rkayen@usgs.gov>, hudnut@caltech.edu, Susan E Hough <hough@usgs.gov>, Erik V Pounders <epounders@usgs.gov>, jones@usgs.gov, David P Schwartz <dschwartz@usgs.gov>, William L Ellsworth <ellsworth@usgs.gov>, Thomas M Brocher <brocher@usgs.gov>, Jill McCarthy <jmccarthy@usgs.gov>, Stephen H Kirby <skirby@usgs.gov>, Justin L Rubinstein <jrubinstein@usgs.gov>, Ross S Stein

<rstein@usgs.gov>, Ruth A Harris <harris@usgs.gov>, Keith L Knudsen <kknudsen@usgs.gov>, John Boatwright <boat@usgs.gov>, Brad Aagaard <baagaard@usgs.gov>, David H Oppenheimer <oppen@usgs.gov>, Steve R Walter <swalter@usgs.gov>, Susan Garcia <garcia@usgs.gov>, atwater@u.washington.edu, craig@ess.washington.edu, Arthur D Frankel <afrankel@usgs.gov>, Joan S Gomberg <gomberg@usgs.gov>, Gerald Bawden <gbawden@usgs.gov>, Dale A Cox <dacox@usgs.gov>, Guy R Gelfenbaum <ggelfenbaum@usgs.gov>, Peter J Haeussler <pheuslr@usgs.gov>
Cc: Michael L Blanpied <mblanpied@usgs.gov>, William S Leith <wleith@usgs.gov>, Elizabeth A Lemersal <lemersal@usgs.gov>, John R Filson <jfilson@usgs.gov>, Joyce A Costello <jcostell@usgs.gov>
Subject: Thanks, talking points and sensitivity

All,

First off, thank you so much for the extraordinary job you have done communicating with the media and public over the past several days. The media onslaught has been extraordinary, and USGS has risen to the challenge over and over again even in the midst of dealing with the many other responsibilities that come with the response to an event of this scope. (Paul/Harley, please share this note with the NEIC analysts who did such yeoman's service through the wee hours).

Second, I asked John Filson to take a first crack at talking points for this earthquake, and he has generated a great list. We would welcome your additions and subtractions -- messages that you felt were effective in your communications.

Finally, a cautionary note that we are seeing the interests of the media changing from the earthquake and tsunami (and whether similar things might happen in the US -- the proverbial teachable moment) to specific concern about the nuclear power plants in Japan and by extension those here in the US. Please remember that we are not charged with nor have the expertise to comment on the vulnerability of structures like nuclear power plants. Please refer anything and everything related to nuclear energy to the U.S. Nuclear Regulatory Commission (USNRC). Here is a link to a new USNRC press release (on radioactive release) with contact info for their Office of Public Affairs:

<http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-046.pdf>

There is also a link to the USNRC's blog (<http://public-blog.nrc-gateway.gov/>) that has an entry "U.S. Nuclear Plants are Designed for Severe Natural Hazards" that in turn refers to a background paper on the topic at: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-seismic-issues.html>

This is obviously a rapidly changing situation with the well-being of thousands at stake. We have a responsibility to avoid speculation regarding what might happen in what is already an unthinkable situation.

Before I get down off my soapbox, I want to thank you again for an extraordinary effort in responding to an extraordinary event.

Thanks, Dave

David Applegate, Ph.D.
Senior Science Advisor for Earthquake & Geologic Hazards
U.S. Geological Survey
12201 Sunrise Valley Drive MS 905, Reston VA 20192
(b)(6) voice, 703 648 6717 fax
applegate@usgs.gov
(See attached file: Honshu_Talking_points_v2.doc)

Munson, Clifford

From: Drs. Foster and Smith [Editor@drsfostersmith.com]
Sent: Monday, March 14, 2011 1:59 PM
To: Munson, Clifford
Subject: SAVE Your GREEN! 4 Days Only - St. Patty's Pet Supply SALE

Dear CLIFF,
Don't miss your pot of gold DEALS! SALE Ends in 4 Days!

View this email [online](#). Unsubscribe [here](#).



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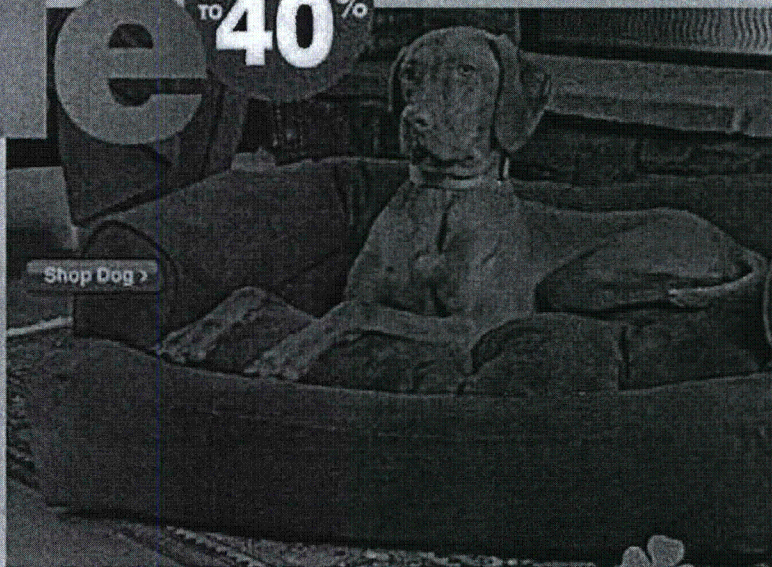
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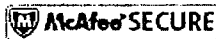
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Munson, Clifford

From: Munson, Clifford
Sent: Monday, March 14, 2011 3:18 PM
To: Ake, Jon
Subject: if you can, call me.

Munson, Clifford

From: Sweeney, Beverly
Sent: Tuesday, March 15, 2011 1:51 PM
To: Munson, Clifford
Subject: RE: DSER Hall of Achievement

LOL – nope you have to suffer!!!]

From: Munson, Clifford
Sent: Tuesday, March 15, 2011 1:49 PM
To: Sweeney, Beverly
Subject: RE: DSER Hall of Achievement

Can we take all of them out? I have to look at all of them every day. ☺ Maybe we could make a big display with people's names engraved. (like the Stanley Cup!)]

From: Sweeney, Beverly
Sent: Tuesday, March 15, 2011 1:08 PM
To: NRO_DSER Distribution
Subject: DSER Hall of Achievement

DSER Staff,

If any of you would have a photo that you would like to place in the DSER Hall of Achievement frames, please let me know before you replace any pictures.]

Thanks!

Bev

Munson, Clifford

From: Audio Advisor, Inc [aa_newsletters=audioadvisor.com@mail36.us2.mcsv.net] on behalf of Audio Advisor, Inc [aa_newsletters@audioadvisor.com]
Sent: Tuesday, March 15, 2011 2:02 PM
To: Munson, Clifford
Subject: PerfectWave Trade-In, Trade-Up Sale

Email not displaying correctly? [1]View it in your browser.

Links:

1. <http://us1.campaign-archive1.com/?u=80e5a8d1b82a27eb253d67a95&id=d3ef2f50b1&e=38d475813c>

Up to \$1,000 Off PS Audio PerfectWave AC Regenerators Trade-in your old PS Audio Power Plant-series power conditioner and trade up to a new PS Audio PerfectWave P10 or PerfectWave P5 AC Regenerator and save up to \$1,000.

The PerfectWave P5 and P10 take your incoming AC power and convert it to DC. Then with patented PS Audio technology, they regenerate and amplify new sine wave-perfect, high current AC power. The ultra low distortion AC power created by Power Plant technology delivers stunning performance from your audio and video components.

Trade Up to PerfectWave and Save

Send us your old PS Audio Power Plant and we'll credit you toward the purchase of a PerfectWave P5 or P10. You'll receive \$1,000 credit when you send us a Power Plant Premier. You'll receive \$750 credit when you send us a Power Plant P1000 or P600. You'll receive \$500 credit when you send us a Power Plant P500 or P300.*

Hurry! This offer expires on April 30, 2011. So trade-in and trade-up now to start enjoying a big step up in audio and video performance.

Up to \$1,000 Off PS Audio PerfectWave P5 AC Regenerator The 8-outlet PerfectWave Power Plant 5 from PS Audio is an amazing technological achievement packed with features that help keep your AV gear running at top performance. The P5 is capable of a continuous 1000 watts of power, with peaks up to 1200 watts. It has four isolated and switched zones.

One zone is specially designed and optimized for high power applications like big power amplifiers.

The PerfectWave P5 retains all the must-have features of PS Audio's best selling Power Plant Premier, including providing perfectly regenerated AC power, while adding exciting new features like touch screen control with an oscilloscope function, Internet-based features, and extended voltage range.

Front Panel Touch Screen

The front panel touch screen is amazing. A touch of a finger allows you to tune your unit's output voltage, switch individual zones on and off, and measure various functions, including the wattage being delivered and used, the THD, and the voltage in and out.

But here's a real kicker! PS Audio added an oscilloscope to the touch screen. Now, for the first time, you can actually see the incoming and outgoing waveforms. So not only can you measure the distortion on the line, but you can also see it. The effect is impressive, because the new PerfectWave Power Plants reduce distortion over ten times, and the difference between what's coming in and what's going out is amazing.

Internet Based Features

A number of cool Internet based features give the PerfectWave 'green' characteristics and allow monitoring from a web page. Both the P5 and P10 connect to PS Audio's Globalnet servers and allow you to access them over the internet. Just go to your unit's web page, schedule the

PerfectWave Power Plant to turn equipment (or even itself) on or off according to any schedule you want, and everything is handled.

PS Audio PerfectWave P5 AC Regenerator, in Black or Silver Finish [2]Regular Price \$3,000, As Low As \$1,999.99 with Trade In

Links:

2.

http://www.audioadvisor.com/prodinfo.asp?number=PSPWPP5&utm_source=Email+Newsletters&utm_campaign=d3ef2f50b1-PerfectWave_Trade_In_Trade_Up_Sale3_14_2011&utm_medium=email

Up to \$1,000 Off PS Audio PerfectWave P10 AC Regenerator The PS Audio PerfectWave P10 offers similar features to the P5, but in a larger 10-outlet chassis. The 1200 continuous watts of pure sine wave power and 1500 peak watts handle just about anything you can throw at the P10. It features five zones, two of which are optimized for high current applications, each switchable from the front panel touch screen.

PS Audio PerfectWave P10 AC Regenerator, in Black or Silver Finish[3] Regular Price \$4,500 As Low As \$3,499.99 with Trade In

Links:

3.

http://www.audioadvisor.com/prodinfo.asp?number=PSPWPP10&utm_source=Email+Newsletters&utm_campaign=d3ef2f50b1-PerfectWave_Trade_In_Trade_Up_Sale3_14_2011&utm_medium=email

PS Audio Power Port Premier AC Outlet

Don't plug your sophisticated hi-fi or home theater component into a \$1.89 mass-produced wall receptacle. PS Audio's Power Port Premier is a custom built, hand crafted, direct gold-plated AC receptacle of the highest quality.

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[4]Only \$99.99

Links:

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PS Audio Soloist Special Edition In-Wall AC Conditioner The PS Audio Soloist Special edition puts AC protection right in the wall.

Built around the Power Port Premier, it's hand-assembled with gold-plated internal contacts.

PS Audio Soloist Special Edition In-Wall AC Conditioner [5]Only \$249.99

Links:

5.

http://www.audioadvisor.com/prodinfo.asp?number=PSSOLO&utm_source=Email+Newsletters&utm_campaign=d3ef2f50b1-PerfectWave_Trade_In_Trade_Up_Sale3_14_2011&utm_medium=email

PS Audio PerfectWave AC-5 Power Cable

The PerfectWave AC-5 is the best-value power cable that PS Audio makes. Its high-tech features and OFC pure copper conductors add up to an incredible power delivery system.

PS Audio PerfectWave AC-5 Power Cable

[6]1.0M, Only \$199.99

[7]1.5M, Only \$349.99

[8]2.0M Only \$399.99

Trade-ins Welcome. Call 1-800-942-0220 for Details.

Links:

6.

http://www.audioadvisor.com/prodinfo.asp?number=PSPWAC5&variation=1&utm_source=Email+Newsletters&utm_campaign=d3ef2f50b1-PerfectWave_Trade_In_Trade_Up_Sale3_14_2011&utm_medium=email

7.

http://www.audioadvisor.com/prodinfo.asp?number=PSPWAC5&variation=1.5&utm_source=Email+Newsletter&utm_campaign=d3ef2f50b1-PerfectWave_Trade_In_Trade_Up_Sale3_14_2011&utm_medium=email

8.

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PS Audio PerfectWave AC-10 Power Cable The PerfectWave AC-10 is the second-best power cable that PS Audio makes. It is an incredible performer when no-compromise power delivery is critical.

PS Audio PerfectWave AC-10 Power Cable

[9]1.0M, Only \$699.99

[10]1.5M, Only \$829.99

[11]2.0M Only \$959.99

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[12]1.0M, Only \$999.99

[13]1.5M, Only \$1,199.99

[14]2.0M Only \$1,399.99

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Klipsch Image X10i Headphone

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Links:

9.

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10.

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11.

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12.

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Coupon Key Code = KLX10I_

[17]*Here's how the trade-in, trade-up offer works:

Links:

17.

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1) Choose a PS Audio PerfectWave P10 or PerfectWave P5 Power Regenerator. Order online or by calling us toll-free at (800) 942-0220. We'll charge you for the PerfectWave P5 or P10 and ship it promptly to you.

2) After you receive your PerfectWave P10 or P5, call us for a Return Authorization Number (RA#), ship us your old PS Audio Power Plant-series power conditioner with the RA# clearly on the outside of the package, and we'll promptly refund your credit card the trade-in value for your PS Audio Power Plant gear. See our website for more information, or call us toll-free at 1-800-942-0220.

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From: [Newswatch](#)
To: [Munson, Clifford](#)
Subject: Exempt or Nonexempt? Coping with Tougher Overtime Enforcement Under the Obama DOL March 16 Webinar
Date: Tuesday, March 15, 2011 10:30:47 AM

Exempt or Nonexempt? Coping with Tougher Overtime Enforcement Under the Obama DOL

Wednesday, March 16, 2011

Time: 2:00 pm ET (1:00 pm CT, 12 noon MT, 11:00 am PT)

Length: 60 minutes

Registration: \$219.00

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COURSE DESCRIPTION: Last year Secretary of Labor Hilda Solis warned that the Obama administration would turn up the heat on overtime violations and it's done so. One California company got slammed with a \$580 million verdict.

Point made. DOL will catch a lot of scoundrels. But they're also going to nab thousands of well-intentioned companies that unknowingly violate overtime laws, which can be very tricky.

Don't get caught in the net. Attend this straight-talk 60-minute conference conducted by an expert employment law attorney, Edward Bergmann. He'll lay out for HR executives a detailed overview of the white-collar exemptions, providing specific, practical examples showing how they're applied. The course will also highlight the "hot spots" -- those areas where employers are prone to make classification mistakes, and offer advice for conducting audits.

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- Why we see so many fines and lawsuits involving the "discretion and independent judgment" test aspect of the administrative exemption - and what you can do to get it right
- Changes to the salary basis test and steps you can take to ensure compliance
- How to classify analysts, specialists, coordinators, executive assistants, and computer employees
- How to use, draft and manage job descriptions -- which are often your worst enemy when you get into court -- from an overtime classification perspective
- How to correctly determine who is supervising who for purposes of the executive exemption
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- supervised by multiple bosses
- The effect of the increased salary level test on the exempt status of part-time employees
- How employers have been responding to the new regulations.

ABOUT THE SPEAKER

Edward Bergmann, Esq., is a partner in the Chicago office of Seyfarth Shaw. He is the Chair of the firm's Task Force on wage-hour issues. He has represented private and public employers, throughout the United States, in administrative and court litigation under the Federal Fair Labor Standards Act and State Acts for over 30 years. He has handled class actions under state wage payment laws in numerous states and handled collective actions under FLSA throughout the country both at the district court, federal appellate court and Supreme Court levels.

Mr. Bergmann has also provided advice to numerous Fortune 100 and 500 corporations on compliance with state and federal FLSA statutes and avoidance of litigation under those statutes. He participated in the General Accounting Office's review of the White Collar Exemptions to the FLSA, which culminated in a published report to Congress by GAO. Recently he has provided guidance on compliance with the revised federal exempt status regulations.

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This email was sent to: clifford.munson@nrc.gov by Newswatch.
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Munson, Clifford

From: Ciocco, Jeff
Sent: Tuesday, March 15, 2011 12:27 PM
To: Johnson, Michael; Holahan, Gary; NRO_Division_Directors; NRO_Deputy_Division_Directors; NRO_TA; Zobler, Marian
Cc: NRO_Branch_Chiefs; Willingham, Michael; Dozier, Tamsen; Lee, Pete; Barss, Dan; Williams, Kevin; Huyck, Doug; Clayman, Lew; Kirkwood, Sara; Vrahoretis, Susan; Snyder, Amy; Clark, Theresa; Elkins, Scott; Jackson, Christopher; Dusaniwskyj, Michael; Thompson, Jacqueline; Teasley, Shannon; Shams, Mohamed; Jain, Bhagwat; Schmidt, Jeffrey; Ashley, Clinton; Ciocco, Jeff; Colon, Jessica; Galvin, Dennis; Hamzehee, Hossein; Kallan, Paul; Monarque, Stephen; Otto, Ngola; Patel, Chandu; Reyes, Ruth; Roy, Tarun; Smith(NRO), Crystal; Takacs, Michael; Ward, William
Subject: Presentation for WEDNESDAY'S (3/16/11) US-APWR Design Center PROJECT PERFORMANCE MEETING #18
Attachments: FINAL 2011-03-16 US-APWR Project Performance Meeting PPM #18.pdf; image001.jpg

All,

Attached is the presentation for tomorrow's (Wednesday, 3/16/11) US-APWR Design-Center *Project Performance Meeting #18*.

Thanks,

Jeff Ciocco
US-APWR Projects
New Nuclear Reactor Licensing
301.415.6391
jeff.ciocco@nrc.gov



US-APWR Design Center

Project Performance Meeting #18

Jeff Ciocco, Lead Project Manager, US-APWR Design Certification
Stephen Monarque, Lead Safety Project Manager, Comanche Peak RCOL
Michael Willingham, Lead Environmental Project Manager, Comanche Peak RCOL
Chandu Patel, Lead Safety Project Manager, North Anna SCOL
Tamsen Dozier, Lead Environmental Project Manager, North Anna SCOL

March 16, 2011



PPM Meeting Action Items

- Action Items From Last PPM
 - None
- Action Items Carried Over
 - No items carried over.



US-APWR Design Certification

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(b)(5)

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US-APWR DC – Issues

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6

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US-APWR DC – Issues (cont'd)

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7



US-APWR DC – Issues (cont'd)


(b)(5)



US-APWR DC – Risks


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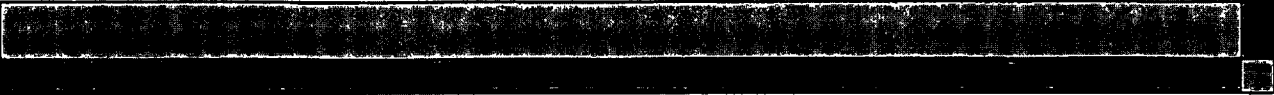
US-APWR DC – Risks (cont'd)

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US-APWR DC – Risks (cont'd)

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US-APWR DC – Risks (cont'd)

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US-APWR DC – Risks (cont'd)

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US-APWR

Comanche Peak RCOL

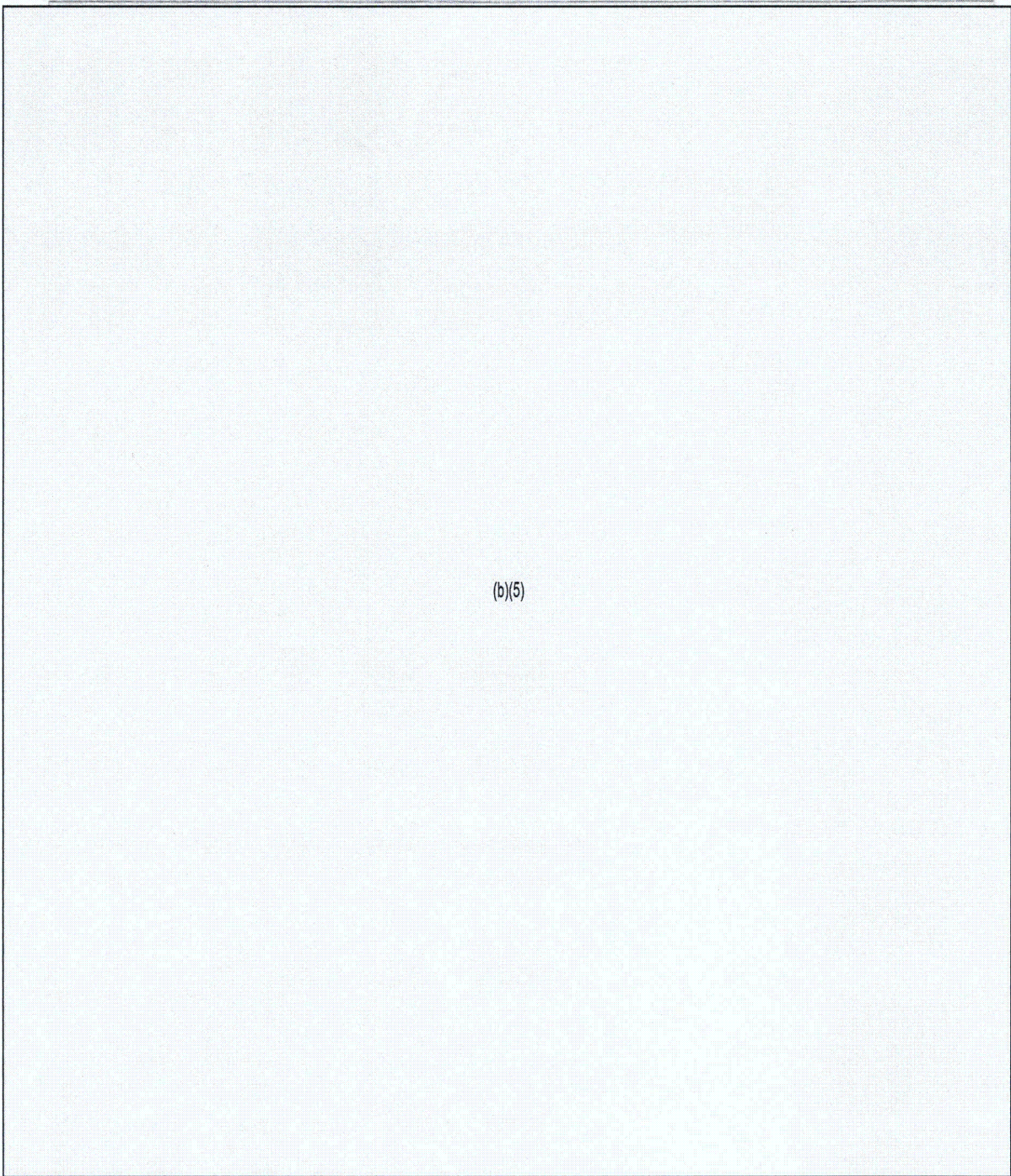
Safety Review

Environmental Review

US-APWR RCOL – Overall Project Status

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US-APWR RCOL – Risks

(b)(5)

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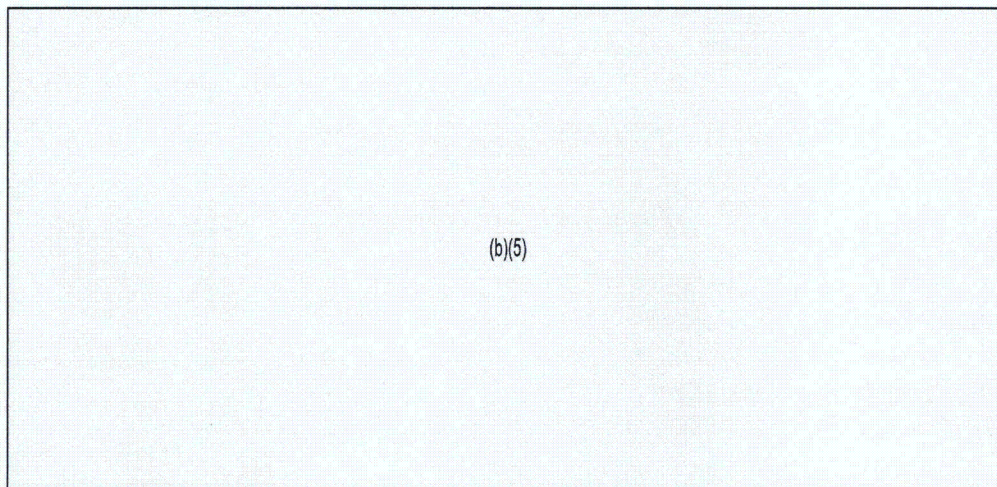
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19

CN 792 of 2437

Comanche Peak Environmental RCOL- Environmental Project Status

(b)(5)



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From: [Newswatch](#)
To: [Munson, Clifford](#)
Subject: Employment Litigation: Avoid it Settle it Win it April 12 Webinar
Date: Tuesday, March 15, 2011 5:18:03 PM

Employment Litigation: How to Avoid It. How to Settle It. How to Win It.

Sponsored by Park Avenue Presentations

Tuesday, April 12, 2011

Time: 1:30 pm ET (12:30 pm CT, 11:30 am MT, 10:30 am PT)

Length: 90 minutes

Registration - Session Only: \$198.00

Registration - Session Plus CD Recording: \$289.00

WEBINAR OVERVIEW

Employment litigation can be stressful, risky, bad for morale and disruptive to your business. Lawsuits are also overwhelmingly expensive (all too often, unnecessarily so) and are generally best to be avoided. This Webinar discusses steps you can take to reduce the risk of employee litigation and, where litigation is unavoidable, maximize your chances of prevailing at trial or reaching a resolution as quickly, efficiently and cost-effectively as possible.

David Ebert, a partner with the New York law firm Ingram Yuzek Gainen Carroll & Bertolotti, LLP, has been litigating complex commercial disputes and employee claims on behalf of both employees and employers for 24 years. Having guided clients through the expense, uncertainty, frustration and highs and lows of litigation, he has focused increasingly in recent years on offering creative and practical solutions to business owners, executives, in-house lawyers and HR professionals on handling employee disputes and claims, with a strong emphasis on litigation avoidance and early settlement.

TOPICS TO BE COVERED

- Why employees sue
- Family and Medical Leave Act, Americans with Disabilities Act, and other federal and state statutes that govern employment
- Employee handbooks
- Employee confidentiality/non-compete agreements
- Employee files and documentation
- Mechanics of terminating employees
- Separation Agreements
- Good reasons to litigate and good reasons not to litigate

UPCOMING TELECONFERENCES

Exempt or Nonexempt?

Coping with Tougher
Overtime Enforcement
Under the Obama DOL
Mar. 16, 2011

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They Save You Time,
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Mar. 17, 2011

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How to Successfully Use
Social Media for Hiring and
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Mar. 17, 2011

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Using Travel Policy to
Control Costs
Mar. 18, 2011

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How to Handle Travel Pay
Legally
Mar. 21, 2011

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- * Document retention
- * E-Discovery and Emails a goldmine for them, a landmine for you (and vice-versa)
- * Managing your lawyer and the lawsuit
- * When, why and how to settle

WHO SHOULD ATTEND

Business owners, executives, HR professionals and in-house counsel who want to learn practical ways to avoid employee litigation and, where it is unavoidable, how to put yourself in the best position to succeed in the lawsuit.

FACULTY

David G. Ebert

Ingram Yuzek Gainen Carroll & Bertolotti, LLP

250 Park Avenue - 6th Floor, New York, N.Y. 10177

212.907.9603 debert@ingramllp.com

TELECONFERENCE OVERVIEW

- * 90-minute webinar (Travel-Free) delivered over the phone and Internet.
- * Unlimited listeners per connection - bring the entire department.
- * Q&A session with the expert.

This event will be presented live by phone together with a PowerPoint presentation to be viewed on your computer. Internet access is not required for phone-only participants.

The PowerPoint slides will be provided shortly before the event. Once you register, you will receive an email which is your receipt and which includes your instructions for dialing in and logging on. You will also receive an email reminder 24 hours before the webinar.

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Munson, Clifford

From: Shockley Honda [ShockleyHonda@YourVehicleRewards.com]
Sent: Tuesday, March 15, 2011 5:42 PM
To: Munson, Clifford
Subject: Everyone is Invited to Ladies Day !



Everyone is invited !!!

Shockley Honda

Ladies Day

Weds, March 16th from 2-5 pm

Ladies, if you haven't joined us for Ladies Day yet, this Wednesday is the Day! Please join us for a few hours of pampering and

INVITE YOUR FRIENDS!!!

Professionals from the salon will provide mini manicure (shaping & polish), makeup demonstration/application featuring the makeup line Jane Iredale Cosmetics, hand massages and seated massages. Also, refreshments will be provided including baked goods from Cakes for Causes.

ladiesday@shockleyhonda.com



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Munson, Clifford

From: Drs. Foster and Smith [Editor@drsfostersmith.com]
Sent: Tuesday, March 15, 2011 6:47 PM
To: Munson, Clifford
Subject: "Pet Tails" - Stories from our Clinic

Dear CLIFF,

In this issue of "Pet Tails": The dog fighting the tick-borne disease. [View email online here.](#)

DOCTORS
FOSTER and SMITH

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A Case of Ehrlichiosis

Jeanne, a breeder of champion Golden Retrievers, called us because one of her females, Alice, was just not acting right. She seemed depressed, she didn't want to exercise, and she didn't want to eat. All she wanted to do was to lie down. To make matters more complicated, Alice was showing all the classic signs of a potential litter.

Read the rest of the story here »

<p>EMAIL reminder SERVICE Never forget to give your pet her heartworm meds again! LEARN HOW »</p>	<p>SALE Tick Control: Flea & Tick Control! FREE SHIPPING! »</p>	<p>Visit our Online Pet Resource Library</p>
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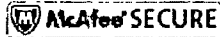
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Munson, Clifford

From: L.L.Bean [LLBean@e.llbean.com]
Sent: Tuesday, March 15, 2011 8:15 AM
To: Munson, Clifford
Subject: Letter from Camp--Wish You Were Here


L.L.Bean: [Are you out there?](#) You haven't responded to emails lately. Trouble viewing? View this email in a [browser](#) or on a [mobile device](#).

1-888-610-2326 Customer Service

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Men's Women's Kids' Footwear Outdoor Gear - Hunt/Fish Luggage Home Sale



Are You Still There?
We've noticed that our weekly emails haven't kindled your interest.

The tents are set up, the lamps are alight and the fire is burning. There's just one thing missing - you. We've noticed that you haven't responded to our emails lately so we'd like to guide you back to camp by helping you customize your email preferences for a more personal experience.

Our founder, Leon Leonwood Bean, known to his friends as "L.L.," recommended a system of signals for finding lost companions. He fired two warning shots and listened for a two-shot reply. Well, here are our two shots - we hope they bring you back.

Let us know your position:

Keep sending me L.L.Bean emails <input type="radio"/> Select my areas of interest	I no longer use this email account <input type="radio"/> Update my email address
Please send me fewer emails <input type="radio"/> Set my frequency	I no longer want to receive L.L.Bean email <input type="radio"/> Unsubscribe



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L.L.Bean Inc.
Dept. CFM
15 Casco Street
Freeport, Maine 04033
USA
1-888-610-2326

3036058

Munson, Clifford

From: Karas, Rebecca
Sent: Tuesday, March 15, 2011 9:14 AM
To: Stieve, Alice; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Devlin, Stephanie; Cook, Christopher; Flanders, Scott
Subject: RE: Update, and DSER support that is being provided + support that needs to be provided

Yong is going to cover through 4pm, so if you want to come in a little later, maybe 1:30pm so he can get you trained up, that would be great.

-----Original Message-----

From: Stieve, Alice
Sent: Tuesday, March 15, 2011 8:27 AM
To: Karas, Rebecca; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Devlin, Stephanie; Cook, Christopher; Flanders, Scott
Subject: RE: Update, and DSER support that is being provided + support that needs to be provided

Per my conversation with Becky and Stephanie last night I am planning on reporting to the ops center around Noon today and plan to support them until 11 PM. I anticipate turnover with Yong at that time.

From: Karas, Rebecca
Sent: Tuesday, March 15, 2011 3:33 AM
To: Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Stieve, Alice; Devlin, Stephanie; Cook, Christopher; Flanders, Scott
Subject: Re: Update, and DSER support that is being provided + support that needs to be provided

ANnie call me (b)(6)

Sent from my nrc blackberry
Rebecca Karas
Chief, Geosciences and Geotechnical Engineering Branch 1, Office of New Reactors, U.S. Nuclear Regulatory Commission
(b)(6) blackberry
1-301-415-7533 office

From: Kammerer, Annie
To: Karas, Rebecca; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Stieve, Alice; Devlin, Stephanie; Cook, Christopher; Flanders, Scott
Sent: Tue Mar 15 01:42:51 2011
Subject: RE: Update, and DSER support that is being provided + support that needs to be provided

OK. When you say "much worse" are you referring to possible dose due to winds taking radiation to the population; or do you mean the state of the reactors, or both?

I am still buried in the Q&As...and don't have a television.

Annie

From: Karas, Rebecca
Sent: Tuesday, March 15, 2011 12:40 AM

To: Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Stieve, Alice; Devlin, Stephanie; Cook, Christopher; Flanders, Scott
Subject: Re: Update, and DSER support that is being provided + support that needs to be provided

Yes, but I gave Nilesh and Cliff's names as Cliff is SI and Nilesh deputy so they need to direct DSER support, including from Richard's branch.

Sent from my nrc blackberry

Rebecca Karas

Chief, Geosciences and Geotechnical Engineering Branch 1, Office of New Reactors, U.S. Nuclear Regulatory Commission

(b)(6)

blackberry

1-301-415-7533 office

From: Kammerer, Annie

To: Karas, Rebecca; Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Stieve, Alice; Devlin, Stephanie; Cook, Christopher; Flanders, Scott

Sent: Tue Mar 15 00:01:06 2011

Subject: RE: Update, and DSER support that is being provided + support that needs to be provided Becky, I will be in tomorrow morning, but am on the reactor safety team. So, I don't think I can help on the GIS side. Good luck keeping that very important position staffed!

Also, I didn't get anything back on the tsunami fact sheet. WRT whether or not the Q&As are enough. I think we need to be a little careful as the group that typically acts as my counterpart on tsunami is hydrology, specifically Henry Jones. I don't care who helps, but it's important to keep the NRO branch that is actually doing the tsunami reviews in the loop. Perhaps we can touch base later.

From: Karas, Rebecca

Sent: Monday, March 14, 2011 11:37 PM

To: Chokshi, Nilesh; Munson, Clifford; Li, Yong; Seber, Dogan; Stieve, Alice; Devlin, Stephanie; Cook, Christopher; Flanders, Scott

Cc: Kammerer, Annie

Subject: Update, and DSER support that is being provided + support that needs to be provided

The situation is now much worse than before at several of the units. Wind direction has also changed, and they needed to staff up the PMT fully. Michelle was in, as well as Kevin, but they also needed night shift. They are critically short on met and also GIS. I got the OK to use people not qualified in ops center procedures, as otherwise they would have had no one. I offered NRO's assistance tonight (you can tell Mike later....). I called in Dogan to work 8pm to 7am. Do not keep him over on day shift as he needs to sleep. Yong needs to support 7am – 3pm GIS. I also requested Alice to cover GIS from 3pm to 11pm. I would suspect this will continue to last several days at least due to the worsening situation (I would describe fully, but my understanding is the information is being kept fairly closely within the ops center – they are considering getting more information out to a larger body of staff). Nilesh, feel free to wake me up via cell if you want info. Or watch TV, YouTube, etc. The TEPCO and NISA sites are not updated, but they are conducting regular press briefings.

To those of you who are giving up sleep/working strange hours, thank you for your eagerness to help and your understanding. You are directly supporting Americans in Japan, and the U.S. government's offer of assistance to the Japanese. Please be prepared that you will likely be needed for additional shifts throughout the week. We should work with DNRL as needed to adjust due dates due to the situation.

Also, can someone please check with Dan Barnhurst – Alice indicated he has GIS experience, so we could use him for additional shifts. And, do we have any met people besides Brad and Kevin who could help out (Brad I understand is out of town – Kevin is already supporting). I can't remember his name right now, but the

guy who used to work in RSAC but lateralled somewhere else is also already supporting. If so, have them check in with the ops center to see if they still need met people.

Please also see related email, they need a tsunami fact sheet ASAP.

Rebecca Karas, Acting Deputy Director
Division of Site and Environmental Reviews Office of New Reactors U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

Munson, Clifford

From: Zordan, Diane N. [zordan@dep.anl.gov]
Sent: Tuesday, March 15, 2011 9:19 AM
To: Munson, Clifford
Subject: IAEA Vacancy Information
Attachments: Expert Codes.xls

March 15, 2011

Dear Mr. Munson:

You have received this letter because you were identified as a key U.S. advisor/expert for the International Atomic Energy Agency's (IAEA) activities. As you may know, the United States is the largest donor to the IAEA and is a strong supporter of the IAEA's mission and programs. The purpose of this letter is to collect essential information for developing a network of U.S. contacts willing to participate in IAEA activities such as:

- Hosting IAEA fellowship participants
- Participating in IAEA meetings/workshops
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- Giving lectures or presenting papers

If you would like your information stored in our database for our future activities with the IAEA, please complete the attached document and email it back to Zordan@dep.anl.gov.

If we do not receive your reply by April 15, 2011, we will assume that you are not interested in the IAEA activities, and your information will be removed from our database.

Thank you and regards,

Diane Zordan for
Sunaree Hamilton, Ph.D.
Program Manager, International Program
Argonne National Laboratory
Division of Educational Programs
9700 S. Cass Ave, Argonne, IL 60439

Office: (630) 252-1050
Cell: (b)(6)
Fax: (630) 252-3193
E-mail: shamilton@dep.anl.gov

NAME:
 POSITION:
 ORGANIZATION:
 ADDRESS:
 CITY, STATE, ZIP:
 PHONE, FAX, EMAIL:
 COUNTRY(S) OF CITIZENSHIP

Place an X in the column for the codes which are applicable to your qualifications.

TC FIELD CODES		
Code	Field Description	X
0A	General Atomic Energy Development	
0B	Overall Programming	
0C	Nuclear Material Management (Safeguards)	
0D	Development of National Nuclear Law	
0E	Sustainable Energy Development	
0F	Nuclear Information Processing, Capacity Building	
0G	Administration in Nuclear Fields	
0H	Nuclear Centres and Laboratories	
0I	Education, Training and Nuclear Knowledge Management	
0J	Information Technology and Data Processing	
0K	Public Information and Communication	
0L	Security of Material (Historical subject. As of 2004 use Field 9)	
0M	Country Programme Framework	
0N	Strengthening Institutional Capacity for Sustainability and Self-Reliance	
0O	Resource Mobilization and Partnership Development	
0P	Technical Cooperation among Developing Countries (TCDC)	
0Q	Quality Management (QM) in Nuclear Applications	
1A	Nuclear and Atomic Physics	
1B	Theoretical Physics	
1C	Atomic Physics	
1D	Nuclear Physics	
1E	Neutron Physics	
1F	Reactor Physics	
1G	Solid State Physics	
1H	Plasma Physics and Fusion Research	
1I	High Energy Physics	
1J	Mass Spectrometry and Mass Separators	
1K	Radiometry and Dosimetry (Historical subject. As of 2004 use 6F)	
1L	Analytical Nuclear Physics	
1M	Accelerators – Applications in Physics	
2A	Nuclear Chemistry and Radiochemistry	
2B	Radiochemistry	
2C	Radioanalytical Techniques	
2D	Radiation Chemistry	
2E	Physical Chemistry (Historical subject)	
2F	Preparation of Labelled Compounds	
2G	Radiopharmaceuticals	
2H	Quality Management (QM) of Radiopharmaceuticals	
2I	Quality Management (QM) and Good Laboratory Practice (GLP) for Radioanalytical Techniques	

3A	Fuel Cycle and Waste Management	
3B	Raw Material	
3C	Evaluation of Uranium and Thorium Ore Deposits and other Ores of Nuclear Interest (Historical subject. As of 2004 use 3B)	
3D	Mining of Nuclear Raw Materials (Historical subject. As of 2004 use 3B)	
3E	Analysis of Nuclear Raw Materials (Historical subject. As of 2004 use 3B)	
3F	Processing of Nuclear Materials (Historical subject. As of 2004 use 3B)	
3G	Nuclear Fuel Management (From Fresh to Spent)	
3H	Radioactive Waste Management Technology and Infrastructure	
3I	Predisposal of Radioactive Waste	
3J	Disposal of Radioactive Waste	
3K	Decommissioning of Nuclear Facilities	
3L	Environmental Remediation	
3M	Sealed Radioactive Sources Management	
3N	Information Technology for Radioactive Waste	
3O	Nuclear Fuel Performance	
3P	Innovative Fuel Cycle Technology	
4A	Nuclear Engineering and Technology	
4B	Research Reactors	
4C	Power Reactors	
4D	Reactor Technology	
4E	Reactor Metallurgy and Materials	
4F	Nuclear Chemical Engineering	
4G	Nuclear Instrumentation, Electronics and Reactor Control	
4H	Production of Isotopes	
4J	Fuel Element Reprocessing (Historical subject)	
4K	Irradiation Effects on Equipment and Materials	
4L	Radiation Engineering and Accelerator Technology	
4M	Management Systems (QS) for Nuclear Facilities	
4N	Nuclear Fuel Management (Historical subject. As of 2004 use Field 3)	
4O	Radioactive Waste Management Technologies (Historical subject. As of 2004 use Field 3)	
4P	Nuclear Engineering Infrastructure Development	
4Q	Human Resources for Nuclear Engineering and Technology	
4R	Engineering Economics for Nuclear Power Plant	
4S	Information Technology for Nuclear Power Plant	
4T	Nuclear Power Plant Life Cycle Management	
4U	Nuclear Power Plant Operational Support	
4V	Nuclear Power Plant Planning and Pre-Operational Support	
4W	Innovative Nuclear Power Systems	
4X	Nuclear Power for Desalination and for other Non-Electric Applications	
5A	Application of Isotopes and Radiation in Food and Agriculture	
5B	Soil and Water Management and Crop Nutrition	
5C	Plant Breeding and Genetics	
5D	Insect Pest Control	
5E	Animal Production	
5F	Animal Diseases	
5G	Contaminants and Residues in Food and Environment	
5H	Food Irradiation	
5I	Plant Pathology (Historical subject. As of 2004 use 5C)	
6A	Radiation Medicine and Health	
6B	Nuclear Medicine Imaging	
6C	Radioisotope and Radiation Treatment	

6D	Fundamental Medical Research (Historical subject)	
6E	Radiotoxicology (Historical subject)	
6F	Radiation Metrology and Dosimetry	
6G	Radiopharmacy (Historical subject. As of 2004 use 2G)	
6H	Diagnostic Radiology	
6I	Health Effects of Contaminants	
6J	Assessment of Micronutrients in Nutrition	
7A	Application of Isotopes and Radiation in Biology and Environmental Studies	
7C	Somatic Effects of Radiation	
7D	Genetic Effects of Radiation	
7E	Radiation Sterilization	
7F	Radioecology	
7G	Dosimetry in Radiation Biology	
7H	Preparation of Vaccines	
7I	Radiation Biology	
7J	Nutritional and Health-Related Environmental Studies (Historical subject. As of 2004 use 6I and 6J)	
7K	Environmental and Radiological Assessment and Remediation Strategies	
7L	Isotopes And Radiotracers in Ecotoxicology and Pollution Studies	
7M	Marine Environment and Coastal Zone Management	
7N	Quality Management (QM) of Analytical Measurements	
8A	Isotope Hydrology and Applications of Isotopes and Radiation in Industry	
8C	General Industrial Applications (Historical subject. As of 2004 use 8G to 8Q)	
8E	Non-Nuclear Materials (Historical subject. As of 2004 use 8J)	
8F	Civil Engineering (Historical subject. As of 2004 use 8J)	
8G	Industrial Pollution Studies and Non-Radioactive Effluent Disposal	
8H	Radiation Processing Facilities and Applications	
8I	Multi-Purpose Irradiation (Historical subject. As of 2004 use 8H)	
8J	Radiation Technologies and Tracer Techniques for Industrial Processes	
8M	Ground-Water Hydrology	
8N	Surface-Water Hydrology	
8O	Analytical and Instrumental Techniques	
8P	Non-Destructive Testing (NDT) and Examination (NDE)	
8Q	Quality Management (QM) for Radiation Technologies and Industrial Applications	
9A	Nuclear and Radiation Safety and Nuclear Security	
9B	Safety Standards, Regulations and Procedures (Historical subject. As of 2004 use 9E to 9X)	
9C	Radiation Protection	
9D	Safety of Reactors and Nuclear Materials (Historical subject. As of 2004 use 9M to 9X)	
9E	Safe Predisposal and Disposal of Radioactive Waste	
9F	Safety Assessment of Nuclear Facilities	
9G	Safety of Environmental Remediation	
9H	Regulatory Infrastructure for Nuclear and Radiation Safety	
9I	Occupational Exposure Control	
9J	Medical Exposure Control	
9K	Public Exposure Control	
9L	Emergency Preparedness and Response	
9M	Engineering Safety	
9N	Operational Safety	
9O	Research Reactor Safety	
9P	Fuel Cycle Facility Safety	
9Q	Environmental Exposure Control	
9R	Safety of Decommissioning of Nuclear Facilities	

9S	Transport Safety	
9T	Safety and Security of Radiation Sources	
9U	Security of Nuclear and Radioactive Materials	
9V	Physical Protection	
9W	Prevention and Response to Illicit Trafficking and Nuclear Threats	
9X	Education and Training and Knowledge Management in Nuclear Safety and Security	
XX	Not in Agency's Purview	

AGENCY PROGRAMME CODES		
Code	Code Description	X
A1	A1 Nuclear Power Plant Operating Performance and Life Cycle Management	
A2	A2 Improving Organizational Performance	
A3	Coordination of the International Project on Innovative Nuclear Reactors and Fuel Cycles (INPRO)	
A4	A4 Technology Development for Advanced Reactor Lines	
A5	A5 Support for Non-Electric Applications of Nuclear Power	
B1	B1 Information and Analysis of the Nuclear Fuel Cycle and Materials Management	
B2	B2 Nuclear Power Reactor Fuel Engineering	
B3	B3 Management of Spent Fuel from Nuclear Power Reactors	
B4	B4 Topical Nuclear Fuel Cycle Issues	
C1	C1 Energy Modelling, Databanks and Capacity Building	
C2	C2 Energy Economy Environment (3E) Analysis	
C3	C3 Nuclear Knowledge Management	
C4	C4 International Nuclear Information System (INIS)	
C5	C5 Library and Information Support	
D1	D1 Atomic and Nuclear Data	
D2	D2 Research Reactors	
D3	D3 Utilization of Accelerators and Instrumentation	
D4	D4 Nuclear Fusion Research	
E1	E1 Sustainable Intensification of Crop Production Systems	
E2	E2 Sustainable Intensification of Livestock Production Systems	
E3	Strengthening Compliance with Food and Environmental Safety Standards through Good Agricultural Practices	
F1	Nuclear Techniques in Nutrition and Disease Prevention	
F2	Nuclear Medicine and Diagnostic Imaging	
F3	Radiation Oncology and Cancer Treatment	
F4	Quality Assurance and Metrology in Radiation Medicine	
G1	Isotope Methodologies for the Protection and Management of Surface Water, Groundwater and Geothermal Resources	
G2	Reference Isotope Data and Analysis for Hydrological Applications	
H1	Marine Environmental and Radiological Assessment (MERA)	
H2	Radioecological and Isotopic Solutions for Coastal Marine Problems (RISCMAR)	
H3	Ocean Climate Coupling and Carbon Cycling (OC4)	
H4	Supporting Quality in the Analysis Of Terrestrial Environmental Samples	
H5	Assessment in Support of Sustainable Management of the Terrestrial Environment	
I1	Technology Support to Radioisotopes, Radiopharmaceuticals and Radioanalytical Services	
I2	Radiation Technology for Industrial Applications and a Safer Environment	
J1	National regulatory infrastructure for nuclear installation safety	
J2	Global Infrastructure and Information and Communication Networks for Nuclear Installation Safety	

J3	Development and use of advanced tools for safety assessment	
J4	Design Safety and Site Evaluation	
J5	Operational Safety	
J6	Safety of Research Reactors and Fuel Cycle Facilities	
K1	Radiation safety standards	
K2	Radiation Safety Infrastructures	
K3	Occupational Radiation Protection	
K4	Radiological Protection of Patients	
K5	Control of Radiation Sources	
K6	Safety of the Transport of Radioactive Material	
L1	Development of Waste Safety Standards, Servicing the Joint Convention and Fostering Information and Communication Networks	
L2	Disposable Waste: Management of Radioactive Waste and Disused Sealed Sources	
L3	Dischargeable Waste: Public and Environmental Protection	
L4	Residual Waste: Decommissioning of Installations and Remediation of Sites	
M1	Assessing Nuclear Security Needs, Threat Analysis and Coordination	
M2	Preventing malicious activities involving nuclear and radioactive materials and their associated facilities	
M3	Detecting and Responding to Malicious Activities involving Nuclear and other Radioactive Materials	
N2	Development and Support	
P1	Public Communications	
P2	Media Relations and Outreach	
P3	Multimedia Production and Support	
Q3	ICT Customer Services and IT Solutions	
T1	Strategic Planning and Coordination	
T2	Formulation and Implementation of the Programme	
U4	Legal Activities	
W2	Programme Evaluation	
W3	Programme Implementation Monitoring and Performance Assessment	
X1	Incidents and Emergency Preparedness and Response	

IAEA SECTION CODES		
Code	Section Description	X
Nuclear Energy Department		
NE1	Planning & Economic Studies	
NE2	INIS & Nuclear Knowledge Management	
NE3	IAEA Library	
Nuclear Power Division		
NEA1	Nuclear Power Technology Development	
NEA2	Nuclear Power Engineering	
Nuclear Fuel Cycle & Waste Technology Division		
NEB1	Nuclear Fuel Cycle & Materials	
NEB2	Waste Technology	
Nuclear Safety and Security Department		
NS1	Safety & Security Coordination	
NS2	Nuclear Security	
NS3	Incident & Emergency Centre	
Nuclear Installation Safety Division		

NSA1	Policy & Program Support	
NSA2	Engineering Safety	
NSA3	Research Reactor Safety	
NSA4	Operational Safety	
NSA5	Safety Assessment	
NSA6	Regulatory Activities	
Radiation Transportation & Waste Safety Division		
NSB1	Policy & Program Support	
NSB2	Radiation & Transport Safety	
NSB3	Waste Safety	
Management Department		
MT1	Program Development & Performance Assessment	
MT2	Procurement Services	
Budget & Finance Division		
MTA1	Program & Budget	
MTA2	Financial Policy & Systems	
MTA3	Staff Accounts Payable	
MTA4	General Accounts Payable	
MTA5	Finance & Accounting	
MTA6	Control	
Conference & Document Services Division		
MTB1	Arabic Translation	
MTB2	Chinese Translation	
MTB3	English Translation	
MTB4	French Translation	
MTB5	Russian Translation	
MTB6	Spanish Translation	
MTB7	Publishing	
MTB8	Printing	
MTB9	Document Support	
MTB10	Conference Services	
General Services Division		
MTC1	Archives & Records Management	
MTC2	Travel & Transportation	
MTC3	Facilities Management	
MTC4	VIC Commissary	
Information Technology Division		
MTD1	Systems Services	
MTD2	Customer Services	
MTD3	Business Solutions	
MTD4	Network & Telecommunication	
Human Resources Division		
MTE1	Human Resources Planning	
MTE2	Recruitment & Staff Development	
MTE3	Staff Administration	
MTE4	VIC Medical Service	
Public Information Division		

MTF1	Media & Outreach	
MTF2	News & Information	
Nuclear Sciences & Applications Department		
NA1	Research Contracts Administration	
NA2	Program of Action for Cancer Therapy	
Agency's Laboratories (Seibersdorf and Headquarters) Division		
NAA1	General Services & Safety	
NAA2	Agriculture & Biotechnology Laboratory	
NAA3	Physics, Chemistry & Instrumentation Laboratory	
NAA4	Safeguards Analytical Laboratory	
Human Health Division		
NAB1	Dosimetry & Medical Radiation Physics	
NAB2	Nuclear Medicine	
NAB3	Nutrition & Health Related Environment Studies	
NAB4	Applied Radiation Biology & Radiotherapy	
Marine Environment Division		
NAC1	Radiometrics	
NAC2	Radioecology	
NAC3	Marine Environment Studies	
Nuclear Techniques in Food & Agriculture Division		
NAD1	Soil & Water Management & Crop Nutrition	
NAD2	Plant Breeding & Genetics	
NAD3	Animal Production & Health	
NAD4	Insect Pest Control	
NAD5	Food & Environment Protection	
Physical & Chemical Sciences Division		
NAE1	Industrial Applications & Chemistry	
NAE2	Isotope Hydrology	
NAE3	Nuclear Data	
NAE4	Physics	
Safeguards Department		
SG1	Effectiveness Evaluation	
Concepts & Planning Division		
SGA1	Concepts & Approaches	
SGA2	Process Design	
SGA3	Program & Resources	
SGA4	Training	
Information Management Division		
SGB1	Information Architecture & Projects	
SGB2	Information Collection & Analysis	
SGB3	Declared & Statistical Information Analysis	
SGB4	Customer Services & Operations	
Technical Support Division		
SGC1	Inspection Logistics	
SGC2	Technical Support Coordination	
SGC3	Surveillance, Seals & Remote Monitoring	

SGC4	Attended & Unattended Non-Destructive Assay	
SGD	Operations A Division	
SGE	Operations B Division	
SGF	Operations C Division	
Technical Cooperation Department		
Program Support & Coordination Division		
TCA1	Concepts & Planning	
TCA2	Program Coordination	
TCA3	Information Systems	
TCB	Africa Division	
TCC	Asia & the Pacific Division	
TCD	Latin America Division	
TCE	Europe Division	

Munson, Clifford

From: Your Friends at Shockley Honda [mkeller@shockleyhonda.com]
Sent: Tuesday, March 15, 2011 12:46 PM
To: clifford.munson@
Subject: March sales specials

To view this email in your internet browser, [click here](#).

To experience the rich media content in this e-mail, it must be viewed on a PC or Mac with a broadband connection.

The Really Big Thing Sales Event is going on now at Shockley Honda . We are offering great deals on many new and certified used vehicles. Just click on the link below to watch a special video message to learn more about our March offers.

[Click here to view our March sales specials.](#)

Your Friends at Shockley Honda
7400 Shockley Drive
Frederick, MD 21704

[Forward to a friend.](#)

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\$50 Off NHT Super8 Mini Subwoofer

"Bass junkies are going to love the new Super 8 subwoofer," notes BigPictureBigSound.com. This powerful compact sub features an 8" driver and 110-watt RMS amp.

NHT Super8 Mini Subwoofer. In High Gloss Black Finish [4]Regular Price \$399, Now Only \$349.00 PSB Sub Series 1 8" Subwoofer The Absolute Sound calls the SS1 "a confident little sub that easily extended into the mid-30 Hz range without drama." It has a dynamic 110-watt amplifier and 8" polypropylene driver.

PSB Sub Series 1 8" Subwoofer, in Black Ash Finish [5]Now Only \$399.00 MartinLogan Dynamo 500 10" Subwoofer MartinLogan's compact Dynamo 500 powered sub has a 10" woofer and 360-watt peak low-distortion amplifier. Flip it on its stand to change from front- to down-firing.

MartinLogan Dynamo 500 10" Subwoofer, in Black Ash Finish [6]Now Only \$495.00 PSB Sub Series 5i 10" Subwoofer The Absolute Sound rated the PSB SubSeries 5i as the "Best Subwoofer" in the Winter 08 / Spring 09 issue. It boasts a 10" driver and an impressive dynamic peak of 450 watts.

PSB Sub Series 1 10" Subwoofer, in Black Ash Finish [7]Now Only \$549.00 \$150 Off NHT B-12d 500-Watt 12" Subwoofer NHT's amazing B-12d 500-watt powered subwoofer packs a lot of low bass performance into a compact 14" cabinet, thanks to a high excursion 12" driver.

NHT B-12d 500-Watt 12" Subwoofer, in High Gloss Black Finish [8]Regular Price \$850, Now Only \$699.00 PSB Sub Series 6i 12" Subwoofer The Inner Ear reports that the PSB SubSeries 6i subwoofer "performs flawlessly." The hugely powerful built-in BASH amplifier is capable of a 700-watt dynamic peak.

PSB Sub Series 6i 12" Subwoofer, in Black Ash Finish [9]Now Only \$749.00 \$120 Off MartinLogan Dynamo 1000 12" Subwoofer with FREE SWT-1 Wireless Transmitter MartinLogan's Dynamo 1000 sub has a 12" woofer, 1,000-watt peak low-distortion amplifier, and wireless capability.

Order now, and get the \$120 SWT-1 wireless transmitter FREE!

MartinLogan Dynamo 1000 12" Subwoofer with FREE SWT-1 Wireless Transmitter, in Black Ash Finish [10]Regular Price \$1,115, Sale Price. Only \$995.00 PSB HD10 Ultra Compact 10" Subwoofer The 12-inch-square PSB HD10 10" powered subwoofer may be small enough to fit anywhere, but it's got a massive peak power output of 1,600-watts.

PSB HD10 Ultra Compact 10" Subwoofer, in Black Finish [11]Now Only \$1,499.00 Essential Subwoofer Add-Ons \$250 Off Velodyne SMS-1 Subwoofer Management System The Velodyne SMS-1 brings automatic room tuning to any subwoofer with the included microphone and remote. It also adds customizable DSP control.

Velodyne SMS-1 Subwoofer Management System [12]Regular Price \$749, Now Only \$499.00 62% Off AudioQuest Black Thunder II Subwoofer Cable AudioQuest Black Thunder II subwoofer cable has ultra-smooth PSC+ Perfect Surface Copper conductors and \$80-per-pair RCA-800 plugs.

AudioQuest Black Thunder II Subwoofer Cable [13]3.0 M Regular Price \$212.50, Now Only \$80.00 Get Maximum Subwoofer Power Pangea Audio AC-9 Power Cable Upgrade Pangea Audio's massive 9-gauge AC-9 power cable with IEC end has been designed specifically to deliver the high current needed by amps, powered speakers, subwoofers, and more.

Pangea Audio AC-9 Power Cable with IEC End

[14]1.5 M Regular Price \$225.00, Now Only \$75.00 [15]2.0 M Regular Price \$250.00, Now Only \$89.95 [16]3.0 M Regular Price \$300.00, Now Only \$75.00 Sonic Saucers Isolation Discs - 33% Off!

Let our Saucers soup up your audio performance. Machined brass Sonic Saucer isolation discs improve sound and protect your furniture and floors.

Sonic Saucers Isolation Discs

[17]Regular Price \$38/set-of-4, Three or More Sets Now Only \$25.50/set-of-4 In-Wall Subwoofer Solution 66% Off Parasound C 1002 10" In-wall Subwoofer Parasound proves that you can indeed get superb low bass response from an in-wall speaker with the C-1002 in-wall passive subwoofer with big 10" driver. It integrates nicely with the C 280 v2.

Parasound C 1002 10" In-Wall Passive Subwoofer [18]Regular Price \$295, Now Only \$99.99 Each 61% Off Parasound CX 1002 120 Hz Passive Crossover Parasound's CX-1002 120 Hz passive crossover makes it easy to integrate the C 1002 in-wall passive subwoofer with your C 280 v2 or other in-wall speakers.

Parasound CX 1002 120 Hz Passive Crossover [19]Regular Price \$130, Now Only \$49.99 [20] Unsubscribe
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Munson, Clifford

From: Chokshi, Nilesh
Sent: Wednesday, March 16, 2011 4:11 PM
To: Munson, Clifford
Cc: Karas, Rebecca
Subject: RE: working from home tomorrow

I will be at the Ops. Ctr. In the morning.

From: Munson, Clifford
Sent: Wednesday, March 16, 2011 4:01 PM
To: Chokshi, Nilesh
Cc: Karas, Rebecca
Subject: working from home tomorrow

Nilesh,

I will be working from home tomorrow monitoring emails and working on the Seismic Q&A. Annie comes in at 3:00 PM for the 3to11PM shift. I can be reached at

Home:301-414-0268

Cell: (b)(6)

Thanks,
Cliff

Munson, Clifford

From: Munson, Clifford
Sent: Wednesday, March 16, 2011 11:24 AM
To: Lauron, Carolyn
Subject: RE: no more acronyms

Pretty pressure-packed.

From: Lauron, Carolyn
Sent: Wednesday, March 16, 2011 11:02 AM
To: Munson, Clifford
Subject: no more acronyms

Ok... I figured these out... *sigh*

No more acronyms... No more drills!!

How is it?

From: Munson, Clifford
Sent: Wednesday, March 16, 2011 9:56 AM
To: Lauron, Carolyn
Cc: Chokshi, Niles; Karas, Rebecca; Bauer, Laurel; Li, Yong
Subject: RE: does anyone besides Yong and Laurel have a paper/presentation coming up soon (to external audiences)?

I am giving a presentation on CAV at SSA mtg in April.

From: Karas, Rebecca
Sent: Wednesday, March 16, 2011 9:54 AM
To: Raione, Richard; Ahn, Hosung; Caverly, Jill; See, Kenneth; Giacinto, Joseph; Jones, Henry; McBride, Mark; Tiruneh, Nebiyu; Bauer, Laurel; Bieganousky, Wayne; Candelario, Luisette; Cook, Christopher; Devlin, Stephanie; Graizer, Vladimir; Kahler, Carolyn; Li, Yong; Munson, Clifford; Plaza-Toledo, Meralis; Rodriguez, Ricardo; Seber, Dogan; Stieve, Alice; Stirewalt, Gerry; Tabatabai, Sarah; Thompson, Jenise; Vega, Frankie; Wang, Weijun; Xi, Zuhun
Cc: Lauron, Carolyn; Chokshi, Niles
Subject: does anyone besides Yong and Laurel have a paper/presentation coming up soon (to external audiences)?
Importance: High

Need to know before 10am today, as given the situation in Japan, we are looking at these again. Please forward to Carolyn with Niles and I on cc.

Rebecca Karas, Chief
Geosciences and Geotechnical Engineering Branch 1
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

Munson, Clifford

From: Ake, Jon
Sent: Wednesday, March 16, 2011 2:03 PM
To: Munson, Clifford
Subject: can you give me a call....

thanks

Jon Ake Ph.D.
Sr. Seismologist
U.S. NRC RES-DE
301-251-7626
jon.ake@nrc.gov

Munson, Clifford

From: Munson, Clifford
Sent: Wednesday, March 16, 2011 2:27 PM
To: Ake, Jon
Subject: RE: can you give me a call...

I am beginning to think that next week will not be less busy ...

From: Ake, Jon
Sent: Wednesday, March 16, 2011 2:03 PM
To: Munson, Clifford
Subject: can you give me a call...

thanks

Jon Ake Ph.D.
Sr. Seismologist
U.S. NRC RES-DE
301-251-7626
jon.ake@nrc.gov

Munson, Clifford

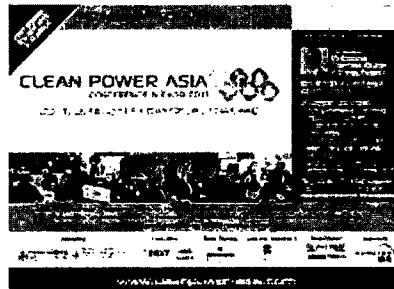
From: Elly Kreijkes [info@synergy-events.ccsend.com] on behalf of Elly Kreijkes [info@synergy-events.asia]
Sent: Thursday, March 17, 2011 12:07 AM
To: Munson, Clifford
Subject: Cleaner fossil power approaches in Indonesia, Thailand and Malaysia

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Dear Clifford Munson,

The agenda for Clean Power Asia 2011, taking place in June 2011 in Bangkok, is soon to be finalized and we are pleased to share the preliminary programme with you. You may have already received a hard copy of this. If not, you can download it directly below:



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Alstom's investment in technologies for capture of CO₂ from power generation plant including an update on six pilots that are in commissioning/operation stage and four commercial scale demonstrations
Gwen Andrews, Vice President, Power and Environmental Policies Australia/Asia, Alstom, Australia

PLN's approach in coal power production in the most environmentally friendly way using innovative approaches and technologies such as lignite drying technology
Mr Nur Pamudji, Director for primary energy, PPT LN (Persero), Indonesia

Structuring of high calibre, innovative carbon deals
Mark Meyrick, Head Carbon Desk, Eneco, The Netherlands

Technology update on the clean' 660MW coal-fired power plant in Thailand (Gheco-One)
Mr Heikki Pudas, Executive Vice President Project Development and Business, Glow Energy Public Co. Ltd, Thailand

Critical success factors for hydro power project developments in the Philippines

Emmanuel Rubio, CEO, SN Aboitiz Power Benguet (SNAP-Benguet), Philippines

Plan, Policy and Performance, the key for promotion of renewable energy and China's wind power development
Maofeng Luo, Vice President, China WindPower, China

Limited Recourse Financing in Hydropower Development in Laos
Xaypaseuth Phomsoupha, Director General, Department of Energy Promotion and Development, Ministry of Energy and Mines, Lao PDR

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And visit the [targeted exhibition](#) to get the latest updates on new and innovative clean power technologies.

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Leading industry and government stakeholders from Thailand, Indonesia, Malaysia, the Philippines, Singapore, China, Laos, Vietnam and other countries have already confirmed their participation. Further details can be found at www.cleanpower-asia.com

CONTACT

For more information, please contact:

Conference

Mrs Elly Krelijkes
General Manager
Phone: +65 6590 3972
info@synergy-events.asia

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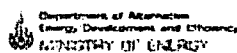
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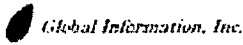
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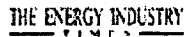
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Munson, Clifford

From: Hatchett, Gregory
Sent: Thursday, March 17, 2011 11:54 AM
To: Munson, Clifford; Hart, Michelle; Li, Yong; Brown, David; Devlin, Stephanie; Stieve, Alice; Seber, Dogan; Quinlan, Kevin; Harvey, Brad; Mazaika, Michael; Kugler, Andrew; Tiruneh, Nebiyu; Barnhurst, Daniel; Jones, Henry; Raione, Richard; See, Kenneth; Chaput, Peter; Giacinto, Joseph; McBride, Mark; Emch, Richard
Cc: Lauron, Carolyn; Karas, Rebecca
Subject: ACTION: Please Respond by 2:00pm Today - Direct Support to Ops Center
Importance: High

To All,

We have been asked to provide a list of staff to NSIR that can provide direct support to the operations center as a follow-on to the initial staffing up conducted in the immediate aftermath of the Japanese event. If you are currently providing technical support outside of the operations center we anticipate that you may continue to do so. Thus, when responding to this email you only need to acknowledge that you are providing external technical support and the area that you currently doing so.

For those of you that are currently providing direct support within the operations center or are on standby to do so, I am requesting that you provide the current role you are fulfilling and your availability. In providing your availability please consider whether you can perform shift work, including any conflicts you may have over the next month such as planned leave, training, or support to any hearing related issues.

Thanks in advance,

Gregory P. Hatchett
Chief, Environmental Projects Branch I
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
(301) 415-2164

(b)(6)

Munson, Clifford

From: ssa_tocs@seismosoc.org on behalf of Seismological Society of America
[ssa_tocs@seismosoc.org]
Sent: Thursday, March 17, 2011 5:21 PM
To: SSA Contents Alert
Subject: SRL, Vol. 82, No. 2, Contents Alert

SEISMOLOGICAL RESEARCH LETTERS

Contents Alert

Volume 82 • Number 2 • March/April 2011



The March/April 2011 issue of *Seismological Research Letters* (SRL Volume 82, Number 2) is now available online to all SSA members (and *GeoScienceWorld* subscribers) at <http://srl.geoscienceworld.org>. SRL tables of contents and article extracts are freely available to all and non-members/subscribers can purchase access to individual articles. Links to article extracts, as well as full text links for SSA members, can be found beneath each article's title.

The regular columns (*Opinion*, *Electronic Seismologist*, *Historical Seismologist*, &/or *EduQuakes*) from each issue of SRL are still available to all for free on the SSA website (click the "Free Public Version" link below a column's title to read it). This issue also includes two electronic supplements available on the SSA website (see links below).

The print edition of this issue mailed on March 2nd.

SEE YOU IN MEMPHIS? SSA's 2011 Annual Meeting will be held 13-15 April in Memphis, Tennessee. If you're planning on attending be sure to **register** soon. SSA has added a special session for abstracts on the March 2011 Tohoku, Japan and February 2011 Christchurch, New Zealand Earthquakes and reopened **abstract submission** until March 25th for this special session only. Abstracts and schedules for all the previously-scheduled sessions are now available online in our **searchable abstract database**. For more information please visit the **meeting home page**.

COLUMNS

Opinion: The Magnitude of the Problem

[FREE PUBLIC VERSION] [GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Susan E. Hough

Introducing a New Editor

[FREE PUBLIC VERSION] [GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Jonathan M. Lees

ARTICLES

Earthquake Scenario Ground Motions for the Urban Area of Evansville, Indiana

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Jennifer S. Haase and Robert L. Nowack

A Comparison of Teleseismic and Regional Seismic Moment Estimates in the European-Mediterranean Region

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

K. I. Konstantinou and S. Rontogianni

Magnitude Estimations in Earthquake Early Warning for the 2010 JiaSian, Taiwan, Earthquake

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Ting-Li Lin, Yih-Min Wu, Da-Yi Chen, Nai-Chi Hsiao, and Chien-Hsin Chang

Removing Reverberation in Ice Sheets from Receiver Functions

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Tongjun Cho

Management of Large Seismic Datasets: I. Automated Building and Updating using BREQ_FAST and NetDC

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Igor B. Morozov and Gary L. Pavlis

Ⓜ Electronic Supplement: *IGeoS* scripts implementing the procedures described in this paper

Management of Large Seismic Datasets: II. Data Center-type Operation

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Igor B. Morozov and Gary L. Pavlis

Ⓜ Electronic Supplement: *IGeoS* scripts implementing the procedures described in this paper.

A Second Opinion on "Operational Earthquake Forecasting: Some Thoughts on Why and How," by Thomas H. Jordan and Lucile M. Jones

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Stuart Crampin

Reply to 'A Second Opinion on "Operational Earthquake Forecasting: Some Thoughts on Why and How," by Thomas H. Jordan and Lucile M. Jones,' by Stuart

Crampin

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Thomas H. Jordan and Lucile M. Jones

Comment on "On the Selection of Ground-Motion Prediction Equations for Seismic Hazard Analysis" by Julian J. Bommer, John Douglas, Frank Scherbaum, Fabrice Cotton, Hilmar Bungum, and Donat Fäh

[GSW EXTRACT] [FULL TEXT LINK FOR SSA MEMBERS]

Vladimir Graizer

This is a announcement-only list (messages sent to the list address are not sent to other list subscribers). To be removed from the list, go to <<http://www.seismosoc.org/publications/alerts.php>> and follow the instructions there to unsubscribe, or send an e-mail to <requests@seismosoc.org> with unsubscribe ssa_tocs in the subject header or the first line of the body. If you need assistance, you can contact the moderator at <webmaster@seismosoc.org>.

If you would like more information about the Seismological Society please visit our website at <<http://www.seismosoc.org>>.

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Posted: 17 March 2011

Munson, Clifford

From: Newswatch [webinars@hrnewswatch.com]
Sent: Thursday, March 17, 2011 6:37 PM
To: Munson, Clifford
Subject: Telecommuting: Does it Make Sense for Your Company? April 14 Webinar

Telecommuting: Does it Make Sense for Your Company?

Sponsored by Park Avenue Presentations

Thursday, April 14, 2011

Time: 1:30 pm ET (12:30 am CT, 11:30 am MT, 10:30 am PT)
Length: 90 minutes

Registration - Session Only: \$198.00

Registration - Session Plus CD Recording: \$289.00

WEBINAR DESCRIPTION

As technology advances, more employers are exploring and offering telecommuting to both reduce costs and provide flexible work options to employees. Although there are many benefits to working off-site for both employer and employee, there are also many pitfalls if compliance with employment laws is not maintained.

WHAT THIS WEBINAR WILL COVER

UPCOMING TELECONFERENCES

Change Management: A Five-Part Plan for Leading in a Transition
Mar. 15, 2011

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Hot Topics In Wage and Hour Law in New Jersey
Mar. 16, 2011

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Exempt or Nonexempt?
Coping with Tougher Overtime Enforcement Under the Obama DOL

While federal, state and local laws are no different for telecommuters, their application to telecommuters raises many questions such as:

- What type of injuries are telecommuters covered for under Worker's Compensation?
- Who is responsible for providing a safe work environment and complying with OSHA's safety guidelines?
- As the employer, do you have Worker's Compensation Insurance coverage in the right states for all of your telecommuting employees?
- How do you track time for telecommuting employees?
- What is the employer's obligation to ensure that time and other work records are accurate? Are required breaks taken and undisturbed?
- Who pays for which business expense?
- Must the company pay for travel time to the office or business meetings?
- Is the worker an employee or independent contractor?
- Workplace violence where does the employer's liability stop?
- How does an employer enforce policies when the employee is out of sight attendance, file maintenance, hours, postings on the bulletin board, and the like?
- Can management maintain an open door policy when the employee can't see the door?

Discussion will include an overview of issues involved in telecommuting. Webinar participants should come away with an understanding of whether permitting employees to telecommute makes sense for their companies. A question and answer session at the end of the program will allow participants to ask questions that apply to their specific circumstance. The question and answer session also gives individuals with in depth knowledge an opportunity to raise their issues.

WHO SHOULD ATTEND

This webinar will provide vital information for Human Resource managers, business owners, senior executives, accountants and lawyers.

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Mar. 17, 2011

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Using Travel Policy to Control Costs

Mar. 18, 2011

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How to Handle Travel Pay

FACULTY

Robert G. Brody is the founding member of Brody and Associates, LLC, a labor and employment law firm which represents management, founded in 1997. Before founding Brody and Associates, Bob was a Managing Partner for one of the largest management labor and employment law firms in the United States, Jackson Lewis.

Bob has been in private practice for over twenty-five years. He has represented both public and private sector entities across the United States. He works in all industries and with companies that are leaders in their own industry, as well as with developing companies. In addition to providing daily counsel to management on labor and employment issues, such as the new health care legislation, ADA, FMLA, workplace violence and alternative dispute initiatives, Bob represents employers before federal, state and local civil rights agencies and in court.

Bob presents seminars nationally and locally on labor and employment law and related topics. He has been quoted and published in national publications and appears as a guest T.V. commentator on contemporary labor and employment law issues. Bob is a contributor to some of the leading treatises in his field, including How Arbitration Works; The Developing Labor Law; and Employment Discrimination Law. Bob has also had numerous labor and employment law articles published on the Internet and in periodicals.

Robert G. Brody
Brody and Associates, LLC
Telephone: (203) 965-0560
Email: rbrody@brodyandassociates.com
Website: www.brodyandassociates.com

TELECONFERENCE OVERVIEW

- * 90-minute webinar (Travel-Free) delivered over the phone and Internet.
- * Unlimited listeners per connection - bring the entire department.
- * Q&A session with the expert.

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FMLA Leave Abuse: How to Stop It

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Managing Employees Who Can't Work: Understanding and Applying Leave Law in Ohio

Mar. 23, 2011

Registration - Session Only:

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Responding to an EEO Charge

Mar. 23, 2011

Registration - Session Only:

PowerPoint presentation to be viewed on your computer.
Internet access is not required for phone-only participants.

The PowerPoint slides will be provided shortly before the event.
Once you register, you will receive an email which is your receipt and which includes your instructions for dialing in and logging on. You will also receive an email reminder 24 hours before the webinar.

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Medical Clinics to Reduce

Health Care Costs

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Company Be Next?

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Types of Employees

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Attack: Responding to

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Employer: Interaction

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Law and Strategies for

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Injuries and Enrich Your
Safety Culture

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Legally

Mar. 31, 2011

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Making Workplace Diversity
Work for You

Mar. 31, 2011

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Employment Litigation: How
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Apr. 12, 2011
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Choice of Business Entity -
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How FMLA Leave, ADA and
Workers' Compensation
Work Together
April 28, 2011
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Everything You Need to
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May 5, 2011

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Can You Pass DOL Security?

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Jun. 2, 2011

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Munson, Clifford

From: Bauer, Laurel
Sent: Thursday, March 17, 2011 8:22 PM
To: Chokshi, Nilesch
Cc: Karas, Rebecca; Li, Yong; Munson, Clifford; Flanders, Scott
Subject: RE: For your review: SSA session on nuclear power plants

(b)(5)

Thank you,

Laurel
(301) 415-3210 (HQ)
(b)(6) (cell)

From: Chokshi, Nilesch
Sent: Thursday, March 17, 2011 7:09 PM
To: Bauer, Laurel
Cc: Karas, Rebecca; Li, Yong; Munson, Clifford; Flanders, Scott
Subject: RE: For your review: SSA session on nuclear power plants

This is different than the guidance I got from Gary. Hold off doing anything till Scott F. and I confer with Gary again. I am not sure that this is an OPA question.

From: Burnell, Scott
Sent: Thursday, March 17, 2011 5:43 PM
To: Bauer, Laurel; Chokshi, Nilesch
Cc: Karas, Rebecca; Li, Yong; Munson, Clifford
Subject: RE: For your review: SSA session on nuclear power plants
Importance: High

Hi Laurel;

(b)(5)

Scott

From: Bauer, Laurel
Sent: Thursday, March 17, 2011 2:12 PM
To: Chokshi, Nilesch; Burnell, Scott
Cc: Karas, Rebecca; Li, Yong; Munson, Clifford
Subject: FW: For your review: SSA session on nuclear power plants

Scott / Nilesch,

I am forwarding you this request from SSA. Yong and I are scheduled to lead an oral session at the annual Seismological Society of America Meeting next month, April 13-16. The title of the session is: Seismic Siting for Nuclear Power Plants. The session is scheduled for Friday, April 15 in the afternoon. Hosung and Cliff will also be presenting in this session. We received the following request from their press officer who is putting together a tip sheet. How should this be handled? I have attached the SSA Meeting Program as the talks listed are only a few that are scheduled. I would not exactly call what she has provided a tip sheet.

Scott, the OPA staff that I spoke with directed me by phone to forward to you.

Thanks,

Laurel Bauer
(301) 415-3210 (HQ)

From: Nan BROADBENT [mailto:nan0604@msn.com]
Sent: Thursday, March 17, 2011 1:47 PM
To: Li, Yong; Bauer, Laurel
Subject: For your review: SSA session on nuclear power plants

Dr. Li and Dr. Bauer:

I am preparing a media tip sheet that highlights selected talks and posters at the upcoming SSA annual meeting. I don't know if there have been additional talks added to your session since the earthquake in Japan. Based on the submitted abstracts I have drafted the following text and would appreciate feedback from either of you. Please let me know how to improve it.

Thank you,

Nan Broadbent
SSA, press officer
408-431-9885

Seismic Siting for Nuclear Power Plants
Ballroom D, 1:30 – 3 p.m.

Developing and implementing a real-time earthquake notification system for nuclear power plant site using ShakeCast (Poster)

The IAEA International Seismic Safety Centre (ISSC) and the U. S. Nuclear Regulatory Commission (NRC), in collaboration with the U. S. Geological Survey (USGS), are developing and implementing a custom ShakeCast system for discovery, processing, and notification of real-time ground shaking information at nuclear power plant (NPP) sites. ShakeCast takes freely available, post-earthquake data and compares intensity measures against nuclear power plants, sends notifications of potential damage to responsible parties, and generates facility damage maps. [K. Lin, U.S. Geological Survey, klin@usgs.gov]

Geomorphic assessment of past extreme ground motion on Yucca Mountain, Southern Nevada (poster)

Analysis of rock fall along the cliffs near Yucca Mountain, Nevada, a long-proposed nuclear waste storage site, helps to date past extreme ground motions in the area. The researchers say that the rock fall data show no evidence that Yucca Mountain cliffs have been shattered in response to extreme ground motions for at least 250,000 years. [J.W. Whitney, U.S. Geological Survey, jwhitney@usgs.gov]

Unanticipated Exceptional Ground Motions at a Nuclear Power Plant during the 2007 Chuetsu-Oki, Japan, Earthquake

The 2007 Chuetsu-oki, Japan, earthquake occurred on July 16 with a moment magnitude (M_w) of 6.6. This event is significant as the world's first major earthquake upon a source fault that extends beneath a nuclear power plant (until the March 2011 earthquake/tsunami). The researchers looked at several models to find out why their previous models of ground shaking for the area underpredicted how severe the actual shaking was in 2007. [K. Koketsu, University of Tokyo, koketsu@eri.u-tokyo.ac.jp]

Munson, Clifford

From: Cook, Christopher
Sent: Thursday, March 17, 2011 11:12 PM
To: Vega, Frankie
Cc: Karas, Rebecca; Munson, Clifford
Subject: TP audit: we need to re-evaluate dates

Frankie,
I know you have put a lot of effort into planning the TP audit. However with all the Ops Center support RGS is providing, I don't see how we could hope to keep the current RAI date. If true, we should consider also moving out the audit dates. Do not cancel it just yet...I'm just planting an idea. Let's discuss more fully once I return on Monday.

Please do alert all contractors not to purchase tickets until we tell them it's OK.

Please also alert Manny regarding these upcoming discussions.

Chris

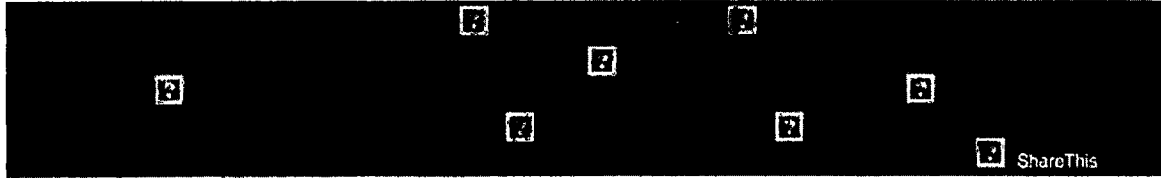
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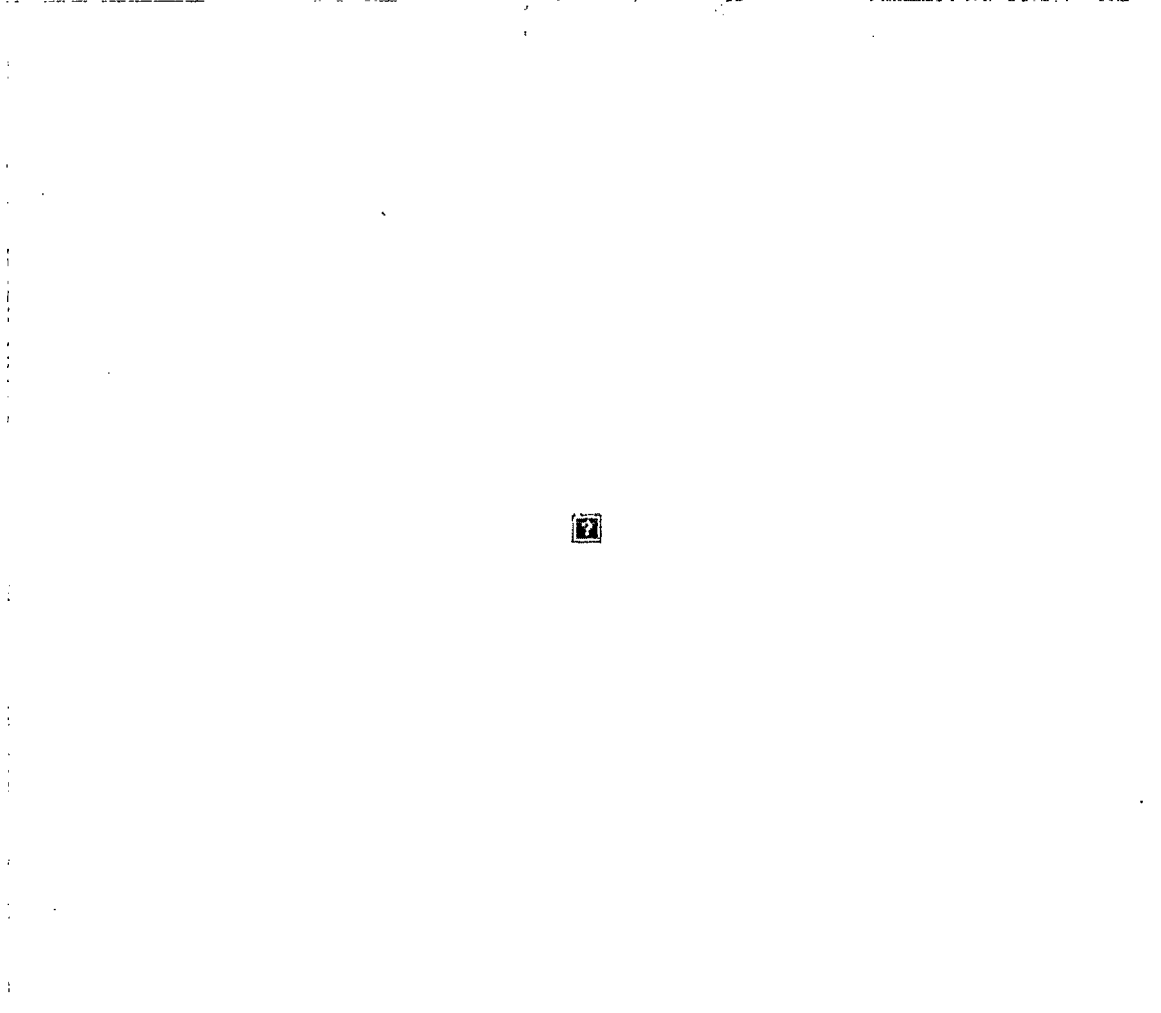
From: [L.L.Bean](#)
To: [Munson, Clifford](#)
Subject: Come Back to Camp, and Get a \$10 Coupon
Date: Thursday, March 17, 2011 8:32:02 AM

L.L.Bean: Join us and get a [\\$10 Coupon](#).

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From: [Elly Kreijkes](#)
To: [Munson, Clifford](#)
Subject: Cleaner fossil power approaches in Indonesia, Thailand and Malaysia
Date: Thursday, March 17, 2011 12:07:29 AM

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Dear Clifford Munson,

The agenda for [Clean Power Asia 2011](#), taking place in June 2011 in Bangkok, is soon to be finalized and we are pleased to share the preliminary programme with you. You may have already received a hard copy of this. If not, you can download it directly below:



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GET THE LATEST PROJECT UPDATES ON INNOVATIVE CLEAN ENERGY APPROACHES AND ACHIEVEMENTS

Alstom's investment in technologies for capture of CO2 from power generation plant including an update on six pilots that are in commissioning/operation stage and four commercial scale demonstrations
Gwen Andrews, Vice President, Power and Environmental Policies Australia/Asia, Alstom, Australia

PLN's approach in coal power production in the most environmentally friendly way using innovative approaches and technologies such as lignite drying technology
Mr Nur Pamudji, Director for primary energy, PPT LN (Persero); Indonesia

Structuring of high calibre, innovative carbon deals
Mark Meyrick, Head Carbon Desk, Eneco, The Netherlands

Technology update on the clean' 660MW coal-fired power plant in Thailand (Gheco-One)
Mr Heikki Pudas, Executive Vice President Project Development and Business, Glow Energy Public Co. Ltd, Thailand

Critical success factors for hydro power project developments in the Philippines
Emmanuel Rubio, CEO, SN Aboitiz Power Benguet (SNAP-Benguet), Philippines

Plan, Policy and Performance, the key for promotion of renewable energy and China's wind power development
Maofeng Luo, Vice President, China WindPower, China

Limited Recourse Financing in Hydropower Development in Laos
Xaypaseuth Phomsoupha, Director General, Department of Energy Promotion and Development, Ministry of Energy and Mines, Lao PDR

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For more information, please contact:

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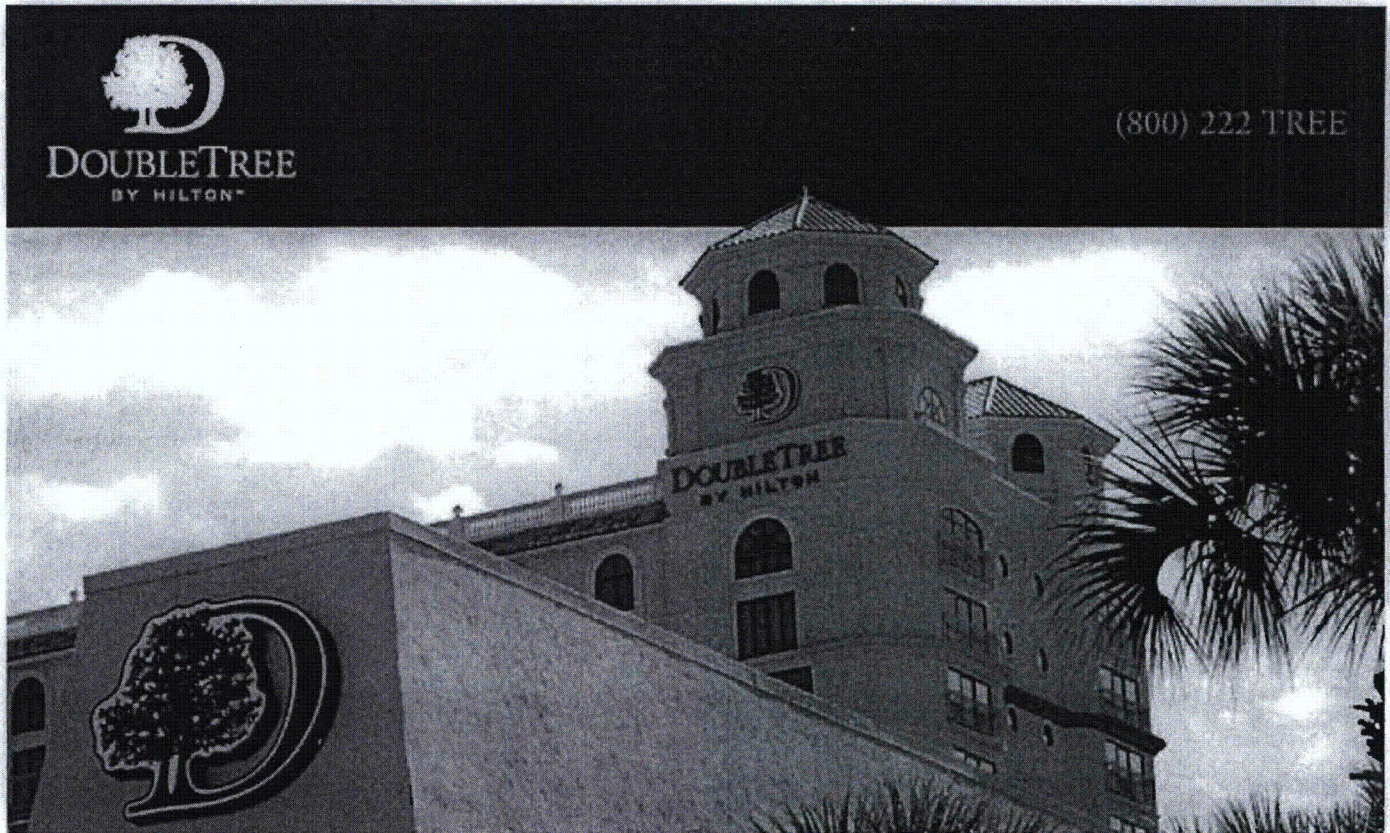
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Munson, Clifford

From: DoubleTree by Hilton [doubletreeemail@h1.hilton.com]
Sent: Thursday, March 17, 2011 5:16 PM
To: Munson, Clifford
Subject: Our new look has arrived.

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[Welcome to our new look.](#)



Welcome to our new look

Where the smallest details make the biggest difference

Last month we told you about our new look, and now we're proud to announce eleven properties from around the world that look a little different. But we're not stopping there. Keep an eye on your inbox for monthly updates about all the little improvements we're making across the globe at more than 250 of our properties.

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Munson, Clifford

From: latimes.com Offers and Deals [latimes@e-mail.latimes.com]
Sent: Thursday, March 17, 2011 11:22 AM
To: Munson, Clifford
Subject: Feeling lucky today? Enter Zap2it's TV Fan Sweepstakes

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FEELING LUCKY?

Enter Zap2it's TV Fan Sweepstakes on Facebook to win VIP Passes for Reality Rocks or a Sony HDTV.

What is Reality Rocks? It's the first live event created just for reality TV fans. Love "American Idol," "Big Brother" and "Top Chef"? Then this event is for you!

At Zap2it, we have reality TV fully covered. So we want to connect reality fans with Reality Rocks happening April 9 - 10 in Los Angeles. There, you can:

- Meet reality TV stars
- Watch live performances and new show screenings
- Connect with fellow TV fans

 Like Us to Enter!

Zap2it's 'Ultimate Reality TV Fan Sweepstakes' runs from March 1 - 25, 2011. For Official Rules and details, [click here](#). The Reality Rocks Expo happens April 9 - 10, 2011 at the Los Angeles Convention Center.



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Munson, Clifford

From: MarineDepot.com Update [newsletter=marinedepot.com@mcsv129.net] on behalf of MarineDepot.com Update [newsletter@marinedepot.com]
Sent: Thursday, March 17, 2011 10:05 PM
To: Munson, Clifford
Subject: Lucky Liquidation: Pinch More Pennies!

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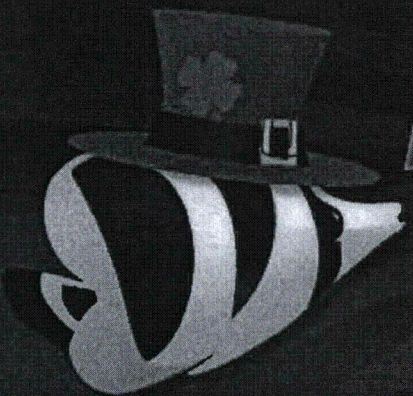
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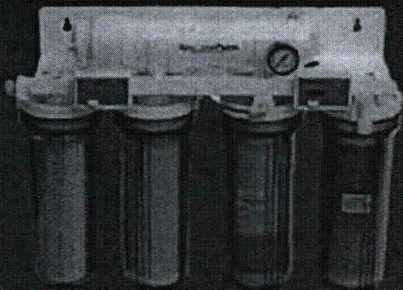
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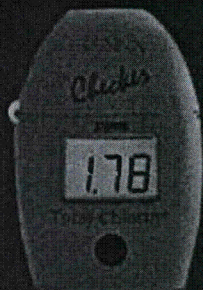
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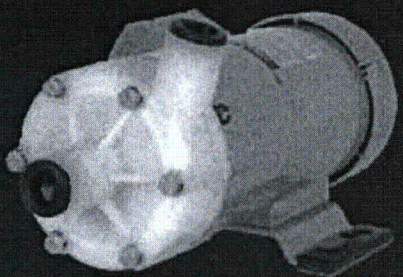
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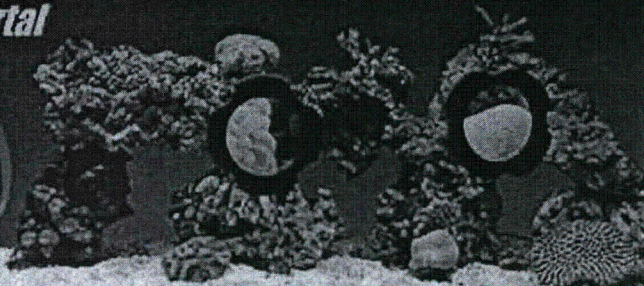
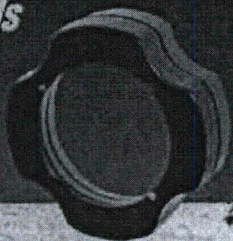


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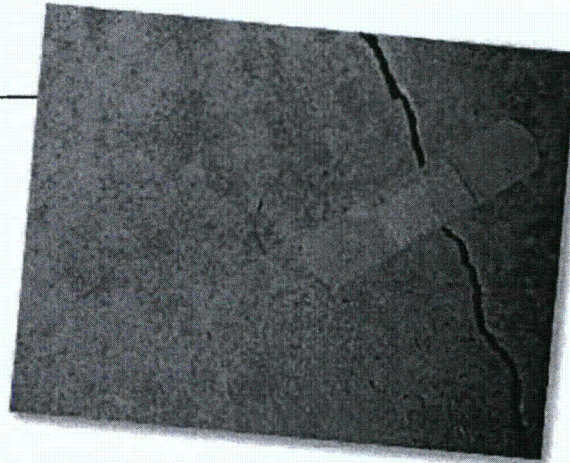


Munson, Clifford

From: ServiceMagic Snap [customerservice@mp.servicemagic.com]
Sent: Thursday, March 17, 2011 11:11 PM
To: Munson, Clifford
Subject: Your concrete's enemies...



March 17, 2011



...avoid tearing it out and maintain your concrete.

Excessive moisture, cracking and large weight. These are your enemies. Well, you and your concrete. Whether it's your patio, driveway, walkway or house foundation, concrete hates these things. One of the easiest ways to avoid cracks and chips in your concrete is to seal it correctly. Let's learn more, shall we?

While concrete is itself a porous material (meaning it absorbs moisture), you want to avoid excess water getting to it. Every 3-4 years, be sure to apply a sealant to your concrete, which essentially acts like wax on a car - keeping the water rolling off it. Without a good sealer, your concrete will begin to crack (an off-repeated phrase in the concrete business is "the only guarantee about concrete is it will crack"), and water will make these cracks larger.

While sealants work great for most flatwork concrete, and the sides of your patio, they're a bit more difficult to apply on your foundation. Here, you want to ensure that all water coming from your roof is going out as far as possible from your foundation. A good gutter system, regularly checked, will work wonders.

If you already have cracks in your foundation, be sure to seal them from the inside with caulk. If they are significant, hire a structural engineer to assess the situation and advise you on stopping them from getting worse.

The enemy of my friend is my enemy, or so the saying goes, and your concrete is your friend, so help it keep your mutual enemies at bay. Seal on a regular basis, and if things get worse, hire a pro to help you out.

this month's top projects

- | | |
|---------------------|---------------------|
| 1 Kitchen Remodel | 6 Landscaping |
| 2 Hardwood Flooring | 7 Heating Systems |
| 3 Bathroom Remodel | 8 Cleaning Services |
| 4 Handyman Services | 9 Windows |
| 5 Roofing & Gutters | 10 Siding |

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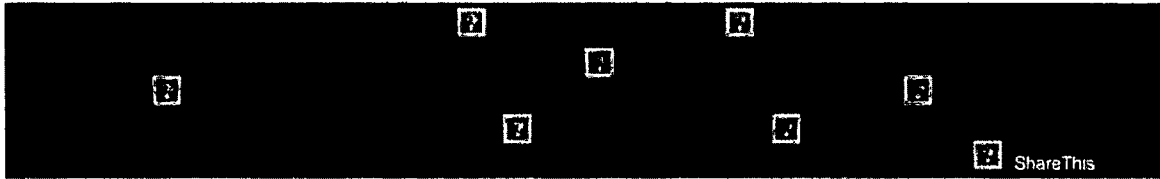
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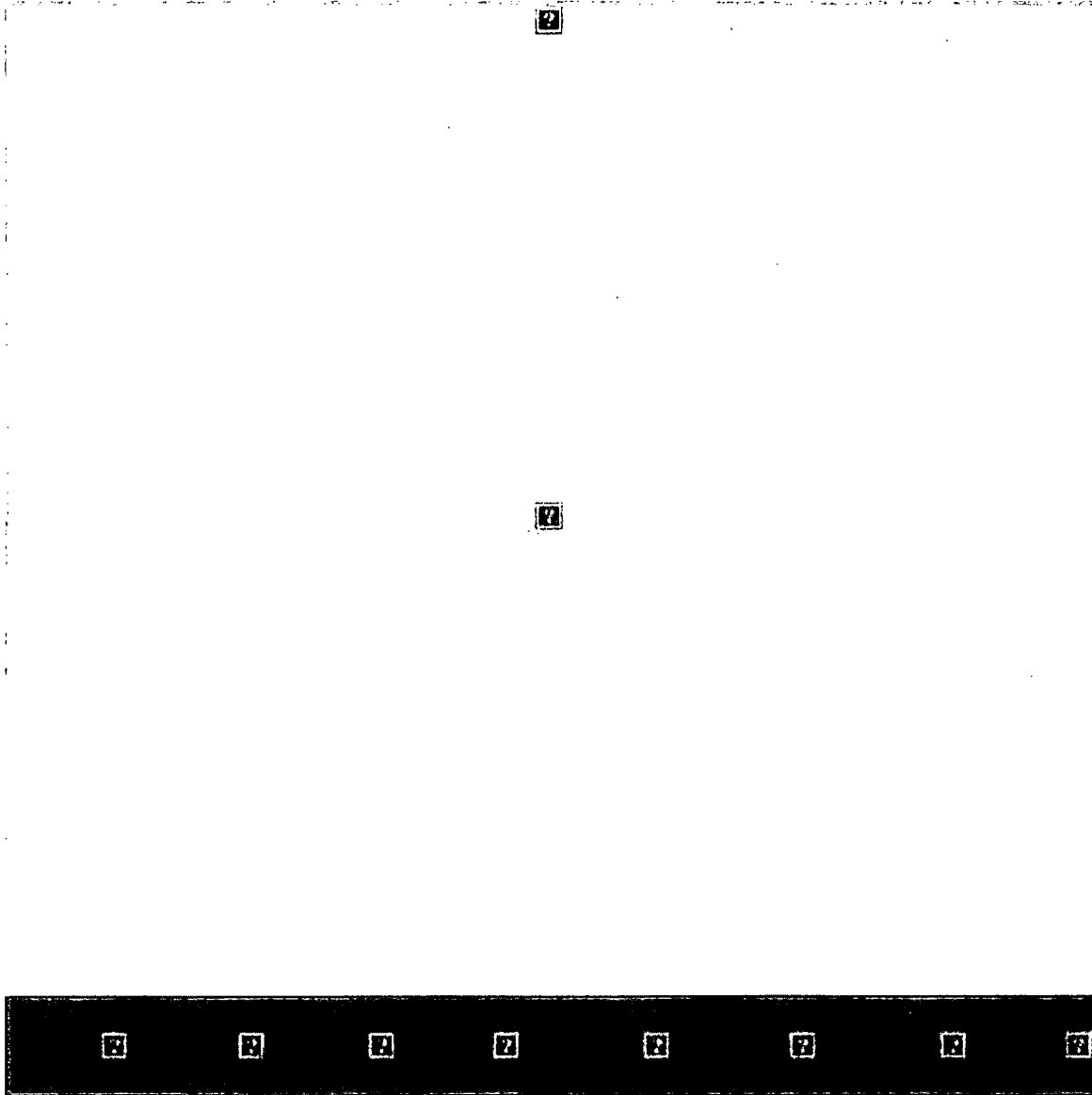
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To: [Munson, Clifford](#)
Subject: A Special Subwoofer Offer from the Outlaws
Date: Friday, March 18, 2011 8:17:33 AM

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Dear Clifford:

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Now that the [M8](#) is in the field, daily e-mails from our customers and comments in the [Saloon](#) prove our claims with raves about the performance of this wallet-friendly sub. 

For those who rely on professional, independent reviews, we now have even more confirmation of the [M8's](#) exceptional value. Audiophile aficionado Steve Guttenberg's review of the M8 on [cnet.com](#) says it all:

"Home theater skills were consistently impressive; the M8's bass had exceptional impact and potency. The Outlaw Audio M8 sub is the most powerful sub I've heard for less than \$300. Highly recommended!" [Click here](#) to read the full review.

In celebration of this exciting endorsement, from now through March 28th we're taking 10% off the [M8's](#) everyday value price and adding free ground. That's a total savings of more than \$55!

So act fast, before it's too late and order this amazing subwoofer at [Outlaw Audio](#) where "The best values in Home Theater are just a mouse click away."[™]

Best regards,
The Outlaws

* Free ground shipping to the contiguous US only. Orders to Alaska, Hawaii, and Canada will be credited for the value of US domestic shipping.

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Munson, Clifford

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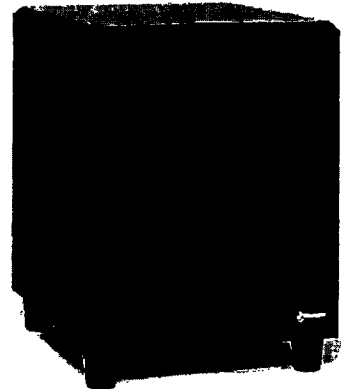
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
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Munson, Clifford

From: Bieganousky, Wayne
Sent: Friday, March 18, 2011 4:00 PM
To: Anderson, Patricia; Martin, Karnisha
Cc: Munson, Clifford
Subject: RE: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval

Patty,

I live in Waxhaw, N.C., and work virtually from my home.

Thank you, Wayne

From: Anderson, Patricia
Sent: Friday, March 18, 2011 3:10 PM
To: Martin, Karnisha; Bieganousky, Wayne
Cc: Munson, Clifford
Subject: RE: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval

Thank you.

I also wanted to check is Wayne Bieganousky Official Duty Station in Charlotte, NC or Waxhaw, NC or Rockville, MD?

Patty

From: Martin, Karnisha
Sent: Friday, March 18, 2011 2:43 PM
To: Anderson, Patricia; Bieganousky, Wayne
Cc: Munson, Clifford
Subject: RE: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval

Thanks Patty. I just made the changes and sent it Cliff for his approval.

From: Anderson, Patricia
Sent: Friday, March 18, 2011 2:38 PM
To: Martin, Karnisha; Bieganousky, Wayne
Cc: Munson, Clifford
Subject: RE: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval

Karnisha,

It must have been removed when you submitted it for approval. When I received it, there was zero amount under the estimated lodging of the authorization. This happens sometimes, even when you make the slightest change. In order for me to approve the funds for this trip, I need all the costs included.

Thanks.

Patty

From: Martin, Karnisha
Sent: Friday, March 18, 2011 2:36 PM
To: Anderson, Patricia; Bieganousky, Wayne

Cc: Munson, Clifford
Subject: RE: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval

This was already marked done correctly when I was on the phone with Carlson....unless this was changed after I already did it....

From: Anderson, Patricia
Sent: Friday, March 18, 2011 2:35 PM
To: Bieganousky, Wayne
Cc: Munson, Clifford; Martin, Karnisha
Subject: ACTION...FW: Travel for BIEGANOUSKY, WAYNE pending your approval
Importance: High

Wayne,

I returned your authorization because you need to do the following:

- Need to include the lodging per diems and estimated lodging taxes in the appropriate fields for the actual days he will be on official travel. All personal days should be marked as OFFICIAL DAYS OFF. All costs have to be included in the travel estimate.

After you have completed the item(s) above, please resubmit your authorization for approval.

Thanks.

Patty

Patricia Anderson
NRO's eTravel Funds Certifying Official
and Management Analyst, PMDA
Office of New Reactors
U.S. Nuclear Regulatory Commission
301-415-1704 (Room T-6F17)
Patricia.Anderson@nrc.gov

From: etravelservices@carlson.com [mailto:etravelservices@carlson.com]
Sent: Friday, March 18, 2011 9:01 AM
To: Anderson, Patricia; Kromer, Harry; Lee, Chia-Ling; Murphy, Jerome
Subject: Travel for BIEGANOUSKY, WAYNE pending your approval

Dear eTravel Approver,

MUNSON, CLIFFORD has approved the following travel and you are the next approver.

Please access E2 and either approve, return, or revoke the authorization.

Approver Remarks: --APPROVER_REMARKS--
Trip ID : 2835505
Traveler : BIEGANOUSKY, WAYNE
Destination: LAS VEGAS, NV

TDY Type : OTHER
Purpose : ASCE 1 meeting
Trip Dates : 2011-04-07 To 2011-04-15
Status : Pending Authorization Approval

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Munson, Clifford

From: Khanna, Meena
Sent: Friday, March 18, 2011 4:50 PM
To: Wilson, George; Chokshi, Niles; Stutzke, Martin; Farzam, Farhad; Mathew, Roy; Matharu, Gurcharan; Kammerer, Annie; Munson, Clifford; Jones, Henry; See, Kenneth; Wescott, Rex; Hiser, Allen; Pelton, David; Terao, David; Cook, Christopher; Graves, Herman; Pires, Jose; Beasley, Benjamin; Murphy, Andrew; Uribe, Juan; Markley, Michael; Hiser, Allen
Subject: URLs for articles addressed at meeting...

As requested, here are the url's for the two articles that we addressed at today's meeting..thanks again to all of you for all of the tremendous support!

http://www.msnbc.msn.com/id/42103936/ns/world_news-asiapacific/

From: Beasley, Benjamin
Sent: Friday, March 18, 2011 3:35 PM
To: Khanna, Meena; Wilson, George
Subject: URL for article

http://www.huffingtonpost.com/2011/03/18/nuclear-plants-regulators-risk_n_837504.html

Munson, Clifford

From: Pham, Bo
Sent: Friday, March 18, 2011 5:17 PM
To: Munson, Clifford
Subject: Re: Seismic Q&As March 18th 5am update

Thanks!
Sent from NRC blackberry
Bo Pham

From: Munson, Clifford
To: Pham, Bo
Sent: Fri Mar 18 12:56:46 2011
Subject: FW: Seismic Q&As March 18th 5am update

Let me know if you need additional info.
Cliff
Clifford Munson, Ph.D.
Senior Level Advisor
U.S. NRC - Office of New Reactors
Division of Site and Environmental Reviews
301-415-6947
clifford.munson@nrc.gov

From: Kammerer, Annie
Sent: Friday, March 18, 2011 6:51 AM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffry; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly; Seber, Dogan; Ledford, Joey; Johnson, Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas; Webb, Michael; Manoly, Kamal; Khanna, Meena; Screnci, Diane; Thomas, Eric; Nguyen, Quynh; Meighan, Sean
Subject: RE: Seismic Q&As March 18th 5am update

All,

Please see the updated version of the Seismic Q&As.

Among today's highlights:

- *We added a Terms and Definitions section at the end of the document. (We know that an acronyms list would be helpful too, but it will have to wait a little)
- *The "additional information" section has been split into tables, plots, and fact sheets
- *A high-level draft fact sheet on NRC's seismic regulations has been added
- *We added a section to track outstanding questions that have come in from congress. This will support those who get the tickets in the short terms (most likely NRR). The questions will be moved to the appropriate sections long term (as long as they are not duplicates.)

I'm sure we all agree this has been a crazy week!. We're hoping that the weekend workload is lighter (if only because we won't get as many email from in house) and we can clean up this document and fill in some of the missing answers in preparation for the news story changing. We're trying hard to get out in front of the next wave.

Cheers,
Annie

From: Kammerer, Annie
Sent: Thursday, March 17, 2011 2:36 AM
To: Kammerer, Annie; Hiland, Patrick; Skeen, David; Case, Michael; RST01 Hoc
Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael; Orders, William; Santiago, Patricia; Snodderly, Michael; Baggett, Steven; Sosa, Belkys; Davis, Roger; Franovich, Mike; Castleman, Patrick; Sharkey, Jeffrey; Boska, John; Ma, John; Tegeler, Bret; Patel, Pravin; Shams, Mohamed; Morris, Scott; Brenner, Eliot; Harrington, Holly; Seber, Dogan; Ledford, Joey; Johnson, Michael; Virgilio, Martin; Holahan, Vincent; Bergman, Thomas
Subject: Seismic Q&As March 17th 2am update

All,

As promised, a sharepoint site has been set up where our friends in NRR will be posting the latest version of the Seismic Q&A document on an ongoing basis. If someone would prefer to use the sharepoint site, instead of being on this distribution list, please let me know...

<http://portal.nrc.gov/edo/nrr/NRR%20TA/FAQ%20Related%20to%20Events%20Occuring%20in%20Japan/Forms/AllItems.aspx>

This latest update has a number of new questions (not many with answers today, but we are working hard). A high priority question we are working on is "how many plants are near a mapped active fault". We're focusing on anything within 50 miles. We're also pulling relevant questions from the congressional inquiries we just received; and will also give these high priority to support any needs by NRR.

Many new figures and some draft fact sheets have added to the "additional information" section. These include the NRO half of a tsunami fact sheet...a description of the tsunami research is still to come from RES.

Some good news: Yesterday's version seems to have been widely forwarded around the agency. So, we are also starting to get some excellent questions from staff looking forward. This is allowing us to feel that we are finally getting out in front of things to a small degree. Also, our team has grown and we now have someone acting as source of seismic expertise for the 11pm to 7 am shift. This means that we now have seismic experts available to the RST and OPA at the Op Center 24 hours, with 2 people during the day. That extra support is allowing us to get this out at least an hour earlier today ☺

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me for compilation.

This is a living document and will be updated daily in the foreseeable future.

Happy St. Paddy's Day. May the world (especially our friends in Japan) have the luck of the Irish today.

Cheers,
Annie

Dr. Annie Kammerer, PE

Senior Seismologist and Earthquake Engineer
US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555

1 (b)(6) mobile
1 BB

From: Kammerer, Annie

Sent: Tuesday, March 15, 2011 3:41 AM

To: Hiland, Patrick; Skeen, David

Cc: Howe, Allen; Nelson, Robert; Stutzke, Martin; Giitter, Joseph; Rihm, Roger; McDermott, Brian; Hasselberg, Rick; Kammerer, Annie; Chokshi, Nilesh; Munson, Clifford; Cook, Christopher; Flanders, Scott; Ross-Lee, MaryJane; Brown, Frederick; Giitter, Joseph; Howe, Allen; Case, Michael; Ruland, William; Dudes, Laura; Karas, Rebecca; Ake, Jon; Munson, Clifford; Hogan, Rosemary; Uhle, Jennifer; Marshall, Michael; Uselding, Lara; Randall, John; Allen, Don; Burnell, Scott; Hayden, Elizabeth; Pires, Jose; Graves, Herman; Candra, Hernando; Murphy, Andrew; Murphy, Andrew; Pires, Jose; Hogan, Rosemary; Sheron, Brian; Dricks, Victor; Warnick, Greg; Reynoso, John; Lantz, Ryan; Markley, Michael

Subject: latest version of Q&As

All,

This is the first draft of the seismic-specific Q&As. It is pretty rough and there are many answers still missing, but people have contributed a lot and we thought it may be useful for many people trying to answer questions coming in.

We are continuing to compile the questions that come in and update the seismic Q&A document. If you have suggested changes, or want to provide missing answers, please forward them to me for compilation.

This is a living document and will be updated daily in the foreseeable future.

Annie

Dr. Annie Kammerer, PE
Senior Seismologist and Earthquake Engineer
US Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Washington DC 20555

(b)(6) mobile
BB

Munson, Clifford

From: Bieganousky, Wayne
Sent: Friday, March 18, 2011 9:23 AM
To: Munson, Clifford
Subject: travel

Cliff,

I know you are extremely busy so I thank you for taking the time to attend to this mundane task. I hope you are well and holding up under all the demands.

Wayne

Munson, Clifford


From: L.L.Bean [LLBean@e.llbean.com]
Sent: Friday, March 18, 2011 9:33 AM
To: Munson, Clifford
Subject: 20% Off Fishing Gear--This Weekend Only

L.L.Bean: 20% off [fishing gear](#) this weekend only.
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Munson, Clifford

From: Drs. Foster and Smith [Editor@drsfostersmith.com]
Sent: Friday, March 18, 2011 4:45 PM
To: Munson, Clifford
Subject: Protect Your Dog from Fleas & Ticks for LESS

Dear CLIFF,
SAVE up to 20% OFF these late-breaking specials today!

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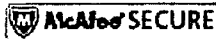
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Munson, Clifford

From: Harvey, Brad
Sent: Sunday, March 20, 2011 5:12 PM
To: Schaaf, Robert
Cc: Lauron, Carolyn; Karas, Rebecca; Munson, Clifford; Brown, David; Quinlan, Kevin; Mazaika, Michael; Galletta, Thomas; Hatchett, Gregory
Subject: RE: ACTION: Please Respond by 2:00pm Today - Direct Support to Ops Center

Bob:

The Ops Center called me at home this morning. I have agreed to helping out at the 3 pm – 11 pm shifts on Mon, Tue, Wed, and Fri this week. Consequently I am not planning to be in the office until around 2 PM tomorrow (Monday March 21).

I can be reached at home (b)(6) or via my cell phone (b)(6) tomorrow morning if there are any questions.

Brad

From: Hatchett, Gregory
Sent: Thursday, March 17, 2011 11:54 AM
To: Munson, Clifford; Hart, Michelle; Li, Yong; Brown, David; Devlin, Stephanie; Stieve, Alice; Seber, Dogan; Quinlan, Kevin; Harvey, Brad; Mazaika, Michael; Kugler, Andrew; Tiruneh, Nebiyu; Barnhurst, Daniel; Jones, Henry; Raione, Richard; See, Kenneth; Chaput, Peter; Giacinto, Joseph; McBride, Mark; Emch, Richard
Cc: Lauron, Carolyn; Karas, Rebecca
Subject: ACTION: Please Respond by 2:00pm Today - Direct Support to Ops Center
Importance: High

To All,

We have been asked to provide a list of staff to NSIR that can provide direct support to the operations center as a follow-on to the initial staffing up conducted in the immediate aftermath of the Japanese event. If you are currently providing technical support outside of the operations center we anticipate that you may continue to do so. Thus, when responding to this email you only need to acknowledge that you are providing external technical support and the area that you currently doing so.

For those of you that are currently providing direct support within the operations center or are on standby to do so, I am requesting that you provide the current role you are fulfilling and your availability. In providing your availability please consider whether you can perform shift work, including any conflicts you may have over the next month such as planned leave, training, or support to any hearing related issues.

Thanks in advance,

Gregory P. Hatchett
Chief, Environmental Projects Branch I
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
(301) 415-2164

(b)(6)

Munson, Clifford

From: Munson, Clifford
Sent: Monday, March 21, 2011 8:48 AM
To: Cook, Christopher
Subject: FW: Delegation of Authority for Richard Raione on March 21, 2011

Hmmm....

From: Donkor, Lydia
Sent: Monday, March 21, 2011 8:44 AM
To: Flanders, Scott
Cc: NRO_DSER_FRONTOFFICE; NRO DSER Branch Chiefs; NRO_DSER_RHEB Distribution; Dent, Kimberly; Duque, Esther; Griggs, Alicia; Horne, Ronnie; Martin, Kamisha; Short, Amanda
Subject: Delegation of Authority for Richard Raione on March 21, 2011

While Richard Raione is out of the office today, 3/21, he has delegated Henry Jones as Acting Branch Chief for the Hydrologic Engineering Branch (RHEB). Henry can be reached at 415-1463 and is located at T-7C26.

Distribution:
NRO_DSER_Front Office
NRO_DSER_Branch Chiefs
NRO_DSER_RHEB Distribution
NRO_DSER_Secretaries Distribution

Lydia Donkor
Contract Secretary
NRO/DSER/RHEB
301-415-0324

Tracking:

Recipient
Cook, Christopher

Read
Read: 03/24/2011 12:43 PM

Munson, Clifford

From: Munson, Clifford
Sent: Monday, March 21, 2011 1:21 PM
To: Kammerer, Annie; Donato.Visco@aps.com
Cc: Ake, Jon
Subject: RE: Request of contact information
Attachments: ICAPP-10_ake_munson.pptx

Here are the slides from the ICAAP.
Cliff

From: Kammerer, Annie
Sent: Monday, March 21, 2011 12:55 PM
To: Donato.Visco@aps.com
Cc: Munson, Clifford; Ake, Jon
Subject: RE: Request of contact information

That is Cliff Munson and Jon Ake. I have CCed them.

Annie

From: Donato.Visco@aps.com [<mailto:Donato.Visco@aps.com>]
Sent: Monday, March 21, 2011 10:59 AM
To: Kammerer, Annie
Subject: Request of contact information

Ms Kammerer,

At the RIC I asked a question regarding the SSHAC Level required for greenfield sites in western US. The reply was a Level 3 and I was referred to ask the other attending NRC personnel regarding their presentation last fall on this subject. I contacted the two gentlemen in attendance and gave them my business card so they could e-mail me the presentation. I have not yet received the presentation and have misplaced their contact information. Could you either forward this e-mail to them or could you provide me with their contact info so that I can contact them.

Thank you.

Donato A. Visco
Quality Assurance Manager
Arizona Public Service Co.
W 602-250-5108 C (b)(6)

Tracking:

Recipient
Kammerer, Annie
Donato.Visco@aps.com
Ake, Jon

Read
Read: 03/21/2011 3:13 PM



United States Nuclear Regulatory Commission

Protecting People and the Environment

Seismic Considerations for Western U.S. Sites

Clifford Munson, Senior Technical Advisor

Jon Ake, Senior Seismologist

***Division of Site and Environmental
Reviews***

Office of New Reactors

June 16, 2010

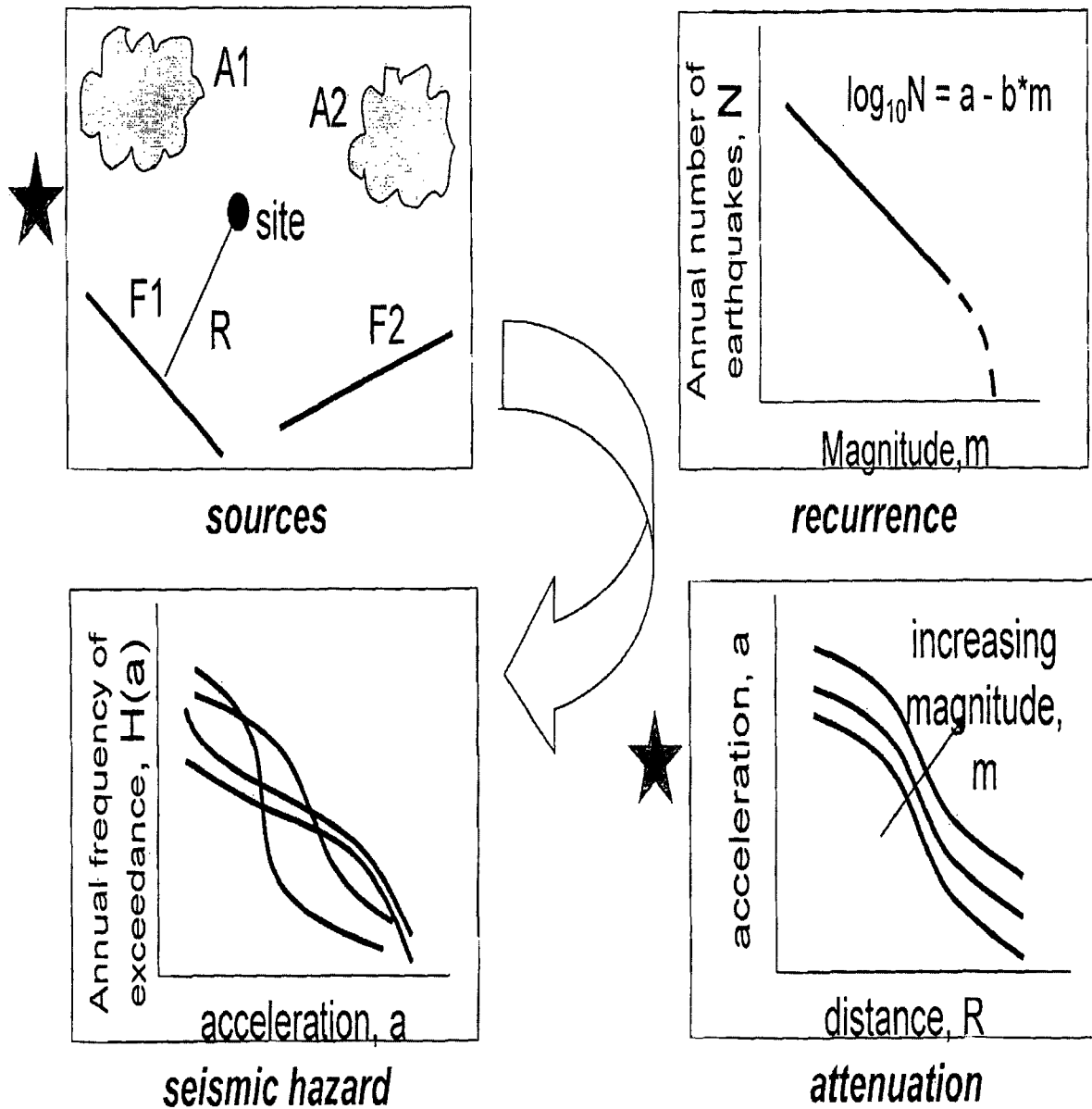
Outline

- Regulatory Framework
- Technical Background
- Considerations for the Western U.S. (WUS)
- Specific WUS Examples
- Summary of Potential WUS Issues
- Question/Answer

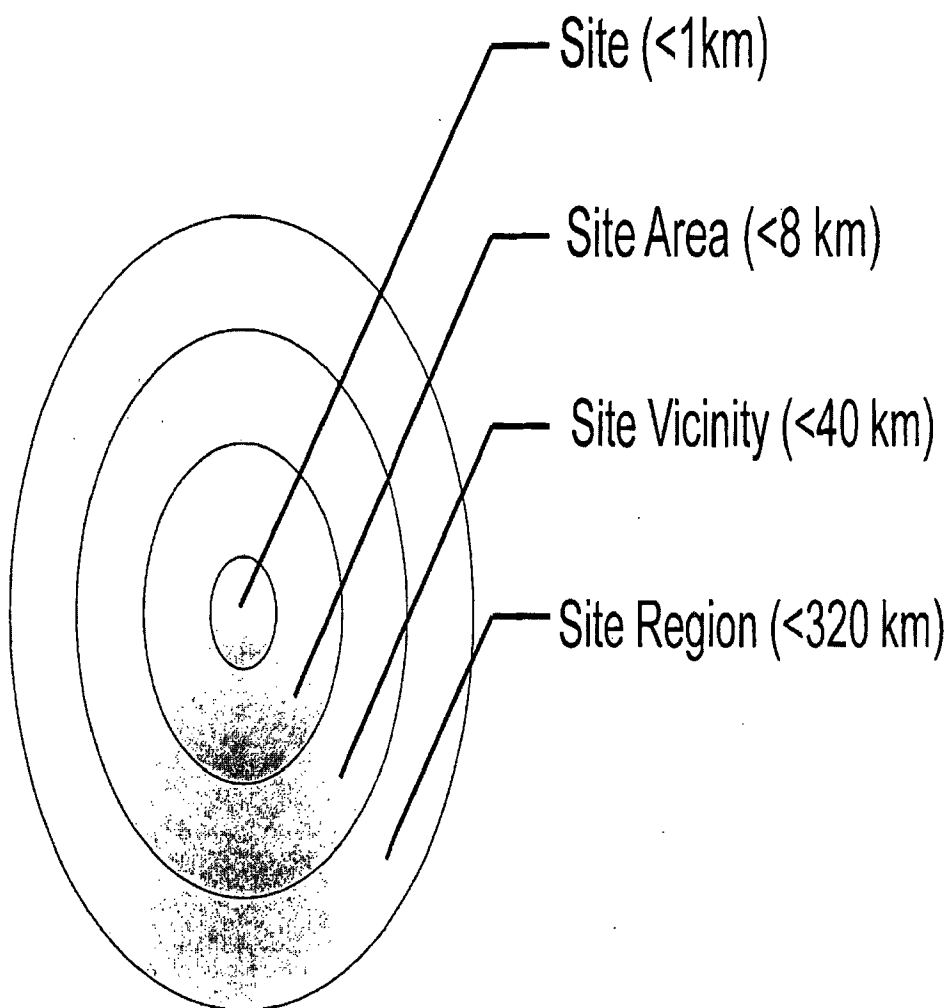
Regulatory Background

- The principal geologic and seismic considerations for site suitability and engineering criteria are given in 10 CFR 100.23 and Appendix S to Part 50.
- Regulatory Guide 1.208 provides more detailed guidance on:
 - Investigations and applications of PSHA and development of the ground motion response spectra (GMRS). Contains some general discussion on WUS approaches
 - Application of the Senior Seismic Hazard Analysis Committee (SSHAC) guidelines for determination of source characterization and GMPEs (NUREG/CR-6372)
 - Integrated site response (NUREG/CR-6728)
- **ANS/ANSI Standards 2.27 (*Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments*) and 2.29 (*Probabilistic Seismic Hazards Analysis*) have been issued subsequent to the publication of RG 1.208**
- **Regulatory requirements are the same for WUS and CEUS**

Seismic Hazard Model (PSHA)



Investigation and Characterization Activities per Regulatory Guide 1.208



Increasing level of effort close to site.

However, any seismic sources that may impact hazard should be appropriately assessed.

Regional source models must still be refined with site-specific information

Appropriate data collection and field investigation efforts to meet 10 CFR 100.23 and Appendix S requirements

WUS Seismic Siting Considerations

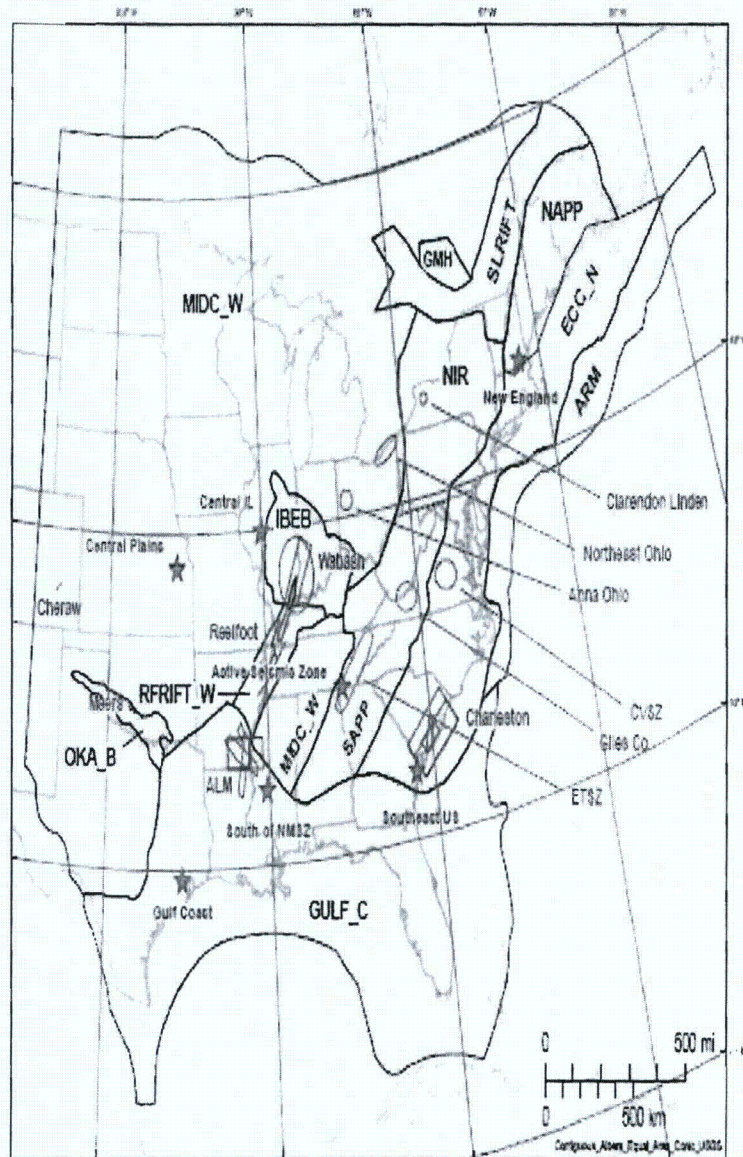
- For NPP siting studies in the central and eastern U.S. (CEUS), NRC staff has endorsed existing regional seismic source characterization (EPRI-SOG-1989, LLNL-1994) and ground motion models (EPRI-GM-2004) as starting points for seismic hazard assessment.
- A new multi-sponsor source characterization project will replace EPRI-SOG and LLNL: **CEUS-SSC** (2011). Site specific updates still required.
- **No such endorsed regional studies exist for potential NPP sites in the western U.S. (WUS).**

CEUS-SSC Model

• Discrete seismic sources and regional zones of seismic activity defined.

• Developed following SSHAC Guidelines

• Areas west of ~103.5 W do not have established source characterization or ground motion models.



Seismotectonic Regions:

ARM - Atlantic Rifted Margin
 ECC_N - Extended Continental Crust Wide
 GMH - Great Meteor Hotspot
 GULF_C - Gulf Coast Zone
 IBEB - Illinois Basin Exposed Basement
 NIR - Northern Iapetan Rift
 MIDC_W - Mid-Continent Craton Wide

NAPP - Northern Appalachian
 OKA_B - Oklahoma Anisocogen Model B
 RFRIFT_W - Reelfoot Rift Wide
 SLRIFT - Lawrence Rift
 SAPP - Southern Appalachians

note: Southern Appalachians (SAPP) and Northern Iapetan Rift (NIR) are included in the Iapetan Rifted Margin (IRM) seismotectonic source zone.

★ Test Sites
 ○ Zones of Elevated Seismicity
 — RLME Source Zones
 — Seismotectonic Zones

Seismotectonic Regions, RLME Source Zones, Zones of Elevated Seismicity, and Test Sites

From CEUS-SSC TI Team

USGS-National Seismic Hazard Mapping Project: WUS Source Characterization Model

- *Identified major regional zones and fault sources.*
- *Focus on hazard impacts at annual exceedance levels of interest to Building Codes, potential for missing issues important to critical facilities.*
- *National fold and fault database a valuable tool for starting any new PSHA in WUS.*

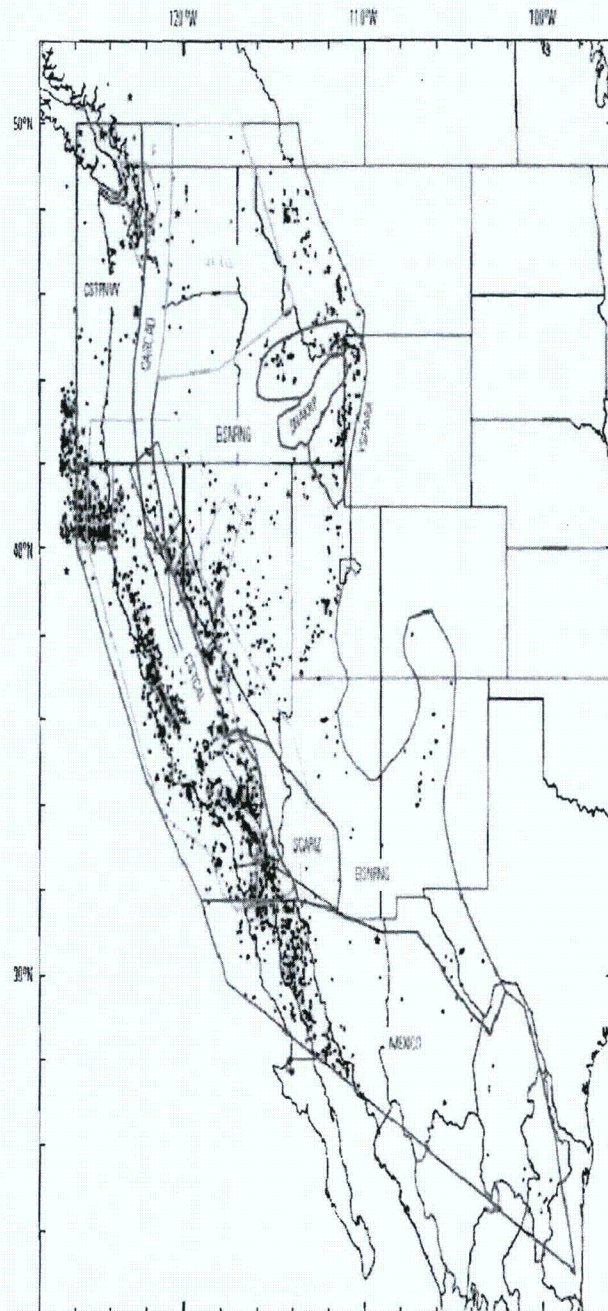


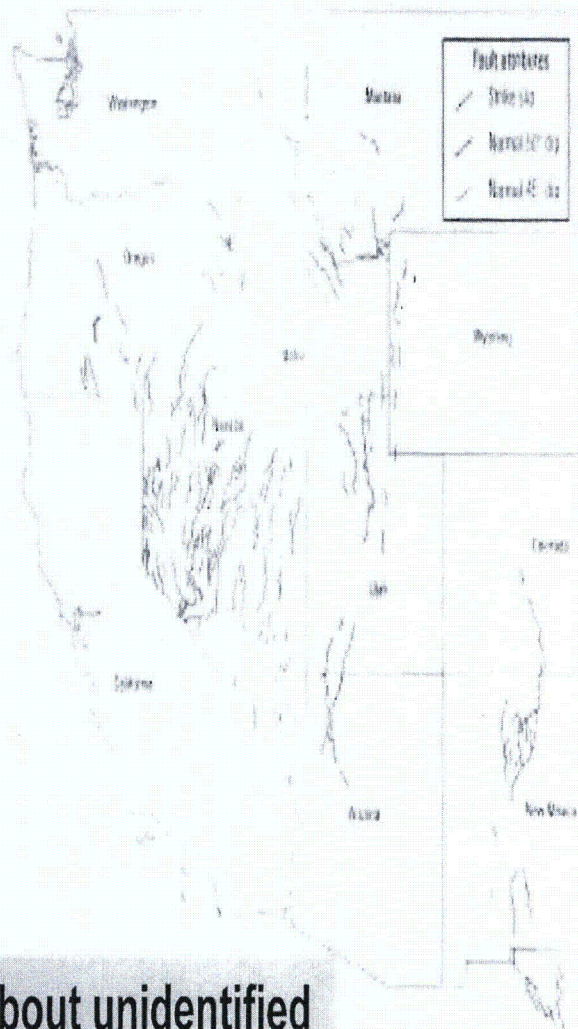
Figure 15. Historical seismicity patterns (redded seismicity), uniform broad regional zones (regional zones), and local seismicity variations (special zones) used in Western United States background seismicity model. Regions include: BSWRNG, Basin and Range; CASCAD, Cascadia; CSTCAL, Coastal California; SCARIZ, Southern California and Arizona; SHAKRP, Snake River Plain; YSPARA, Yellowstone parabola; YAKIMA, Yakima; CSTPNW, coastal Pacific Northwest; MEXICO, Mexico; WCCEP, Working Group on California Earthquake Probabilities. Other regions: P, Puget Lowlands; see figure 14 for explanation.

Identified Faults in the WUS

• *There are many more identified faults in the WUS than in the CEUS. Not all well characterized.*

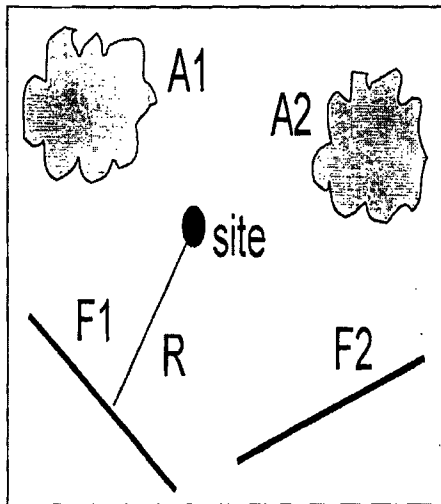
• *Within 320 km regional area of investigation potential for large number of sources requiring characterization.*

• *May require hazard informed, phased approach*

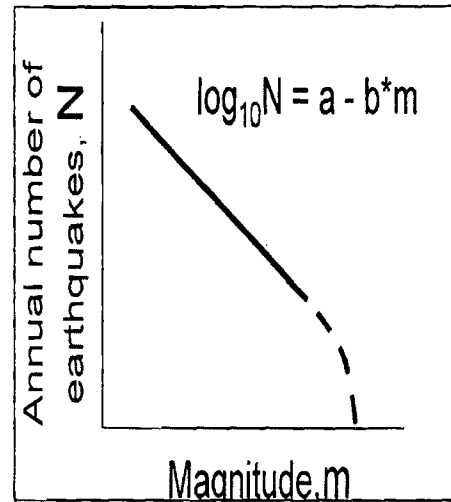


What about unidentified faults?

Seismic Hazard Model (PSHA)



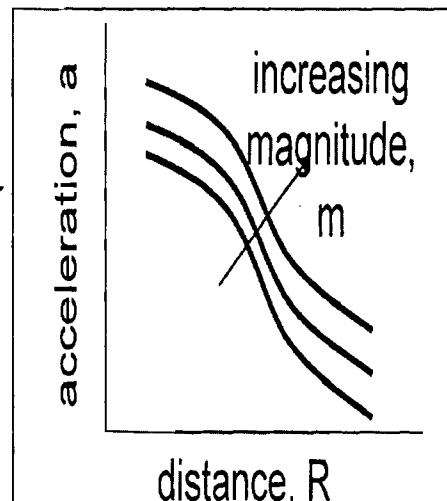
sources



recurrence



seismic hazard

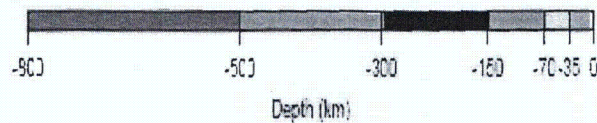
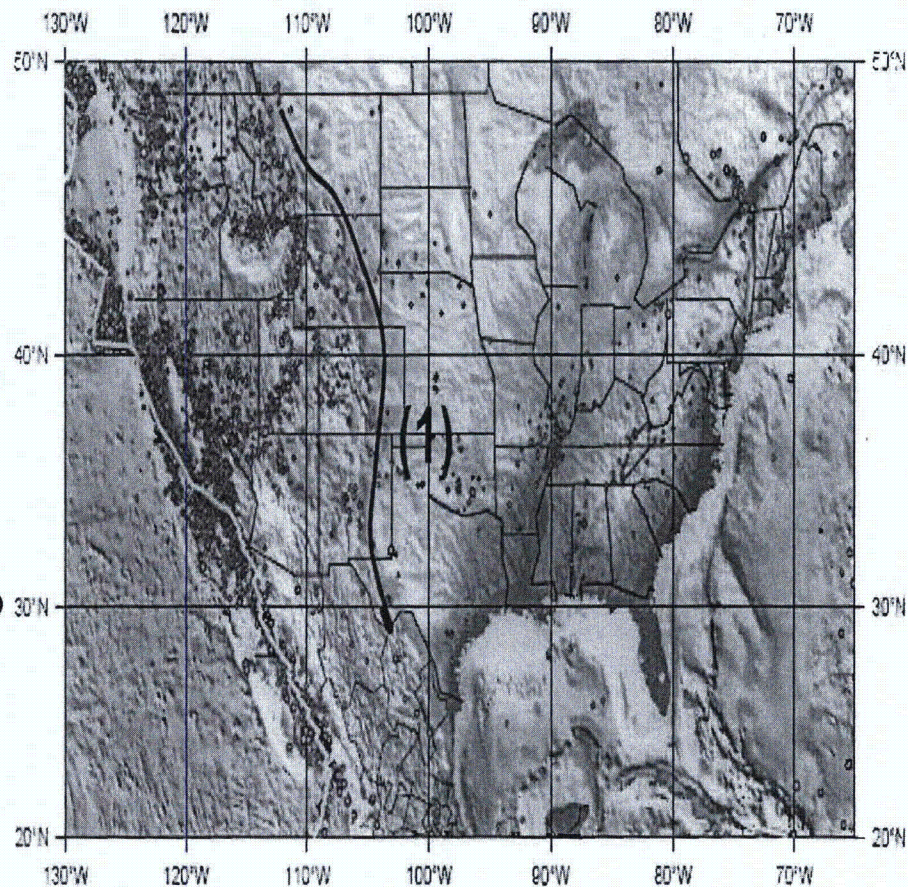


attenuation

Ground Motion Models

Seismicity of the United States: 1990 - 2000

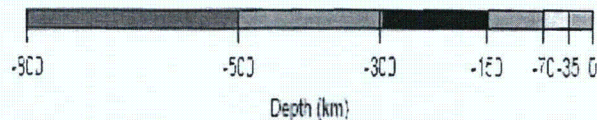
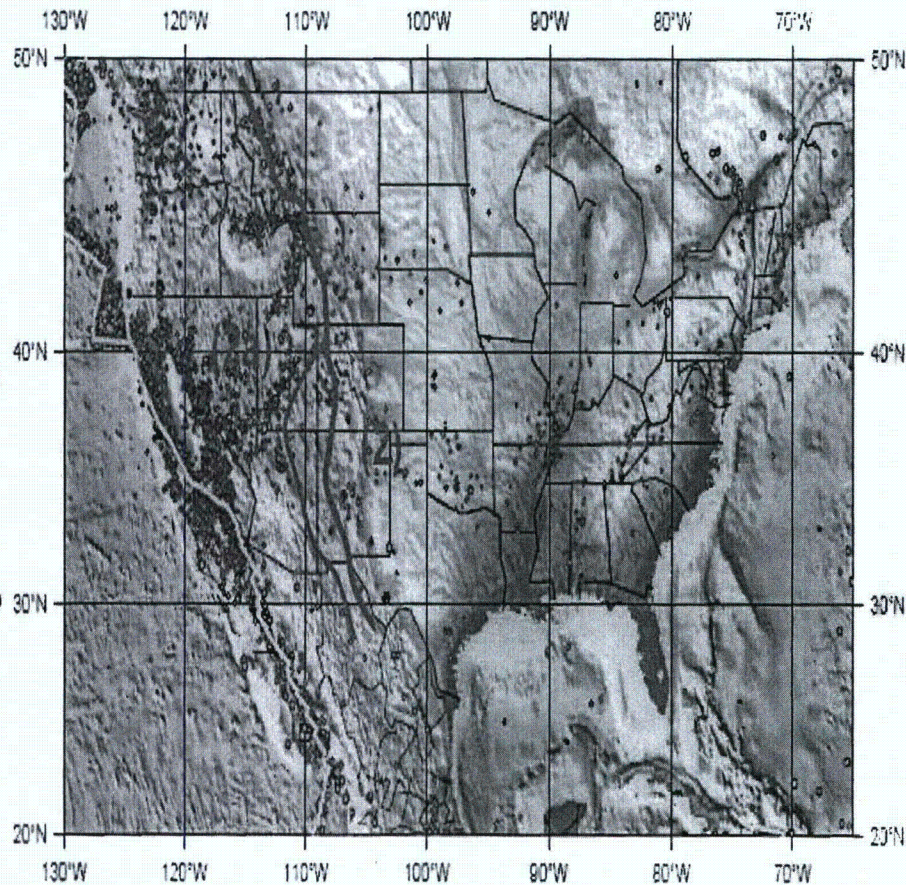
*Where does
the
transition from
CEUS
attenuation
to WUS occur?
(1)*



Ground Motion Models

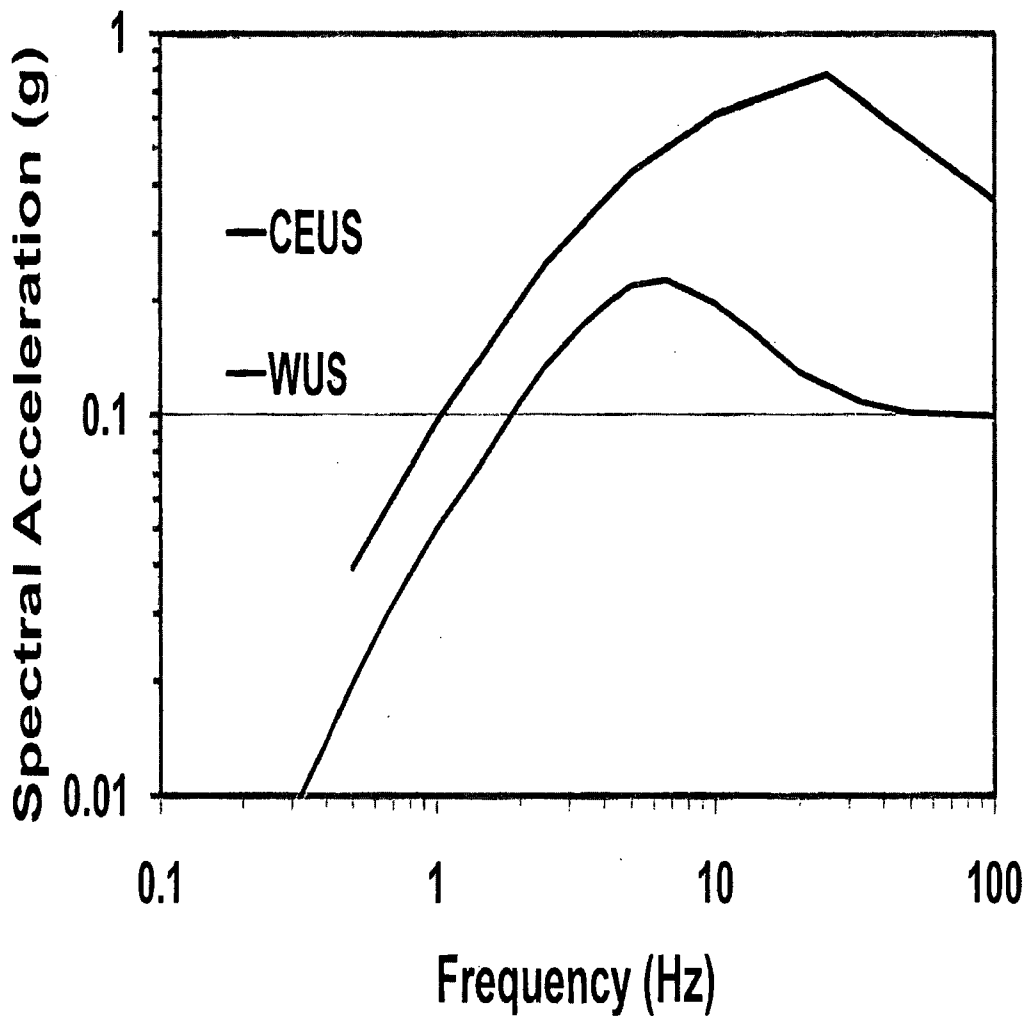
Seismicity of the United States, 1990 - 2000

*Where does
the
transition from
CEUS
attenuation
to WUS occur?
or (2) or (2a)*



Ground Motion Models

Median Spectral Acceleration: M 6.25, R=20 km



Uncertainty and SSHAC

- Significant uncertainties exist regarding appropriate ground motion and seismo-tectonic models, robustness and applicability of various of data sets, etc.
- SSHAC provides a framework for incorporating experts into scientific assessments through structured processes and interactions
- Fundamental concepts behind guidelines
 - Views of the larger technical community are fundamental inputs
 - Competing scientific hypotheses can be considered and uncertainties captured
 - PSHA is a snapshot in time of our knowledge and uncertainties
- **Application of SSHAC Guidelines necessary for new WUS sites**

Recommendations Regarding Developing/Updating PSHA Assessments

Existing PSHA Study	Condition of Existing Study	Hazard Assessment Needed	Recommendation	Level for New Study
No study, or previous studies conducted at lower Study Levels (2 or 1), or non-SSHAC studies	Not adequate for nuclear/critical facilities	Regional or site-specific	Conduct new study	3 or 4
Regional or site-specific	Not Viable: Inputs not representative of current ITC <u>and</u> hazard results expected to change significantly	Regional or site-specific	Replace existing study	3 or 4
Regional or site-specific	Not Viable: Inputs not representative of current ITC <u>but</u> hazard results expected to change significantly	Regional or site-specific	Revise existing study	2, 3 or 4
Regional, no site-specific	Viable	Site-specific	Refine regional study locally consistent with RG 1.208 and ANS 2.27	2, 3 or 4
Regional, no site-specific	Not Viable	Site-specific	Expand scope to include revision of	2, 3 or 4

DRAFT



Significant Seismic Siting Considerations for WUS

- Goal: Efficient review process consistent with NRC Regulations and Guidance
- Potential Issues:
 - Transition between CEUS and WUS ground motion characteristics, Intermountain West
 - Definition of “rock” shear-wave velocity
 - Specific details for performing hazard informed screening evaluations (focus on characterizing important sources)
 - Robustness of data used in screening assessments
 - Applicability of minimum slip-rate estimates as a screening

Significant Seismic Siting Considerations for WUS (cont'd)

- Potential Issues (cont'd):
 - Development of comprehensive, regional moment magnitude based seismicity catalog
 - Maximum magnitude determination for background zones
 - Appropriate minimum magnitude for hazard calculations
 - Applicability of geodetic information for seismic source characterization
 - Appropriate SSHAC Level for new studies (Level 3/4)
 - Methodologies and bases for smoothing of seismicity
 - Development of realistic spectral shapes for regions influenced by Cascadia subduction zone
 - Consider what has been working in the CEUS

Summary

- **Path Forward:**
 - *Interaction with Stakeholders (Industry, DOE, USGS)*
 - *Develop Interim Staff Guidance*
 - *Emphasize integration between site characterization/hazard assessment and engineering*
 - *Evaluate the potential for engineering solutions (ex., base isolation)*
- **Questions?**

Munson, Clifford

From: [redacted] (b)(6)
Sent: Monday, March 21, 2011 5:39 PM
To: [redacted] (b)(6) Munson, Cliff [redacted] (b)(6) Munson, Clifford
Subject: [redacted] (b)(6)

[redacted]

(b)(6)

On Sun, Mar 20, 2011 at 11:56 PM, [redacted] (b)(6) wrote:

[redacted]

(b)(6)

(b)(6)

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Munson, Clifford

From: (b)(6)
Sent: Monday, March 21, 2011 9:22 AM
To: Munson, Clifford
Cc: (b)(6)
Subject: tonight

(b)(6)

Munson, Clifford

From: Your Friends at Shockley Honda [gshuman@shockleyhonda.com]
Sent: Tuesday, March 22, 2011 10:52 AM
To: clifford.munson@
Subject: March service specials

To view this email in your internet browser, [click here](#).

To experience the rich media content in this e-mail, it must be viewed on a PC or Mac with a broadband connection.

Winter's poor driving conditions can be hard on your car. With warm weather approaching, you'll want your Honda to be ready. Bring in your vehicle to Shockley Honda for all your service needs. Click on link below to find out more about our March specials and to print this month's service coupons.

[Click here to view our March service specials.](#)

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Frederick, MD 21704

[Forward to a friend.](#)

We respect your privacy. To opt-out of future e-mails, [click here](#).

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Munson, Clifford

From: Cook, Christopher
Sent: Tuesday, March 22, 2011 1:57 PM
To: Munson, Clifford
Subject: FW: borings at Blue Castle...in March!

FYI... and thanks for the talking points!

From: Cook, Christopher
Sent: Tuesday, March 22, 2011 1:55 PM
To: Akstulewicz, Frank; Flanders, Scott; Matthews, David; Karas, Rebecca; Chokshi, Nilesh; Madden, Patrick; Tonacci, Mark
Subject: RE: borings at Blue Castle...in March!

This is the only opportunity for staff to see these tests being performed. In addition to the borings, it's also the test probing, geophysical surveys, and related site studies. Staff typically report in the SER that they observed some of these tests, which adds credibility. Historically, the Region has attended and has made QA findings. The applicant's get an opportunity to dialogue with us about seismic modeling, which they generally start just after the site studies are complete, as well as how best to implement the various Reg Guides dealing with geology, seismology, and geotech.

Chris

From: Akstulewicz, Frank
Sent: Tuesday, March 22, 2011 12:46 PM
To: Flanders, Scott; Matthews, David; Karas, Rebecca; Chokshi, Nilesh; Madden, Patrick; Tonacci, Mark
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Can someone please explain why it is so important to go during the borings?
What are we trying to accomplish?

From: Flanders, Scott
Sent: Tuesday, March 22, 2011 12:40 PM
To: Matthews, David; Karas, Rebecca; Akstulewicz, Frank; Chokshi, Nilesh; Madden, Patrick; Tonacci, Mark
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Dave, as we discussed BCH may not be aware of the significance of us participating at the boring stage. Are we still on a path to have DNRL contact BCH and inform them that it may be useful to meet with is in the near future to discuss pre-app work

Scott

From: Matthews, David
Sent: Tuesday, March 22, 2011 12:33 PM
To: Karas, Rebecca; Akstulewicz, Frank; Flanders, Scott; Chokshi, Nilesh; Madden, Patrick; Tonacci, Mark
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Rebecca,

Mark Tonacci is in the process of identifying a project manager. There is a Project # assigned. Regardless of their self-initiated work ...we have NOT agreed to any expenditures at this point. I suspect we will first have a drop-in with BCH managers and DNRL/DSER to discuss pre-app work and path forward.
David

From: Karas, Rebecca
Sent: Tuesday, March 22, 2011 12:07 PM
To: Matthews, David; Akstulewicz, Frank; Flanders, Scott; Chokshi, Nilesh; Madden, Patrick
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Yeah, Ok, but we do have a letter from them that says they are starting borings in March – perhaps they do not realize that we go during the borings.

Rebecca Karas, Chief
Geosciences and Geotechnical Engineering Branch 1
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

From: Matthews, David
Sent: Monday, March 21, 2011 12:23 PM
To: Akstulewicz, Frank; Flanders, Scott; Chokshi, Nilesh; Madden, Patrick; Karas, Rebecca
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Frank, et al.,
Based on their letter (sent to both me and Scott), I would have expected BCH (principally Nils Diaz) to have arranged a meeting with us and Scott to discuss pre-app support from the NRC (provided we have resources to pursue). In the absence of such a meeting, and with no Project # assigned, I would not expect the NRC staff do anything at this point.
David

From: Akstulewicz, Frank
Sent: Monday, March 21, 2011 12:15 PM
To: Matthews, David
Subject: FW: borings at Blue Castle...in March!

DSER is having a reaction to some recent info... seems like we will need to have a call with them. Do you have contact info? Apparently we seem to have some interaction with them when they do borings.

From: Karas, Rebecca
Sent: Monday, March 21, 2011 12:06 PM
To: Akstulewicz, Frank
Cc: Cook, Christopher
Subject: RE: borings at Blue Castle...in March!

Ok, I'm here, albeit, somewhat sleepy. I'm gonna see if Chris can stop down and see you sometime this pm.

Rebecca Karas, Chief
Geosciences and Geotechnical Engineering Branch 1
Division of Site and Environmental Reviews

Office of New Reactors
U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

From: Akstulewicz, Frank
Sent: Sunday, March 20, 2011 8:42 PM
To: Karas, Rebecca
Subject: Re: borings at Blue Castle...in March!

Ok. Let's chat monday

From: Karas, Rebecca
To: Akstulewicz, Frank
Cc: Munson, Clifford; Cook, Christopher; O'Donohue, Kathleen; Jackson, Rahsean
Sent: Sun Mar 20 10:02:12 2011
Subject: RE: borings at Blue Castle...in March!

OK, but we need to do pre-app. So what we had done in the past is assigned a PM to follow it. Not sure what you guys have them charge to (we did this all the time when the first wave was coming in). Possibly there is a pre-app tac you guys open. It's not a lot of work for a PM – someone just needs to set up a quick phone call so we can talk timing with them.

From: Akstulewicz, Frank
Sent: Saturday, March 19, 2011 11:42 PM
To: Karas, Rebecca
Subject: Re: borings at Blue Castle...in March!

No PM assigned. Because we have no app in front of us

From: Karas, Rebecca
To: Cook, Christopher; Munson, Clifford; Akstulewicz, Frank; O'Donohue, Kathleen; Jackson, Rahsean
Sent: Sat Mar 19 12:16:54 2011
Subject: RE: borings at Blue Castle...in March!

Frank, who is your PM assigned to Blue Castle. We need to work on getting information/scheduling the borings trip.

Rebecca Karas, Chief
Geosciences and Geotechnical Engineering Branch 1
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

From: Cook, Christopher
Sent: Monday, March 14, 2011 6:58 PM
To: Karas, Rebecca; Munson, Clifford
Subject: borings at Blue Castle...in March!

This letter says borings are starting in March after the QA program is set up. Has anyone contacted you about this? I guess we should hunt around and find out about pre-application trip details.

(b)(5)

Chris

From: Flanders, Scott
Sent: Thursday, March 10, 2011 5:13 PM
To: NRO DSER Branch Chiefs; Fetter, Allen; Munson, Clifford
Cc: Lauron, Carolyn
Subject: FW: U.S. Nuclear Regulatory Commission - BCH Submittal of ESP and COL Application

FYI

From: DAVID MATTHEWS [mailto:davidmatthews11@verizon.net]
Sent: Thursday, March 10, 2011 2:21 PM
To: Johnson, Michael; Gusack, Barbara; Holahan, Gary; Akstulewicz, Frank; Madden, Patrick; Flanders, Scott; Chokshi, Nilesh; Snyder, Amy; Erwin, Kenneth
Subject: Fw: U.S. Nuclear Regulatory Commission - BCH Submittal of ESP and COL Application

Latest LOI from Blue Castle Holdings attached.

----- Forwarded Message -----

From: Kaycee Conger <kayceeconger@bluecastleproject.com>
To: "David.Matthews@nrc.gov" <David.Matthews@nrc.gov>; "(b)(6)" <davidmatthews11@verizon.net>
Cc: Kaycee Conger <kayceeconger@bluecastleproject.com>
Sent: Wed, March 9, 2011 3:05:20 PM
Subject: U.S. Nuclear Regulatory Commission - BCH Submittal of ESP and COL Application

Mr. Matthews;

I apologize for the delay -- I am currently experiencing computer issues. Please let me know if you receive this message w/the attached notification letter. Also note that the hard copy of this letter will be mailed FEDEX to the NRC Document Control Desk this afternoon.

Thank you,

Kaycee Conger
Administrative Manager
Blue Castle Holdings, Inc.
86 N. University Avenue, Suite 400
Provo, Utah 84601
801.717.3080 X311

Munson, Clifford

From: L.L.Bean [LLBean@e.llbean.com]
Sent: Tuesday, March 22, 2011 9:55 AM
To: Munson, Clifford
Subject: NEW: Flattering Easy Stretch Pants + Rainwear with Fresh Details

L.L.Bean: See why customers call our [new Easy Stretch Pants](#) "amazing." Plus, rainwear with fresh details. Trouble viewing? View this email in a [browser](#) or on a [mobile device](#).

1-888-610-2326 Customer Service

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"These pants are amazing - fit, comfort and a great look."

☆☆☆☆☆
-L.L.Bean customer, Scituate, MA

Flattering styles with a hidden elastic waist for all-day comfort. In denim and stretch twill.

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NEW Easy Stretch Pants starting at \$44.50





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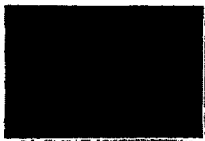
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\$49.95



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Set of Three, \$29.95

share
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"This group has been fishing together for several years. At first, just one or two of us had Bean hunting boots. Little by little, the great Bean tradition spread."

-submitted by Richard B.

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You have agreed to receive L.L.Bean email updates at [clifford.munson@nrc.gov].

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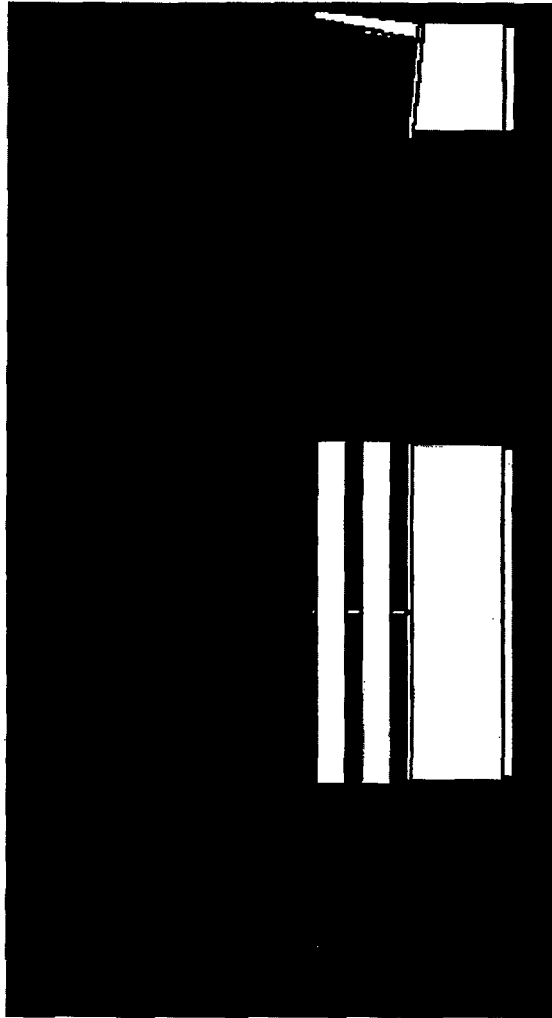
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USA
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Munson, Clifford

From: Audio Advisor, Inc [aa_newsletters=audioadvisor.com@mail7.us2.mcsv.net] on behalf of Audio Advisor, Inc [aa_newsletters@audioadvisor.com]
Sent: Tuesday, March 22, 2011 4:05 PM
To: Munson, Clifford
Subject: Money Saving Klipsch Koupons

Email not displaying correctly? [1]View it in your browser.

We Can't Spell, But We Can Save You a Kaboodle on Klipsch Earphones

Links:

1. <http://us1.campaign-archive1.com/?u=80e5a8d1b82a27eb253d67a95&id=3fe9f7d7f1&e=38d475813c>

Don't blame us if we can't spell. We're so excited about Klipsch earphones that we're offering instant 'Koupon' savings on great-sounding, lightweight, and affordable 'phones from the industry experts in portable listening. We've got earphones specially designed for gaming, a great on-ear headphone, the high-end Image X10i, and more.

Pick the Klipsch that suits your listening needs the best. Or buy a bunch.

These 'phones are easy to afford when you use our Klipsch Koupons. But hurry... quantities are limited at our low prices. So grab 'em today while we've still got 'em, and save yourself a kaboodle.

Klipsch Image S3 In-Ear Headphones – Only \$34!

Klipsch Image S3 in-ear headphones offer a major boost in sound and comfort over anything near the price. Producing spectacular highs and lows, the Image S3 brings legendary Klipsch sound to an affordable headphone. The S3 has undergone extensive strength testing to ensure it stacks up to virtually every real-world scenario. It features durable, tangle resistant cables to avoid unwanted tangling. The cable is molded into the plug for improved strain relief.

Luxurious Comfort and Fit

Unlike circular-shaped ear tips that put stress on the pressure points inside the ear, Klipsch's patented oval ear tips naturally fit the contours of your ear canals, providing long-term comfort. These lightweight ear tips also offer superior noise isolation, blocking out almost all ambient noise and providing excellent bass.

Premium Sound

At the heart of every Klipsch product is over 60 years of audio expertise beating strong. The company's commitment to no-compromise performance has made it a leader in stereo and home theater sound and now a premium name in headphones. The Image S3 employs a customized 5.8mm moving-coil micro speaker with controlled damping in each piece, allowing it to deliver smooth, full-bodied sound that's similar to a more expensive balanced armature design.

The Image S3 works with virtually any device that has a standard 3.5mm headphone jack. It comes with three pairs of different-sized oval ear tips, a carrying case, and a two-year warranty.

It all adds up to an unbelievable value at the regular selling price, and an absolute steal when you use our Klipsch Koupon!

Klipsch Image S3 In-Ear Headphone

[2]Regular Price \$49, with Special Sale 'Klipsch Koupon'

Now Only \$34.00 - Save \$15!

Coupon Key Code = KLIMS3G

Links:

2.

http://www.audioadvisor.com/prodinfo.asp?number=KLIMS3&utm_source=Email+Newsletters&utm_campaign=3fe9f7d7f1-Money_Saving_Klipsch_Koupons3_21_2011&utm_medium=email

_Klipsch Image S2 In-ear Headphone – Only \$34!

_Klipsch Image S2 in-ear headphones boasts precise, comfortable fit for long-term wear plus a superior noise-isolating design. "For the quality the S2s give you, there is no better buy out there for standard earphones," reports Rolling Stone magazine.

_Klipsch Image S2 In-Ear Headphone

[3]Regular Price \$49, with Special Sale 'Klipsch Koupon'

Now Only \$34.00 - Save \$15!

Links:

3.

http://www.audioadvisor.com/prodinfo.asp?number=KLIMS2&utm_source=Email+Newsletters&utm_campaign=3fe9f7d7f1-Money_Saving_Klipsch_Koupons3_21_2011&utm_medium=email

Coupon Key Code = KLIMS2_

_\$20 Off Klipsch ProMedia In-Ear Headphone _Ideal for music listening or computer gaming, the ProMedia In-Ear is designed for today's highly sophisticated entertainment. An 8.5 mm driver and moving coil technology delivers exceptional sound quality. The single-button microphone offers crisp, clear communication.

_Klipsch Image S2 In-Ear Headphone

[4]Regular Price \$89, with Special Sale 'Klipsch Koupon'

Now Only \$69.00 - Save \$20!

Links:

4.

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Coupon Key Code = KLPM_

_\$30 Off Klipsch Image One Headphone

_The Image One stereo headphones bring high-performance Klipsch audio to an affordable on-ear headphone. "Overall sound is excellent, with vocals and melodies benefiting from a mid-range that's full of punch and warmth," notes Pocket-Lint.com.

_Klipsch Image One Headphone

[5]Regular Price \$149, with Special Sale 'Klipsch Koupon'

Now Only \$119.00 - Save \$30!

Links:

5.

http://www.audioadvisor.com/prodinfo.asp?number=KLIMONE&utm_source=Email+Newsletters&utm_campaign=3fe9f7d7f1-Money_Saving_Klipsch_Koupons3_21_2011&utm_medium=email

Coupon Key Code = KLPIM1_

_\$50 Off Klipsch Image X10i Headphone

_The Klipsch Image X10i with inline mic/remote system offers the absolute best in style, sound, comfort, and fit. "If you're looking for an ultracomfortable, great sounding set of earbud-style headphones, these guys don't disappoint," marvels Steve Guttenberg at CNET.

_Klipsch Image X10i Headphone

[6]Regular Price \$349, with Special Sale 'Klipsch Koupon'

Now Only \$299.00 - Save \$50!

Links:

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http://www.audioadvisor.com/prodinfo.asp?number=KLX10I&utm_source=Email+Newsletters&utm_campaign=3fe9f7d7f1-Money_Saving_Klipsch_Koupons3_21_2011&utm_medium=email

Coupon Key Code = KLX10I_

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Munson, Clifford

From: Kammerer, Annie
Sent: Tuesday, March 22, 2011 7:14 PM
To: Ake, Jon; Munson, Clifford
Subject: RE: how are you holding up?

Thanks. I agree. And with the commissioners plans for a panel hopefully we end up with some having some pull out of this.

Annie

-----Original Message-----

From: Ake, Jon
Sent: Tuesday, March 22, 2011 5:16 PM
To: Munson, Clifford; Kammerer, Annie
Subject: RE: how are you holding up?

Cliff and Annie-

I just wanted to tell you both how great I think you've been since the Japan earthquake. Great job! Even with the high level of short-term stress I feel like we have begun to get a lot of stuff pulled together and a firm direction on the technical issues we all feel we need to conquer. I feel like the seismic staff is coming together and getting a stronger grasp on some key issues.

Annie, as with many things in life, it pays to live upstream.
Jon

From: Munson, Clifford
Sent: Tuesday, March 22, 2011 1:11 PM
To: Kammerer, Annie
Cc: Ake, Jon
Subject: RE: how are you holding up?

(b)(5)

I probably don't have half of your capacity to handle this stressful situation. But reading a good book is also my escape. I don't think people realize the toll that it takes on us to be always ready with the perfect sound bite. Don't worry about yesterday – you did fine answering the question. Get some rest and move to the top floor of your apartment bldg so you stop getting flooded!

Take care. Cliff

From: Kammerer, Annie
Sent: Tuesday, March 22, 2011 11:19 AM
To: Munson, Clifford
Subject: RE: how are you holding up?

I'm actually theoretically off today.. at least I'm not on the schedule today... so I'm at home.

I've got extremely high endurance capacity...but I have nearly reached it. After pulling an all nighter to get the public Q&As done, I finally got to bed at 10am and then at 11 was contacted and started helping the chairman and steve chu's staffs (separately, they weren't together) get them ready for briefings. That lasted all day, then Sunday I reviewed the Q&As and FREAKED out because I finally read the email that said I was covering GI-199. What happened? I thought you were doing that. I read the Comm plan and all the questions like 3 times so I didn't screw up too bad.

(b)(6)

Last nigh again I worked well into the night because Brian called me at 9 and told me the head of congressional affairs needed some stuff. (Boxer is touring Diablo today so I made a fact sheet). They need one for SONGS next...presumably that is next on the road show.)

(b)(6)

I'm determined to take a nap today...and reading at least one chapter of the book that I had been reading on metro. ☺

Annie

From: Munson, Clifford
Sent: Tuesday, March 22, 2011 10:00 AM
To: Kammerer, Annie
Subject: how are you holding up?

I am pretty spent and I haven't been scrambling nearly as much as you have. I think I need a couple of days off – may be next week. Hopefully things will be calming down soon.

Cliff

Munson, Clifford

From: Munson, Clifford
Sent: Wednesday, March 23, 2011 7:35 AM
To: (b)(6)
Subject: (b)(6)

Lets trade 4/11 for 4/18. Cliff

-----Original Message-----

From: (b)(6) [mailto:(b)(6)]
Sent: Tuesday, March 22, 2011 8:37 PM
To: Munson, Clifford
Subject: (b)(6)

Hi Cliff

(b)(6)

Munson, Clifford

From: Lauron, Carolyn
Sent: Wednesday, March 23, 2011 10:16 AM
To: Murphy, Jerome; Schum, Constance; Segala, John
Cc: Flanders, Rhea; Flanders, Scott; Chokshi, Niles; Munson, Clifford
Subject: *Corrected* DSER Response: Funding Needs for Japan Follow-up - Resent to provide Attachment
Attachments: DSER Input to FY13 Budget Formulation - Additional Needs In Support of Japanese Events.xlsx

Hi -

Based on the 3/17/11 planning guidance for the FY13 Budget that was handed out/discussed at yesterday's subprogram meeting, DSER is now requesting the following:

(b)(5)

DSER is working with RES to confirm the activities in the attached list.

DSER is requesting these resources to support the effort led by RES. (DSER anticipates that RES will make a separate request for resources it will need to address its short term and longer term activities)

Please call me if you have questions.

Thanks,
Carolyn
2736

From: Lauron, Carolyn
Sent: Tuesday, March 22, 2011 8:23 AM
To: Murphy, Jerome
Cc: Flanders, Rhea; Flanders, Scott; Chokshi, Niles
Subject: DSER Response: Funding Needs for Japan Follow-up - Resent to provide Attachment

Hi -

(b)(5)

For now, DSER makes no request for the longer-term review since the effort associated with the activities outlined below will be dependent on the results of the near-term review.

Please let me know if you need more information.

Thanks,
Carolyn
2736

From: Murphy, Jerome
Sent: Monday, March 21, 2011 6:53 PM
To: Flanders, Scott
Cc: Flanders, Rhea; Lauron, Carolyn
Subject: RE: Funding Needs for Japan Follow-up - Resent to provide Attachment

Got it. Is this near term or long term.

From: Flanders, Scott
Sent: Monday, March 21, 2011 6:47 PM
To: Murphy, Jerome; NRO_Division_Directors; NRO_Deputy_Division_Directors; NRO_TA
Cc: Flanders, Rhea; Lauron, Carolyn
Subject: RE: Funding Needs for Japan Follow-up - Resent to provide Attachment

Jerome, please include 1.5 FTE and 500k.

Scott

From: Murphy, Jerome
Sent: Monday, March 21, 2011 5:55 PM
To: NRO_Division_Directors; NRO_Deputy_Division_Directors; NRO_TA
Cc: Flanders, Rhea
Subject: FW: Funding Needs for Japan Follow-up - Resent to provide Attachment

Divisions, I previously sent out an e-mail requesting that you provide any resource needs to support the Japan event. DSER provided the following: DSER is not aware of the details in the plan but given DSER's expertise in natural hazards and siting issues (especially seismology, hydrology and tsunami analyses), there is a high likelihood we may be asked to support future, near-term activities.

Now OCFO is requesting to take a look at Near Term Review (90 day effort) and Longer-Term Review (Following obtaining sufficient technical information from the Japan event). Please see below a more descriptive breakout for both. **OCFO would like our answer by noon on Tuesday, 3/22.** Please provide your comments to me.

VR,
Jerome

From: Golder, Jennifer
To: Schum, Constance
Sent: Mon Mar 21 16:24:18 2011
Subject: FW: Funding Needs for Japan Follow-up - Resent to provide Attachment

Jennifer Golder

Budget Director
Office of the Chief Financial Officer
United States Nuclear Regulatory Commission

From: Kasputys, Clare
Sent: Monday, March 21, 2011 4:18 PM
To: RidsNroOd Resource; RidsNrrOd Resource; RidsNsirOd Resource; RidsResOd Resource; RidsFsmeOd Resource; RidsNmssOd Resource; RidsOgcMailCenter Resource; RidsCsoMailCenter Resource; RidsRgn1MailCenter Resource; RidsRgn2MailCenter Resource; RidsRgn3MailCenter Resource; RidsRgn4MailCenter Resource; RidsOipMailCenter Resource
Cc: RidsNrrPmda Resource; RidsNroPmda Resource; RidsNsirPmda Resource; RidsResPmdaMail Resource; RidsFsmePbpaFmb Resource; RidsNmssTa Resource; Golder, Jennifer; Smolik, George; Muessle, Mary; Andersen, James;

Jacobs-Baynard, Elizabeth; Allwein, Russell; Peterson, Gordon; Peterson, Gordon; Virgilio, Martin; Virgilio, Martin; Weber, Michael; Weber, Michael; Ash, Darren; Ash, Darren

Subject: Funding Needs for Japan Follow-up - Resent to provide Attachment

Resent to provide the Attachment

All,

The Chairman has requested for the NRC to conduct a Near-term (90 day effort) and a longer-term review (as discussed by Bill B at the Commission meeting today) of regulatory issues affecting U.S. operating reactors based on the events in Japan. The Chairman is interested in seeking supplemental funding to support our efforts for the above effort, in addition to NRC's costs associated with emergency response and technical experts sent to Japan. OCFO is preparing cost data associated with emergency response and technical support to Japan.

On Friday, the OCFO requested some initial estimates to support the reviews (see attached). At this time, we are requesting the offices to review these initial estimates and include some information concerning the work that is envisioned to support these reviews. Listed below are some initial thoughts about the scope of the near-term and long-term reviews. Also, consider what on-going efforts related to the development of our regulatory program could benefit with supplemental funding. For example, it was mentioned in the Commission meeting that NRC is currently working on GSI-199. Should funding be accelerated for this effort and others of this nature.

Near Term Review (90 day effort):

- Evaluate currently available technical and operational information from the Japan event to identify near-term (or immediate) operational or regulatory issues affecting U.S. operating reactors of all designs in areas such as protection against earthquakes, tsunami, flooding, hurricanes, station blackout and a degraded ability to restore power; severe accident mitigation and emergency preparedness
- Develop recommendations for generic communications, orders, changes to inspection procedures and licensing review guidance, etc.
- Possibly prepare a 30 day quick look report

Longer-Term Review (Following obtaining sufficient technical information from the Japan event)

- Evaluate all technical and policy issues related to the event to identify additional research, generic issues, changes to the reactor oversight process, rulemakings and adjustments to the regulatory framework that should be conducted by the NRC.
- Evaluate interagency issues such as emergency preparedness.
- Applicability of the lessons learned to non-operating reactor and non-reactor facilities.

It is recognized that the full scope of the reviews has yet to be determined or the size of the group that will be conducting the analysis. Therefore, we are looking only for rough cost estimates. You are requested to send the level of funding (dollars and FTE) that is anticipated that could be obligated in FY 2011 for both the near-term and long-term efforts. We are asking the business line leads to coordinate with supporting offices and submit a response by business line and by office. Please send your responses to me and Liz Jacobs-Baynard and copy Jennifer Golder and George Smolik, OCFO NLT than Noon on Tuesday.

If you have any questions, please let me know.

Thank you for your support.

New Reactors Business Line March 22, 2011			NRO			RES		
			0	0.0		1,690	0.0	
Product Line	Product	Project	\$ K	FTE		\$ K	FTE	
50	Research	New Rx Res			H	250		H
		CEUS Seismic Source Zone Follow on						
51	Research	New Rx Res			H	110		H
		NGA - EAST						
52	Research	New Rx Res			H	25		H
		EXTRABUDGETARY TSUNAMI PROJECT						
53	Research	New Rx Res			H	40		H
		2D NON-LINEAR SITE RESPONSE						
54	Research	New Rx Res			H	70		H
		PSHA Software						
55	Research	New Rx Res			H	200		H
		Uncertainty and Simulation for GMPEs						
95	Research	New Rx Res			M	90		M
		Evaluation of Post-Liquefaction Residual Strength						
96	Research	New Rx Res			M	200		M
		Methods, Computational Platform and case Studies for SSI Modeling of Non-Traditional Loads						
97	Research	New Rx Res			M	200		M
		Technology Neutral Framework for Performance-Based and Risk-Informed Approaches for Structural and Seismic Safety Reviews						
98	Research	New Rx Res			M	50		M
		Validation and Verification of Base Isolation Device Models Based on Existing and New Physical Test Data and Protocols						
99	Research	New Rx Res			M	150		M
		n Studies in Moderate Seismicity Regions with a History of Large Events						

FY 13 Formulation

New Reactors Business Line March 22, 2011			NRO			RES		
			0	0.0		1,690	0.0	
Product Line	Product	Project	\$ K	FTE		\$ K	FTE	
100	Research	New Rx Res Study on Post-tensioning Methods			M	90		M
148	Research	New Rx Res East Tennessee Seismic Zone: Paleoseismic Investigations			L	50		L
149	Research	New Rx Res CHARLESTON SEISMIC REFLECT DATA			L	50		L
150	Research	New Rx Res Multidimensional Soil Model Development			L	115		L

Munson, Clifford

From: Cook, Christopher
Sent: Wednesday, March 23, 2011 8:21 AM
To: Flanders, Scott; Munson, Clifford; Chokshi, Niles
Subject: FYI: Weijun to present at today's All hands

For awareness. Weijun has been asked by DCIP to talk thru a 3 minute video showing a time-lapse images/video of the Vogtle excavation. Weijun and I got the request yesterday afternoon.

Chris

From: Beardsley, James
Sent: Wednesday, March 23, 2011 8:03 AM
To: Wang, Weijun
Cc: Cook, Christopher
Subject: RE: All hands meeting - request for DCIP help

Weijun,

I think the files it too big, but I have the DVD sitting on my desk.

Jim Beardsley
Chief, Construction Inspection Program Branch (CIPB)
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of Construction, Inspection, & Operational Programs
Office: T-7D49
MS: T-7D24
W: (301) 415-5998
C: (b)(6)

From: Wang, Weijun
Sent: Wednesday, March 23, 2011 7:17 AM
To: Beardsley, James
Cc: Cook, Christopher
Subject: RE: All hands meeting - request for DCIP help

Jim:

Yes, I can explain what was and is happening since the beginning of the excavation at the Vogtle site. It will help if you could forward me the video (if the file is too big, then I can go to your office to get the DVD). Thanks.

Weijun
(301)415-1175

From: Beardsley, James
Sent: Tuesday, March 22, 2011 1:00 PM
To: Beardsley, James; Wang, Weijun
Cc: Cook, Christopher
Subject: RE: All hands meeting - request for DCIP help

I have a copy of the DVD if you want to take a look.

Jim Beardsley
Chief, Construction Inspection Program Branch (CIPB)

U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of Construction, Inspection, & Operational Programs
Office: T-7D49
MS: T-7D24
W: (301) 415-5998
C: (b)(6)

From: Beardsley, James
Sent: Tuesday, March 22, 2011 12:33 PM
To: Wang, Weijun
Cc: Cook, Christopher
Subject: RE: All hands meeting - request for DCIP help

Weijun,

As I stated in the email below, Mike Johnson would like to show a time lapsed video of the Vogtle construction site at the All Hands Meeting tomorrow. It starts with the clearing of the trees and goes through the excavation and refilling of the safety related areas. My thought is that I would introduce the video and describe the initial portion. When it gets into the excavation and then the safety fill of the construction areas, you could take over and explain what is happening. The video runs around three minutes.

Jim Beardsley
Chief, Construction Inspection Program Branch (CIPB)
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of Construction, Inspection, & Operational Programs
Office: T-7D49
MS: T-7D24
W: (301) 415-5998
C: (b)(6)

From: Cook, Christopher
Sent: Tuesday, March 22, 2011 12:05 PM
To: Beardsley, James; Wang, Weijun
Cc: Karas, Rebecca
Subject: RE: All hands meeting - request for DCIP help

Yes. Jim, Weijun is the right person to coordinate with.

Chris

From: Karas, Rebecca
Sent: Tuesday, March 22, 2011 11:58 AM
To: Beardsley, James
Cc: Cook, Christopher; Wang, Weijun
Subject: RE: All hands meeting - request for DCIP help

I am thinking that would be Weijun. Please coordinate with Chris Cook.

Rebecca Karas, Chief
Geosciences and Geotechnical Engineering Branch 1
Division of Site and Environmental Reviews
Office of New Reactors
U.S. Nuclear Regulatory Commission
Phone: 301-415-7533
Fax: 301-415-5397

From: Beardsley, James
Sent: Monday, March 21, 2011 8:18 AM
To: Karas, Rebecca
Subject: FW: All hands meeting - request for DCIP help

Rebecca,

I have a favor to ask. In the email below, the NRO Front office asked DCIP to explain a DVD that Vogtle gave the EDO at the All Hands This week. The DVD is a time delayed video for the Vogtle construction site over the past couple years. I can introduce the video, but most of the work they have done is digging and then filling the "holes." I was hoping that one of your folks could explain that part of the process at the All Hands. Aida Rivera has the DVD if you would like to take a look.

Jim Beardsley
Chief, Construction Inspection Program Branch (CIPB)
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of Construction, Inspection, & Operational Programs
Office: T-7D49
MS: T-7D24
W: (301) 415-5998
C: (b)(6)

From: Rivera-Varona, Aida
Sent: Friday, March 11, 2011 8:49 AM
To: Williams, Donna
Cc: Tappert, John; Beardsley, James
Subject: RE: All hands meeting - request for DCIP help

Donna,

Yes. We can definitely support. If you can provide me with the copy of the video, we will start working on it.

Thanks!
Aida

From: Williams, Donna
Sent: Friday, March 11, 2011 8:37 AM
To: Rivera-Varona, Aida
Cc: Tappert, John
Subject: All hands meeting - request for DCIP help

Aida

During a recent trip to Vogtle, Nathan Sanfilipo was given a dvd of timelapse photos of the Vogtle site construction. Mike would like to show it at the March 23 all hands meeting, to give staff who won't get a chance to get to the site, an understanding of what is happening there. The video is about 4 minutes long. It would be very helpful to have someone who is familiar with the construction activities narrate the video to explain what is happening and point out structures, etc. in the video (i.e., how far they are digging down, explain the backfill process, point out the modular assembly buildings, etc.) . I will give you the dvd ahead of time so that person can view it and prepare some remarks. We plan to do this at the end of the meeting (around 3:55).

Please let me know who is available.
Thanks

Donna

Munson, Clifford

From: Chokshi, Nilesch
Sent: Wednesday, March 23, 2011 10:32 AM
To: Karas, Rebecca; Munson, Clifford; Raione, Richard; Cook, Christopher; Bagchi, Goutam; Schaaf, Robert
Cc: Flanders, Scott; Dent, Kimberly; Lauron, Carolyn; Kammerer, Annie; Ake, Jon
Subject: Contact Info

After giving some thought and talking with Scott and Gary, I have decided to continue with my vacation plan. I will be out of the office starting tomorrow and will return on April 4th. Luckily, I am going to be in the same time zone, so getting in touch with me will be that much easier.

My contact information is:

My personal cell:

My BB:

My home e-mail address: (please cc non-sensitive message to this address, it is much easier to look at my mailbox)

I will also have my laptop – so, I will be accessing Citrix. E-mail is probably the best way to communicate.

Please do not hesitate to contact me if you need me to answer any questions or for anything else.

Nilesch

Munson, Clifford

From: Munson, Clifford
Sent: Wednesday, March 23, 2011 8:21 AM
To: 'Munson, Cliff'
Subject: (b)(6)
Attachments: image001.png

(b)(6)

From: Munson, Cliff [mailto:(b)(6)]
Sent: Wednesday, March 23, 2011 8:02 AM
To: Munson, Clifford
Subject: (b)(6)

(b)(6)

From: Munson, Clifford [mailto:Clifford.Munson@nrc.gov]
Sent: Wednesday, March 23, 2011 7:56 AM
To: Munson, Cliff
Subject: (b)(6)

(b)(6)

From: Munson, Cliff [mailto:(b)(6)]
Sent: Tuesday, March 22, 2011 9:08 AM
To: Munson, Clifford
Subject: (b)(6)

(b)(6)

(b)(6)

Munson, Clifford

From: Wright USA [WrightMarketing@wrightusa.com]
Sent: Wednesday, March 23, 2011 12:04 PM
To: Munson, Clifford
Subject: Wright USA Goes International (Again)



Wright USA Goes International (Again)

Wright USA has always been sensitive to the changing needs of Federal Employees. To better support those living overseas, we are pleased to introduce our new International Dental Plan. It is specifically tailored for active, full-time Expatriate Federal Employees (i.e., those temporarily or permanently residing outside the United States).

Highlights of Wright's new International Dental Plan include:

- International Dental Coverage
- Choice of your own dentist or access to a network of over 90,000 providers in 160 countries
- No deductibles for services received overseas
- No Waiting Periods for Preventative or Basic Services
- 100% Coverage for Preventive Care Services
- 24/7/365 Multi-lingual Customer Service Center
- Web access and resources for customers and their families

More information about Wright USA's International Dental Plan and World Wide Professional Liability Plan can be obtained by visiting our website. **If you're a Federal Employee living in the U.S., you owe it to yourself to review our Premier and Economy Dental HMO plans that provide comprehensive coverage**

domestically at affordable rates.

You can also visit [our website](#) to learn more about our other insurance offerings. You can enroll for coverage year-round for all our products; even if you missed us at your Open Season Event.

Know someone else who could benefit from what Wright USA offers? Please forward this newsletter to a colleague you think could benefit from what Wright USA offers by using the "Forward to a Colleague" link below.

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[Forward to a Colleague](#)

Wright USA
706 Philadelphia Pike, Suite 1
Wilmington, DE 19809
800-424-9801

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This email was sent to clifford.munson@nrc.gov.

Email communications from:
Wright USA, 706 Philadelphia Pike, Suite 1, Wilmington, DE, US, 19809.

Click for immediate removal with [SafeRemove](#).

Munson, Clifford

From: Kammerer, Annie
Sent: Wednesday, March 23, 2011 2:39 PM
To: Munson, Clifford
Subject: RE: Working phones and email from home today

LOL!! oh so true....]

From: Munson, Clifford
Sent: Wednesday, March 23, 2011 12:31 PM
To: Kammerer, Annie
Subject: RE: Working phones and email from home today

You need to pry the blackberry from your grip before it's too late.]

-----Original Message-----

From: Kammerer, Annie
Sent: Wednesday, March 23, 2011 12:20 PM
To: Bensi, Michelle; Munson, Clifford; Chokshi, Nilesh; Karas, Rebecca; Ake, Jon
Subject: Working phones and email from home today

All,

(b)(6)

(b)(6)

So, I'm going to try again today....working, but from home. Hopefully I didn't forget about a meeting...

Cheers,
Annie

Sent from an NRC blackberry
Annie Kammerer
mobile (b)(6)
bb (b)(6)
annie.kammerer@nrc.gov

From: ODriscoll, James

Sent: Friday, March 11, 2011 6:18 PM

To: Jackson, Christopher; Hart, Michelle; Grady, Anne-Marie

Subject: Possible revisit issue related to RAI 233 Question 6.5.3-1

Michelle/Chris,

The status of what constitutes secondary containment is unclear to me. We may have to re-visit what is credited for secondary containment bypass leakage. Please read below.

(b)(5)

(b)(5)

ODriscoll, James

From: Bernardo, Robert
Sent: Friday, March 11, 2011 2:33 PM
Subject: IOEB Clearinghouse Screening Summary for Friday, March 11, 2011

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Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Ten (10)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

(b)(5)

(b)(5)

(b)(5)

(b)(5)

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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Attendees at Screening Meeting:

Bob Bernardo
Russ Haskell
Jesse Robles
Dave Garmon
Rebecca Sigmon
Eric Thomas
John Lane (RES)
Mary Wegner (RES) – by phone
Ian Spivack (NRO) – by phone
Mark King – by phone
Ross Telson – by phone

ODriscoll, James

From: ODriscoll, James
Sent: Saturday, September 19, 2009 1:41 PM
To: 'Martin Bowling'; Hayes(NRO), Michelle
Cc: Ted Delgazio; Zoltan Rosztoczy; Karen Hall; Hart, Michelle; Chien, Nan; Jackson, Christopher
Subject: FW: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1
Attachments: RAI 233 Supplement 1 US EPR DC.pdf

Martin

Attached is the remaining portions of RAI 6.5.1-1 and 6.5.3-1. AREVA stated that they will not change the FSAR to include any of this information. As we discussed on 7/13/09, please review the complete response and update the TER. Please advise what if any information should be included in the DCD. Please let me know if you have any questions.

Thanks,



Jim O'Driscoll
Reactor Systems Engineer
US Nuclear Regulatory Commission
NRO/DSRA/SPCV
Room: T-10E41
Mail Stop T-10E50M
Email: James.ODriscoll@nrc.gov
Office: (301) 415-1325
Facsimile: (301) 415-5062

From: WELLS Russell D (AREVA NP INC) [<mailto:Russell.Wells@areva.com>]
Sent: Tuesday, September 01, 2009 10:44 AM
To: Tesfaye, Getachew
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to portions of 2 of the 4 questions of RAI No. 233 on July 10, 2009. The attached file, "RAI 233 Supplement 1 Response US EPR DC.pdf" provides technically correct responses to portions of 2 of the remaining 4 questions, as committed.

The following table indicates the respective pages in the response document, "RAI 233 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.05.01-1	2	4
RAI 233 — 06.05.03-1	5	5

The schedule for providing technically correct and complete responses to the remaining 2 questions is unchanged and is provided below:

Question #	Response Date
------------	---------------

RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009

Sincerely,

(Russ Wells on behalf of)

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification
New Plants Deployment

AREVA NP, Inc.

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: (b)(6)

From: Pederson Ronda M (AREVA NP INC)

Sent: Friday, July 10, 2009 9:54 AM

To: 'Tesfaye, Getachew'

Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); GUCWA Len T (EXT)

Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 233 Response US EPR DC.pdf" provides responses to portions of 2 of the 4 questions.

The following table indicates the respective pages in the response document, "RAI 233 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.02.02-29	2	2
RAI 233 — 06.02.02-30	3	5
RAI 233 — 06.05.01-1	6	7
RAI 233 — 06.05.03-1	8	8

A complete answer is not provided for the 4 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009
RAI 233 — 06.05.01-1 (Parts 2, 4, and 5)	September 3, 2009
RAI 233 — 06.05.03-1 (Part d)	September 3, 2009

Sincerely,

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification

AREVA NP Inc.

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: (b)(6)

From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]

Sent: Friday, June 12, 2009 5:18 PM

To: ZZ-DL-A-USEPR-DL

Cc: Ashley, Clinton; ODriscoll, James; Jackson, Christopher; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 233 (2857, 2872,2873), FSAR Ch. 6

Attached please find the subject requests for additional information (RAI).

(b)(5)

The schedule we have

established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,

Getachew Tesfaye

Sr. Project Manager

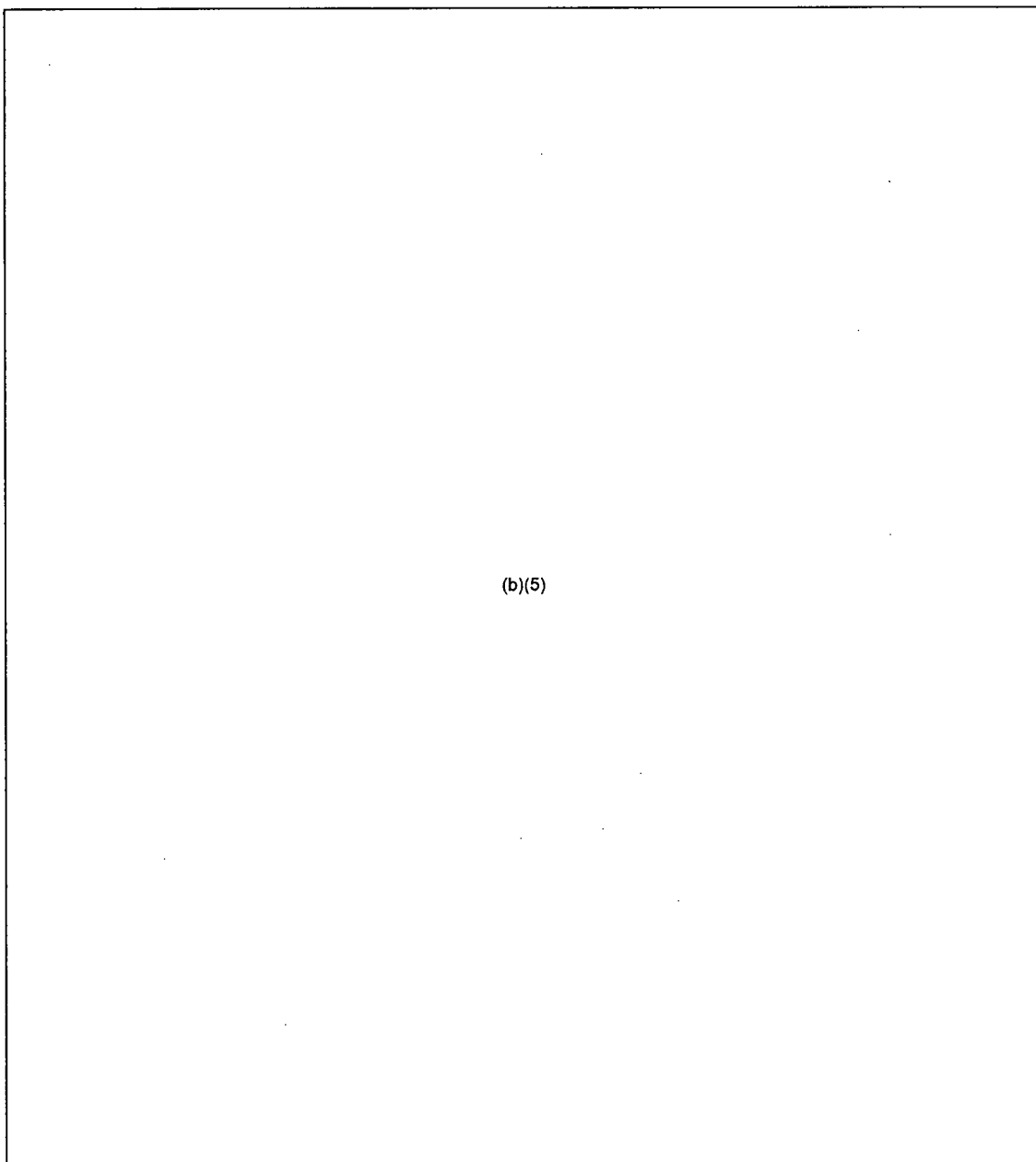
NRO/DNRL/NARP

(301) 415-3361

**CONSULTANT REPORT ACRS Subcommittee Meeting March 8-9, 2011
South Texas 3/4 ABWR**

Graham Wallis March 12, 2011

I will comment on the thermal-hydraulic items.



(b)(5)

(b)(5)

ODriscoll, James

From: Robles, Jesse
Sent: Monday, March 14, 2011 3:24 PM
Subject: New OpE Forum COMM Posting - Callaway - SIT Due To Loss of Lubrication to the Turbine Driven Auxiliary Feedwater Pump (TDAFWP) Bearing

This e-mail is being sent to notify recipients of a new posting on the [@Operating Experience Community Forum](#). Recipients are expected to review the posting for applicability to their areas of regulatory responsibility and consider appropriate actions. However, information contained in the posting is not tasking; therefore, no specific action or written response is required.

Information Security Reminder: this link is on NRC's Internal Web site and may contain sensitive information. Please check with the information owner before distributing outside the agency.

The posting may be reviewed at:

<http://nrr10.nrc.gov/forum/forumtopic.cfm?selectedForum=03&forumId=AllComm&topicId=3239>.

It is being provided to the following groups and individuals: ***All Communications, Auxiliary Feedwater, ECCS, Emergency Diesel Generators, Human Performance, Inspection Programs, New Reactors, Pump and Valve Performance, Safety Culture, SIT/AIT***

To unsubscribe from this distribution list or to subscribe to a different list on the OpE Community, please visit <http://nrr10.nrc.gov/rps/dyn/subscription1.cfm>.

For more information on the Reactor OpE Program, please visit our OpE Gateway at: <http://nrr10.nrc.gov/ope-info-gateway/index.html>

Jesse E. Robles
U.S. Nuclear Regulatory Commission
Reactor Systems Engineer
NRR/DIRS/IOEB
301-415-2940
301-415-3061 (fax)
Jesse.Robles@nrc.gov

ODriscoll, James

From: King, Mark
Sent: Monday, March 14, 2011 2:57 PM
Subject: IOEB Clearinghouse Screening Summary for Monday, March 14, 2011

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(b)(5)

(b)(5)

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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FROM ORIGINATOR**

Attendees at Screening Meeting:

Bob Bernardo – by phone

Russ Haskell

Dave Garmon

Eric Thomas – by phone

Mary Wegner (RES) – by phone

Mark King – by phone

ODriscoll, James

From: Carneal, Jason
Sent: Monday, March 14, 2011 4:33 PM
To: ODriscoll, James; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jim:

Thanks for the clarification. I agree with the approach of tracking it in Chapter 6 if we decide to ask for it at all.

(b)(5)

Thanks,

Jason

From: ODriscoll, James
Sent: Monday, March 14, 2011 4:22 PM
To: Carneal, Jason; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jason,

(b)(5)

From: Carneal, Jason
Sent: Monday, March 14, 2011 3:59 PM
To: ODriscoll, James; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jim:

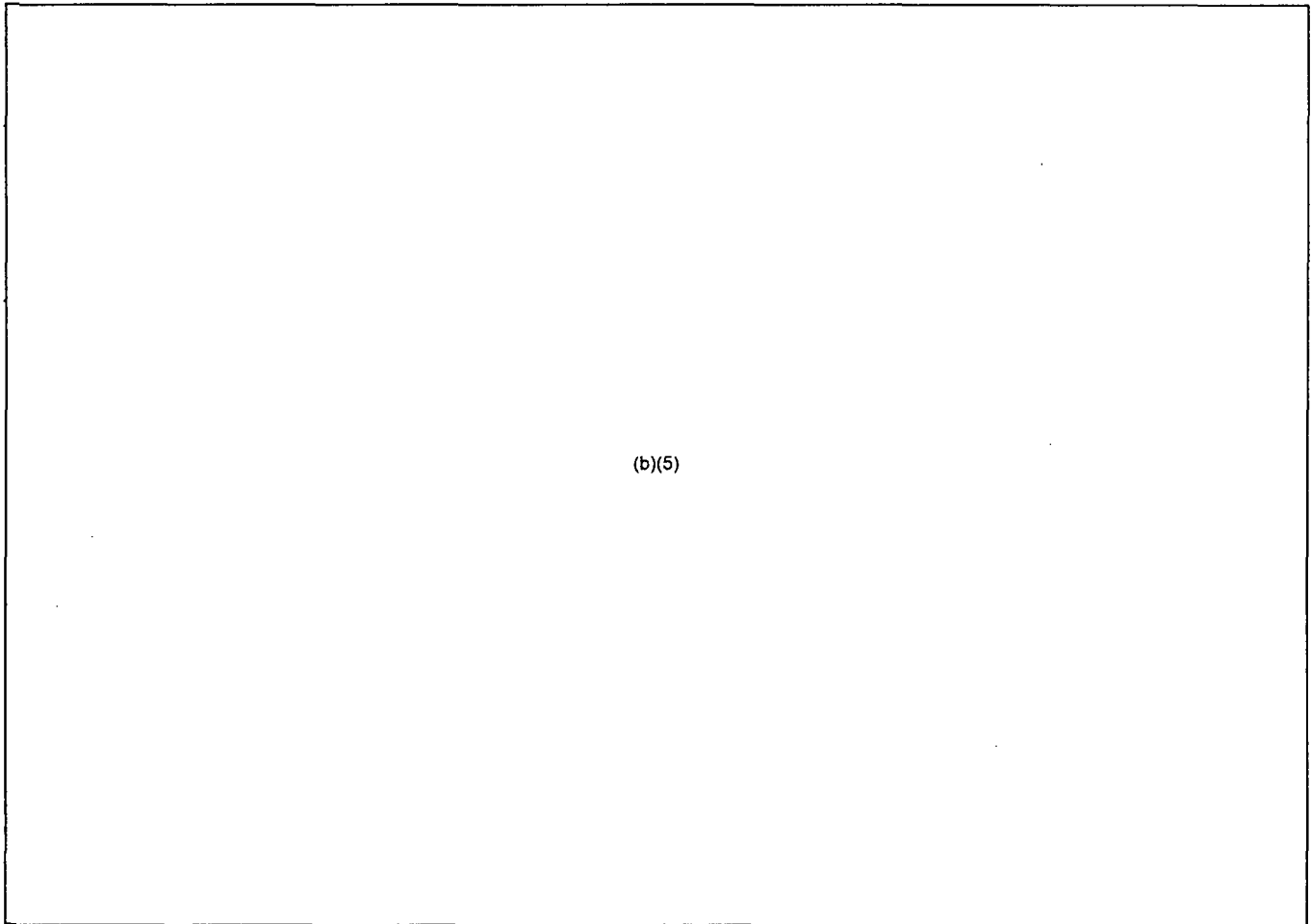
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Thanks,

Jason

From: ODriscoll, James
Sent: Monday, March 14, 2011 2:57 PM
To: Carneal, Jason; Jackson, Christopher
Cc: McKirgan, John
Subject: EPR 6.5 chapter day HVAC ITAAC OGC question

Chris,
I think the SER paragraph under "summary of Application should be changed as follows to address Bob's comment:



Please let me know what you think.
Thanks,
Jim

From: ODriscoll, James

Sent: Monday, March 14, 2011 9:11 PM

To: Jackson, Christopher

Cc: McKirgan, John; Grady, Anne-Marie; Fuller, Edward

Subject: FW: MHI's Responses to US-APWR DCD RAI No. 696-5543 Revision 2 (06.02.05). 03/07/2011

Chris,

FYI, Attached is MHI's response to RAI 5543, which requested they clarify how the containment complies to 50.44 requirements for mixed containment and limit hydrogen to less than 10% by volume

(b)(6)

Thanks,

Jim

From: Reyes, Ruth

Sent: Monday, March 14, 2011 3:52 PM

To: ODriscoll, James

Subject: FW: MHI's Responses to US-APWR DCD RAI No. 696-5543 Revision 2 (06.02.05). 03/07/2011

Hi Jim,

I've attached, for your review, MHI's response to RAI 696-5543. You should have received an email from e-RAI that contains a link to this RAI. Please provide within 30 days your conclusion of this RAI response: Confirmatory Action Applicant, Confirmatory Action NRC, Resolved/Closed, or Question Closed/Issue Unresolved.

Thanks,

Ruth

From: E-RIDS2 Resource

Sent: Friday, March 11, 2011 12:03 PM

To: Berrios, Ilka; Ciocco, Jeff; Colon, Jessica; Dias, Antonio; Elkins, Scott; Galvin, Dennis; Goldin, Laura; Huyck, Doug;

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Kallan, Paul; Monarque, Stephen; Otto, Ngola; Reyes, Ruth; RidsAcrsAcnw_MailCTR Resource; RidsManager Resource; RidsNroDe Resource; RidsNroDnrl Resource; RidsNroDnrlNmip Resource; RidsNroDser Resource; RidsNroDsra Resource; RidsNroLaCSmith Resource; Roy, Tarun; Takacs, Michael; Ward, William; Weaver, Kathy; Williams, Kevin; Zabler, Marian
Subject: MHI's Responses to US-APWR DCD RAI No. 696-5543 Revision 2 (06.02.05). 03/07/2011

ADAMS Distribution Notification

D081 - Docket 52-021 - Mitsubishi MHI US-APWR Design Certification Project

Title	MHI's Responses to US-APWR DCD RAI No. 696-5543 Revision 2 (06.02.05).
Docket Number	05200021
Document Date	03/07/2011
Author Name	Ogata Y
Author Affiliation	Mitsubishi Heavy Industries. Ltd
Addressee Name	Ciocco J A
Addressee Affiliation	NRC/Document Control Desk NRC/NRO
Document Type	Letter
Availability	Publicly Available
Date to be Released	03/21/2011
Document Sensitivity	Non-Sensitive
Comment	
Date Added	03/11/2011

Electronic Recipients can RIGHT CLICK and OPEN the first Attachment to View the Document in ADAMS. The Document may also be viewed by searching for **Accession Number ML110700114.**

ODriscoll, James

From: ODriscoll, James
Sent: Tuesday, March 15, 2011 3:59 PM
To: Grady, Anne-Marie; Hart, Michelle; Jackson, Christopher
Subject: Meeting to discuss EPR secondary containment
Attachments: Possible revisit issue related to RAI 233 Question 6.5.3-1

Ann-Marie/Michelle,

Chris asked me to schedule a meeting to discuss the issue related to the attached email. I'm in all week except Wed. Please let me know your availability and I'll schedule a time.

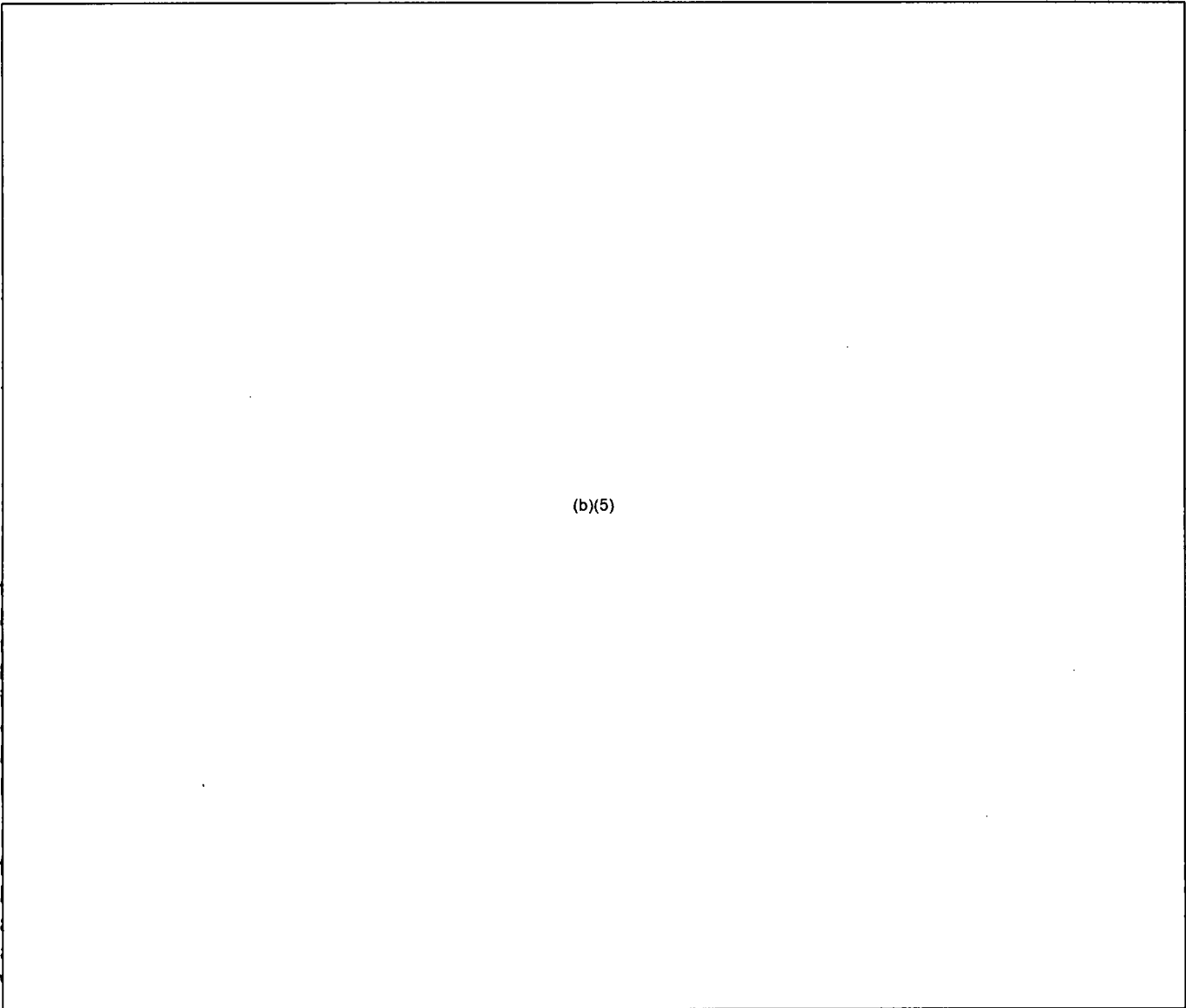
Thanks,
Jim

ODriscoll, James

From: ODriscoll, James
Sent: Friday, March 11, 2011 12:18 PM
To: Jackson, Christopher; Hart, Michelle; Grady, Anne-Marie
Subject: Possible revisit issue related to RAI 233 Question 6.5.3-1
Attachments: FW: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1

Michelle/Chris,

The status of what constitutes secondary containment is unclear to me. We may have to re-visit what is credited for secondary containment bypass leakage. Please read below.



(b)(5)

ODriscoll, James

From: ODriscoll, James
Sent: Saturday, September 19, 2009 1:41 PM
To: 'Martin Bowling'; Hayes(NRO), Michelle
Cc: Ted Delgazio; Zoltan Rosztoczy; Karen Hall; Hart, Michelle; Chien, Nan; Jackson, Christopher
Subject: FW: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1
Attachments: RAI 233 Supplement 1 US EPR DC.pdf

Martin

Attached is the remaining portions of RAI 6.5.1-1 and 6.5.3-1. AREVA stated that they will not change the FSAR to include any of this information. As we discussed on 7/13/09, please review the complete response and update the TER. Please advise what if any information should be included in the DCD. Please let me know if you have any questions.

Thanks,



Jim O'Driscoll
Reactor Systems Engineer
US Nuclear Regulatory Commission
NRO/DSRA/SPCV
Room: T-10E41
Mail Stop T-10E50M
Email: James.ODriscoll@nrc.gov
Office: (301) 415-1325
Facsimile: (301) 415-5062

From: WELLS Russell D (AREVA NP INC) [<mailto:Russell.Wells@areva.com>]
Sent: Tuesday, September 01, 2009 10:44 AM
To: Tesfaye, Getachew
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to portions of 2 of the 4 questions of RAI No. 233 on July 10, 2009. The attached file, "RAI 233 Supplement 1 Response US EPR DC.pdf" provides technically correct responses to portions of 2 of the remaining 4 questions, as committed.

The following table indicates the respective pages in the response document, "RAI 233 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.05.01-1	2	4
RAI 233 — 06.05.03-1	5	5

The schedule for providing technically correct and complete responses to the remaining 2 questions is unchanged and is provided below:

Question #	Response Date
------------	---------------

RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009

Sincerely,

(Russ Wells on behalf of)

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification

New Plants Deployment

AREVA NP, Inc.

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-5694

Cell: (b)(6)

From: Pederson Ronda M (AREVA NP INC)

Sent: Friday, July 10, 2009 9:54 AM

To: 'Tefsaye, Getachew'

Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); GUCWA Len T (EXT)

Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 233 Response US EPR DC.pdf" provides responses to portions of 2 of the 4 questions.

The following table indicates the respective pages in the response document, "RAI 233 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.02.02-29	2	2
RAI 233 — 06.02.02-30	3	5
RAI 233 — 06.05.01-1	6	7
RAI 233 — 06.05.03-1	8	8

A complete answer is not provided for the 4 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009
RAI 233 — 06.05.01-1 (Parts 2, 4, and 5)	September 3, 2009
RAI 233 — 06.05.03-1 (Part d)	September 3, 2009

Sincerely,

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification

AREVA NP Inc.
An AREVA and Siemens company
3315 Old Forest Road
Lynchburg, VA 24506-0935
Phone: 434-832-3694

Cell: (b)(6)

From: Tesfaye, Getachew [<mailto:Getachew.Tesfaye@nrc.gov>]
Sent: Friday, June 12, 2009 5:18 PM
To: ZZ-DL-A-USEPR-DL
Cc: Ashley, Clinton; ODriscoll, James; Jackson, Christopher; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 233 (2857, 2872,2873), FSAR Ch. 6

(b)(5)

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

ODriscoll, James

From: King, Mark
Sent: Tuesday, March 15, 2011 2:17 PM
Subject: IOEB Clearinghouse Screening Summary for Tuesday, March 15, 2011

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
*****MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*****
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR

Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Six (6)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) JAPANESE NUCLEAR EVENTS -- LINKS

The following site links provide periodic updates on the Japanese Nuclear plant responses to the March 11, 2011 earthquake and tsunami events:

[Japan Nuclear Industrial Safety Agency \(NISA\)](#)

[International Atomic Energy Agency \(IAEA\)](#)

[Tokyo Electric Power Company \(TEPCO\)](#)

[\(NRC blog and NRC Press Releases\)](#)

See special note* at the bottom of this email concerning NRC response and should you become aware of information the NRC IRC is not aware of and the actions you should take if you are asked questions by another country. -- INFO ONLY.

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FROM ORIGINATOR**

Attendees at Screening Meeting:

Jesse Robles
Russ Haskell
Dave Garmon – by phone
Mary Wegner (RES) – by phone
Mark King
Ryan Craffey- NRO
Andrea Johnson – NRO

***Special Note** Related to Japanese Nuclear event response from the earthquake and tsunami of March 11, 2011.

NRC Response expectations:

The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response to the events in Japan. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC's Headquarters Operations Center in Rockville, MD has been stood up since the beginning of the emergency in Japan and is operating on a 24-hour basis.

NRC Incident Responders at Headquarters have spoken with the agency's counterpart in Japan and offered the assistance of U.S. technical experts. Two officials from the NRC with expertise on boiling water nuclear reactors have deployed to Japan as part of a U.S. International Agency for International Development (USAID) team. USAID is the Federal government agency primarily responsible for providing assistance to countries recovering from disasters.

It is possible that some of us will be requested by colleagues in another country to provide technical advice and assistance during this emergency. It is essential that all such communications be handled through the NRC Operations Center. Any assistance to a foreign government or entity must be coordinated through the NRC Operations Center and the U.S. Department of State (DOS). If you receive such a request, contact the NRC Operations Officer (301-816-5100 or via the NRC Operator) immediately.

If you receive information regarding this or any emergency (foreign or domestic) and you are not certain that the NRC's Incident Response Operations Officer is already aware of that information, you should contact the NRC Operations Officer (301-816-5100 or via the NRC Operator) and provide that information.

ODriscoll, James

From: King, Mark
Sent: Wednesday, March 16, 2011 2:21 PM
Subject: IOEB Clearinghouse Screening Summary for Wednesday, March 16, 2011
Attachments: Fukushima Daiichi Fuel Damage IER LEVEL 1 Final.pdf; NRC Status Update 3-16.11--0630am.pdf

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
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Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Ten (10)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

1) Japan Nuclear Earthquake / Tsunami Event Updates and related information

a) NRC Status Update 3-16-2011, 6:30am.pdf. Not for public release – Official Use Only, See attached.

b) An INPO Event Report Importance Level 1 (IER Level 1) document has been issued on the "Fukushima Daiichi Nuclear Station Fuel Damage Caused by Earthquake and Tsunami." (Reminder: INPO documents are considered proprietary information, not for public distribution, see warning statement on top of page 1. See attached pdf document).

c) See link: "FAQ Related to Events Occurring in Japan" that is now available on an NRR SharePoint site - (Internal use only).

– This issue is already screened-in as Issue For Resolution [IFR]. - INFO ONLY.

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New Reactors Items: None

Research (RES) Items: None

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**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR**

Attendees at Screening Meeting:

Jesse Robles
Russ Haskell
Dave Garmon
Mary Wegner (RES) – by phone
Mark King
Joe Giantelli
Ryan Craffey- NRO

ODriscoll, James

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 9:40 AM
To: ODriscoll, James
Cc: Jackson, Christopher; Hart, Michelle
Subject: SPCV follow-up items in Section 6.5.3
Attachments: Follow-up items for SPCV - Section 6-5-3 OGC comments.pdf

Jim:

We came across a couple of items during the Section 6.5.3 review that were containment branch items. I have attached a highlighted copy of the OGC comments on which that Michelle said we would need to confer with SPCV.

- 1.
- 2.
- 3.

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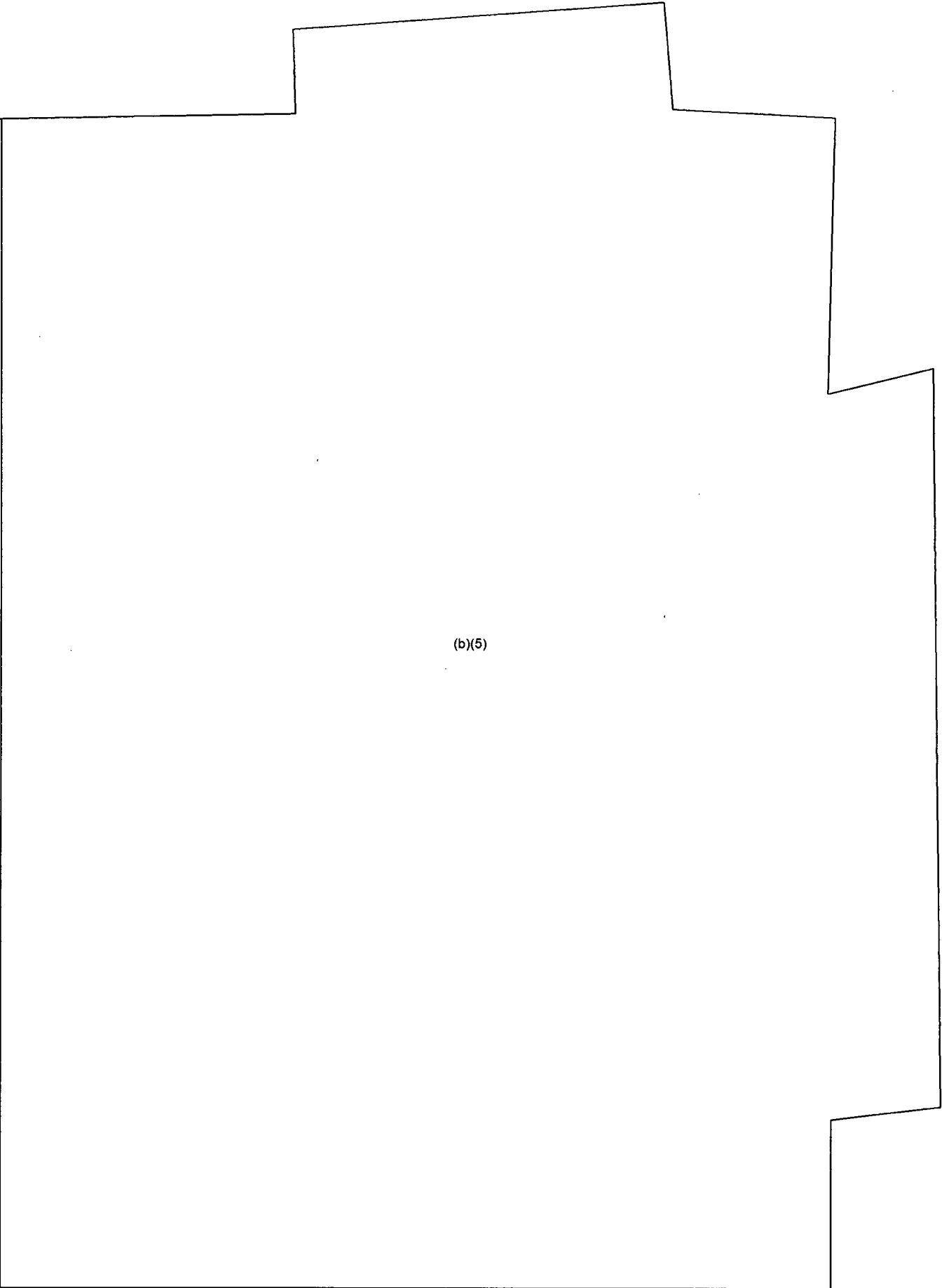
I am expecting to get comments from OGC today on Section 6.4. Could we cover the attached, highlighted items, when we discuss Section 6.4 with OGC?

Joe Colaccino and Getachew are pushing for Friday issuance for Chapter 6. Would a Chapter Day on Friday be possible if I get the comments on Section 6.4 to you today?

Thanks,

Jason

JASON CARNEAL
PROJECT MANAGER
U.S. NUCLEAR REGULATORY COMMISSION
NRO/DNRL/NARP (T-6J4)
301-415-3813



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ODriscoll, James

From: ODriscoll, James
Sent: Wednesday, March 16, 2011 6:03 PM
To: Jackson, Christopher; Grady, Anne-Marie
Subject: Proposed RAI on 6.2.4 for US-APWR Other Defined basis for GDC 56 lines from RWSP to suction of SI and CS/RHR

Chris,
Please see the proposed RAI below and comment.

I reviewed some ground I covered a while ago regarding this issue based on comments raised during an US-APWR ITAAC meeting. I don't think it is a major issue, but based on a second look, believe that MHI should provide more justification that the design has provisions to ensure that any leakage coming from the piping/valve outside containment will not only be measured, but also terminated. MHI's discussion seems heavy on leak detection, but light on design provisions to terminate leakage. I was going to not pursue this but I'm reconsidering.

The only safety consideration is that if there was an uncontrolled leak through the CIV, a surrounding leak tight enclosure, would arrest the leakage. EPR has a guard pipe but Nothing around the CIV. US-APWR has neither a guard pipe or a leak tight enclosure around the CIV. The RAI also points out that there is 39 feet of piping from the containment to the isolation valve, and asks why this is the case. The guidance states that the valve should be placed as close to the containment as practicable, but does not provide an quantitative criteria for length of piping.

RAI:

Clarify details and text of US-APWR DCD .Tier -2 Chapter 6 Table 6.2-1 note number 7.

The purpose of this note is to justify conformance to GDC 56 on "Other Defined Basis". As defined in ANSI N271-1976, ("Containment Isolation Provisions for Fluid Systems"), "Other Defined Basis" is a method of meeting the requirements of the GDC for specific classes of lines where the arrangement differs from the explicit requirements of the General Design Criteria.

DCD Tier 2 Table 6.2-1 states that note 7 applies to the four lines from the RWSP to the suctions of the safety injection pumps and the containment spray/residual heat removal pumps.

The note provides justification for use of a single remote manual containment isolation valve outside containment. In RAI 57-582 Question Number 06.02.04-2 and in RAI 271-1899 Question 06.02.04-38 the staff requested clarification and documentation of the GDC 56 exception in the DCD. Based on review of the latest DCD rev 2 Tracking report (Revision 7). The staff requests the following information:

1.

2.

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typical lines which connect to a suppression pool in Boiling Water Reactor (BWR) plants. This note provides justification for the valve arrangement based, in part, on the following design features:

- a.
- b.
- c.
- d.
- e.
- f.
- g.
- h.

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The staff has reviewed justification for the lines by comparing the justification in note 7 to ANSI N271-1976, Appendix A Note 56-1 and the guidance in ANSI N271-1976 paragraph 3.6.4 for this arrangement. In addition to item 1 above, the following information is needed

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ODriscoll, James

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 2:18 PM
To: ODriscoll, James; Hart, Michelle
Cc: Jackson, Christopher; McKirgan, John
Subject: Section 6.4 OGC comments
Attachments: OGC comments EPR Sections 6-4 highlighted.pdf; Chapter 6 file in ML090780493 for updates - 03-16-11.docx

Jim and Michelle:

I have attached a copy of the OGC comments on Section 6.4. In the attached file and so we don't duplicate efforts, I have highlighted the editorial comments that projects will take action to fix. If you see any you disagree with, we can change them back on Chapter Day. The non-highlighted comments are the ones for which we will need your input.

I have also attached a clean copy of the SER that should track changes by multiple users and keep the names intact. Please track any changes due to OGC comment in the attached word file.

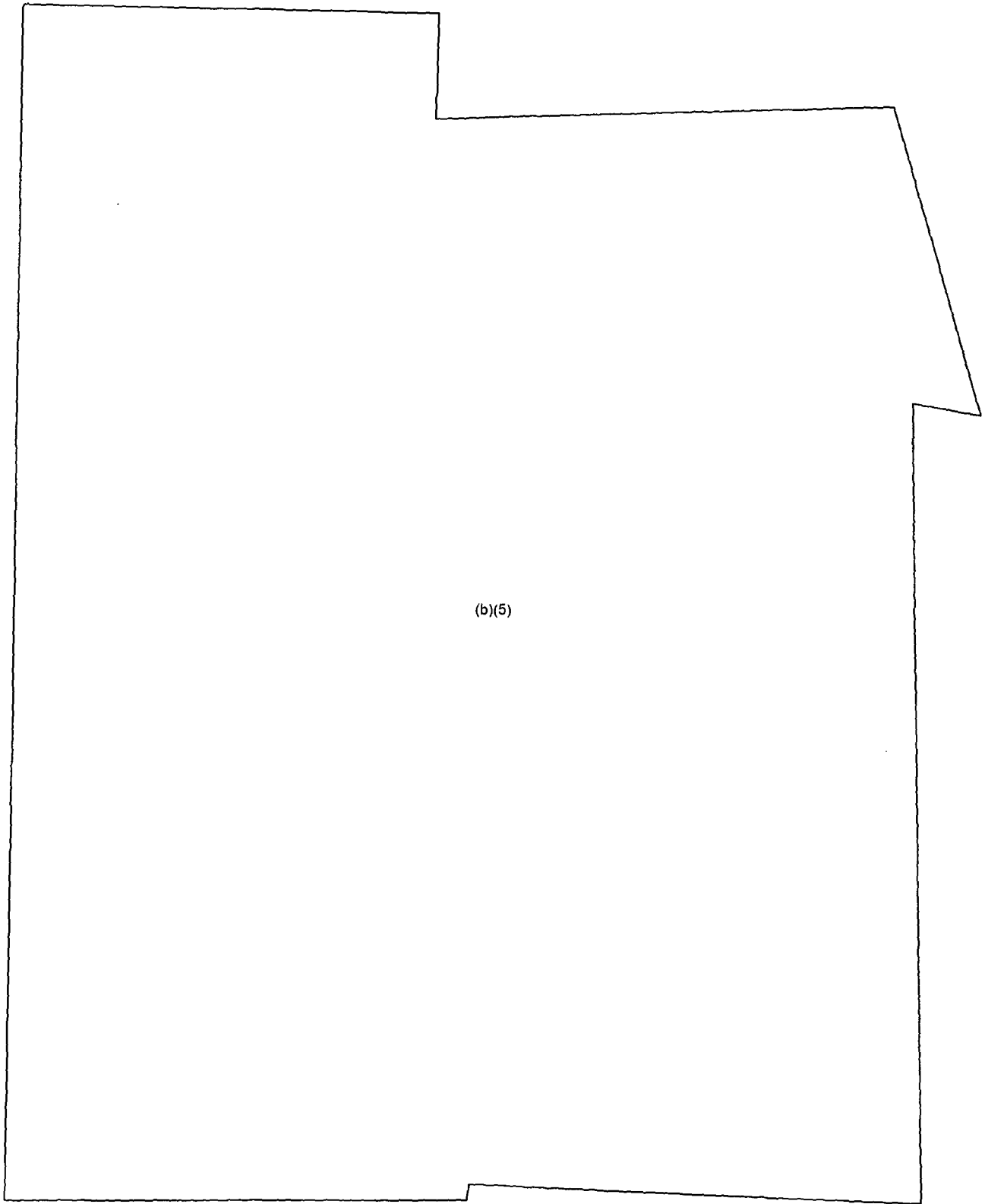
Will we be able to hold a Chapter Day on Friday, March 18, 2011? I have rooms reserved for tomorrow afternoon (for CIB1 Sections tomorrow afternoon) and Friday, so if we need to do a late Thursday meeting, I can arrange that with Bob Weisman.

Please let me know your availability.

Thanks,

Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813



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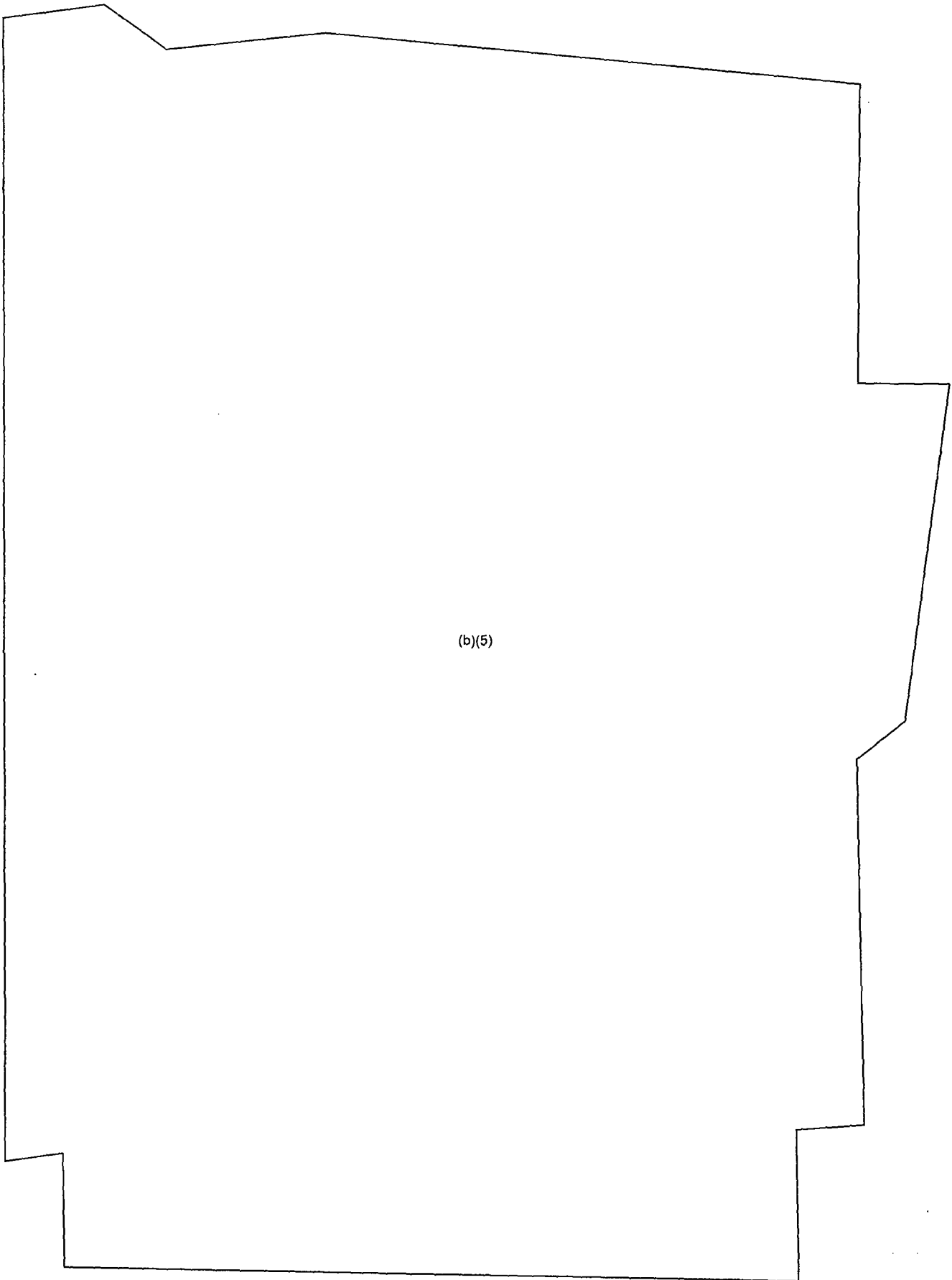
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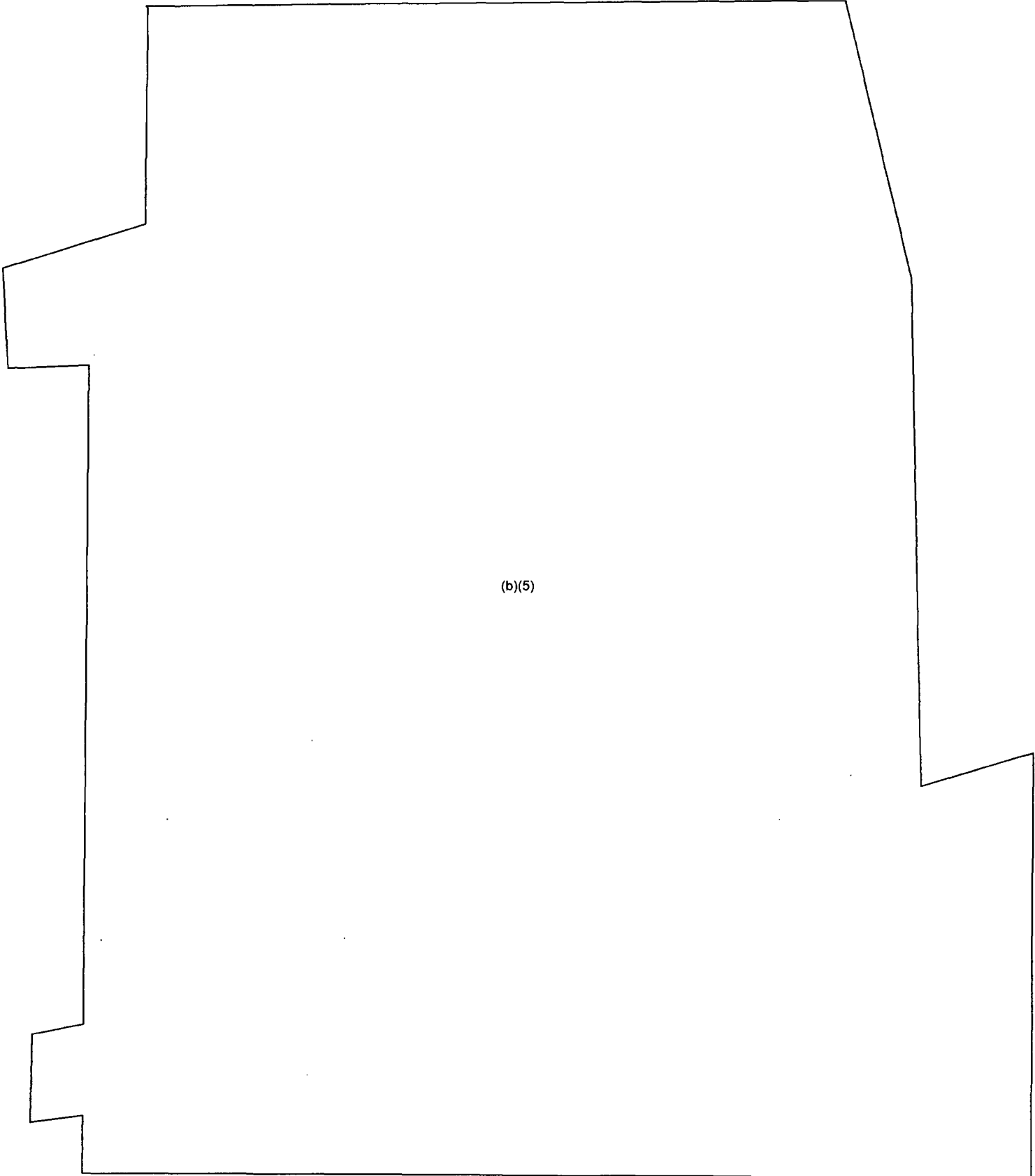
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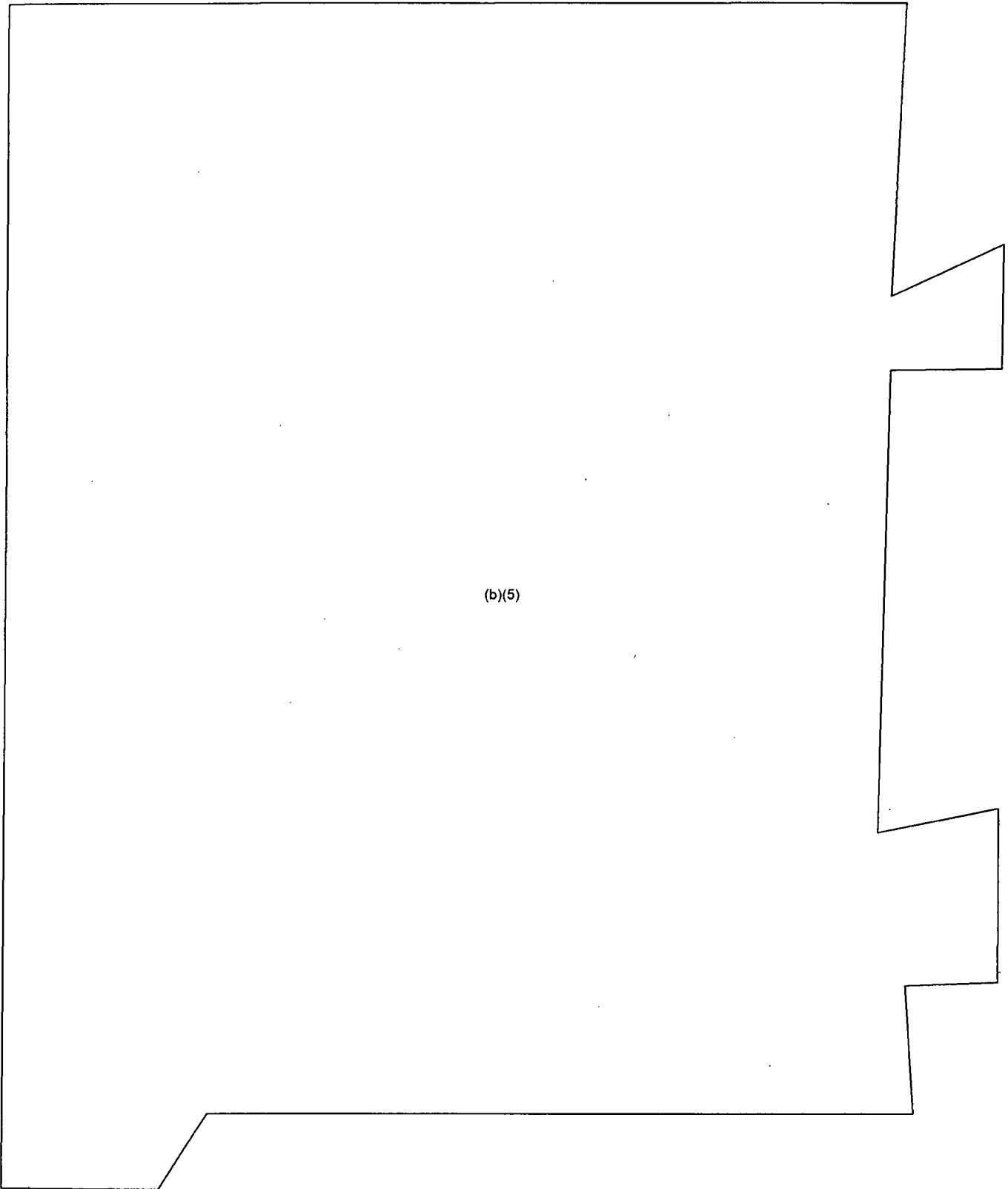
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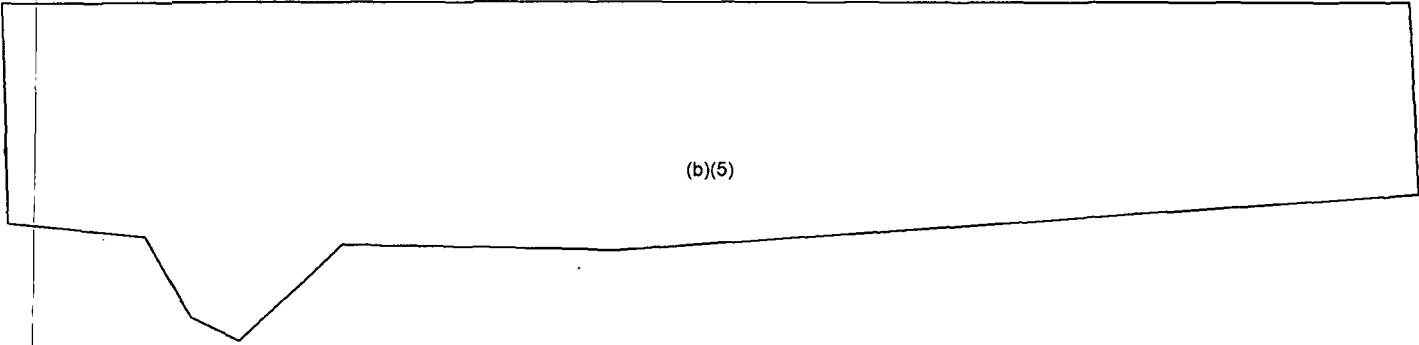
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CONTENTS

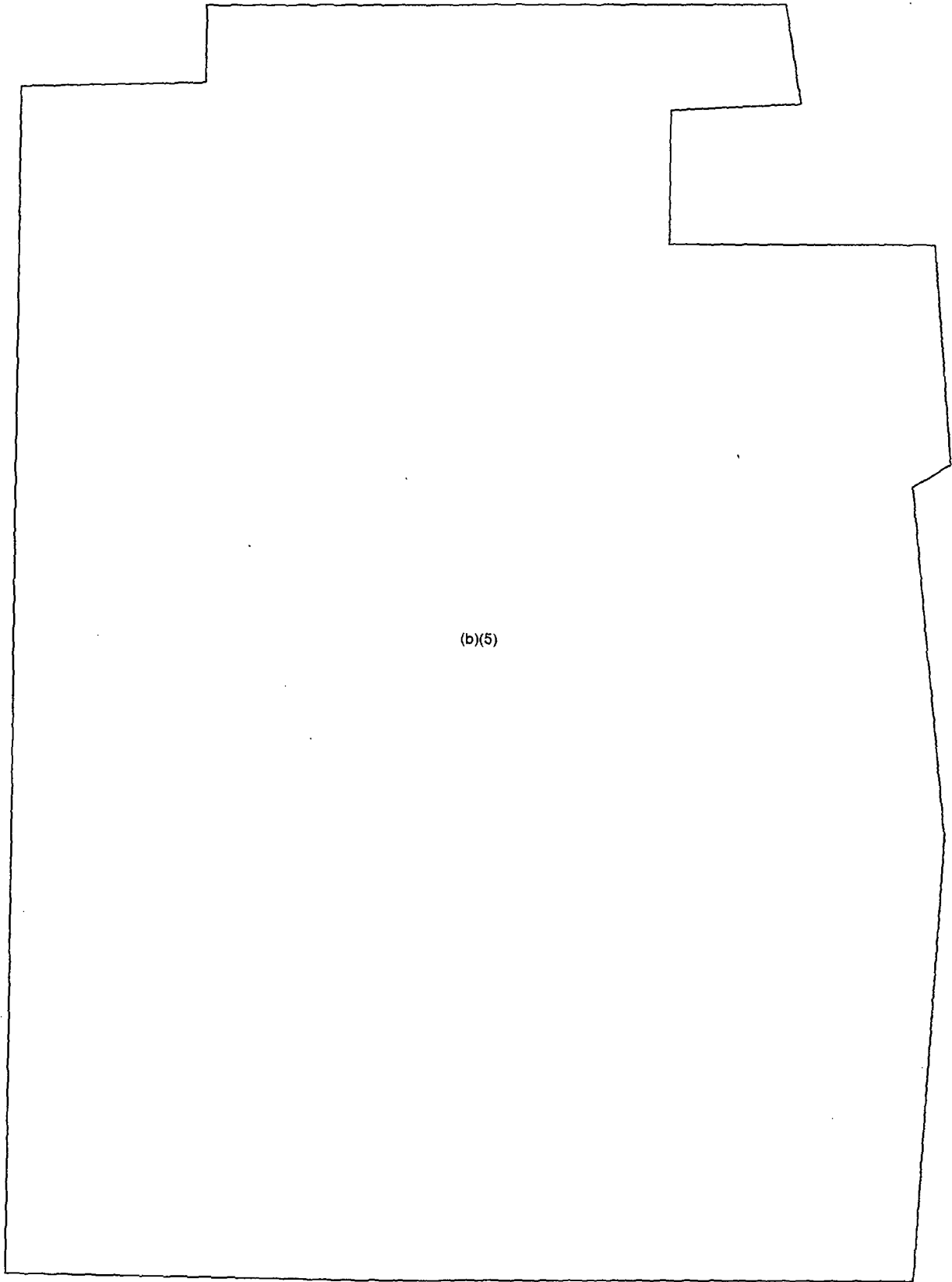
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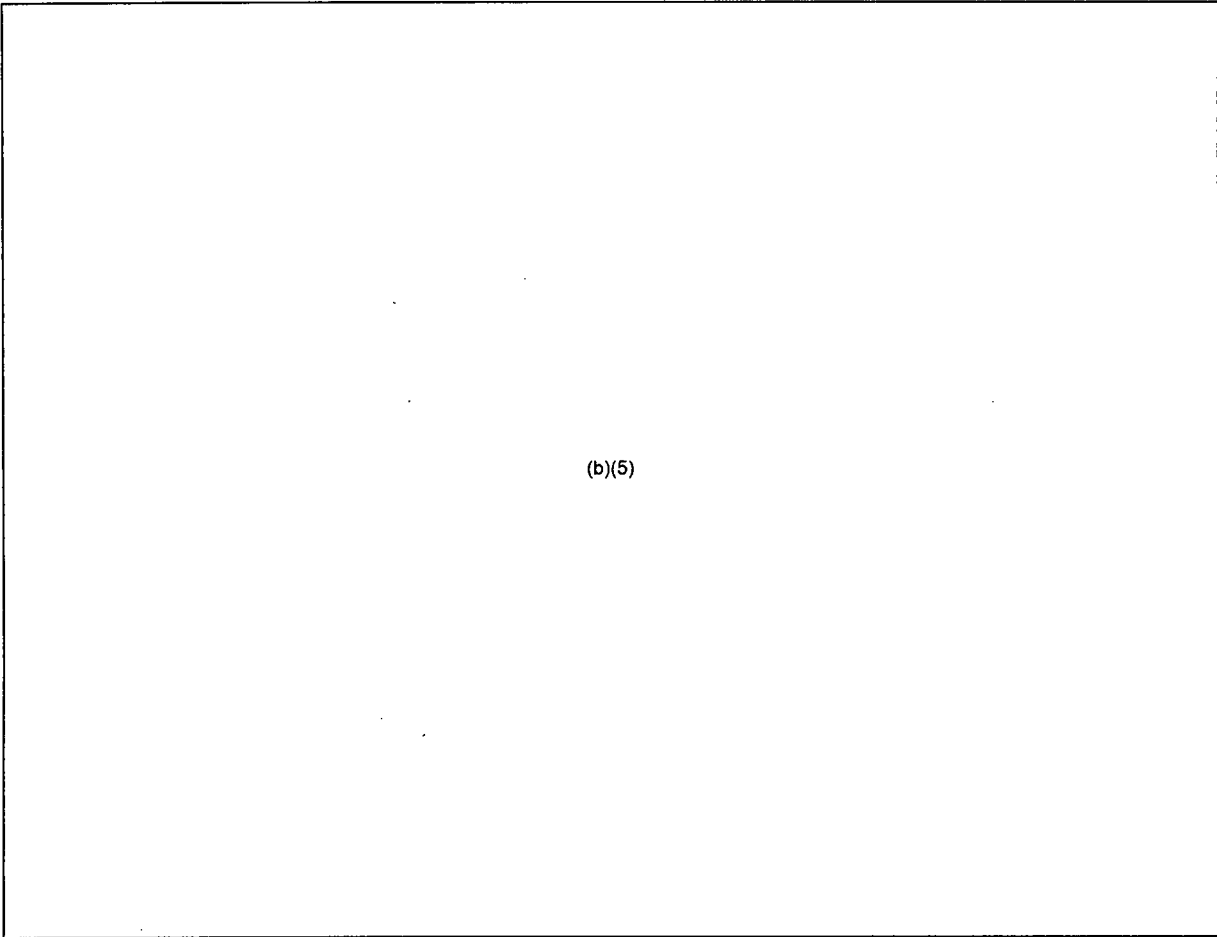
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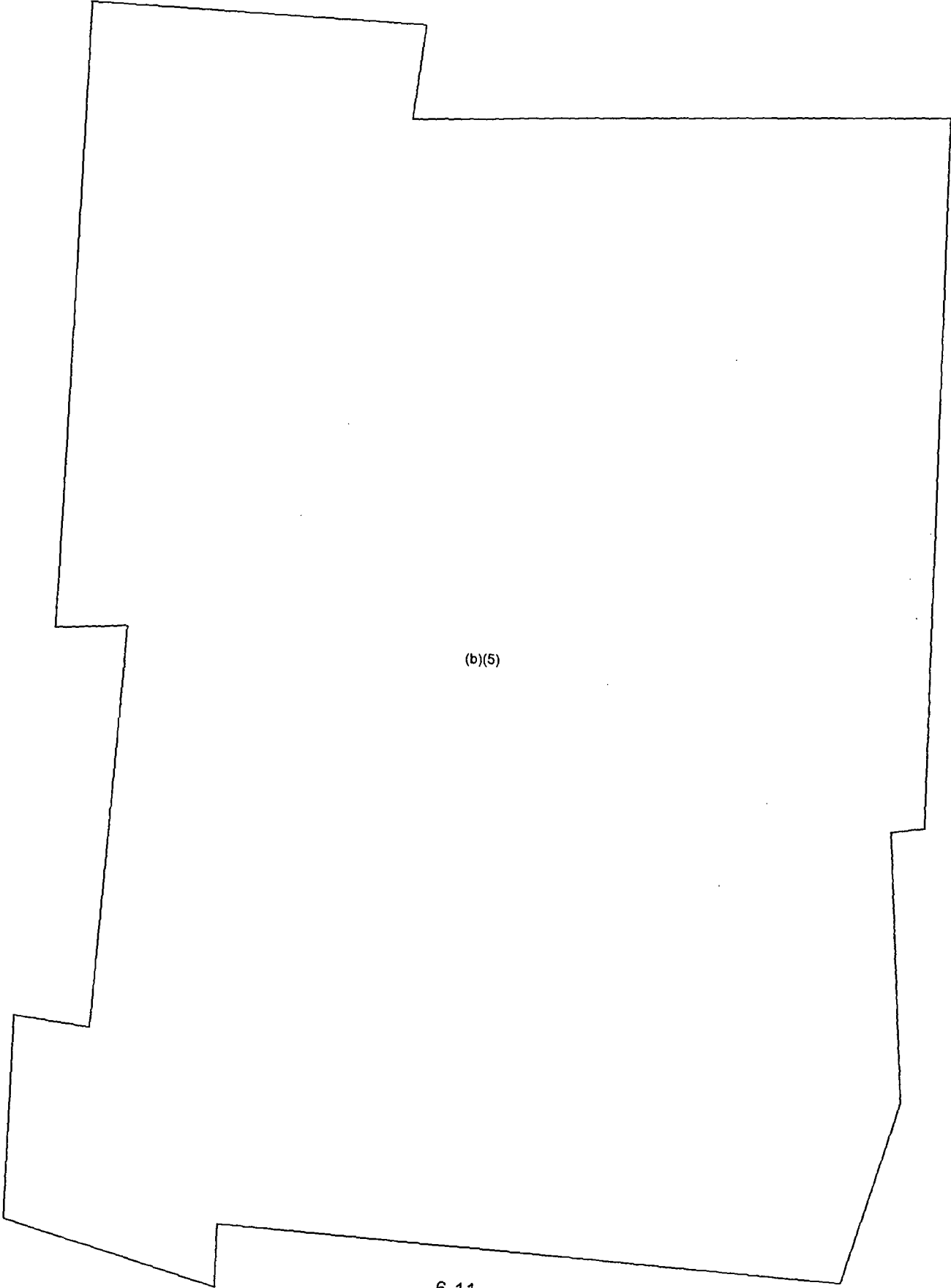
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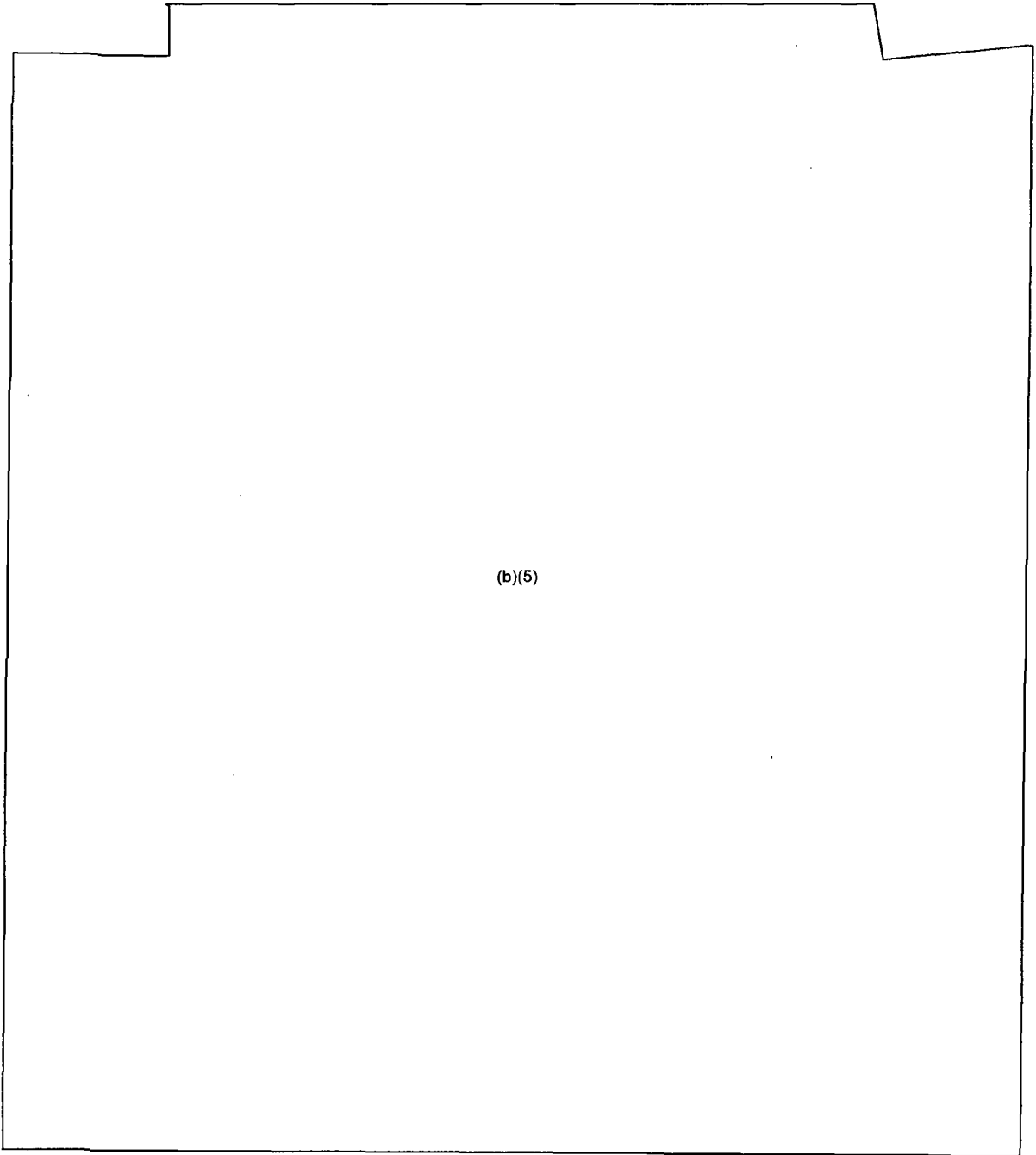


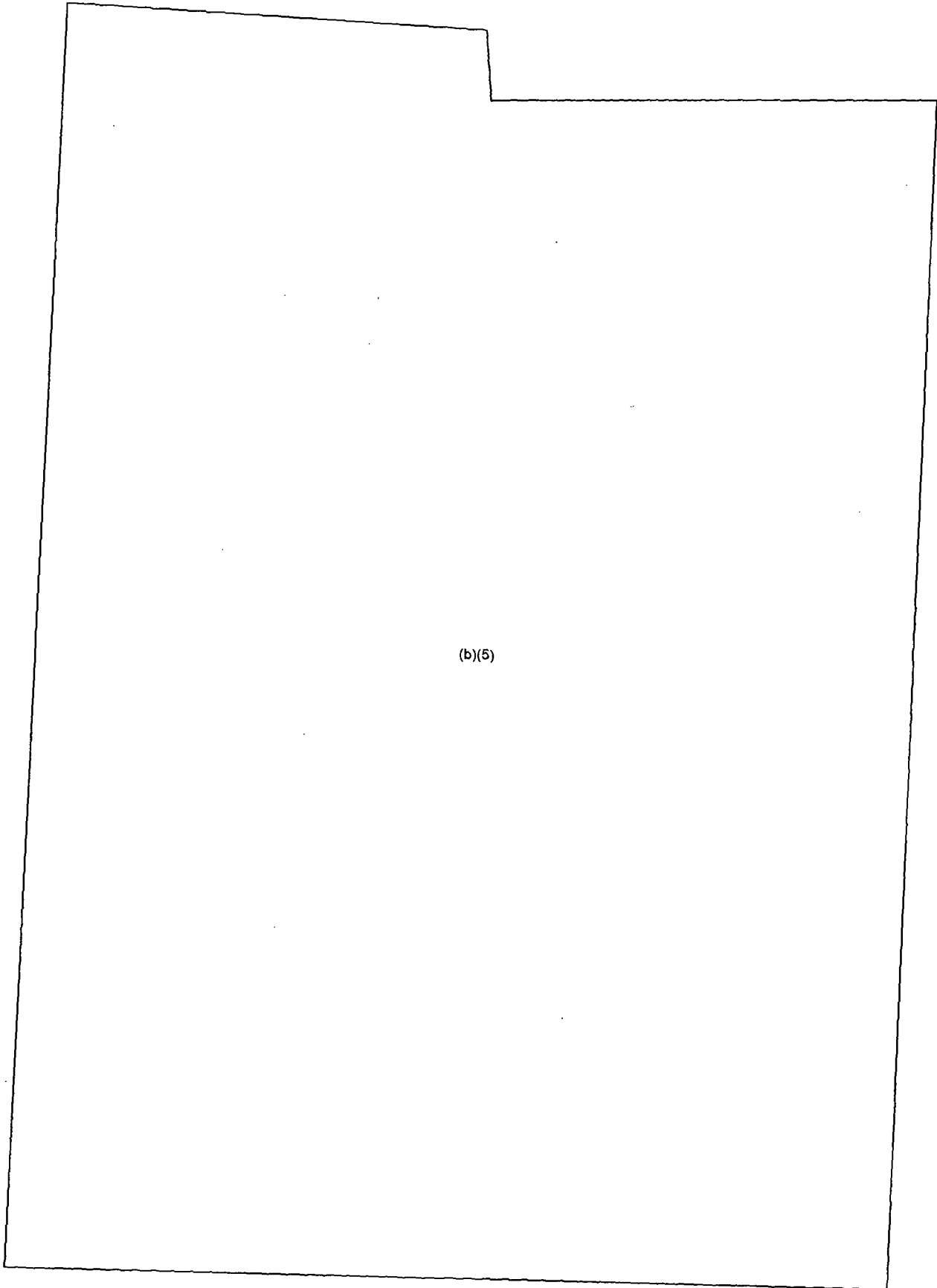
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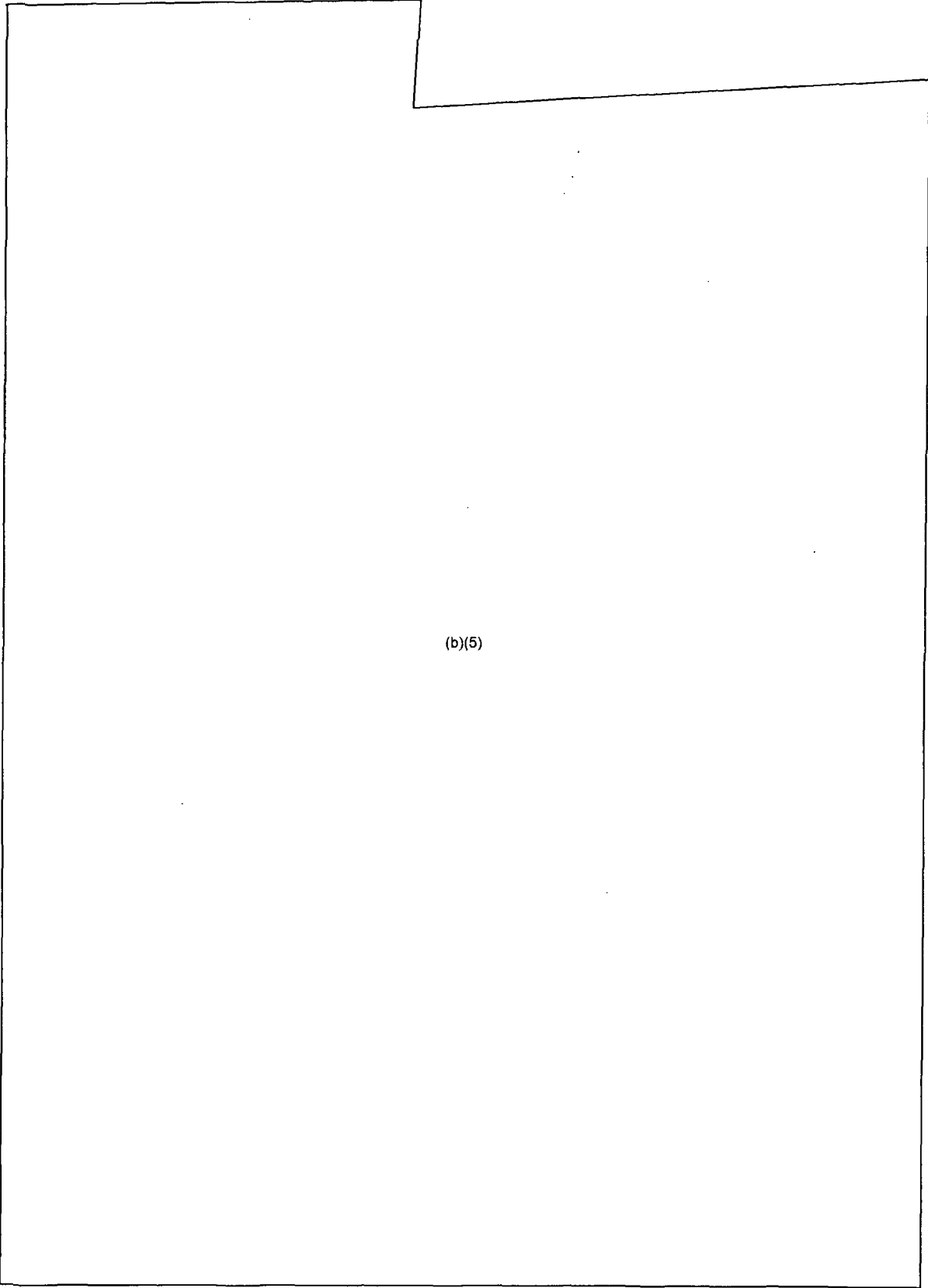
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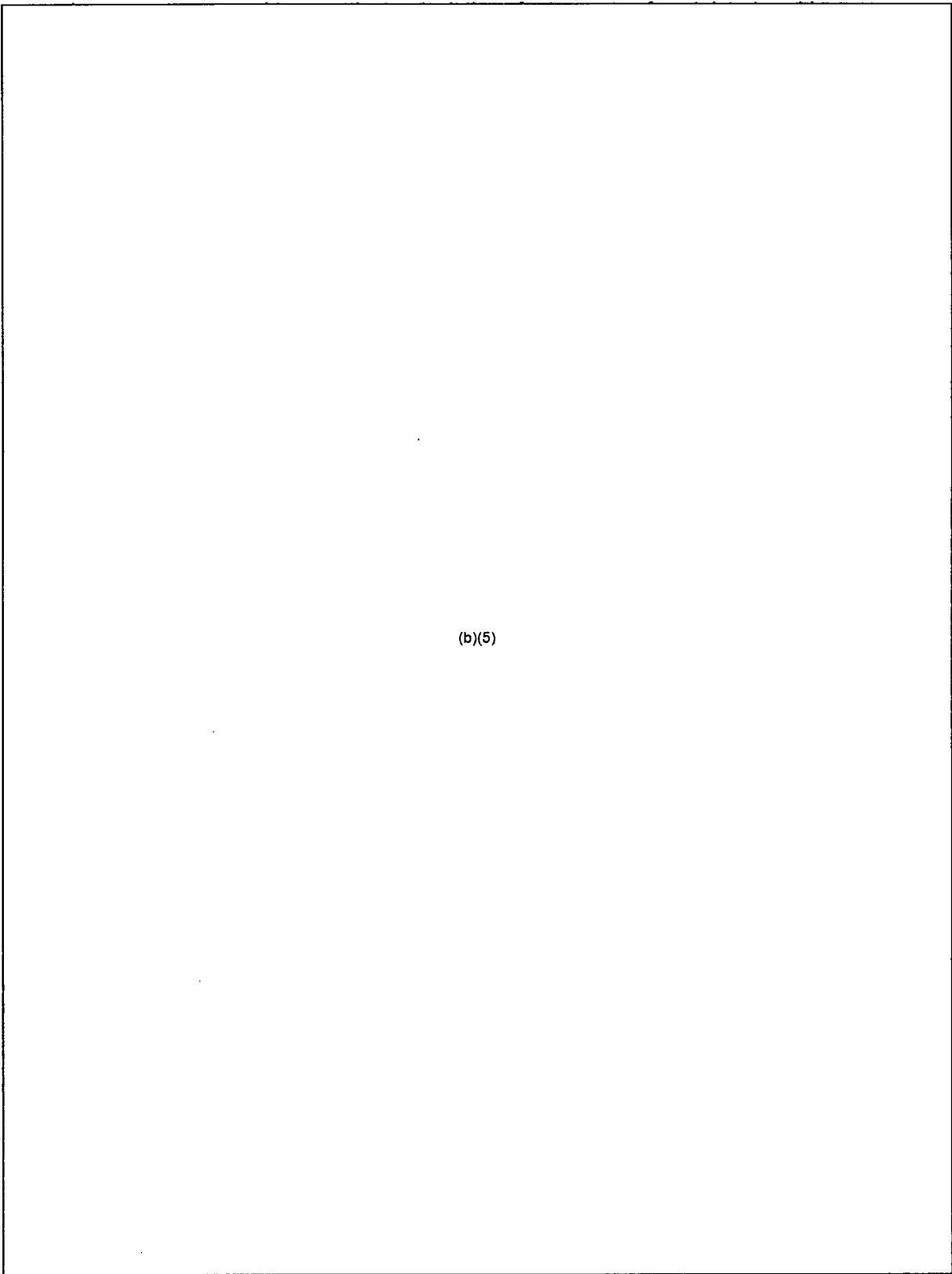


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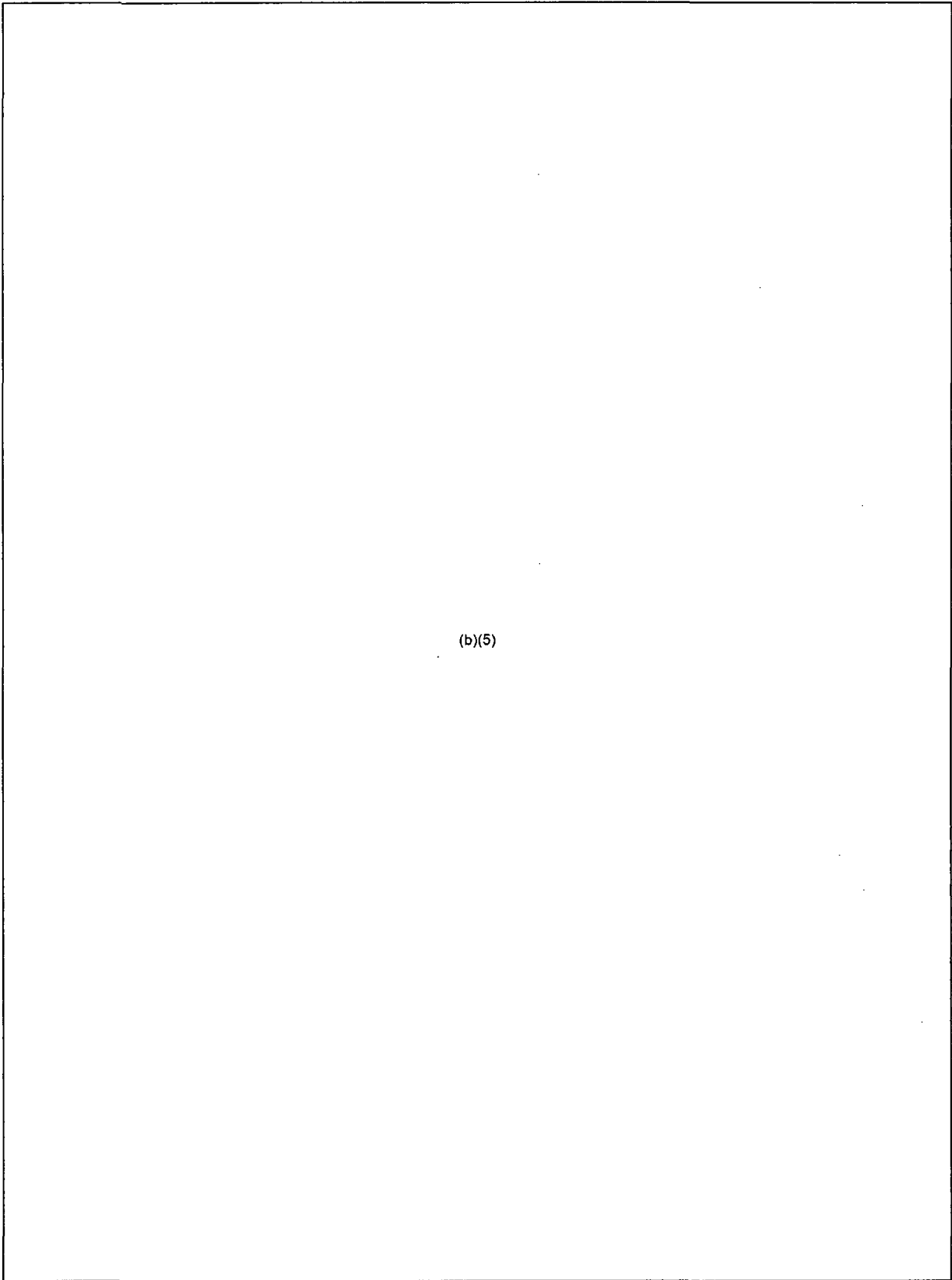


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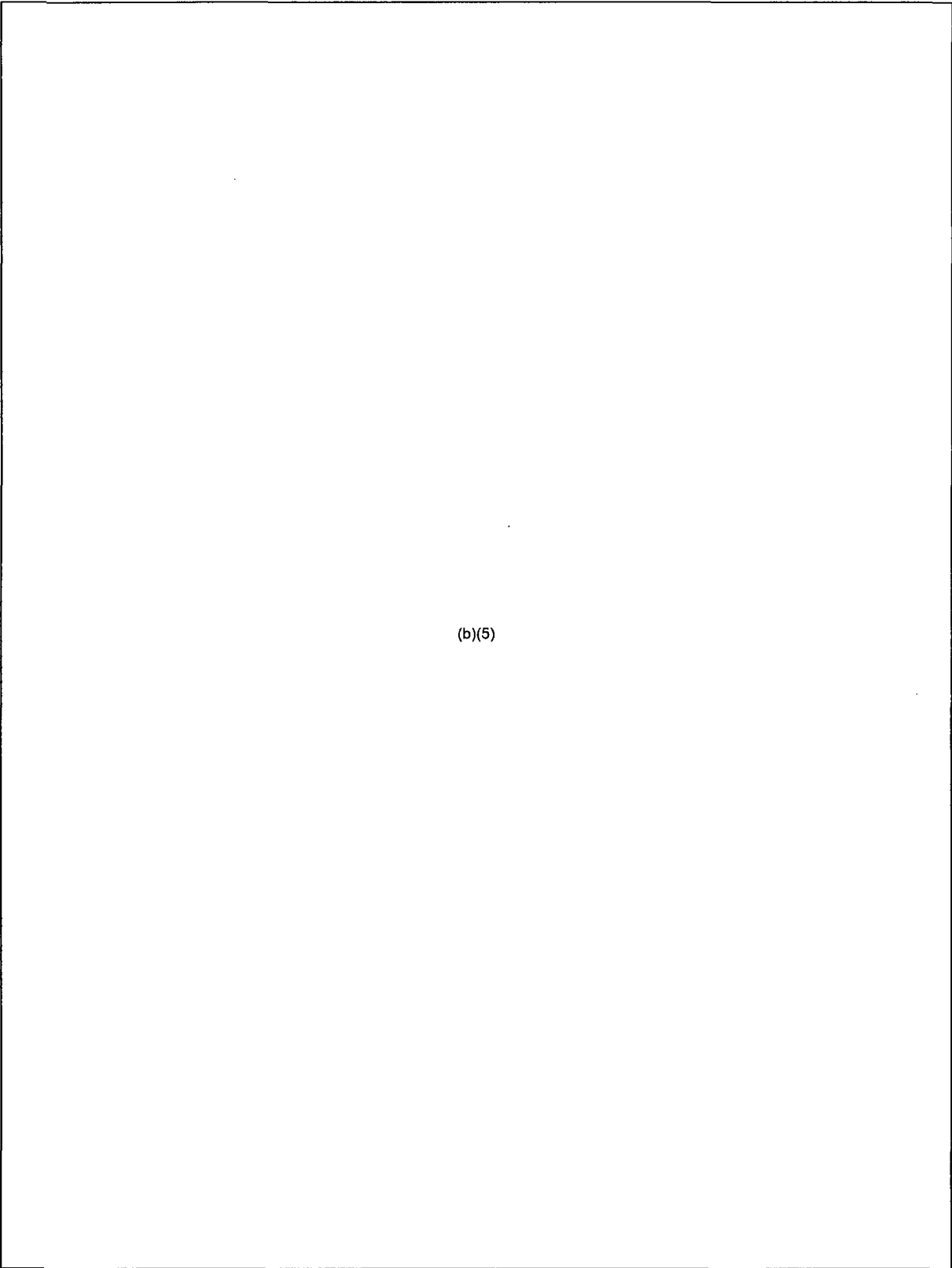
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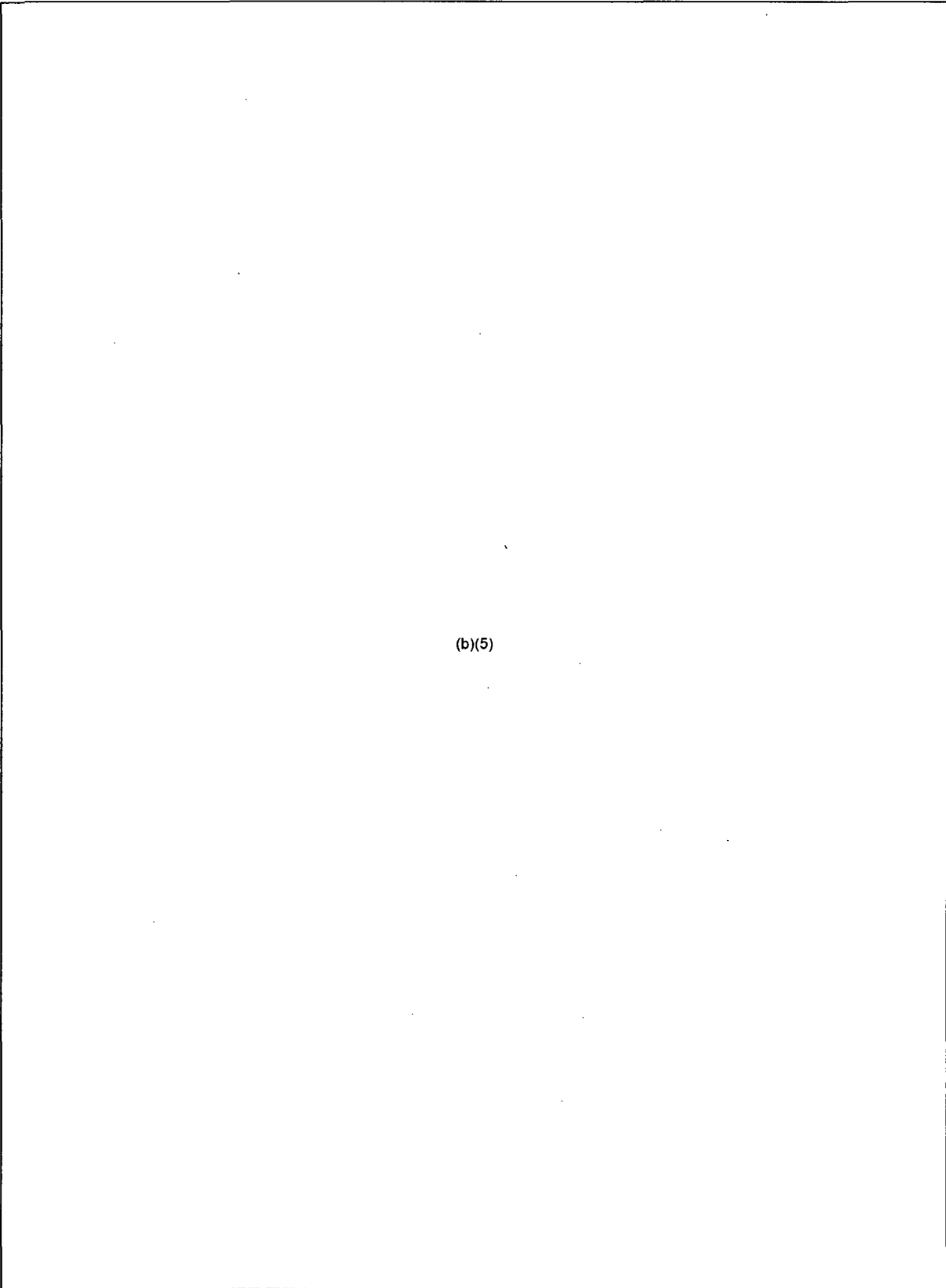
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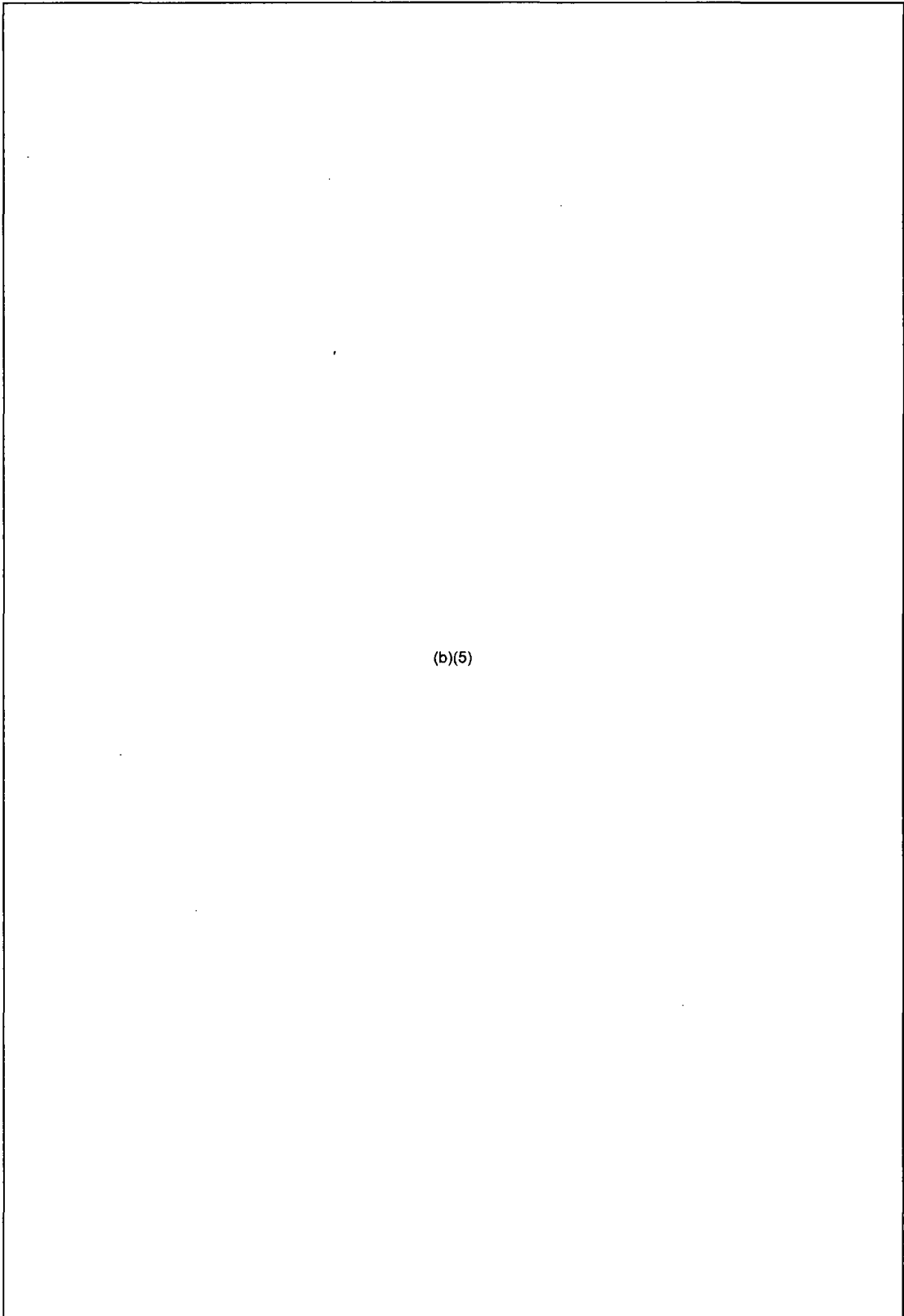
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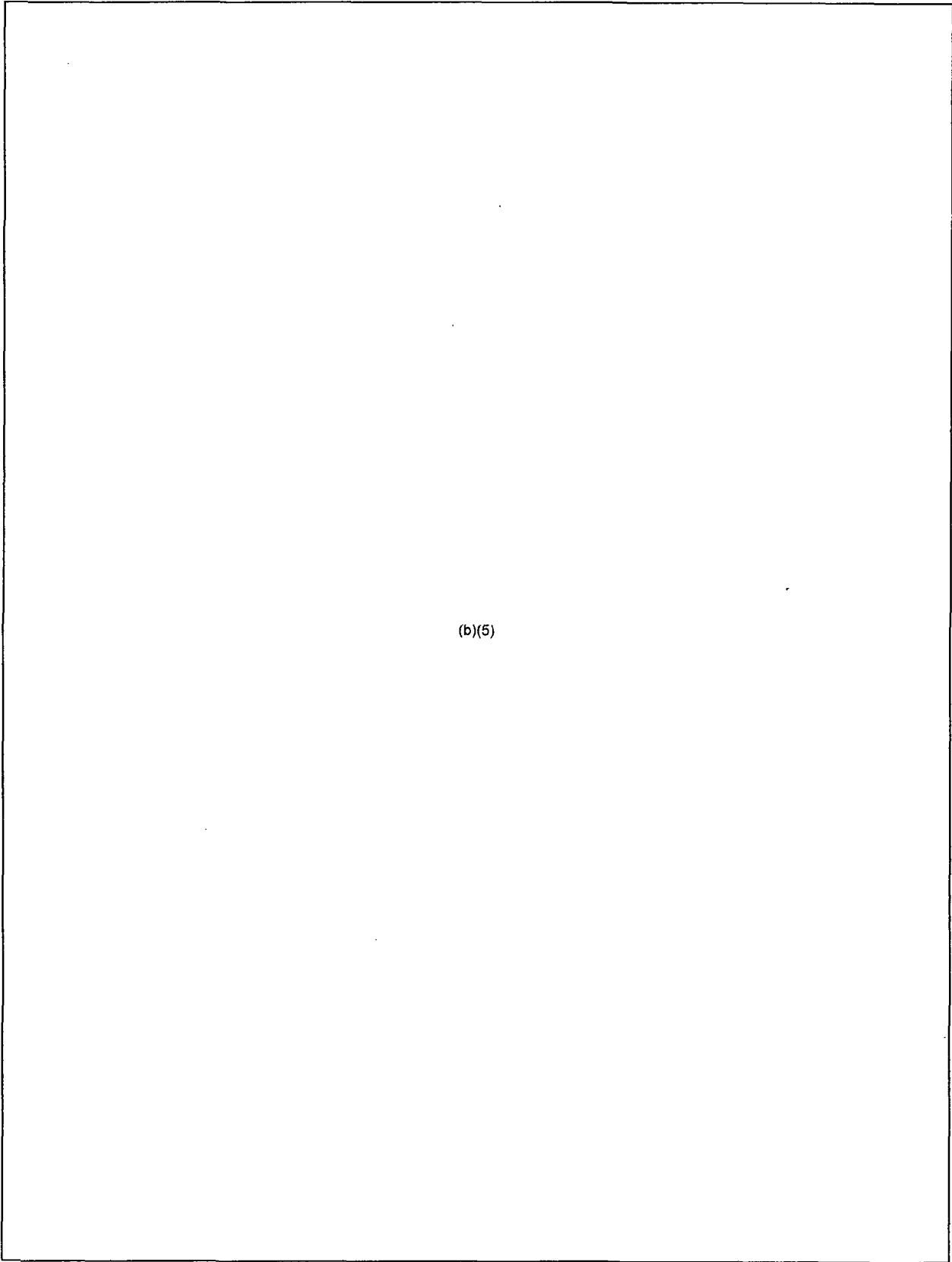
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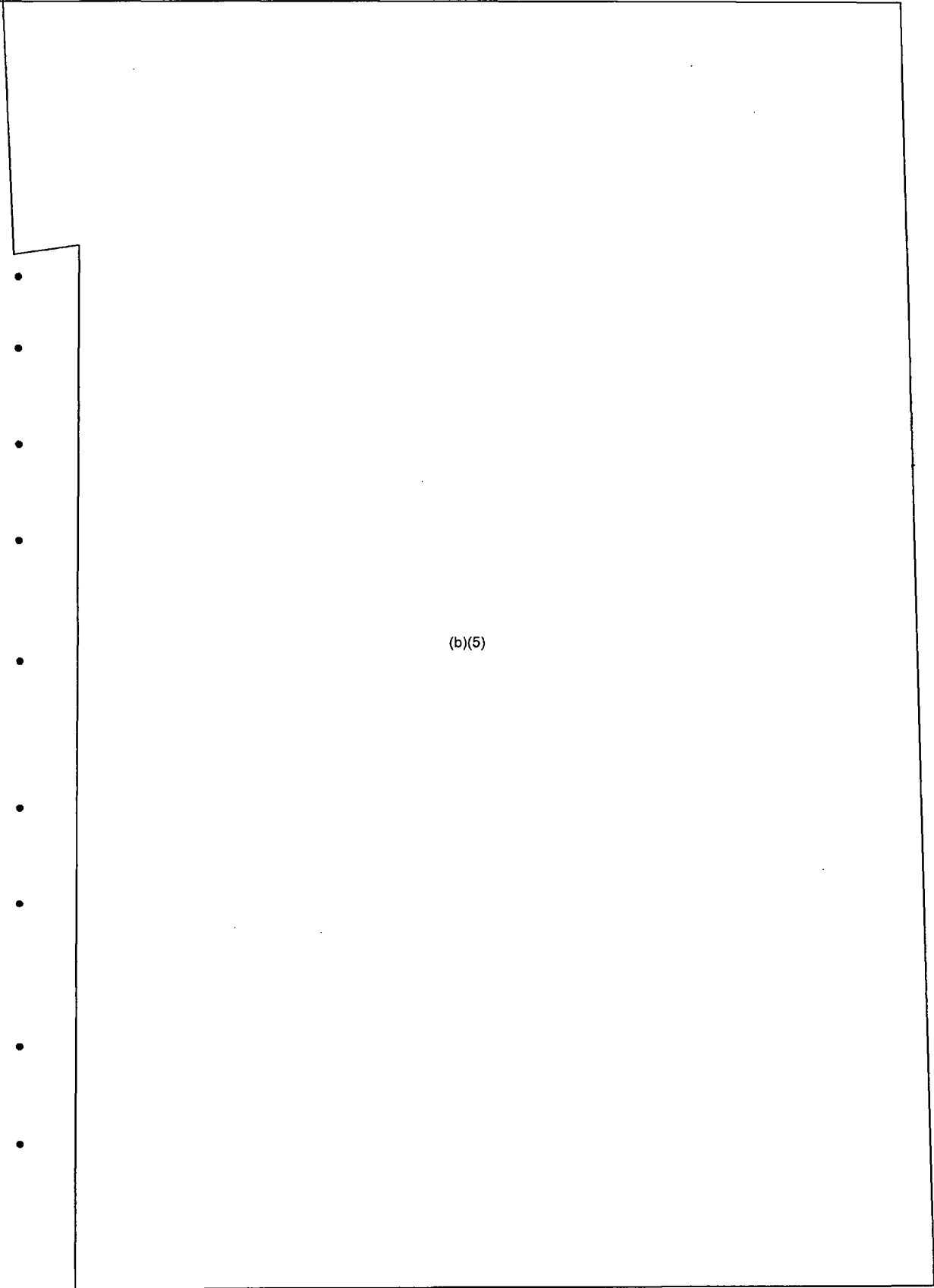
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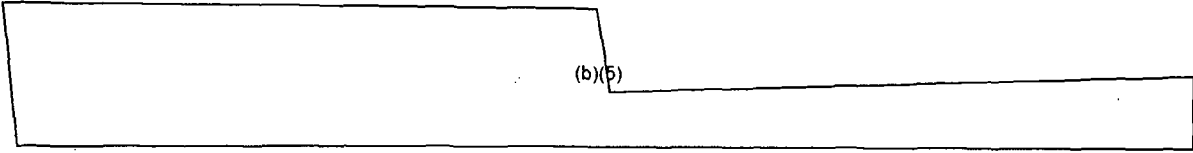


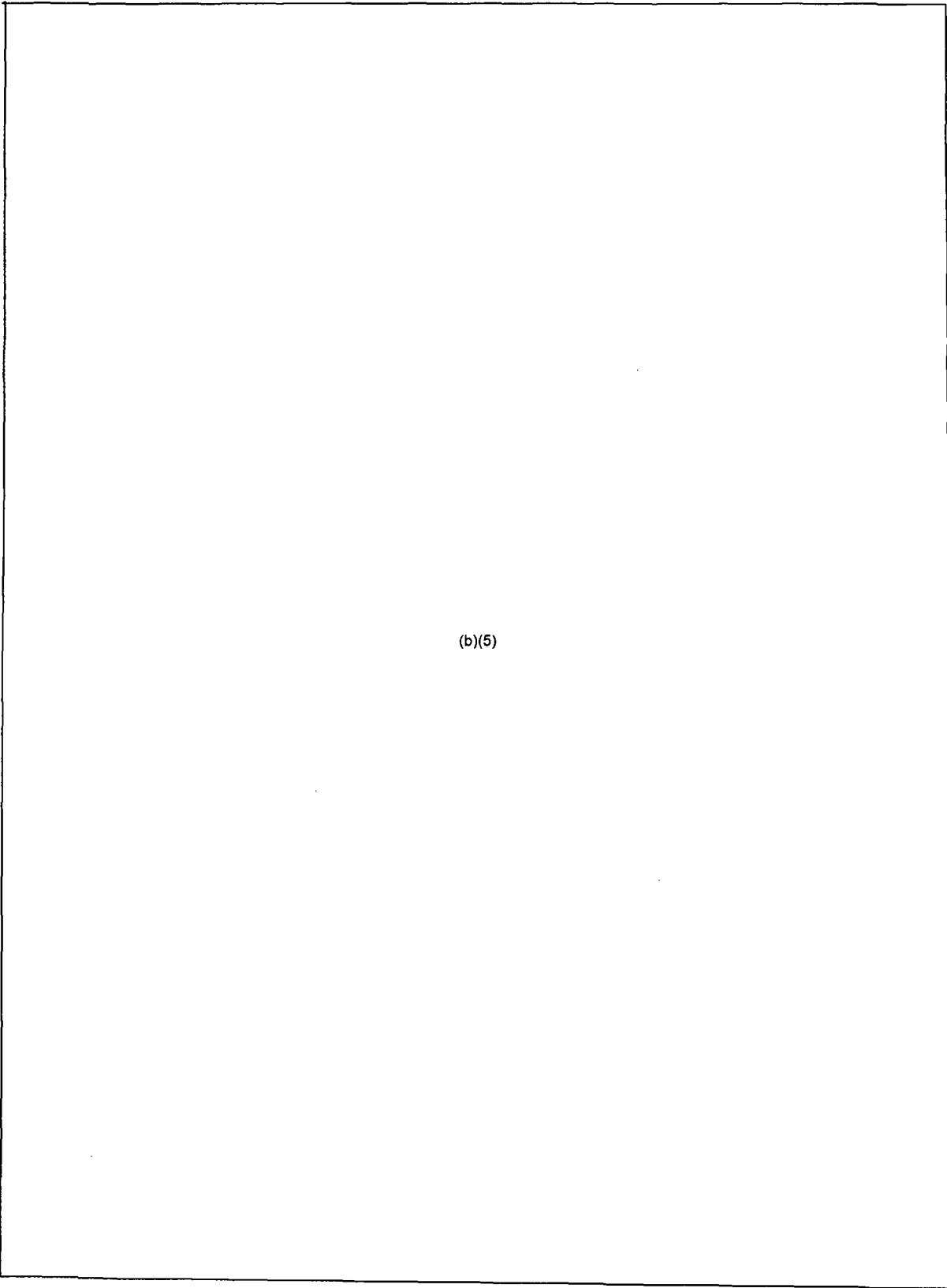
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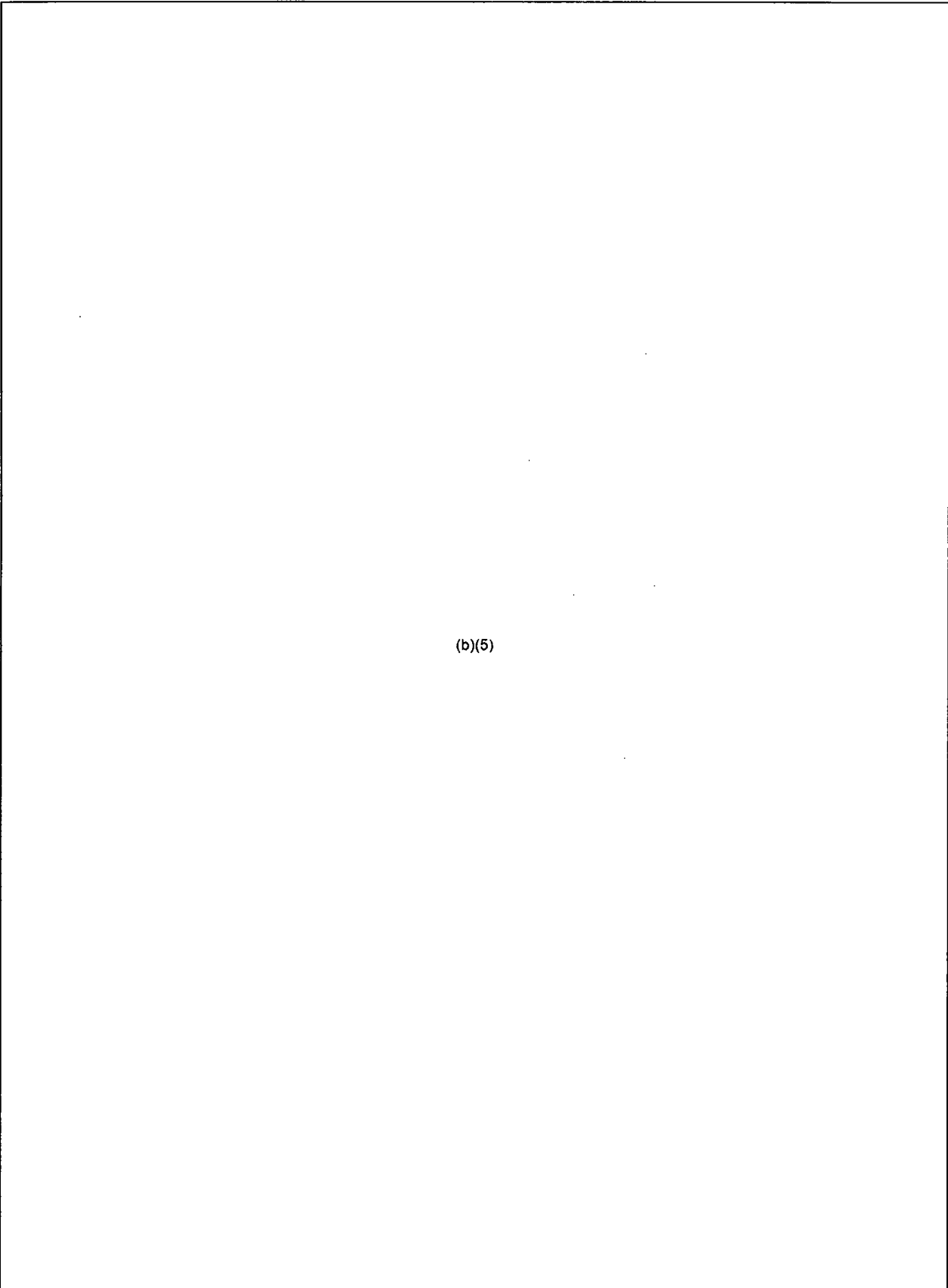
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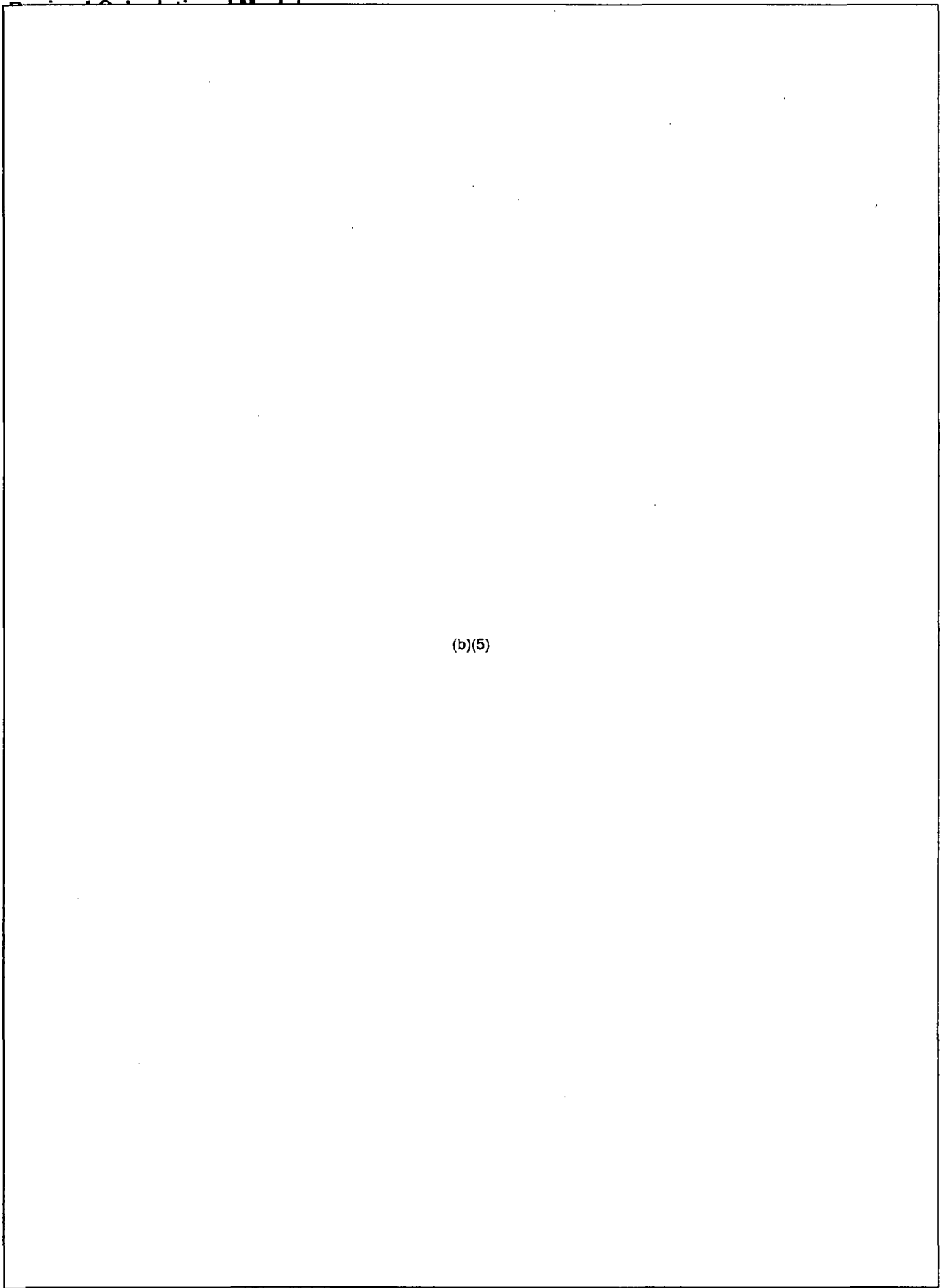
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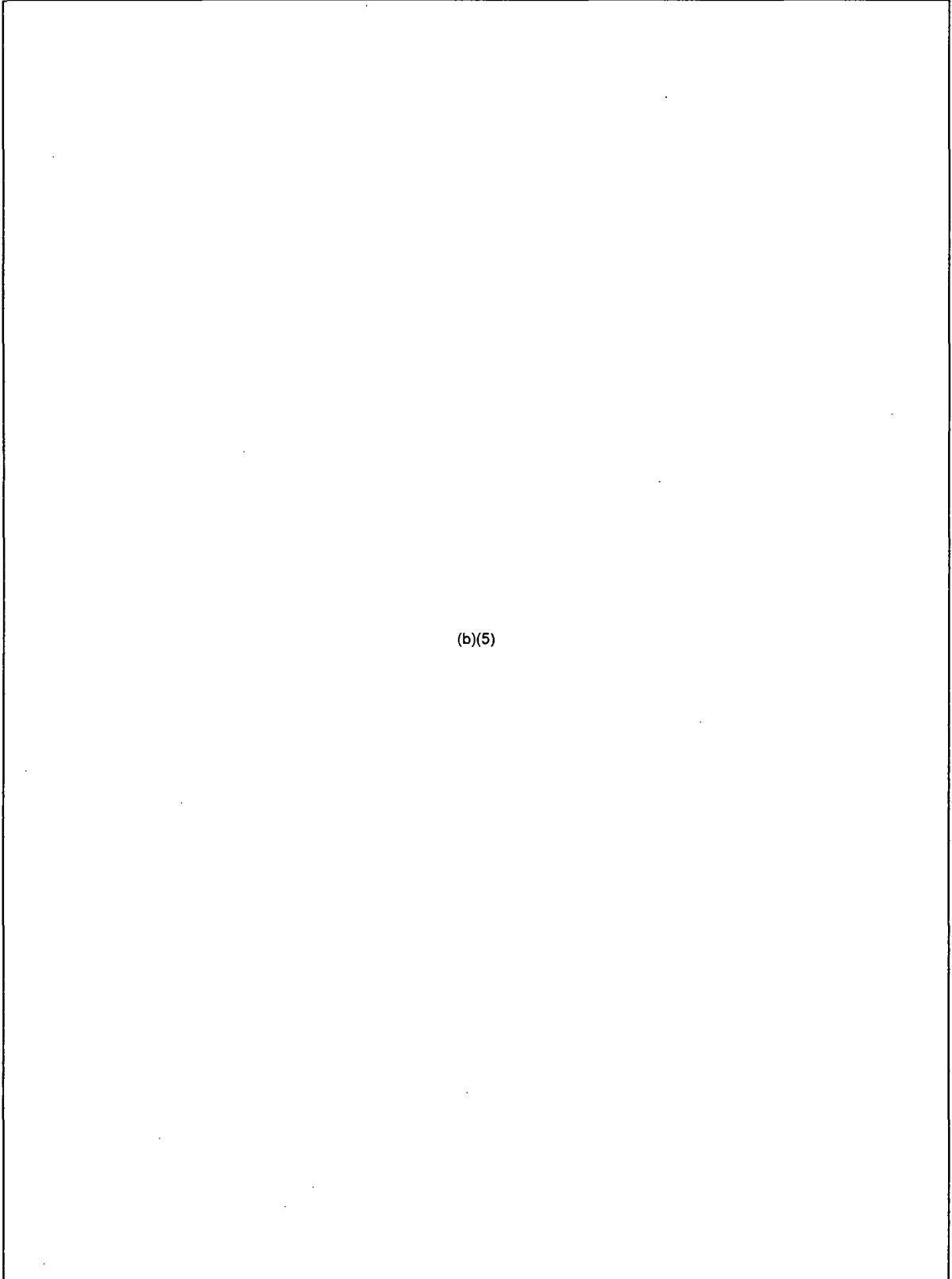
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Sources of Energy

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Mass and Energy Release Determination



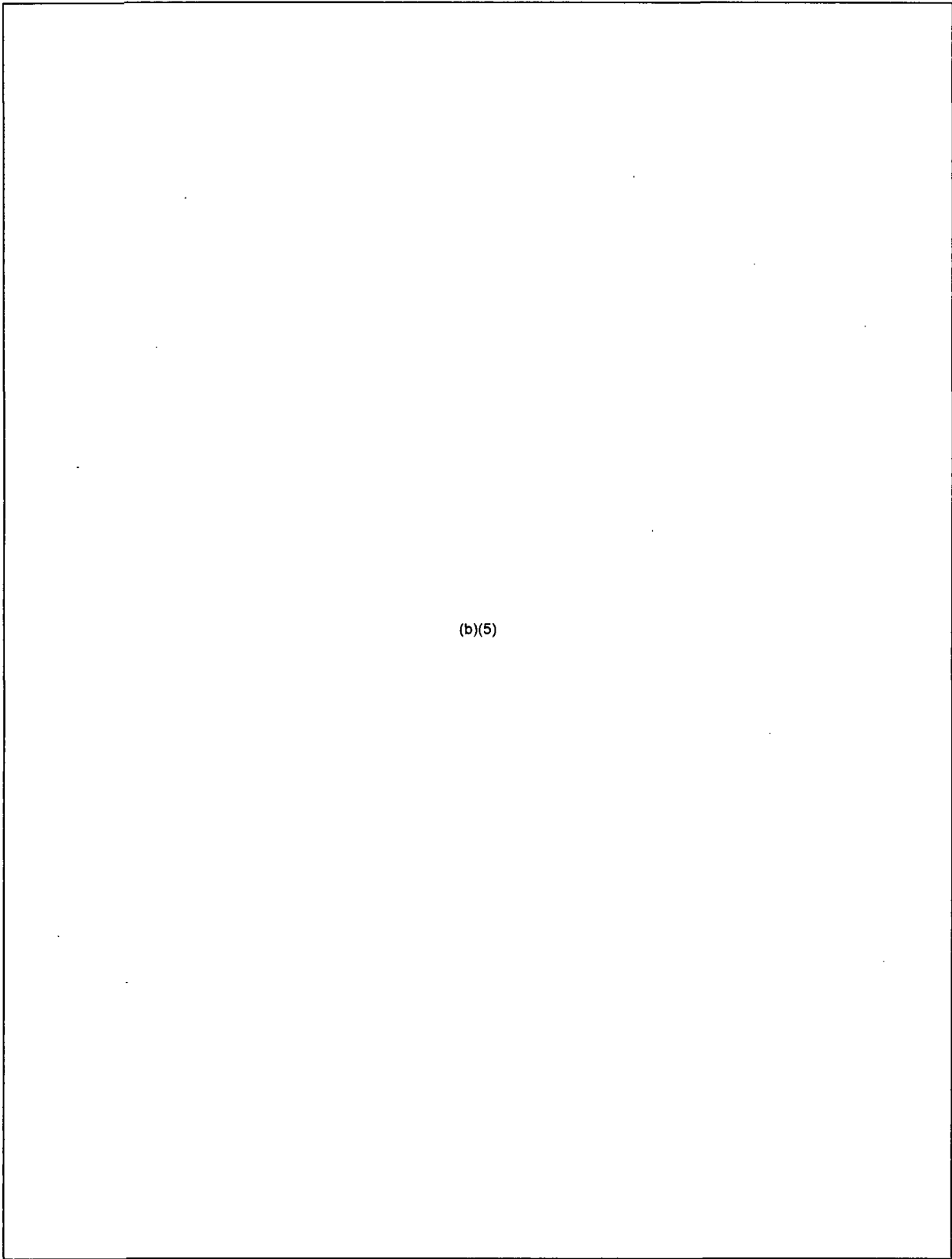
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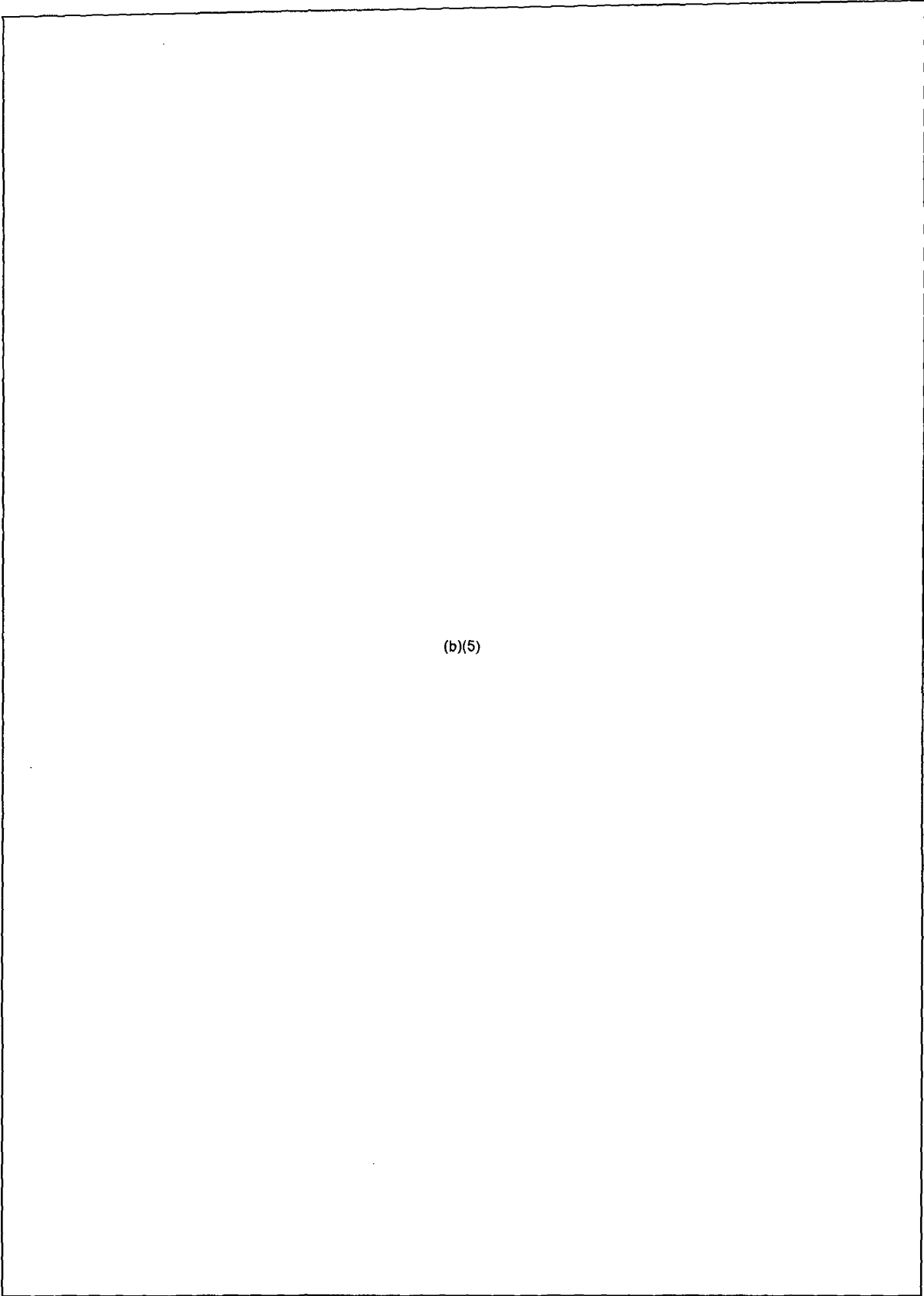
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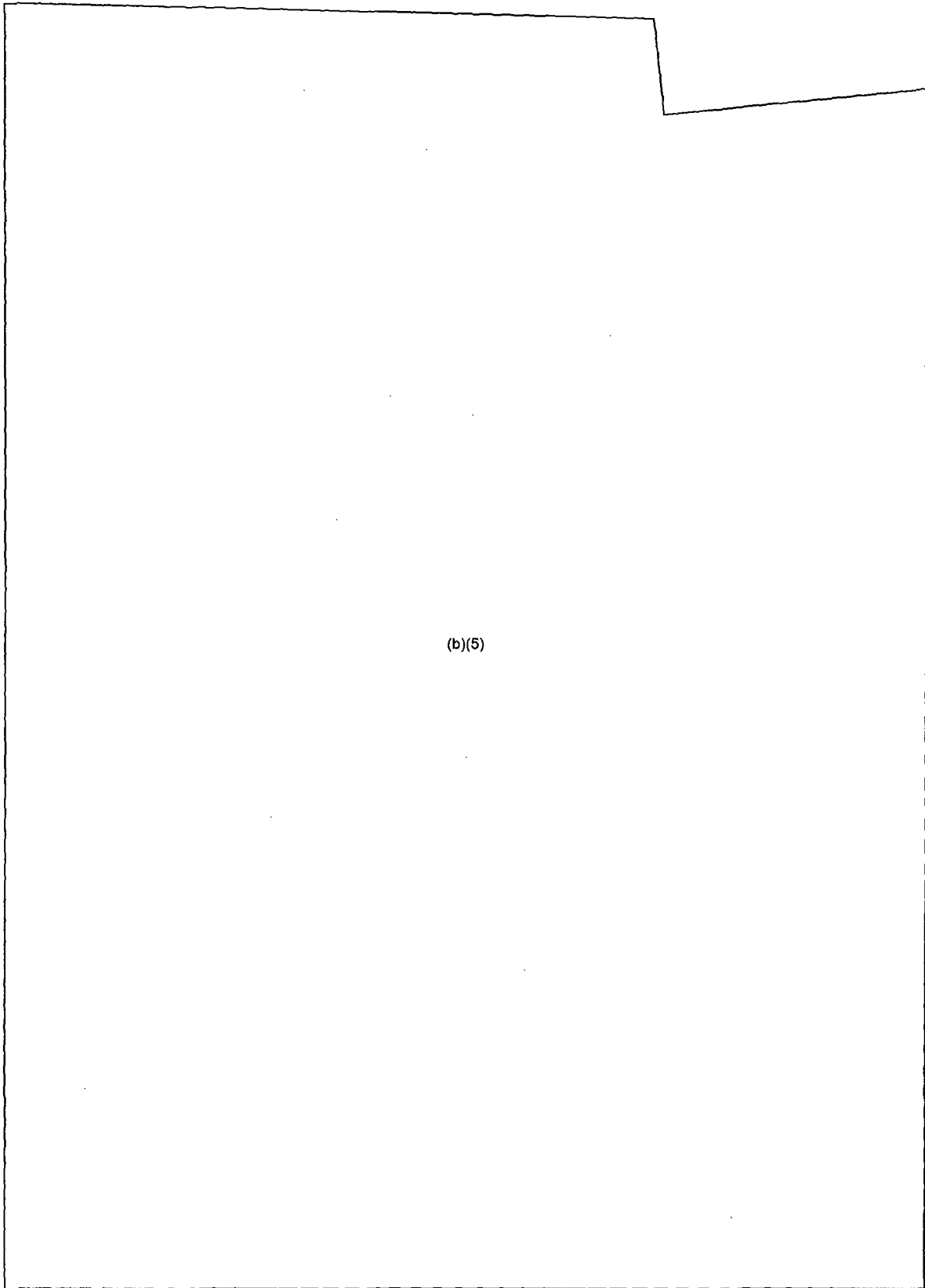
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6.2.1.5.6 Conclusions

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6.2.2 Containment Heat Removal Systems

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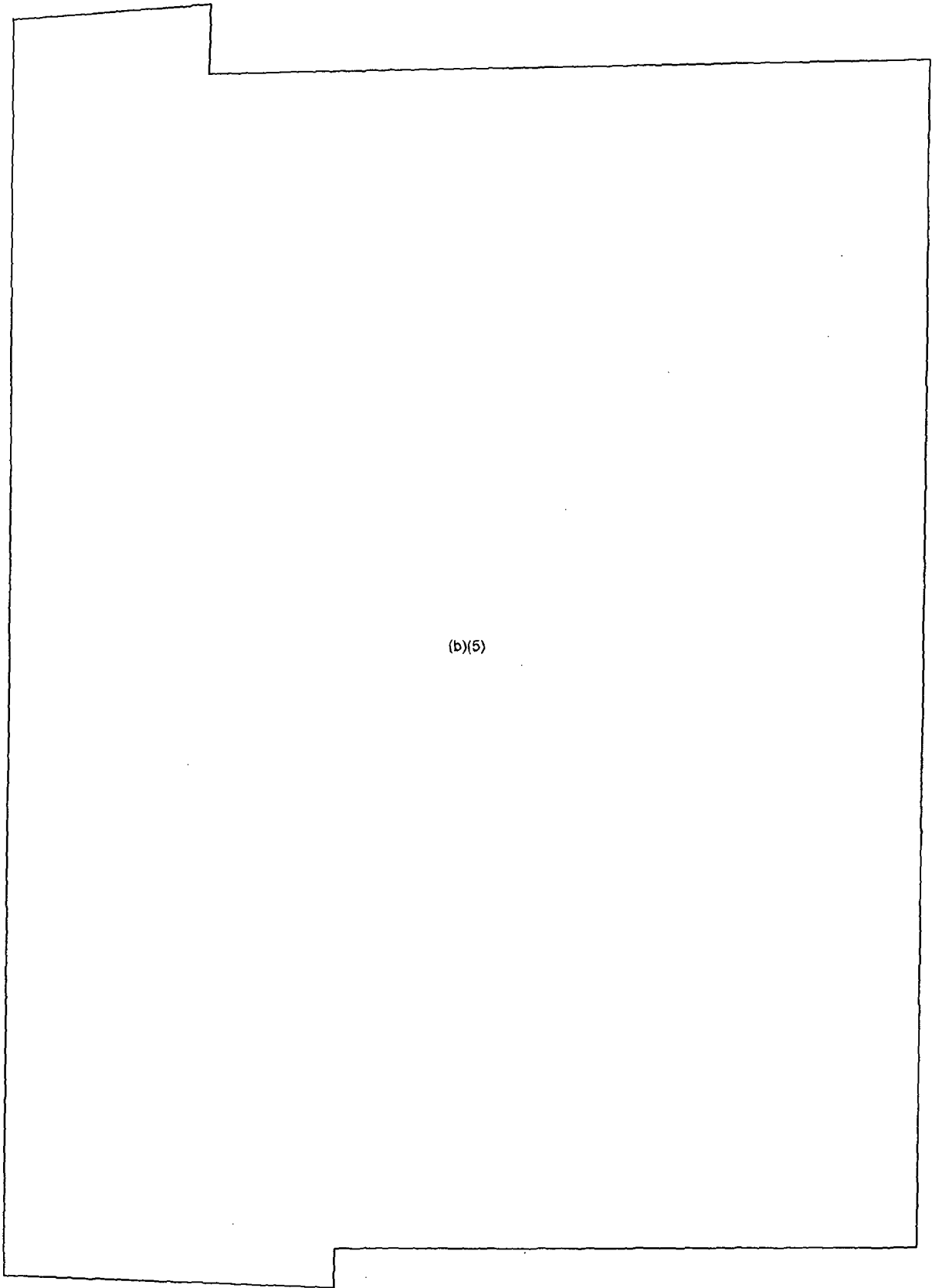
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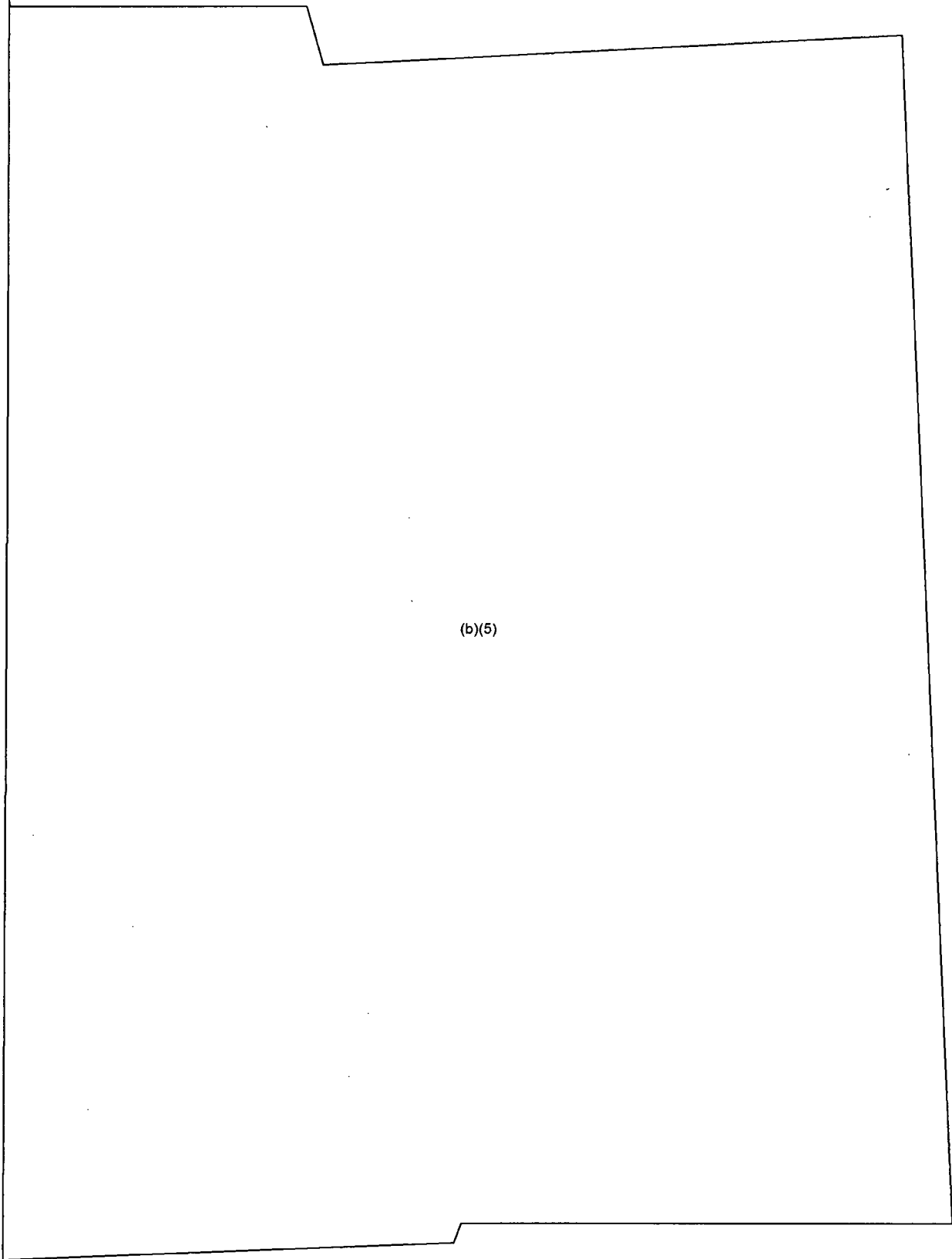
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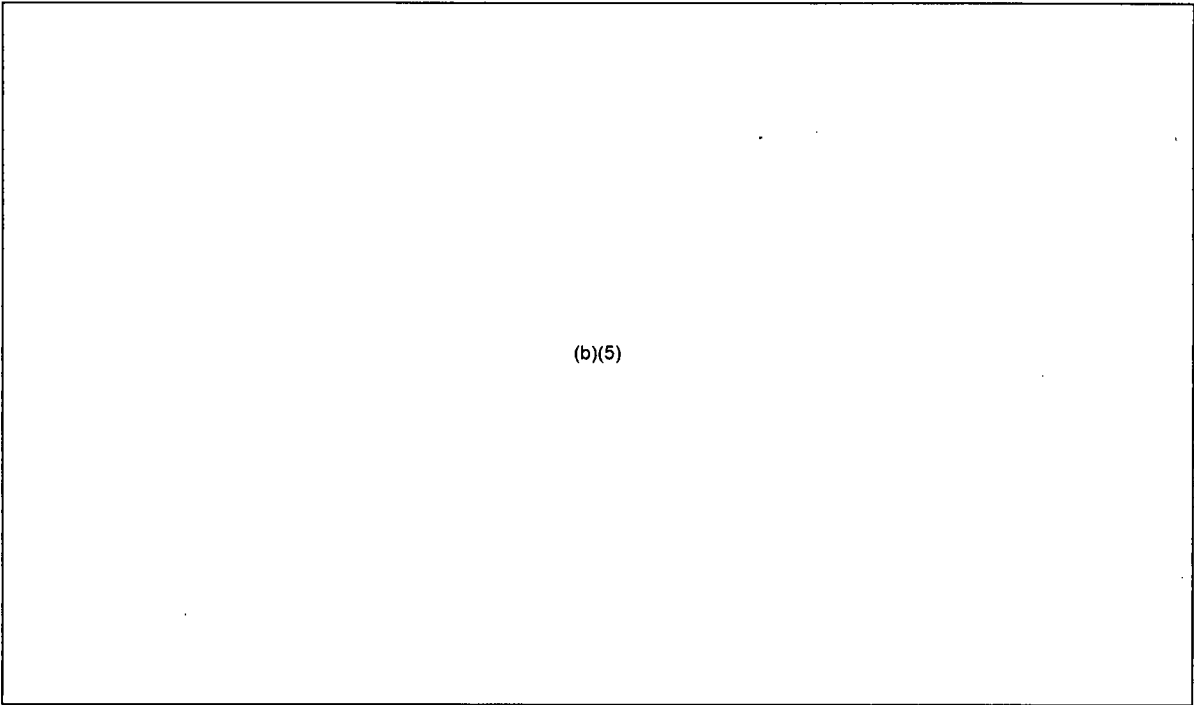
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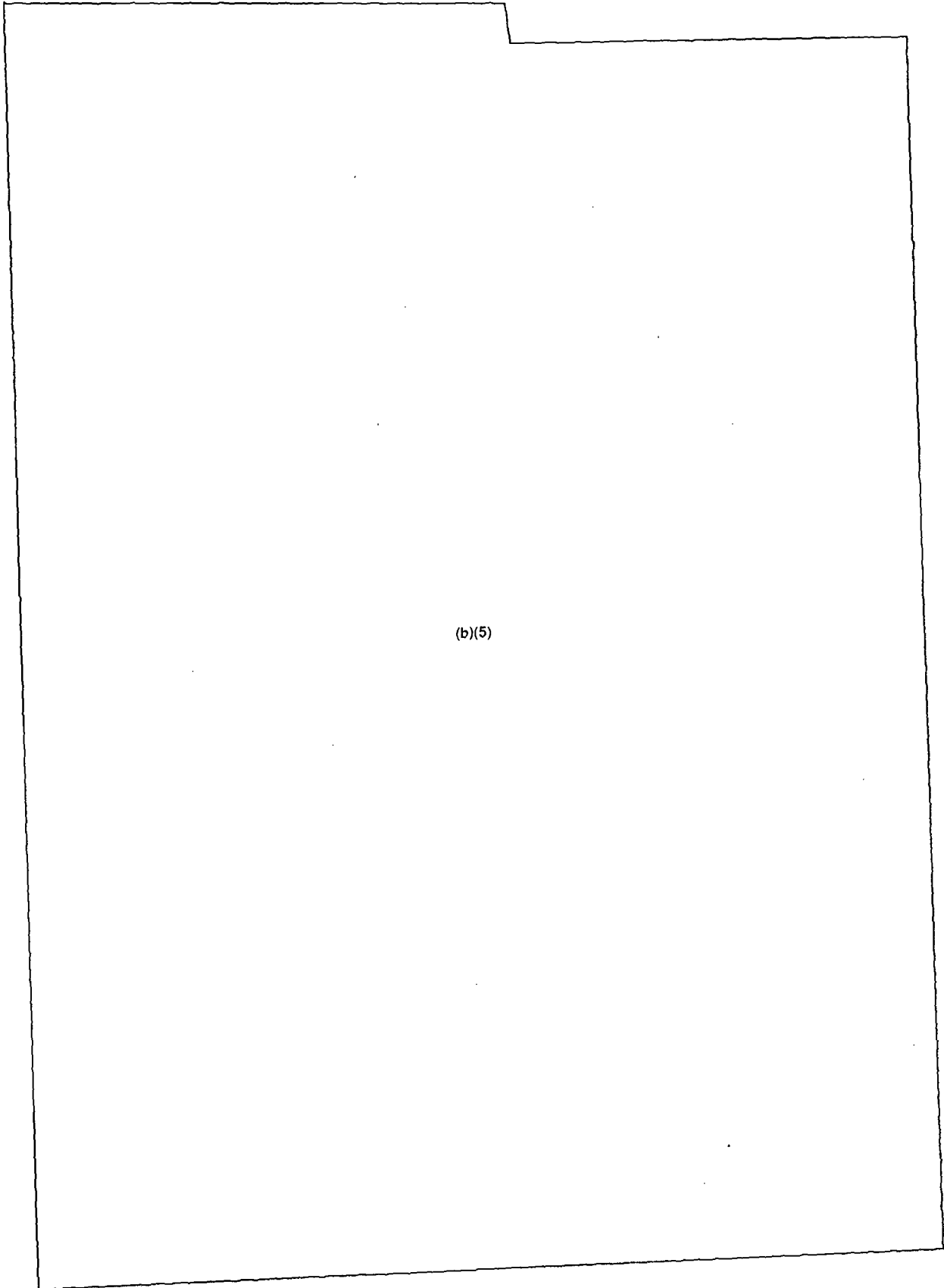
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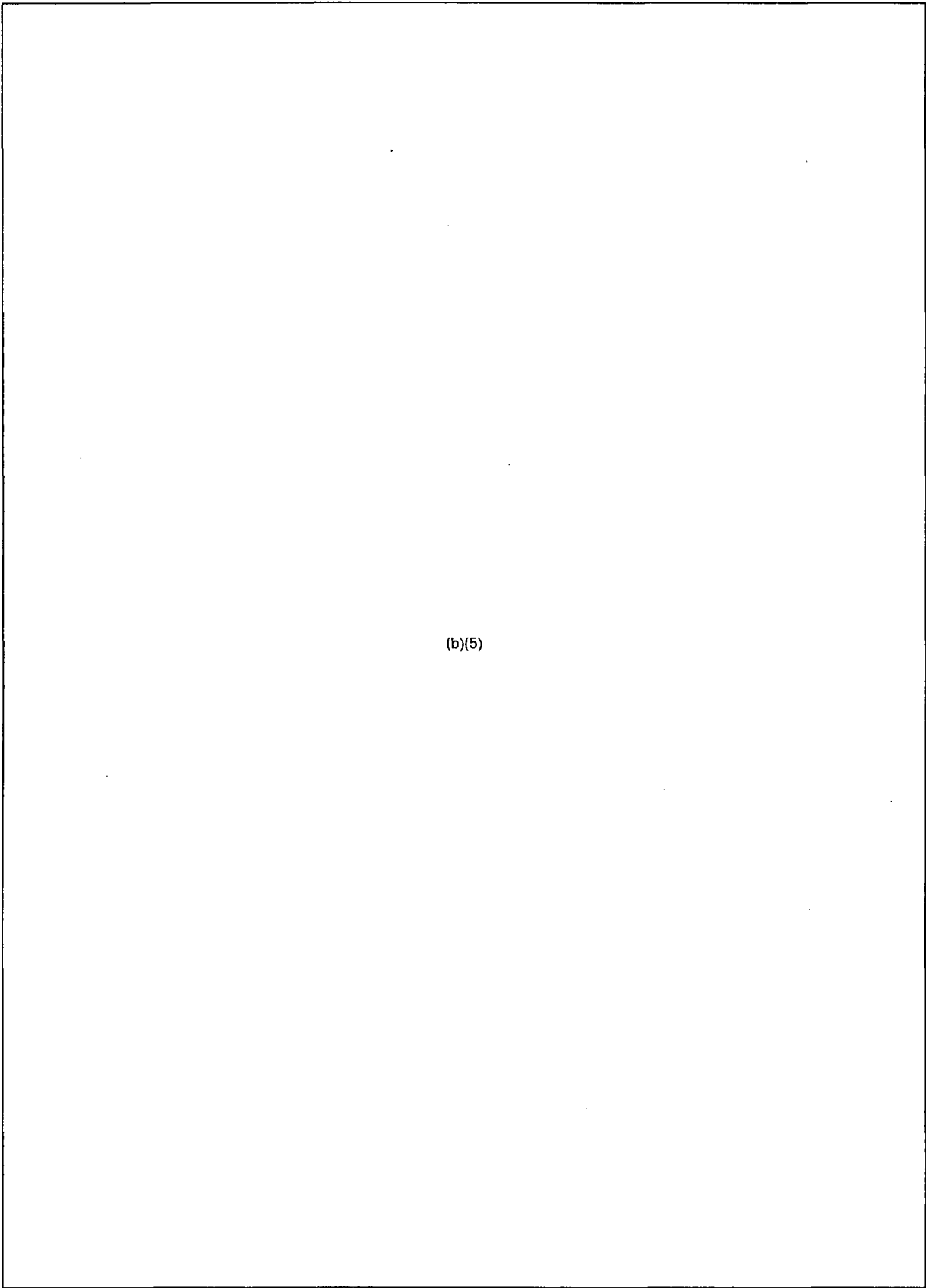
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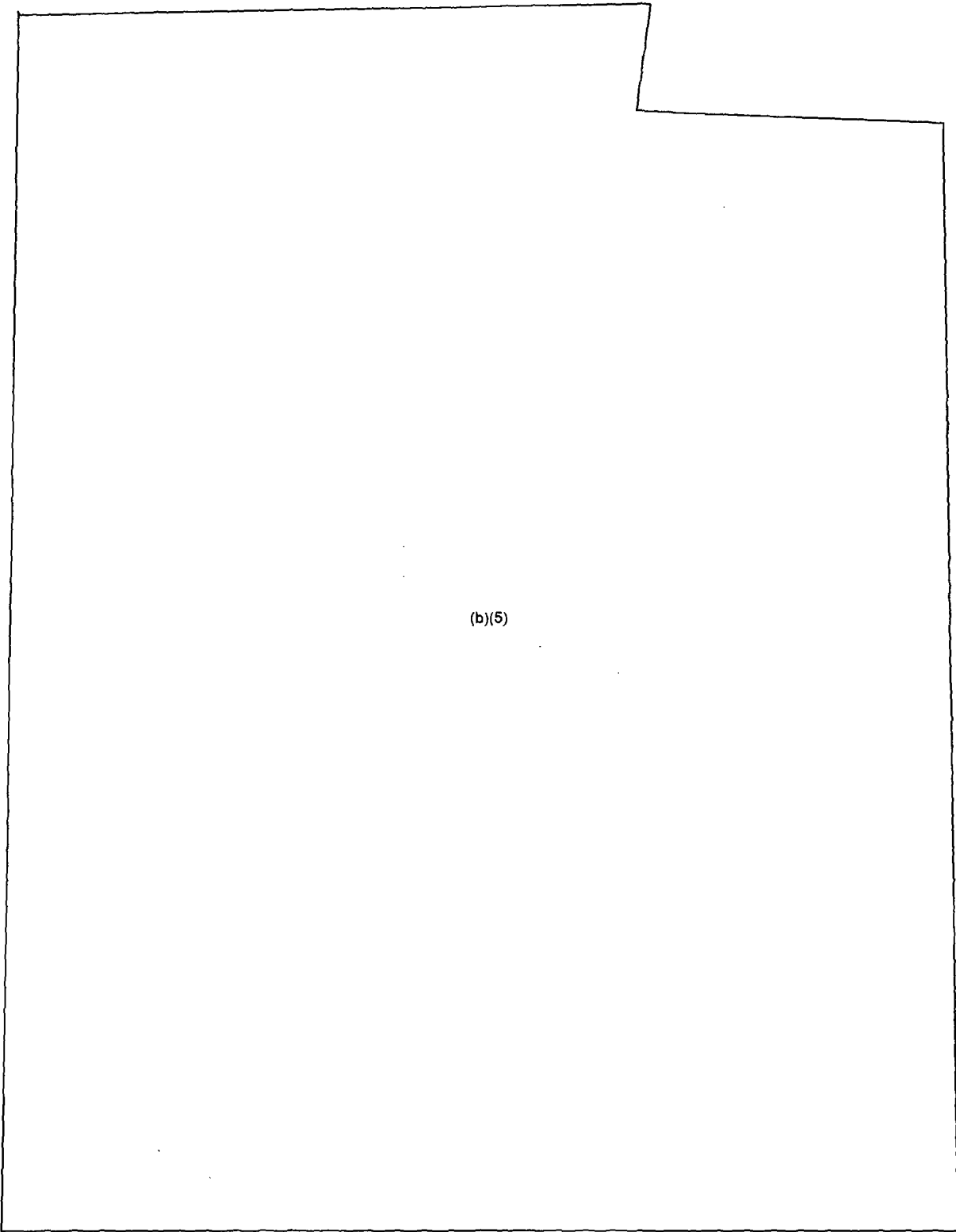
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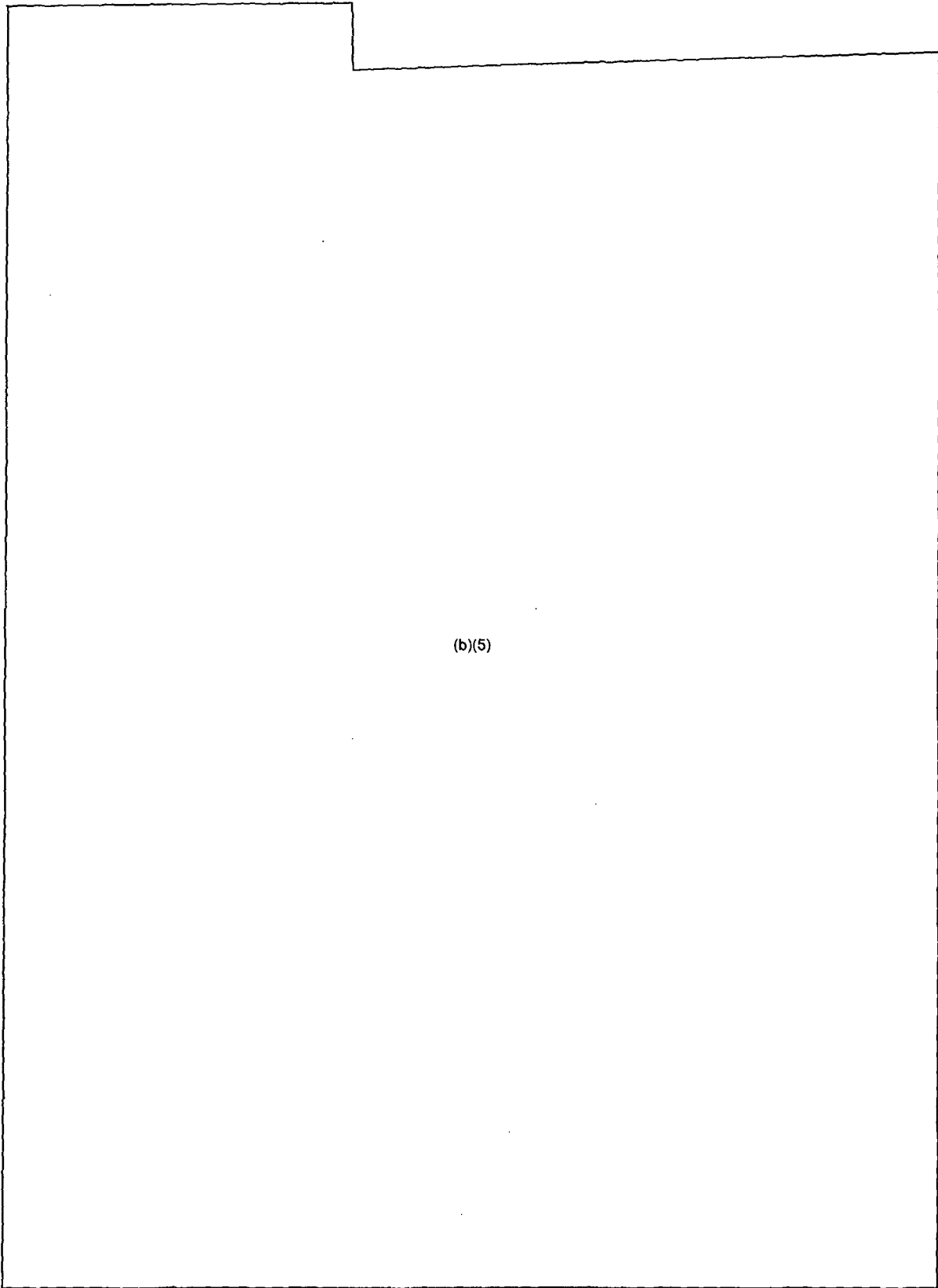


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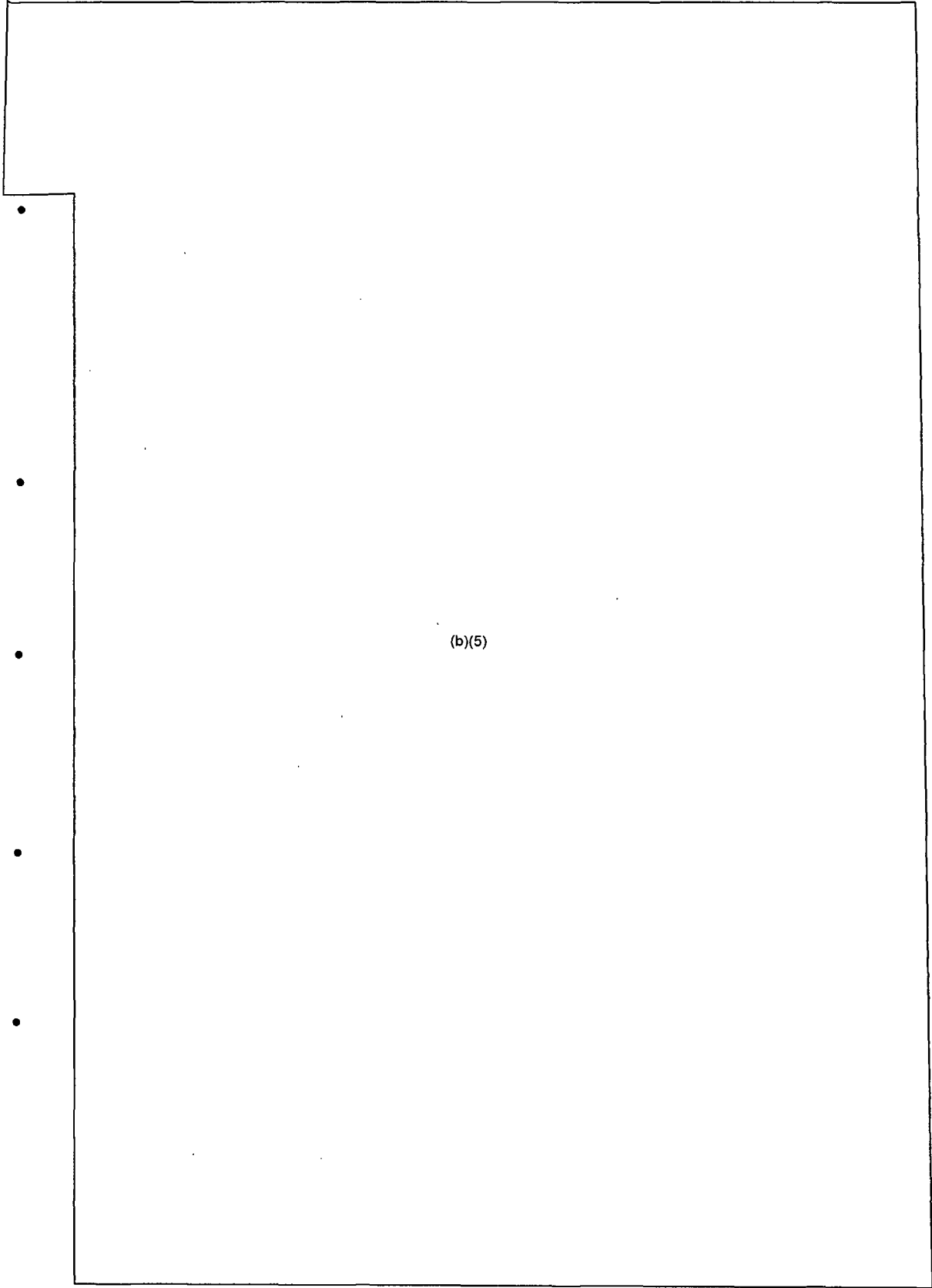
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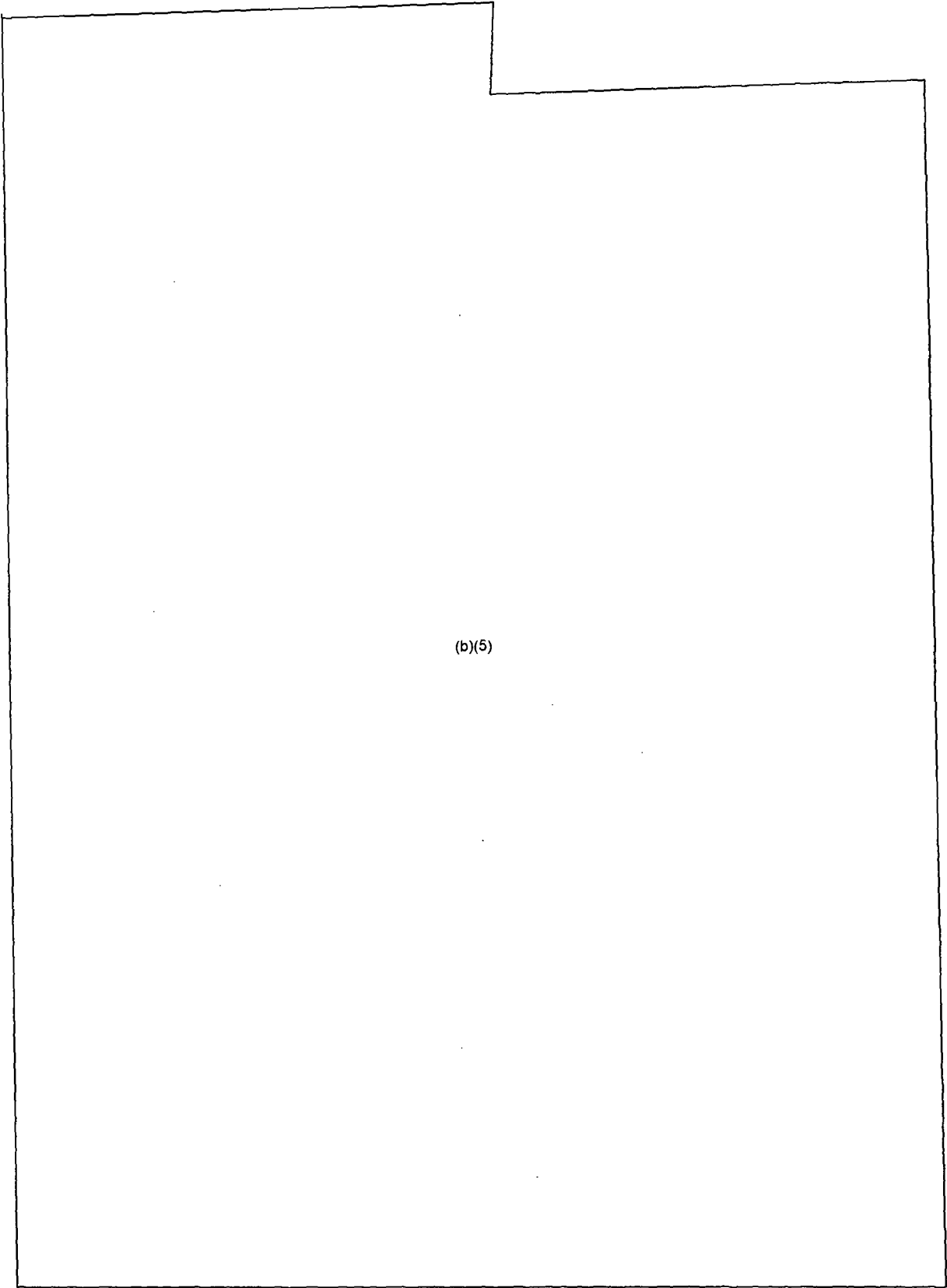
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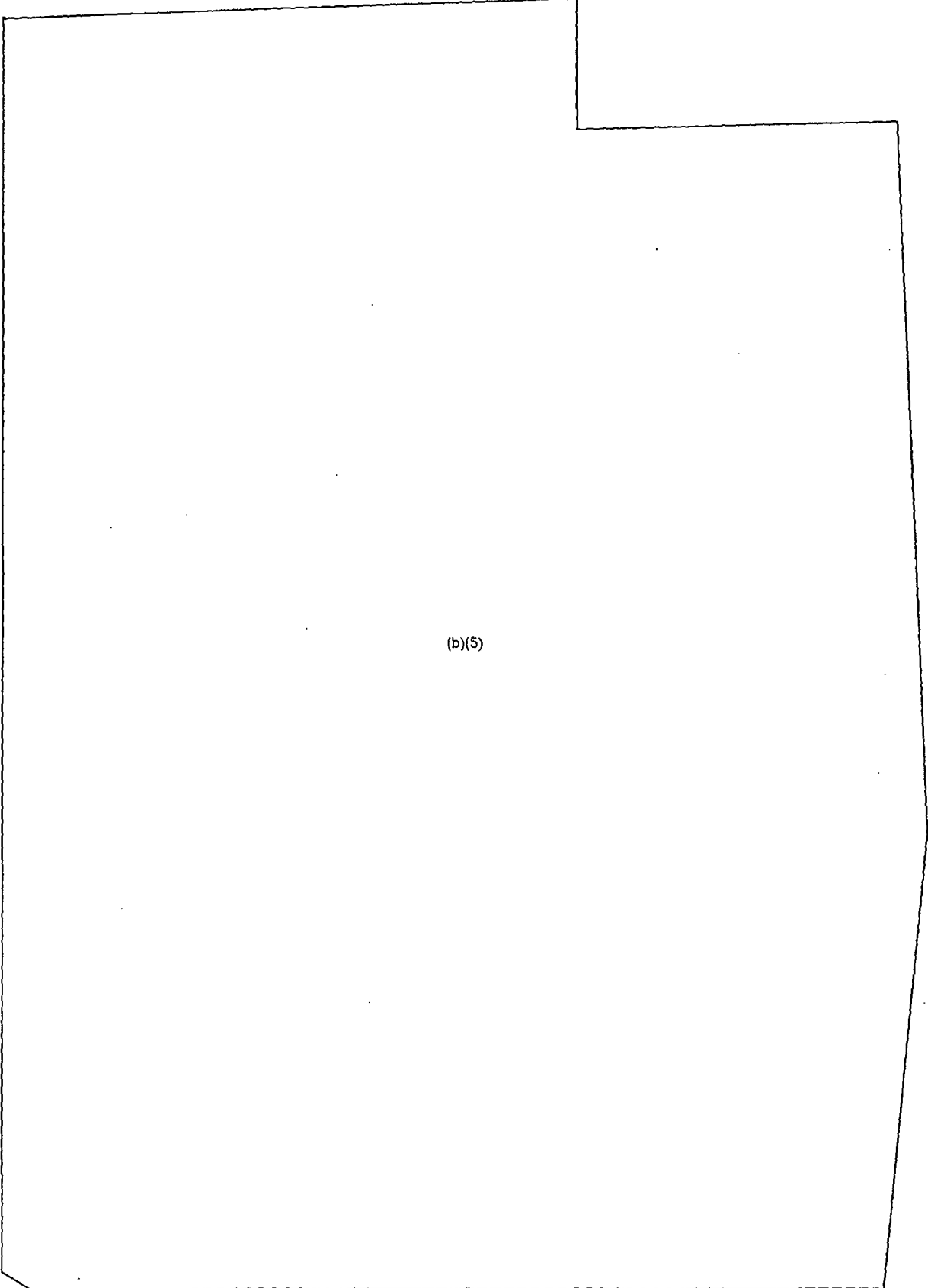
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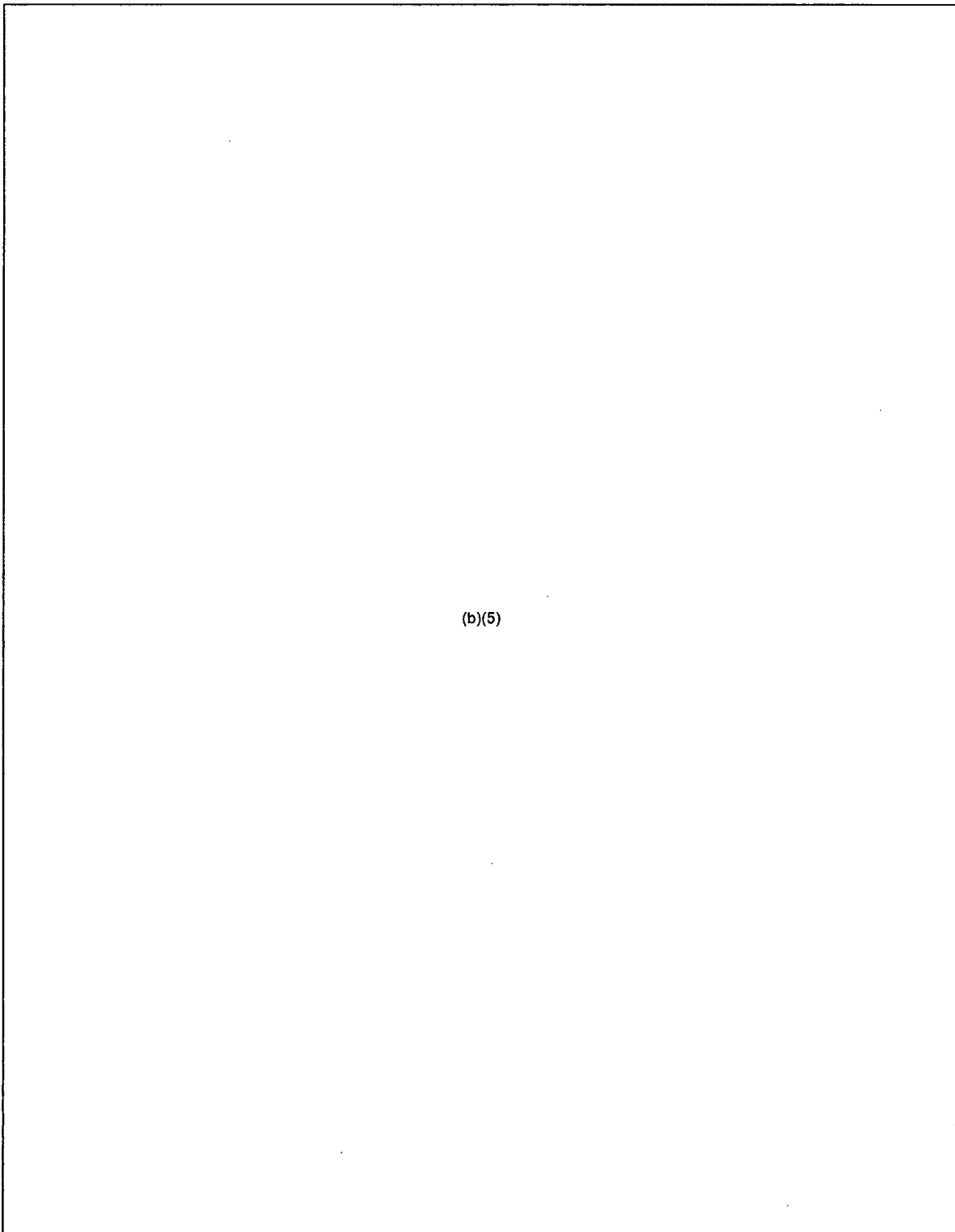
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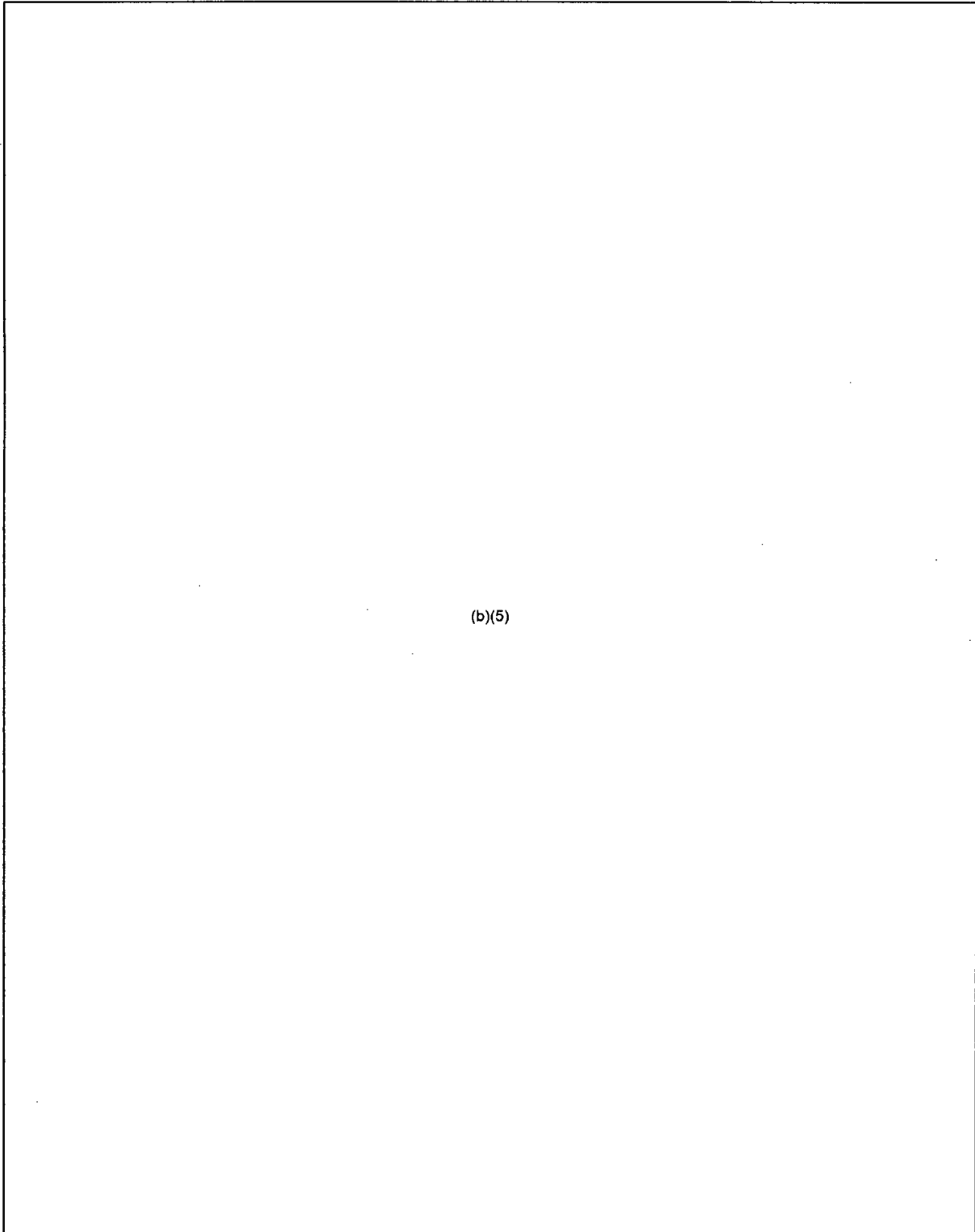
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Summary



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Accumulators



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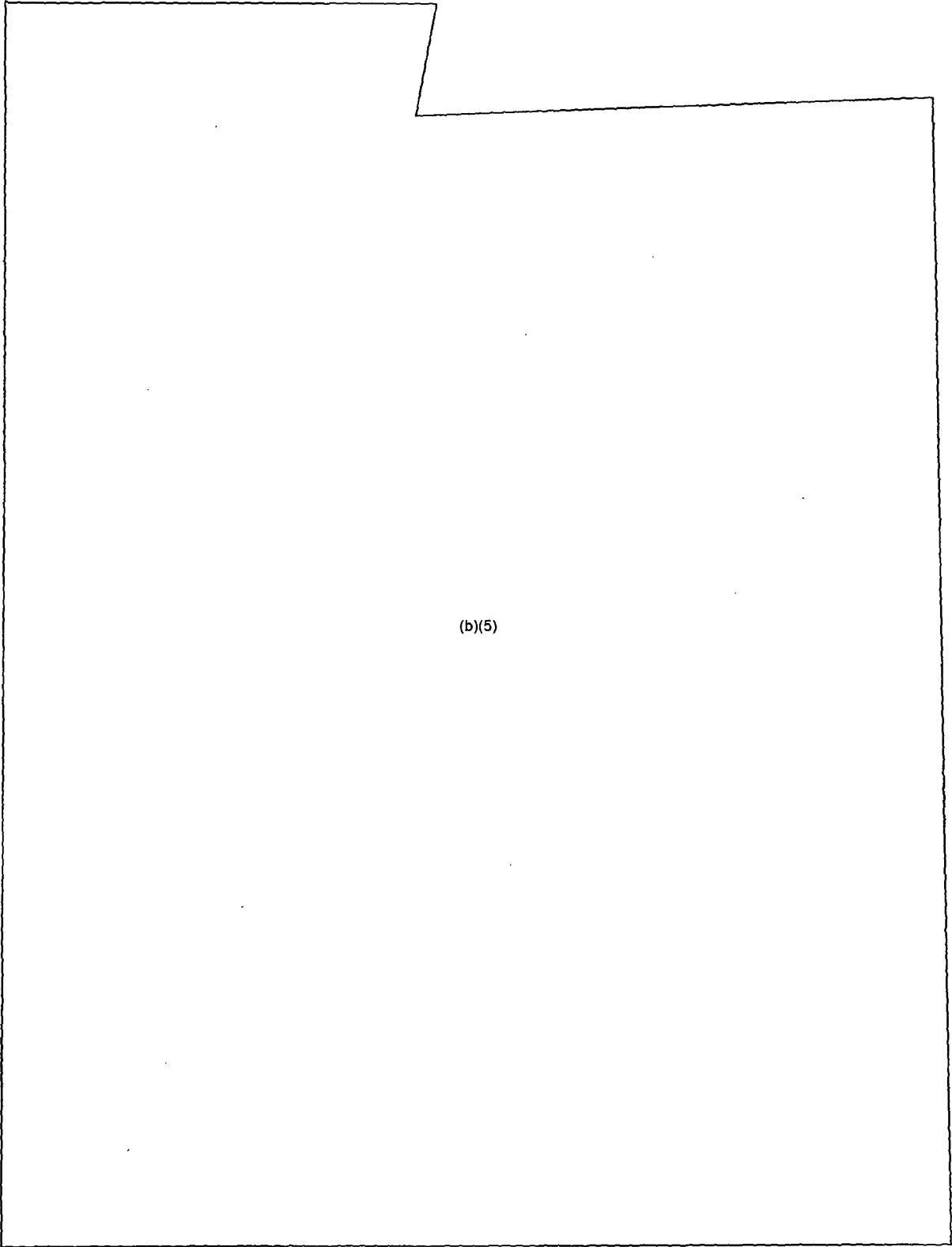
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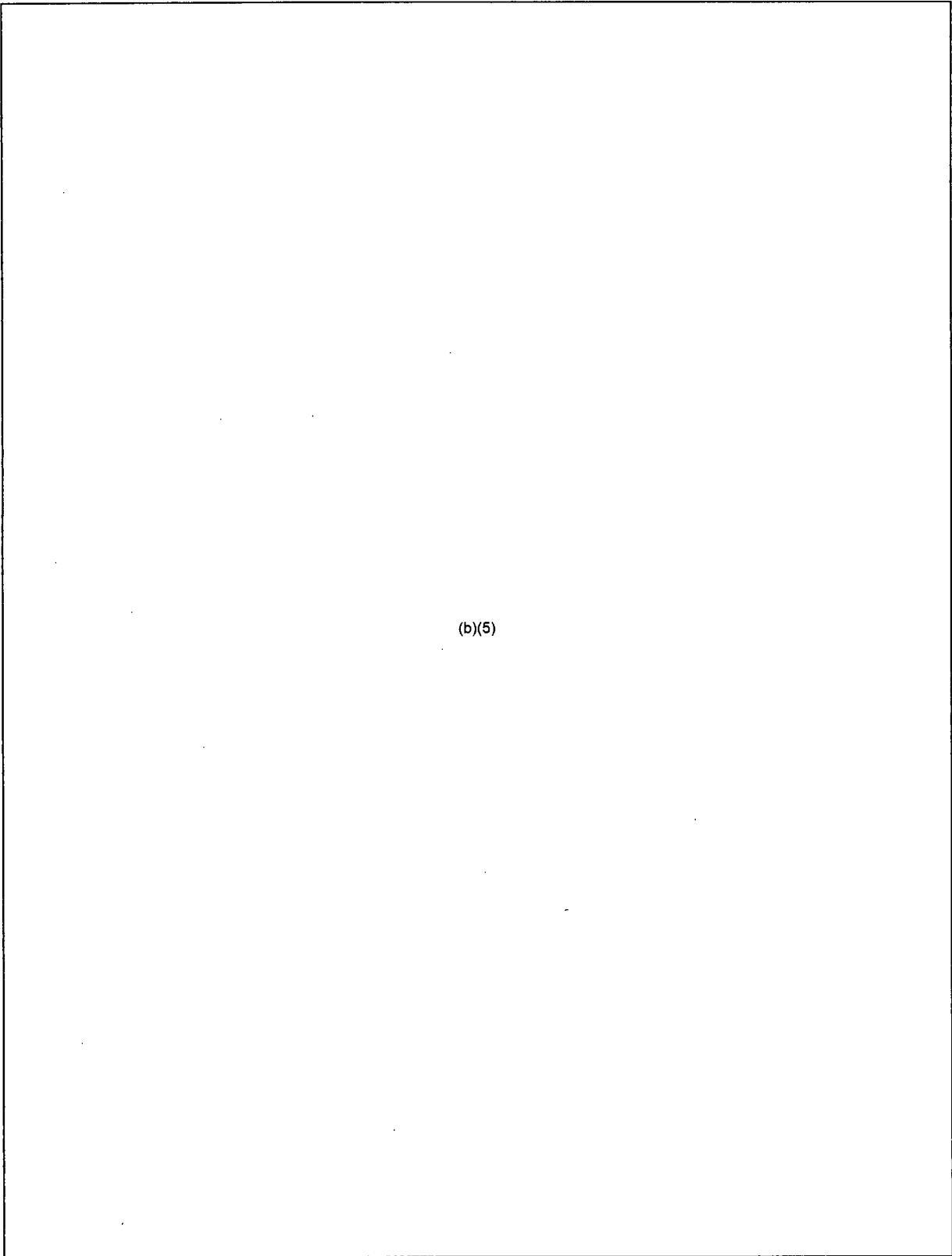
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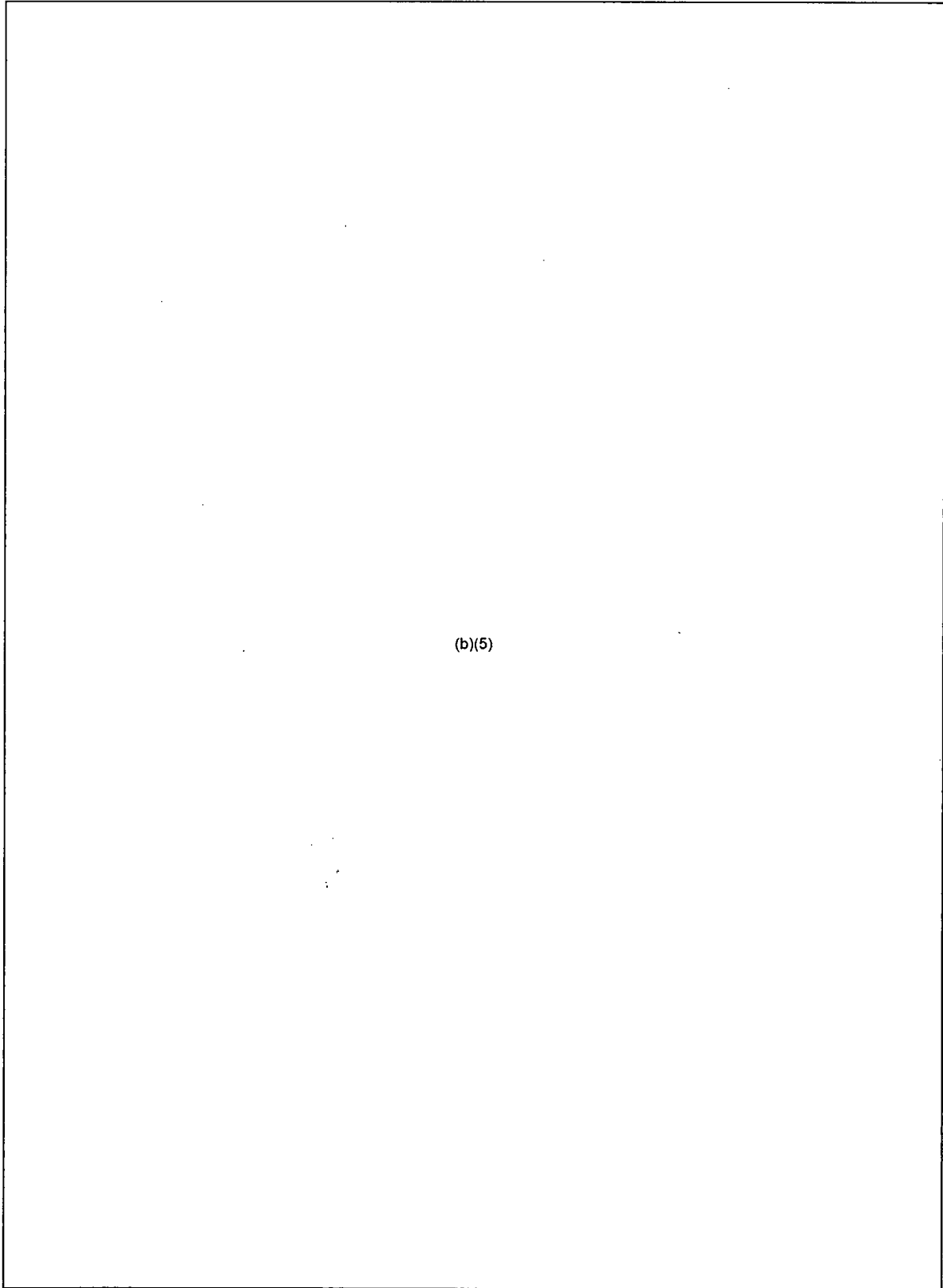
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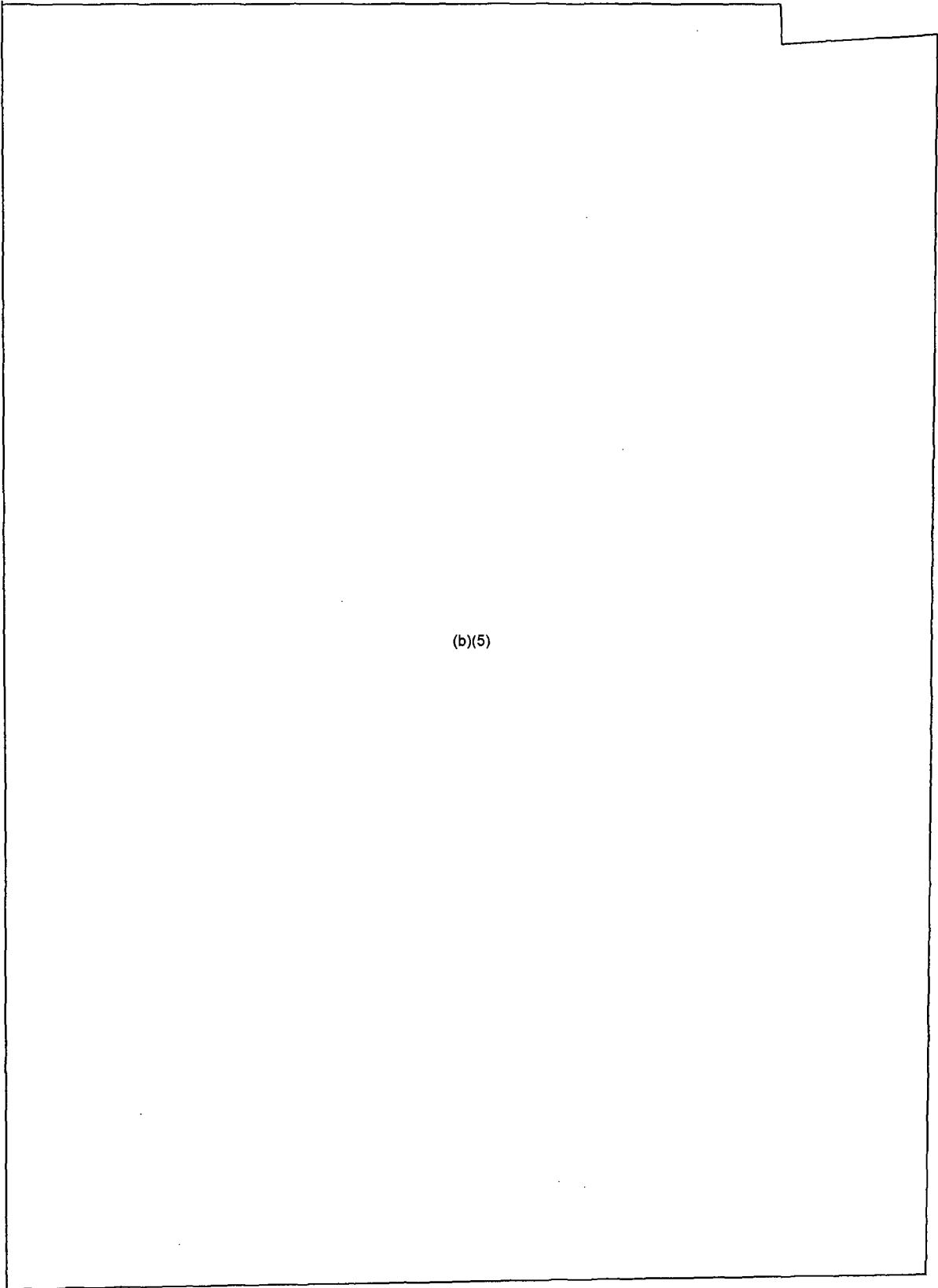
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6.4.5 Combined License Information Items



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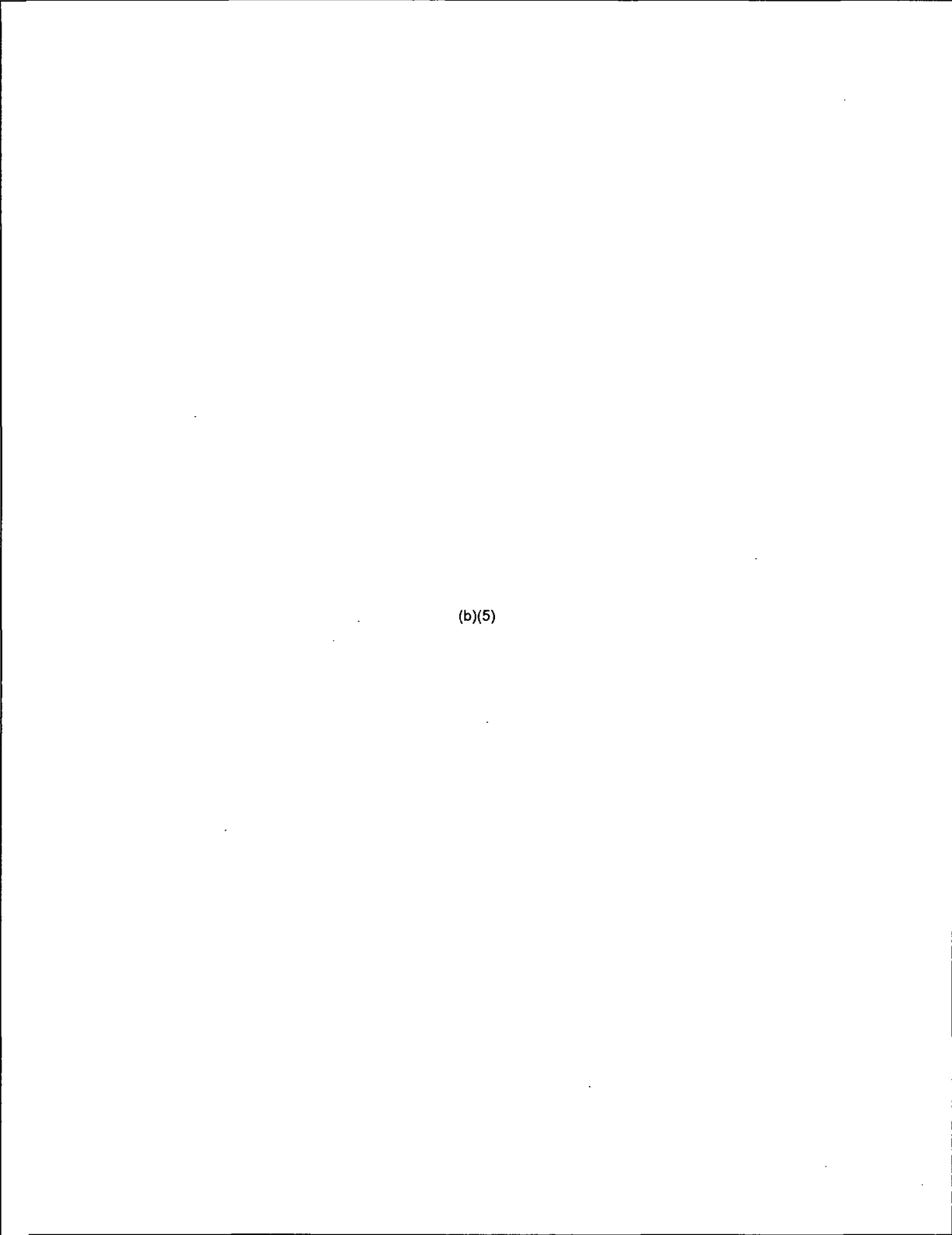
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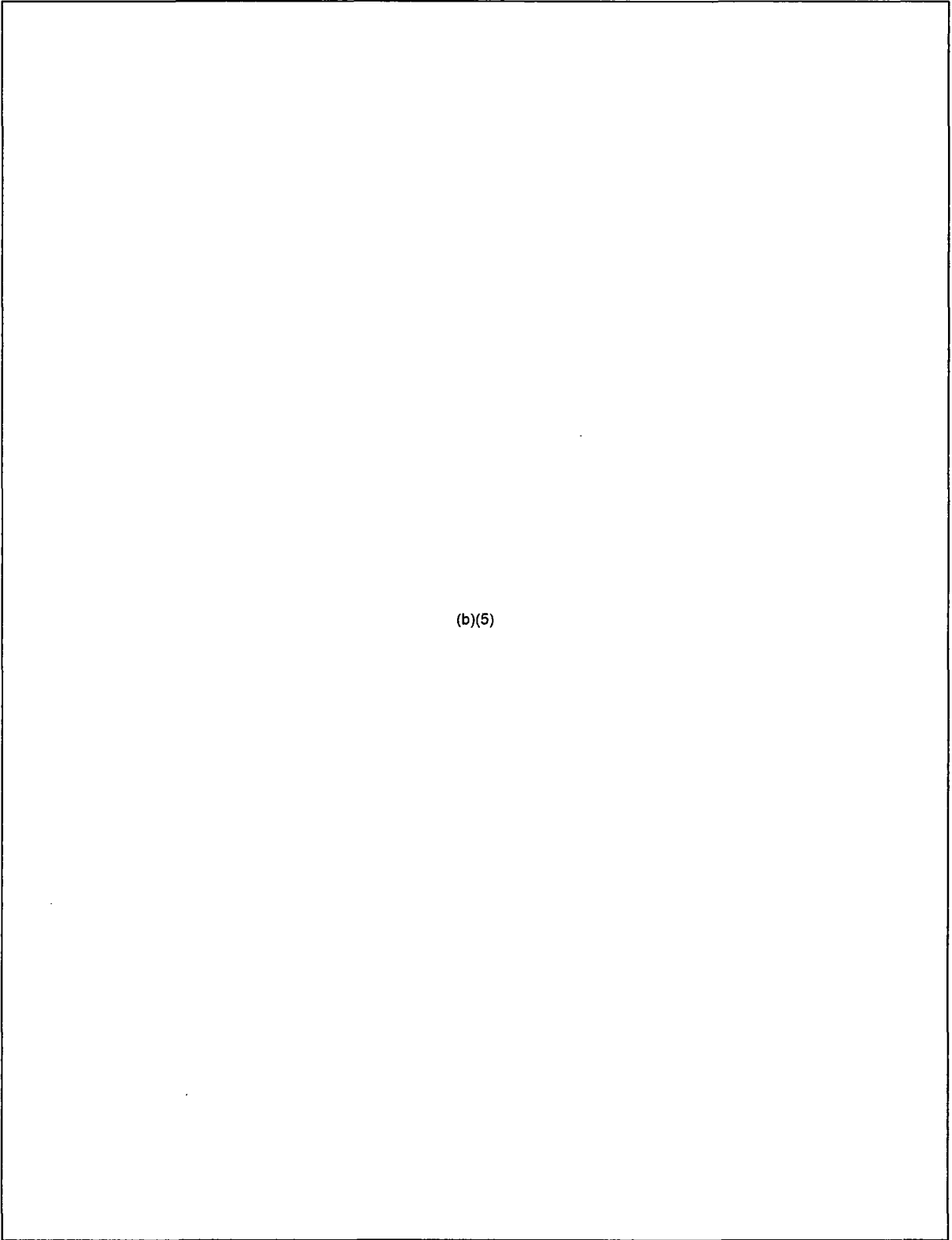
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6.5.3.2 *Summary of Application*



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ODriscoll, James

Hi... [unclear] [unclear] [unclear]

From: King, Mark
Sent: Thursday, March 17, 2011 2:41 PM
Subject: IOEB Clearinghouse Screening Summary for Thursday, March 17, 2011

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
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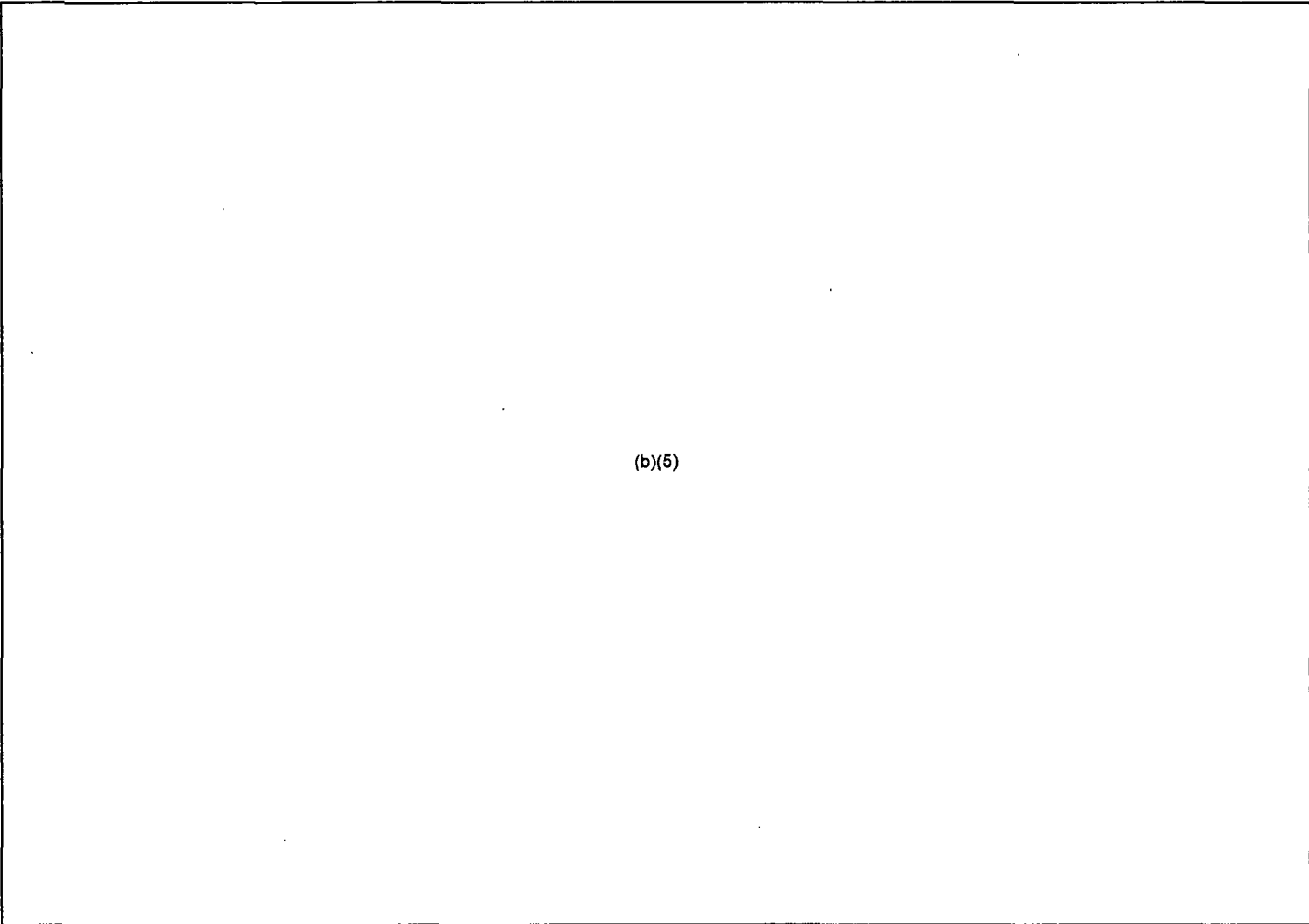
Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: One (1)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]



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New Reactors Items: None

Research (RES) Items: None

Items Screened Out*: One (1) - one (1) Event Notification (EN)

1) EN 46677 - PEACH BOTTOM 2 - HIGH PRESSURE COOLANT INJECTION DECLARED INOPERABLE

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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FROM ORIGINATOR**

Attendees at Screening Meeting:

Jesse Robles
Russ Haskell
Dave Garmon
Mary Wegner (RES) – by phone

Mark King
Jay Pastel - NRO
Ryan Craffey- NRO

ODriscoll, James

From: Carneal, Jason
Sent: Thursday, March 17, 2011 10:35 AM
To: McKirgan, John; Jackson, Christopher
Cc: ODriscoll, James
Subject: RE: Section 6.4 OGC comments
Attachments: RE: Section 6.4 OGC comments; OGC comments EPR Sections 6-4 highlighted.pdf

John:

(b)(5)

Thanks,

Jason

From: McKirgan, John
Sent: Thursday, March 17, 2011 10:24 AM
To: Jackson, Christopher
Cc: Carneal, Jason
Subject: FW: Section 6.4 OGC comments

FYI. Please advise.

From: Schaaf, Robert
Sent: Thursday, March 17, 2011 9:55 AM
To: Carneal, Jason
Cc: Colaccino, Joseph; Hart, Michelle; McKirgan, John
Subject: RE: Section 6.4 OGC comments

Jason,

(b)(5)

Thanks,
Bob

Robert G. Schaaf, Chief
Siting and Accident Consequences Branch
Division of Site and Environmental Reviews
Office of New Reactors
Mail Stop T-7F27
Office: T-7E53
301-415-6020 (o)

(b)(6)

(c)

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 5:06 PM
To: McKirgan, John; Schaaf, Robert
Cc: Colaccino, Joseph
Subject: RE: Section 6.4 OGC comments

John and Bob:

(b)(5)

Thank you for your time and support,

Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813

From: ODriscoll, James
Sent: Wednesday, March 16, 2011 4:41 PM
To: Carneal, Jason; Hart, Michelle; McKirgan, John
Cc: Jackson, Christopher
Subject: RE: Section 6.4 OGC comments

John/Jason,

I will be unavailable from Tomorrow, 3/17 to Monday 3/21. I will be on military duty due to events in Japan. I may be released early, but this is what I have now.

Thanks,
Jim

From: Hart, Michelle
Sent: Wednesday, March 16, 2011 2:57 PM
To: Carneal, Jason
Subject: RE: Section 6.4 OGC comments

Jason,

I am in the ops center Friday 3/18 from 3-11. I am not going to be in the office before then. Tomorrow I have training at the PDC until 4, unless the class ends early. Next week, I am unavailable except Thursday. My calendar should be up to date. If waiting until Thursday is unacceptable, I can come in the morning before my ops center shift on Monday or Wednesday next week. I was planning to take Tues off. I'll take a look at his comments this afternoon.

Michelle

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 2:18 PM
To: ODriscoll, James; Hart, Michelle
Cc: Jackson, Christopher; McKirgan, John
Subject: Section 6.4 OGC comments

Jim and Michelle:

I have attached a copy of the OGC comments on Section 6.4. In the attached file and so we don't duplicate efforts, I have highlighted the editorial comments that projects will take action to fix. If you see any you disagree with, we can change them back on Chapter Day. The non-highlighted comments are the ones for which we will need your input.

I have also attached a clean copy of the SER that should track changes by multiple users and keep the names intact. Please track any changes due to OGC comment in the attached word file.

Will we be able to hold a Chapter Day on Friday, March 18, 2011? I have rooms reserved for tomorrow afternoon (for CIB1 Sections tomorrow afternoon) and Friday, so if we need to do a late Thursday meeting, I can arrange that with Bob Weisman.

Please let me know your availability.

Thanks,

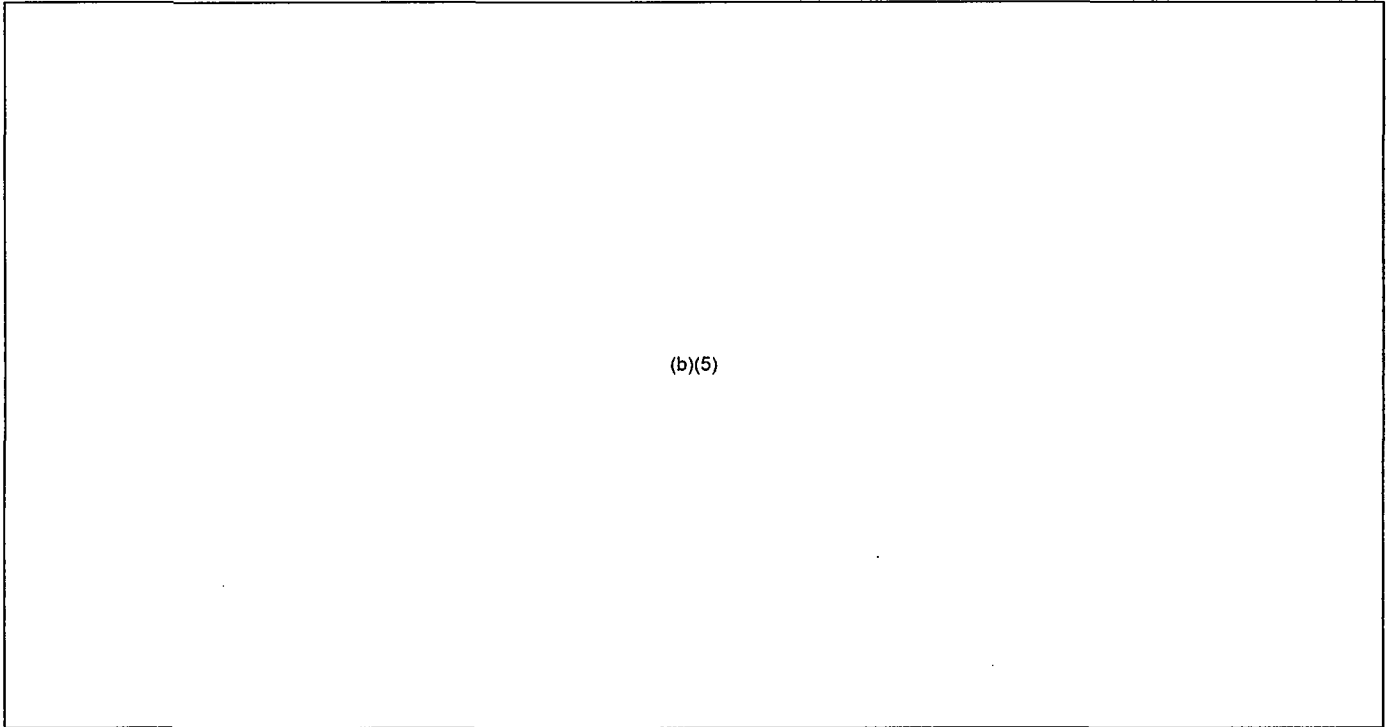
Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813

ODriscoll, James

From: Hart, Michelle
Sent: Wednesday, March 16, 2011 5:32 PM
To: Carneal, Jason
Subject: RE: Section 6.4 OGC comments

Jason,



Michelle

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 3:09 PM
To: Hart, Michelle
Subject: RE: Section 6.4 OGC comments

Michelle:

Thanks for the quick response. I was having trouble gauging which comments were for your review and which were for Jim's, (or if we need to have both RSAC and SPCV support during for the whole meeting on 6.4). If we don't have a lot of comments that affect your portion of the review, maybe we can cover them in a quick meeting Friday afternoon just before your ops center shift.

I had already brought the issue of conflicts with the ops center shifts for Chapter 6 with my branch chief. If the comments don't look easy to get through, it looks like we'll have to schedule something later. Once you have a look at the scope of the comments, please let me know what you think.

Thanks for all the help,

Jason

From: Hart, Michelle
Sent: Wednesday, March 16, 2011 2:58 PM
To: Carneal, Jason
Subject: RE: Section 6.4 OGC comments

And, in addition to my last email, if it is absolutely necessary, I can come in Friday morning before my ops center shift. But that should be a last resort, I think.

Michelle

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 2:18 PM
To: ODriscoll, James; Hart, Michelle
Cc: Jackson, Christopher; McKirgan, John
Subject: Section 6.4 OGC comments

Jim and Michelle:

I have attached a copy of the OGC comments on Section 6.4. In the attached file and so we don't duplicate efforts, I have highlighted the editorial comments that projects will take action to fix. If you see any you disagree with, we can change them back on Chapter Day. The non-highlighted comments are the ones for which we will need your input.

I have also attached a clean copy of the SER that should track changes by multiple users and keep the names intact. Please track any changes due to OGC comment in the attached word file.

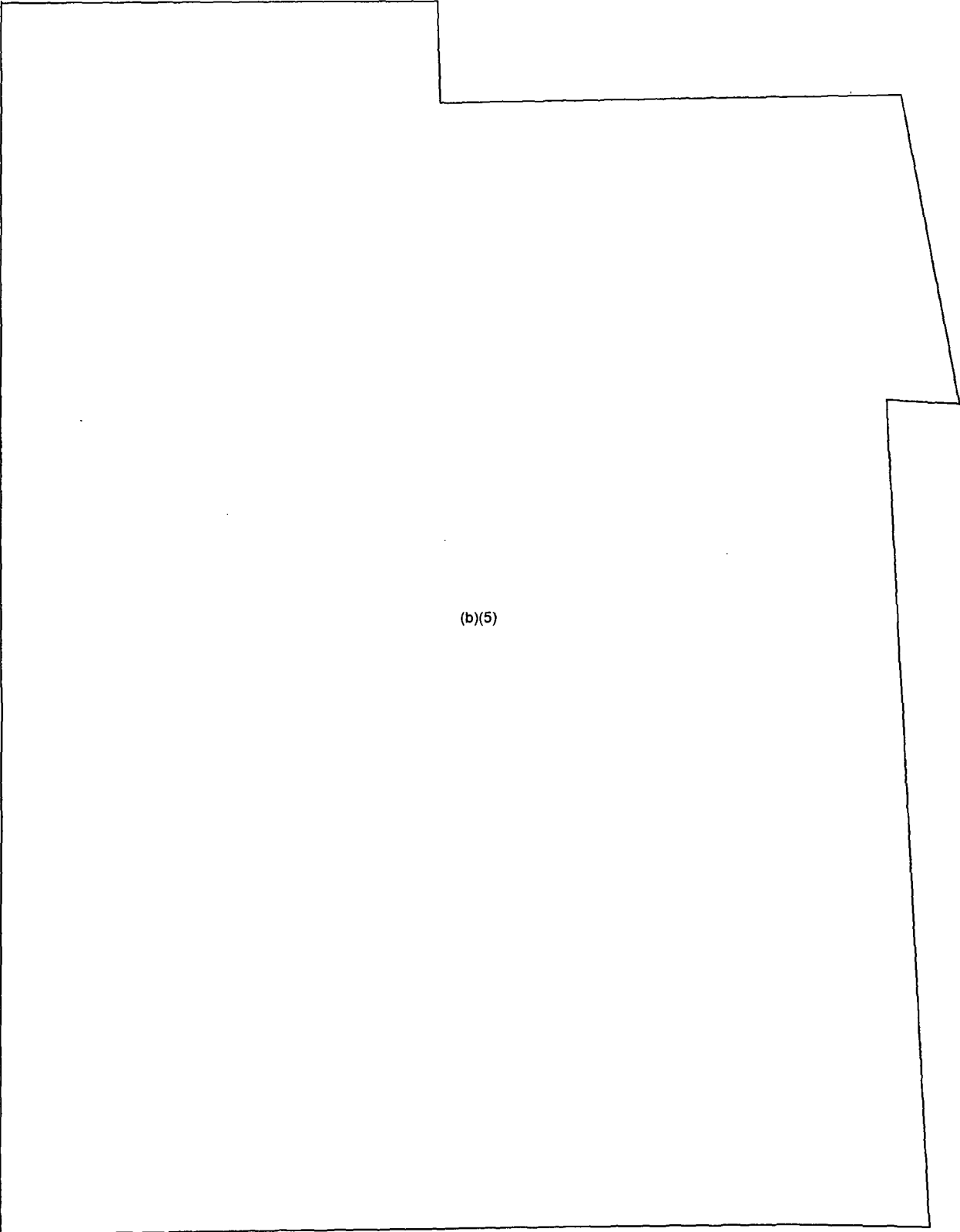
Will we be able to hold a Chapter Day on Friday, March 18, 2011? I have rooms reserved for tomorrow afternoon (for CIB1 Sections tomorrow afternoon) and Friday, so if we need to do a late Thursday meeting, I can arrange that with Bob Weisman.

Please let me know your availability.

Thanks,

Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813



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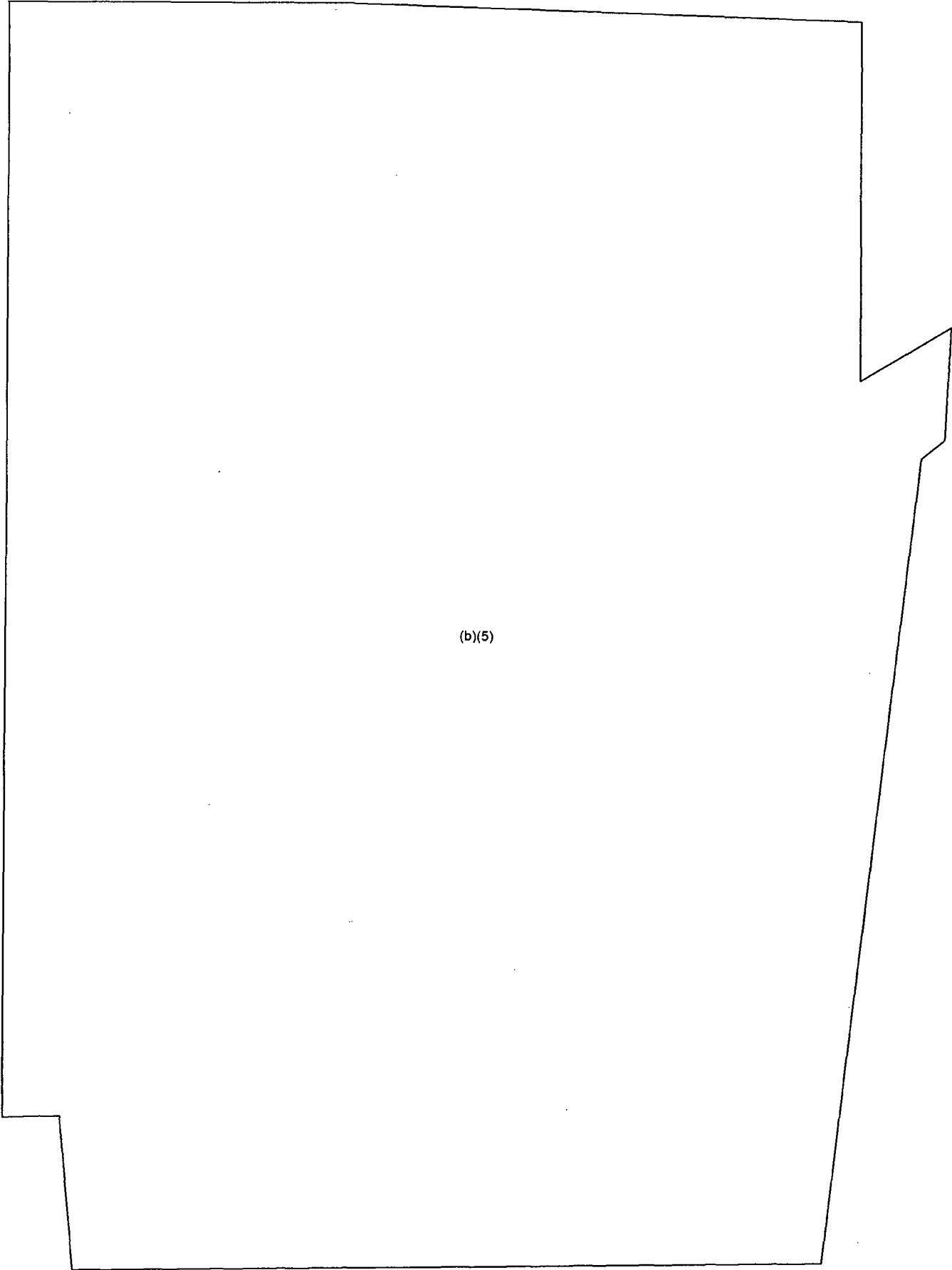
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Security Operations

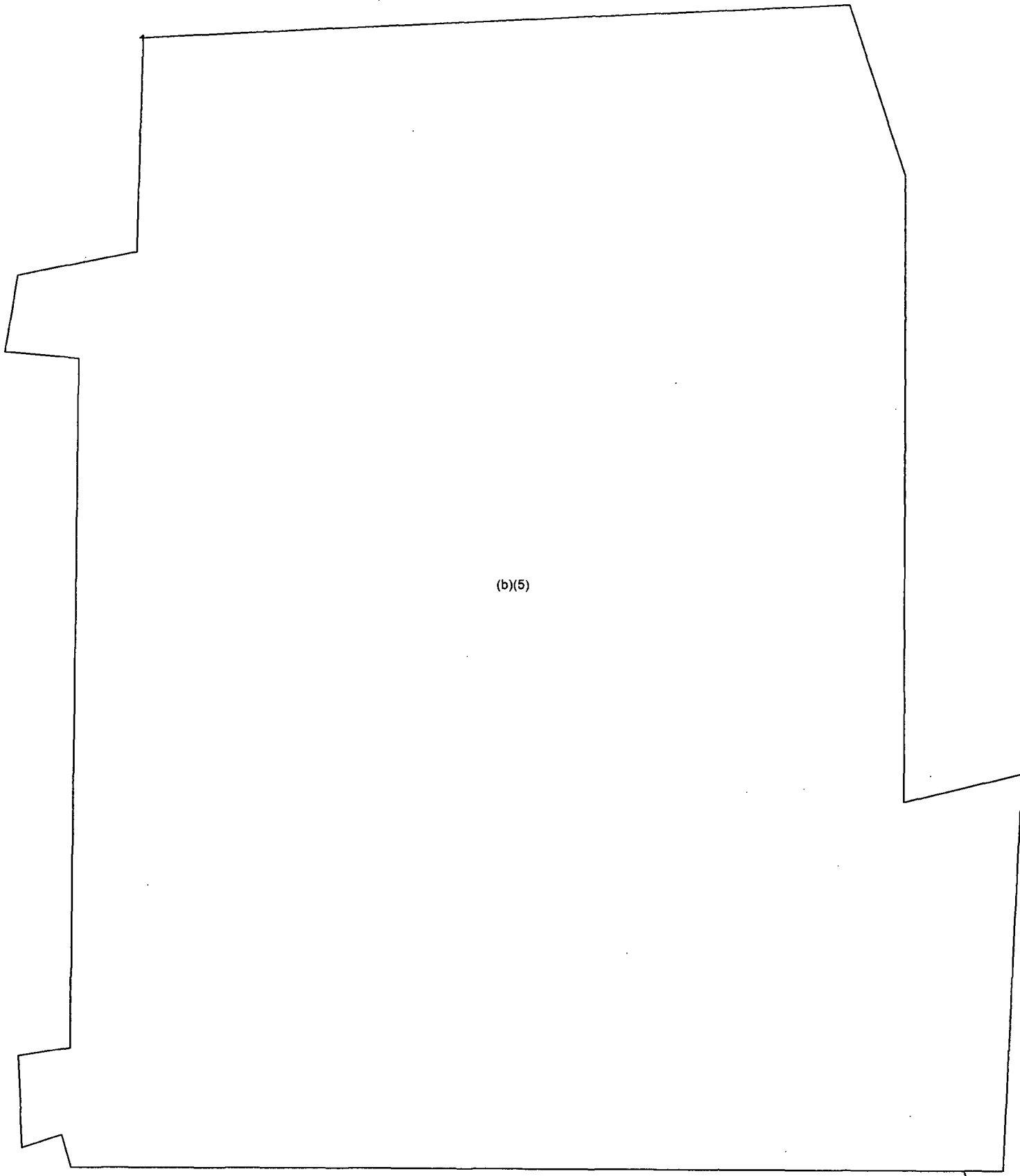
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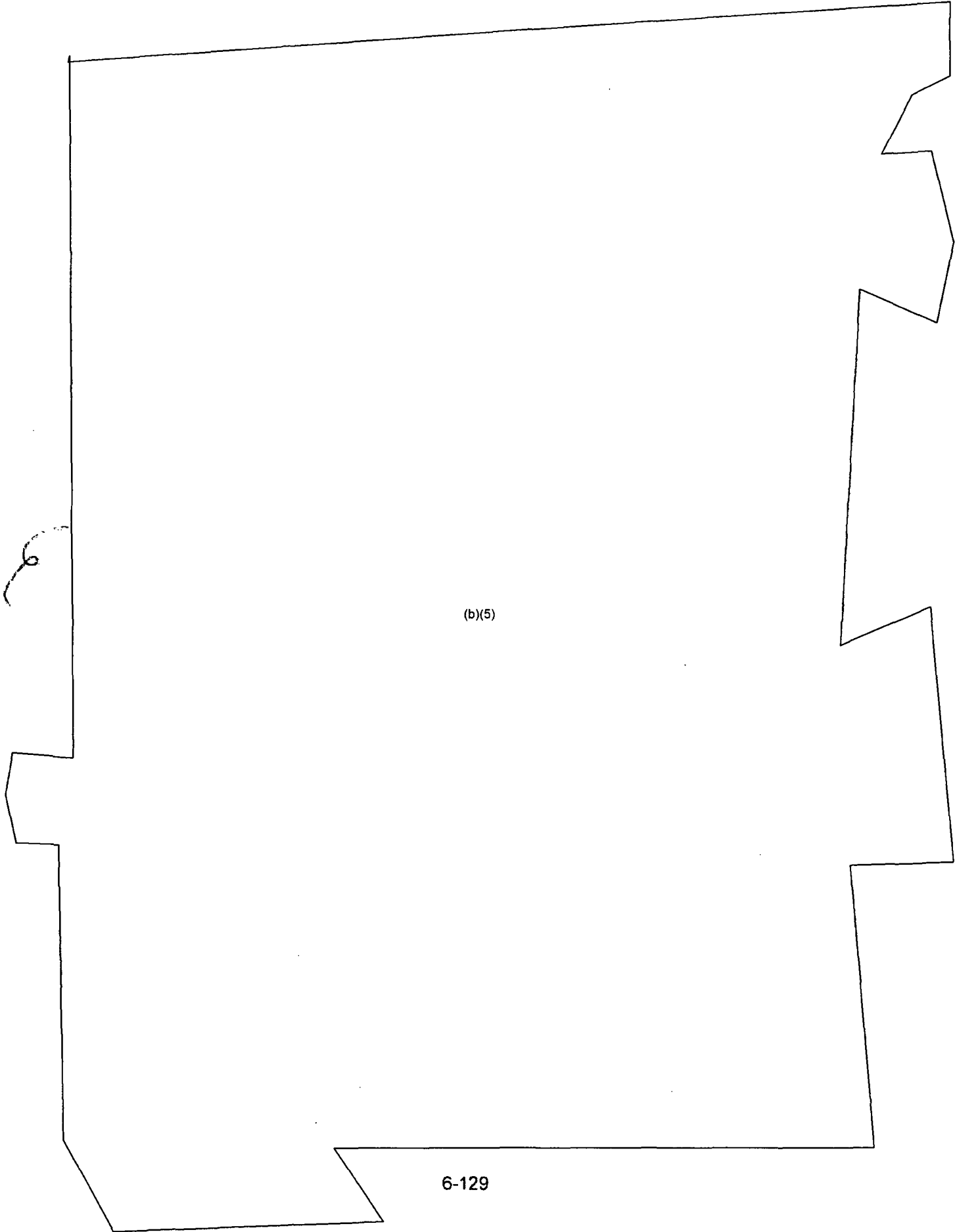
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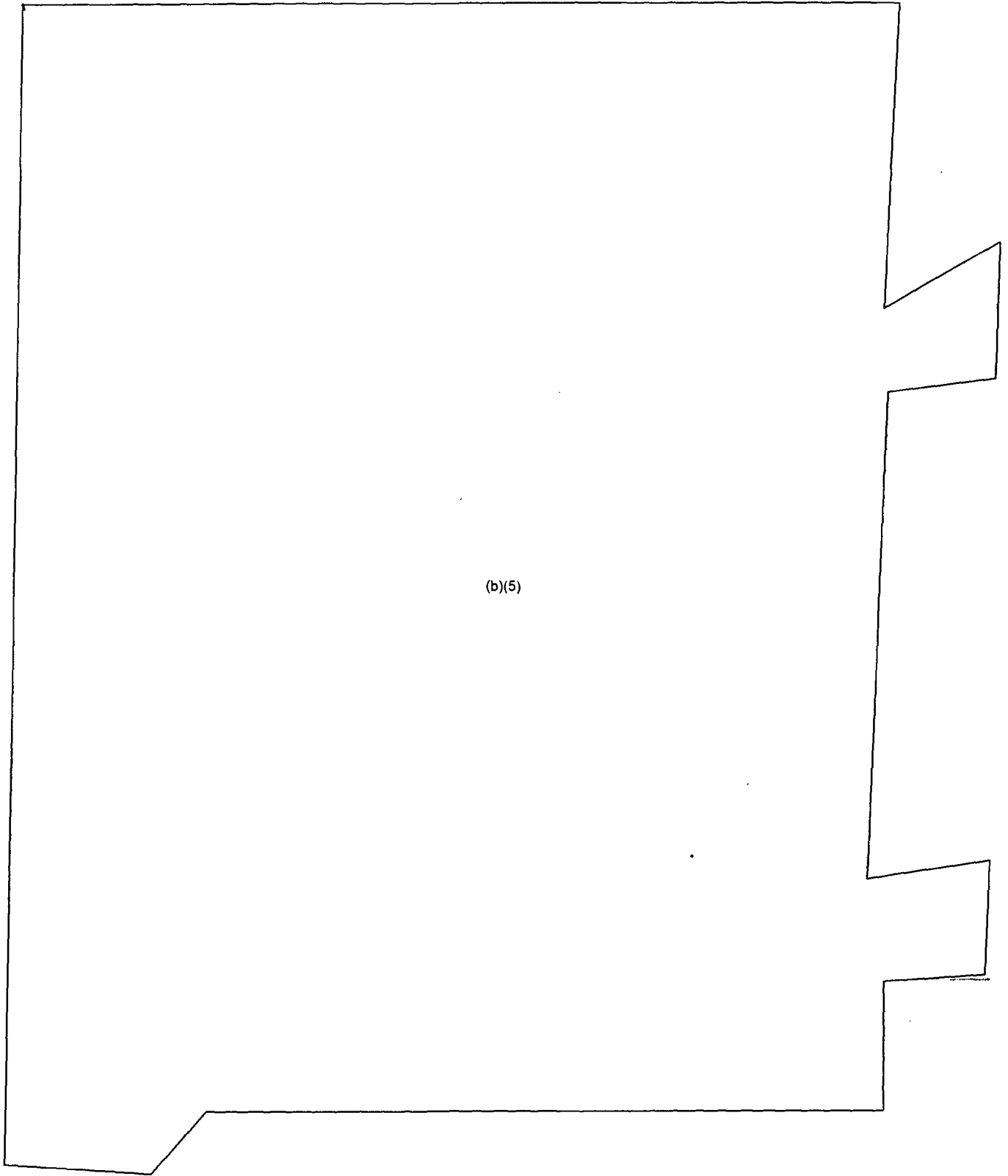


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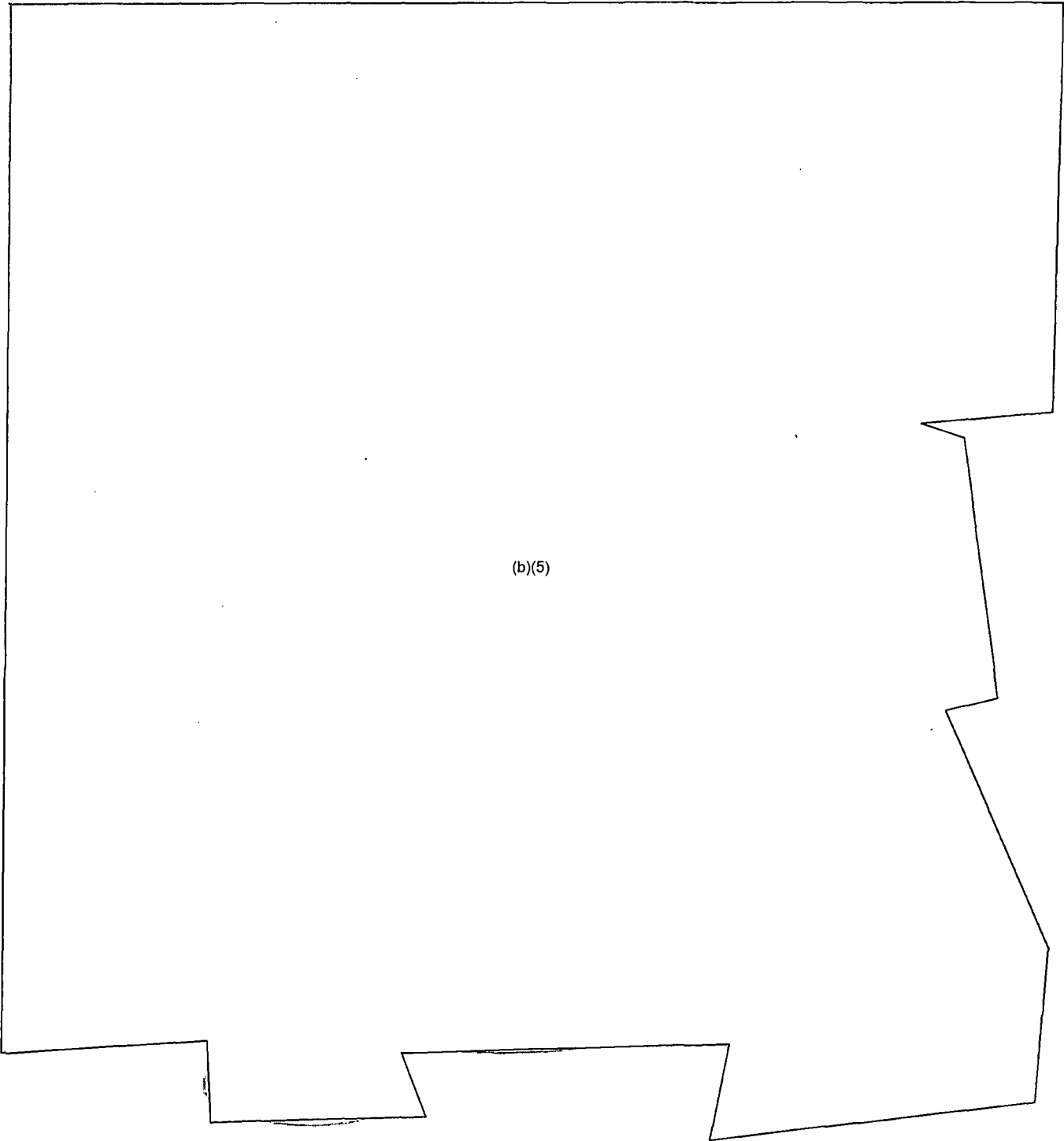
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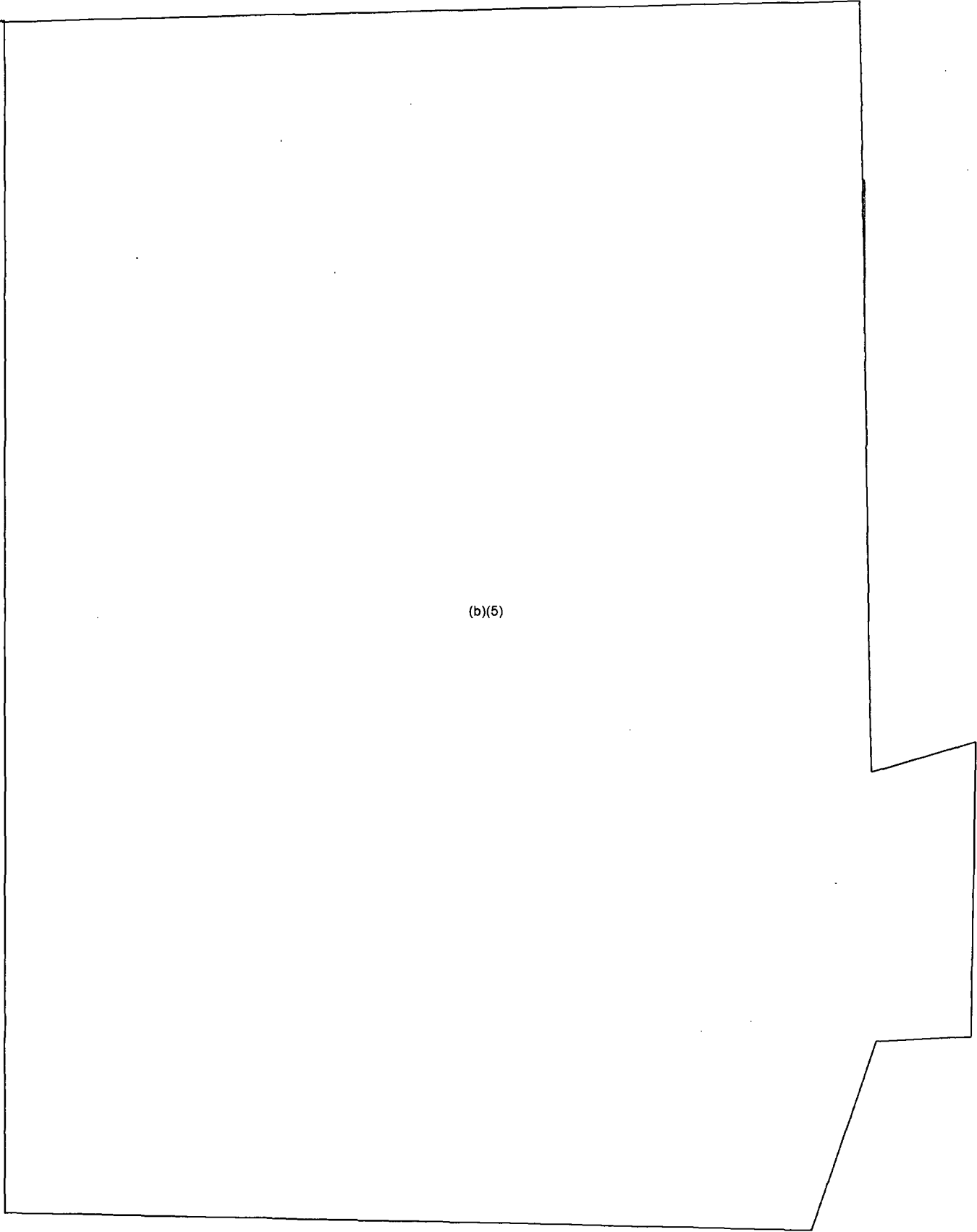


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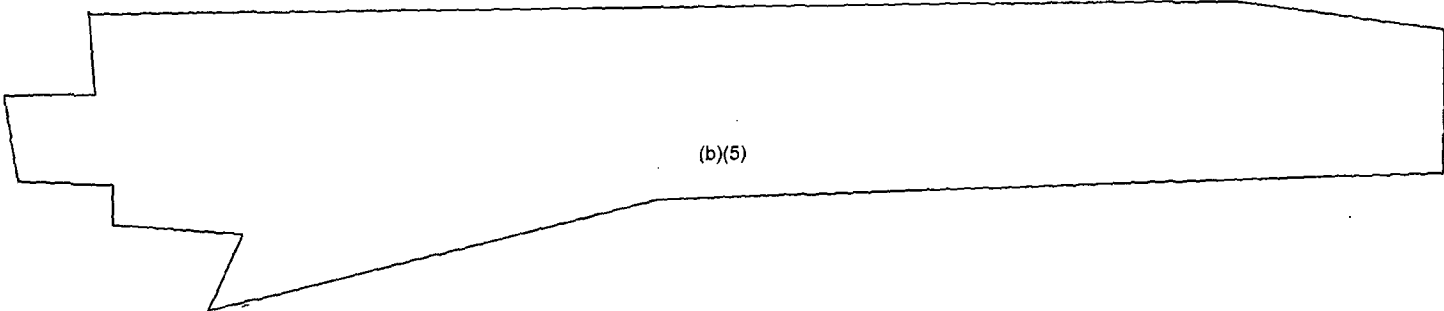
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ODriscoll, James

From: Haskell, Russell
Sent: Friday, March 18, 2011 5:08 PM
Subject: New OpE Forum COMM Posting - DAVIS-BESSE - Radio Frequency Interference from Walkie Talkie Causes Licensee to Declare a Loss of Emergency Feedwater

This e-mail is being sent to notify recipients of a new posting on the [@Operating Experience Community Forum](#). Recipients are expected to review the posting for applicability to their areas of regulatory responsibility and consider appropriate actions. However, information contained in the posting is not tasking; therefore, no specific action or written response is required.

Information Security Reminder: this link is on NRC's Internal Web site and may contain sensitive information. Please check with the information owner before distributing outside the agency.

The posting may be reviewed at:

<http://nrr10.nrc.gov/forum/forumtopic.cfm?selectedForum=03&forumId=SW&topicId=3265&CFID=86342&CFTOKEN=82223744>

It is being provided to the following groups and individuals: ***All Communications, Auxiliary Feedwater, Control Room Habitability, Cyber Security, ECCS, Electrical Power Systems, Emergency Diesel Generators, Fire Protection, Human Performance, HVAC, Instrumentation and Controls, Main Steam & Condensate/Feed Systems, Pump and Valve Performance, Safety Culture, Shutdown Risk, Station Service Water Systems & Ultimate Heat Sink***

To unsubscribe from this distribution list or to subscribe to a different list on the OpE Community, please visit <http://nrr10.nrc.gov/rps/dyn/subscription1.cfm>.

For more information on the Reactor OpE Program, please visit our OpE Gateway at: <http://nrr10.nrc.gov/ope-info-gateway/index.html>

Russell S. Haskell II

United States Nuclear Regulatory Commission (NRC)
Reactor Systems Engineer (NRR/DIRS/IOEB)

Russell.Haskell@nrc.gov | 301.415.1129 | O-7H23

ODriscoll, James

From: King, Mark
Sent: Friday, March 18, 2011 1:56 PM
Subject: IOEB Clearinghouse Screening Summary for Friday, March 18, 2011

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**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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FROM ORIGINATOR

Attendees at Screening Meeting:

Jesse Robles
Russ Haskell
Joe Giantelli
Dave Garmon
Mark King
Rebecca Sigmon
Ryan Craffey- NRO

ODriscoll, James

From: Williams, Wendy [wwilliams@bnl.gov]
Sent: Friday, March 18, 2011 4:30 PM
To: Daly, Jill; Bongarra, James; Braverman, Joseph I; Chakrabarti, Samir; Chapman, Karen; Cheng, Lap-Yan; Contracts POT; Diamond, David J; Diaz-Castillo, Yamil; Fitz, Lynda; Ford, Tanya; Forsaty, Fred; Frejka, Jean M; Fretz, Robert; Gilmer, James; Hayes, Michelle; Hennigan, James; Higgins, James C; Hsii, Yi-Hsiung; Hsu, Kaihwa; Jeng, David; Jo, Jae H; Julian, Maryann; Le, Tuan; Lehner, John R; Li, Yueh-Li; Ludewig, Hans; Ma, John; Morante, Richard J; Ng, Ching; Nguyen, John-Chau; NRO_MLSR Resource; ODriscoll, James; O'Hara, John M; Patel, Pravin; Pieringer, Paul; Rohatgi, Upendra S; Schmidt, Jeffrey; Subudhi, Manomohan; Tjader, Theodore; VanWert, Christopher; Walker, Jacqwan; Willbanks, Charles; Xu, Jim
Subject: NRC Monthly Report for February 2011 - JCN Q-4154
Attachments: Chapman - JCN Q-4154.pdf

Wendy Williams
Brookhaven National Laboratory
Global and Regional Solutions Directorate
Business Operations
Building 179A
Upton, New York 11973
Phone: (631) 344-3924
e-mail: wwilliams@bnl.gov

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March 18, 2011

Mrs. Karen Chapman
Office of New Reactors
Division of New Reactor Licensing
Mail Stop T 9F29
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mrs. Chapman:

Attached is the electronic February monthly letter status report for JCN Q-4154 sponsored by your Division. Also included are the computerized budget summary and the fee recovery cost status sheets for the program. Please review this information and notify the principal investigator if there are any discrepancies.

I hope this meets with your approval. If there are any questions regarding format, distribution, or budget reporting, please contact me at (631) 344-3377.

Sincerely yours,



Theresa Loffredo
Budget Administrator

TL/waw
Enclosures

c: J. Bongarra, NRC
J. Braverman, BNL
S. Chakrabarti, NRC
L-Y. Cheng, BNL
D. Diamond, BNL
Y. Diaz-Castillo, NRC
L. Fitz, BNL
T. Ford, NRC
F. Forsaty, NRC
J. Frejka, BNL
R. Fretz, NRC
J. Gilmer, NRC
M. Hayes, NRC
J. Hennigan, NRC

J. Higgins, BNL
Y. G. Hsii, NRC
K. Hsu, NRC
D. Jeng, NRC
M. Julian, BNL
J. Jo, BNL
T. Le, NRC
J. Lehner, BNL
Y-L. Li, NRC
H. Ludewig, BNL
J. Ma, NRC
R. Morante, BNL
C. Ng, NRC
J. C. Nguyen, NRC

J. O'Driscoll, NRC
J. O'Hara, BNL
P. Patel, NRC
P. Pieringer, NRC
U. Rohatgi, BNL
J. Schmidt, NRC
M. Subudhi, BNL
T.R. Tjader, NRC
M. Todosow, BNL
C. VanWert, NRC
J. Walker, NRC
C. Willbanks, NRC
J. Xu, NRC
ContractsPOT.Resource@nrc.gov
NRO_MLSR@nrc.gov

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 1: Review of Containment and Ventilation (SPCV) Systems for DCD Application – CIA Task Only

(Project Number: 15414)

(Activity Number: 10782)

(Page 1 of 2)

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	James O'Driscoll	(301) 415-1325
BNL Principal Investigator:	John Lehner	(631) 344-3921
Period of Performance:	January 10, 2008 – January 31, 2012	
TAC No.:	RX0115	
Applicant:	Mitsubishi Heavy Industries (MHI)	

Objective

The objective of this task order is to obtain technical expertise from the laboratory to assist the NRC staff in determining adequacy of the DCD application relating to the USAPWR design. The initial task will be to perform an Acceptance Review of the Standard Design Application (DCD) to determine the completeness and technical sufficiency of the application. This includes identifying major deficiencies in the application that might impact the review process or affect the planned resources and schedule. This review will be conducted in accordance with Office Instruction NRO-REG-100, "Acceptance Review Process for Design Certification and Combined License Applications," [ML071980027], Section 3.2.1, Section 3.2.3, and Attachment C. This acceptance review will be documented in the table, columns 1-6, 10 and 11, provided in Attachment 2 to this Task Order Statement of Work (SOW).

Progress During Reporting Period

No work was performed.

Travel

None.

Anticipated and Encountered Problem Areas

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 1: Review of Containment and Ventilation (SPCV) Systems for DCD Application – CIA Task Only

(Project Number: 15414)

(Activity Number: 10782)

(Page 2 of 2)

Plans for the Next Reporting Period

BNL will assist the NRC Technical Monitor with preparation of the final SERs when requested. In addition, BNL will discuss RAI response reviews with the NRC Technical Monitor and update the TER when an agreement is reached on RAI evaluations.

Variance

None.

Financial Status

Project and actual costs are consistent.

Spending Plan Update

The spending plan for the next four months follows:

\$1,000 \$1,000 \$2,000 \$1,000

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 2

Project No. 15414

Activity No. 10793

Page 1 of 2

Task Order No. 2: U.S. APWR Advanced Accumulator: Review of MHI US -APWR Topical Report MUAP-07001-P, "Advanced Accumulator"

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653 (NRO)
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Y. Gene Hsii	(301) 415-2877 (NRO)
BNL Principal Investigator:	U.S.Rohatgi	(631) 344-2475
Period of Performance:	Feb. 25, 2008 to May 28, 2012	
TAC No.:	RX0116	

Objective

The objective of this task order is to obtain technical expertise to assist the NRO staff in determining whether the subject topical report meets appropriate regulatory requirements.

Progress During Reporting Period

Dr. Rohatgi is participating in weekly conference calls with MHI and USNRC to review CFD work being performed to estimate uncertainty in the correlations due to possible scale distortion. There was one set of new information provided by MHI but there was no conference call. This will be reviewed. In addition DR. Rohatgi attended a two day meeting at MHI office in Washington DC with USNRC staff to review the scaling and uncertainties issues for advance accumulator and LBLOCA.

Travel

Dr. Rohatgi traveled to Washington, DC, January 30, 2011 through February 2, 2011 for a meeting on APWR – Advanced Accumulator. All travel expenses are reflected on the Financial Status Report.

Anticipated and Encountered Problem Areas

None

Plans for the Next Reporting Period

PI will continue to be in contact with USNRC to go over the RAIs. BNL will participate in an ACRS meeting when it is arranged.

Variance

None

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 2

Project No. 15414

Activity No. 10793

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Financial Status

Projected and actual costs are consistent.

Spending Plan Update

The spending plan for the next six months follows:

\$4,000 \$6,000 \$5,000 \$5,000 \$1,000 \$5,000

DOE Laboratory Acquired Equipment

Not applicable.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 3

Project No. 15414
Activity No. 10795

Page 1 of 2

Task Order No. 3: Technical Review of Mitsubishi Licensing Topical Report MHI Ref: UAP-HF-07090,"Large Break LOCA Code for U.S," Doc Number MUAP-07011-PRO.

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653 (NRO)
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Fred Forsaty	(301) 415-8523 (NRO)
BNL Principal Investigator:	U.S. Rohatgi	(631) 344-2475
Period of Performance:	March 24, 2008 to June 15, 2011	
TAC No.:	RXX009	

Objective

The objective of this task order is to obtain technical expertise to assist the NRO staff in determining whether the subject topical report meets appropriate regulatory requirements.

Progress During Reporting Period

Dr. Rohatgi reviewed the ASTRUM application for LBLOCA and participated in conference calls and visit to MHI offices. Dr. Rohatgi will continue to review responses and ask USNRC for any new information on LBLOCA methodology from MHI.

Travel

None

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will review the responses to RAIs as and when received..

Variance

None

Financial Status

Projected and actual costs are consistent.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 3

Project No. 15414
Activity No. 10795

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Spending Plan Update

The spending plan for the next six months follows:

\$10,000	\$10,000	\$4,000	\$10,000	\$10,000	\$8,000
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DOE Laboratory Acquired Equipment

Not applicable.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011
(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 5

Project No. 15414
Activity No. 10796

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Task Order No. 5: U.S. APWR Non-LOCA Methodology: Review of MHI U.S.-APWR Topical Report MUAP-07010-P, Non-LOCA Methodology

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653 (NRO)
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Tanya Ford	(301) 415-1194 (NRO)
BNL Principal Investigator:	David Diamond	(631) 344-2604
Period of Performance:	March 17, 2008 to December 31, 2010	
TAC No.:	RX0119	

Objective

The objective of this task order is to obtain technical expertise to assist the NRO staff in determining whether the subject topical report meets appropriate regulatory requirements.

Progress During Reporting Period

No work done.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Any further work will be done upon request from NRC.

Variance

None

Financial Status

Projected and actual costs are consistent.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 5

Project No. 15414

Activity No. 10796

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Spending Plan Update

The spending plan for the next six months is as follows:

\$5,000 \$6,000 \$6,000 \$5,800 \$0 \$0

Subtask	Projected Level of Effort (staff-hours)	Percent Completed
1 Familiarization	20	100
2 Orientation/Kick-off mtg.	20	100
3 RAIs and TER	320	100
4 Review responses	40	95
5 NRC mtg.	80	100
6 Final TER	80	80
7 Tech support	40	0
Project Management	80	75

DOE Laboratory Acquired Equipment

Not applicable.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 6: Evaluation of the Mitsubishi Heavy Industries, Ltd., Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10792

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NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John Chau Nguyen (301-415-1177)
NRC Technical Monitor: Yueh-Li (Renee) C. Li (301-415-2772)
BNL Principal Investigator: M. Subudhi (631-344-2429)
Period of Performance: March 1, 2008 to April 30, 2012
Authorized Budget Ceiling: \$160,000
TAC Number: RX0154
Applicant: Mitsubishi

Objective

The objective of this task order is to obtain technical assistance from Brookhaven National Laboratory (BNL) to assist the staff in determining the technical adequacy of the MHI US-APWR DCD Sections (DCD Section 3.6.2 and related sections of DCD Section 3.6 and Appendices) pertaining to the evaluation of the effects of postulated rupture in high and moderate energy piping.

Subtask	Description	Scheduled Completion Date	Actual Date
Subtask 1	Become familiar with SRP Section 3.6.2 and US-APWR design.	April 11, 2008	April 11, 2008
Subtask 2	Participate in an orientation/kick-off conference call (or meeting, if needed) with the NRC staff to discuss the scope of the work, expectations and task order management.	TBD	Not Required
Subtask 3	Using NRC acceptance criteria documented in the General Design Criteria (GDC), Standard Review Plan (SRP Section 3.6.2,) "Determination of Break Locations and Dynamic Effects Associated with the Postulated Rupture of Piping," including other related sections of DCD Section 3.6, and Appendix and determine the adequacy of the applicant's design criteria, as it relates to structures, systems, and components important to safety being designed to accommodate the dynamic effects of postulated		

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 6: Evaluation of the Mitsubishi Heavy Industries, Ltd., Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414
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Subtask	Description	Scheduled Completion Date	Actual Date
	pipe rupture. This effort includes reviewing the applicant's design criteria for the postulation of pipe rupture/crack locations; break and crack characteristics, analytic methods to define blowdown forcing functions related to pipe whip dynamic response analyses and pipe whip effects on nearby safety-related structures, systems, and components. Identify issues and the need for any additional or clarifying information (request for additional information, RAIs). Participate in conference calls with NRC and ARL as needed to complete this review task. a. Prepare draft questions as input to a formal Request for Additional Information (RAI). b. Prepare a draft Technical Evaluation Report (TER).	May 16, 2008 May 16, 2008	May 16, 2008 May 16, 2008
Subtask 4	Review responses to the RAI questions to determine if they adequately resolve the outstanding issues. Participate in conference calls with NRC and ARL as needed to complete this review task. Prepare a technical letter report. Identify any other open items.	RAI Disposition – Nov. 20, 2008	March 9, 2009 Jan. 7, 2010
Subtask 5	Prepare for and travel to NRC Headquarters and participate in an NRC review team meeting with the applicant to evaluate and discuss the open items identified in Task 4: a. Evaluate and discuss the applicant's responses to the unresolved issues identified in Task 4 to determine if the outstanding	Two weeks after the trip.	

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 6: Evaluation of the Mitsubishi Heavy Industries, Ltd., Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

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Subtask	Description	Scheduled Completion Date	Actual Date
	issues are adequately resolved. b. Prepare a trip report to summarize the information reviewed, results of the meeting discussions.		
Subtask 6	Review the applicant's response to the open items identified as a result of the review team meeting (Task 5). Identify any unresolved issues. Prepare a technical evaluation report (TER). a. Draft report. b. Participate in conference calls with NRC and ARL as needed to attempt in resolving the open items. c. Incorporate NRC comments and prepare a final technical letter report.	Three weeks after receipt of the responses. By mutual agreement. Two week after receipt of NRC comments.	
Subtask 7	As needed and requested by the staff, provide technical support to the staff during related ACRS meetings and hearing proceedings. This effort includes preparing presentation materials and attending meetings, if requested.	TBD	

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 6: Evaluation of the Mitsubishi Heavy Industries, Ltd., Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10792

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Progress during Reporting Period

No work was performed during this period.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will review applicant's responses to the remaining open items and incorporate them as appropriate.

Variance

None.

Financial Status

The authorized budget ceiling for Task Order 6 is \$160,000. The NRC 173 dated February 20, 2008 provided full funding for Task Order 6 in the amount of \$160,000. NRC Form 173 dated October 26, 2010 extended the Period of Performance to February 28, 2011. NRC Form 173 dated January 26, 2011 extended the Period of Performance to April 30, 2012.

Spending Plan Update

The spending plan for the next six months follows:

\$5,000 \$5,000 \$5,000 \$5,000 \$0 \$0

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 6: Evaluation of the Mitsubishi Heavy Industries, Ltd., Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10792

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DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 8: Review of Design Certification Document (DCD) Application Section 3.8
(Design of Category I Structures)
AP1000 DCD Rev. 16 and TR-134 (through Rev. 3)

Project Number: 15414
Activity Number: 10907

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	John Ma	(301) 415-2732
BNL Principal Investigator:	Joseph Braverman	(631) 344-2186
Period of Performance:	May 1, 2008 through April 30, 2011	
TAC Number:	RX0148	
Authorized Budget Ceiling:	\$505,400	

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory to assist the NRC staff in determining whether or not the subject DCD application meets appropriate regulatory requirements relating to the analysis and design of Category I structures: (1) containment vessel shell structure, (2) concrete and steel internal structures of the steel containment vessel, (3) all seismic Category I structures and other safety-related structures, except for the containment structure and foundation mat, and (4) foundation mat.

Specifically, a review of SRP subsections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 is required to ensure that the design meets the applicable requirements of 10 CFR 50.55a, 10 CFR 50, Appendix A, General Design Criteria (GDC) 1, 2, 4, 5, 16, 50, 51, and 53. The review shall focus on the (1) materials, (2) geometry, (3) codes, standards, and specifications, (4) loadings and load combinations, (5) design and analysis procedures, (6) structural acceptance criteria, and (7) testing and in-service surveillance requirements, as appropriate.

Progress During Reporting Period

During this reporting period, BNL continued the review of the markups for Sections 3.8.1 through 3.8.4, Appendixes 3H and 3G of the AP1000 DCD, submitted by Westinghouse. The review was performed to (1) confirm that the DCD reflects all of the proposed revisions to the DCD identified in the RAI responses, (2) verify that the appropriate information from the various TRs has been properly inserted in the DCD, and (3) determine what additional information in the DCD should be identified as Tier 2*.

To document the above review and to incorporate the NRC staff's comments on the review, BNL updated the Assessment Table 1 to identify additional Tier 2* information in the TRs and in Section 3.8 and

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 8: Review of Design Certification Document (DCD) Application Section 3.8
(Design of Category I Structures)
AP1000 DCD Rev. 16 and TR-134 (through Rev. 3)

Project Number: 15414
Activity Number: 10907

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Progress During Reporting Period (cont'd)

Appendix 3H of DCD, and also updated the Assessment Table 2 to identify Tier 1, Tier 2, and Tier 2* information related to RAIs. The updates of the two tables were transmitted to the NRC Technical Monitor in emails dated January 24, February 9, 10 and 12, 2011. BNL also addressed review comments in an email sent to the NRC Technical Monitor on February 12, 2011.

BNL prepared for and participated in several conference calls with the staff to discuss the identification of Tier 2* information in the TRs and in Section 3.8 and Appendix 3H of DCD.

Travel

None

Anticipated and Encountered Problem Areas

None

Plans for the Next Reporting Period

Complete the review of Sections 3.8.1 through 3.8.4, and Appendix 3H of the AP1000 DCD markups to verify that (1) the appropriate information is identified as Tier 2*, (2) the DCD markups reflect all of the proposed revisions identified in the RAI responses, and (3) the appropriate information from the various TRs have been properly inserted in the DCD.

Variance

In response to NRC's request, BNL is preparing a cost estimate to perform additional work on this task order in accordance with Modification 2 to the statement of work.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 8: Review of Design Certification Document (DCD) Application Section 3.8
(Design of Category I Structures)
AP1000 DCD Rev. 16 and TR-134 (through Rev. 3)

Project Number: 15414

Activity Number: 10907

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Financial Status

The authorized cost ceiling for Task Order 8 is \$505,400. NRC Form 173, dated April 14, 2008, provided funding of \$340,000 for work on this project. NRC Form 173, dated July 1, 2008, provided incremental funding of \$22,000 for work on this project. The total obligated funds to date are \$362,000. NRC Form 173, dated April 21, 2009, de-obligated \$200,000. The obligated funding is reduced to \$162,000. NRC Form 173, dated August 21, 2009, provided incremental funding of \$100,000 for work on this project. NRC Form 173, dated April 26, 2010 provided incremental funding of \$50,000 for work on this project. NRC Form 173, dated May 24, 2010 provided incremental funding of \$50,000 for work on this project. NRC Form 173, dated July 4, 2010 provided incremental funding of \$20,000 for work on this project. NRC Form 173, dated August 3, 2010 provided incremental funding of \$25,000 for work on this project. NRC Form 173, dated September 1, 2010 provided incremental funding of \$50,000 for work on this project. NRC Form 173, dated January 5, 2011 provided incremental funding of \$20,000 for work on this project. NRC Form 173, dated January 28, 2011 provided incremental funding of \$28,400 for work on this project. The total obligated funds to date are \$505,400.

Spending Plan Update

The spending plan for the next six months is as follows:

\$20,000	\$20,000	\$8,000	\$5,000	\$0	\$0
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DOE Laboratory Acquired Equipment

None

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 9: Review of Design Certification Document (DCD) Application for Seismic Design of Structures, Components, Equipment, and Systems:
Section 3.7 of AP 1000 DCD Rev. 16 and TR -134 (through Rev. 3)

Project Number: 15414
Activity Number: 10902

Page 1 of 3

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	Ronnie Nguyen	(301) 415-5259
NRC Technical Monitor:	Pravin Patel	(301) 415-1505
BNL Principal Investigator:	Richard Morante	(631) 344-5860
Period of Performance:	April 1, 2008 through December 31, 2011	

TAC Number:	RX0145
Authorized Budget Ceiling:	\$502,600

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory to assist the NRC staff in determining whether or not the subject DCD application meets appropriate regulatory requirements relating to (1) the seismic design parameters and design ground motions, and (2) modeling, computer codes, seismic analyses, and calculation of the seismic loading used in the seismic analyses and design of plant systems, structures and components (SSCs).

Specifically, a review of SRP subsections 3.7.1, 3.7.2, and 3.7.3 is required to insure that the seismic analyses and design meet the applicable requirements of 10 CFR 50, Appendix A, General Design Criterion (GDC) 2, 10 CFR Part 100, Subpart A and Subpart B, 10 CFR Part 20, and 10 CFR Part 50, Appendix S.

Progress During Reporting Period

Evaluated whether new WEC submittals are consistent with the proposed resolutions for all remaining DCD 3.7 and App. 3G technical issues, as agreed during the January 10-14, 2011 meeting.

Prepared comments on these submittals, for action by WEC.

Travel

None.

Anticipated and Encountered Problem Areas

None.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 9: Review of Design Certification Document (DCD) Application for Seismic Design of Structures, Components, Equipment, and Systems:
Section 3.7 of AP 1000 DCD Rev. 16 and TR -134 (through Rev. 3)

Project Number: 15414

Activity Number: 10902

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Plans for the Next Reporting Period

Confirm that subsequent WEC submittals are consistent with the resolutions developed at the January 10-14, 2011 meeting.

Variance

None.

Financial Status

The authorized cost ceiling for Task Order 9 is \$243,600. NRC Form 173, dated March 18, 2008, provided full funding of \$243,600 for work on this project.

NRC Form 173, dated April 21, 2009, de-obligated \$100,000. The authorized cost ceiling remained at \$243,600; the obligated funding was reduced to \$143,600.

NRC Form 173, dated May 19, 2009, re-obligated \$100,000. The authorized cost ceiling remained at \$243,600; the total obligated funding was restored to \$243,600.

NRC Form 173, dated September 9, 2009, accepted BNL's proposal for Mod. 1; increased the cost ceiling to \$389,600; and obligated an additional \$125,000. The total funds obligated to date are \$368,600.

NRC Form 173, dated October 13, 2009, de-obligated \$50,000 for Task Order 9. The total obligated funding was reduced to \$318,600. The cost ceiling remained at \$389,600.

NRC Form 173, dated November 3, 2009, obligated \$50,000 for Task Order 9. The total obligated funding is \$368,600. The cost ceiling remains at \$389,600.

NRC Form 173 dated June 4, 2010 obligated \$21,000 for Task Order 9. The total obligated funding is \$389,600.

NRC Form 173, dated June 18, 2010 increased the authorized cost ceiling to \$502,600, and increased obligated funds by \$100,000 to \$489,600, for Task Order 9.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 9: Review of Design Certification Document (DCD) Application for Seismic Design of Structures,
Components, Equipment, and Systems:
Section 3.7 of AP 1000 DCD Rev. 16 and TR -134 (through Rev. 3)

Project Number: 15414
Activity Number: 10902

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Spending Plan Update

The spending plan for the next six months follows:

\$15,000 \$15,000 \$5,000 \$5,000 \$0 \$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 10

Project No. 15414

Activity No. 10905

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Task Order No. 10: Mitsubishi US-PWR Design Certification: Review of DCD Chapter 15

NRC Technical Assistance Project Manager:	K. Chapman	(301) 415-3653 (NRO)
NRC Project Manager:	J. Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	M. Hayes	(301) 415-8375 (NRO)
BNL Principal Investigator:	D. Diamond	(631) 344-2604
Period of Performance:	May 1, 2008 to December 31, 2011	
TAC No.:	RX0234	

Objective

The objective of this task order is to obtain technical expertise to assist the NRO staff in determining whether the subject topical report meets appropriate regulatory requirements.

Progress During Reporting Period

No work done.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Comments on the TER received from NRC will be addressed.

Variance

See below.

Financial Status

Projected and actual costs are consistent.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154; Task Order 10

Project No. 15414

Activity No. 10905

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Spending Plan Update

The spending plan for the next six months follows:

\$7,000 \$5,000 \$5,000 \$5,000 \$0 \$0

Subtask	Projected Level of Effort (staff-hours)	Percent Completed
1 Familiarization	100	100
2 Orientation/Kick-off mtg.	20	100
3a Develop RAIs	460	100
3b Discuss RAIs	140	100
3c Review responses, draft TER	180	75
3d Discuss open items	180	0
4 Tech support	140	0
5 Finalize TER	140	0
Project Management	120	70

DOE Laboratory Acquired Equipment

Not applicable.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 11: Review of Section 14.2 of the US-APWR Design Certification Application

Project Number: 15414

Activity Number: 10909

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NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	Yamir Diaz-Castillo	(301-415-2228)
BNL Principal Investigator:	J. Higgins	(631-344-2432)
Period of Performance:	3/15/08 – 9/30/11	
TAC Number:	RX0122	
Applicant:	Mitsubishi Heavy Industries: Design Certification	

Objective

The objective of this task order is to obtain technical expertise from PNNL to assist the NRC staff in determining whether or not the US-APWR DC application meets appropriate regulatory requirements. BNL will review the Mitsubishi US-APWR application Section 14.2 to determine the adequacy of the initial test program (ITP) and will determine if the methods and approach proposed by the applicant meet the review guidance.

Progress During Reporting Period

BNL received a question from the NRC TM about the need for an RAI on the ELS system. BNL reviewed this and provided a draft RAI via e-mail on November 7, 2010 to the TM.

On February 11, 2011, BNL received a request from the NRC TM to review RAIs drafted by another technical staff reviewer. BNL provided an answer back to NRC via email on February 28, 2011.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Review any other responses received and update the TER as needed based on requests from the NRC TM.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 11: Review of Section 14.2 of the US-APWR Design Certification Application

Project Number: 15414

Activity Number: 10909

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Variance

None.

Financial Status

NRC sent a Form 173 dated Nov. 17, 2010 that provided \$15K in funds for this TO and which also extended the period of performance until 9/30/11.

Spending Plan Update

The spending plan for the next six months follows:

\$2,000	\$2,000	\$0	\$0	\$1,000	\$2,000
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DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 12: AP1000 Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414
Activity Number: 10912

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	Jacqwan Walker	(301-415-4035)
BNL Principal Investigator:	J. O'Hara	(631-344-3638)
Period of Performance:	5/20/08 to 9/30/11	
TAC No.:	RX0215	

Objective

The objective of this Task Order is to obtain expert technical assistance from BNL to assist NRC staff in the review and evaluation of the AP1000 Design Control Document (DCD), and subsequent revisions, any additional AP1000 Standard Combined License Technical Reports received (up to a total of fifteen and any subsequent revisions), and any associated AP1000 WCAP reports. The review will be guided by SRP Chapter 18, NUREG-0711 and related guidance documents. BNL will provide assistance in developing letter reports that request additional or clarifying information (RAI) and in providing technical input to the draft and final Safety Evaluation Reports (SERs). BNL will also provide technical hearing support to the staff during ACRS meetings and ASLB proceedings, as needed by the staff.

Progress During Reporting Period

No work was done in February, 2011.

Travel

None.

Anticipated and Encountered Problem Areas

None. This task order was extended to 9/30/11.

Plans for the Next Reporting Period

Participate with telecon as needed between NRC, WEC and BNL to resolve any issues identified in the current review.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 12: AP1000 Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414

Activity Number: 10912

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Variance

None.

Financial Status

NRC deobligated \$15K on 8/3/10.

Spending Plan Update

The spending plan for the next six months follows:

\$0	\$1,000	\$1,000	\$0	\$5,000	\$5,000
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DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 13: Review of EPR Rod Ejection Accident Methodology
as Presented in Topical Report ANP-10286P

(Project Number: 15414)

(Activity Number: 10910)

(Page 1 of 2)

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Chris Van Wert	(301) 415-4035
BNL Principal Investigator:	Hans Ludewig	(631) 344-2624
Period of Performance:	May 20, 2008 – April 30, 2011	
TAC number:	RX0304	

Objective

The objective of this task order is to obtain technical expertise from BNL to assist the NRC staff in determining whether or not the subject topical report application meets appropriate regulatory requirements.

Progress During Reporting Period

The SER was reviewed. The review of the submittal regarding the new and spent fuel storage facility continued.

Travel

The travel expenses shown on the attached financial status sheet reflect the cost of a BNL staff member who traveled to NRC Headquarters on February 7-8, 2011.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

The review of the submittal regarding the new and spent fuel storage facility will continue.

Variance

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 13: Review of EPR Rod Ejection Accident Methodology
as Presented in Topical Report ANP-10286P

(Project Number: 15414)

(Activity Number: 10910)

(Page 2 of 2)

Financial Status

Project and actual costs are consistent.

Spending Plan Update

The spending plan for the next two months follows:

\$1,500 \$1,500

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 14: ESBWR Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414

Activity Number: 10913

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NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitors:	Jacqwan Walker	(301-415-4035)
	James Bongarra	(301-415-1046)
	Paul Pieringer	(301-415-4664)
BNL Principal Investigator:	J. O'Hara	(631-344-3638)
Period of Performance:	5/20/08 to 3/29/11	
TAC No.:	RX0214	
Applicant:	General Electric Hitachi (GEH)	

Objective

The objective of this Task Order is to obtain expert technical assistance from BNL to assist NRC staff in the review and evaluation of Revision 5, three earlier revisions of the GEH ESBWR Design Control Document (DCD) and various other related GEH documents. The review will be guided by SRP Chapter 18, NUREG-0711 and related guidance documents. BNL will provide assistance in developing letter reports that request additional or clarifying information (RAI) and in providing technical input to the draft and final Safety Evaluation Reports (SERs). BNL will also provide technical hearing support to the staff during ACRS meetings and ASLB proceeding as needed by the staff.

Progress During Reporting Period

No work was performed in February, 2011.

Travel

None.

Anticipated and Encountered Problem Areas

None

Plans for the Next Reporting Period

None. Work is complete and Task Order will expire 3/29/2011.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 14: ESBWR Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414

Activity Number: 10913

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Variance

None.

Financial Status

Funds are adequate.

Spending Plan Update

The spending plan for the next month follows:

\$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 15: EPR Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414

Activity Number: 10914

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	Jacqwan Walker	(301-415-4035)
BNL Principal Investigator:	J. O'Hara	(631-344-3638)
Period of Performance:	5/20/08 to 6/30/11	
TAC No.:	RX0080	

Objective

The objective of this Task Order is to obtain expert technical assistance from BNL to assist NRC staff in the review and evaluation of the AREVA EPR Design Control Document (DCD) and the AREVA ANP-10279, "US EPR Human Factors Engineering Program Topical Report." The review will be guided by SRP Chapter 18, NUREG-0711, and related guidance documents. BNL will provide assistance in developing letter reports that request additional or clarifying information (RAI) preparing draft technical evaluation reports (TERs), which will serve as input to the draft and final Safety Evaluation Reports (SERs). BNL will also provide technical hearing support to the staff during ACRS meetings and ASLB proceeding as needed by the staff. Note: This work is a continuation of work that was performed under JCN Q-4060, Task Order 3, which is now closed.

Progress During Reporting Period

BNL reviewed AREVA's responses to RAI related to staffing and qualifications (S&Q). The S&Q SER and RAI table were updated and revised accordingly and sent to NRC on December 30, 2010. There are no more open RAIs, just confirmatory in the S&Q area.

BNL reviewed AREVA's responses to RAI related to human reliability analysis (HRA). NRC also supplied BNL with Rev. 4 to the HRA Implementation Plan. BNL reviewed this as well and its impact on the RAIs and the SER. The HRA RAI table was updated and sent to NRC on January 13, 2011. The HRA SER was revised and sent to NRC on January 17, 2011.

BNL began the review of the revised EPR Task Analysis Implementation Plan. The changes to the plan reflect discussion held during an NRC audit of new RAIs on an earlier version of the plan.

During the February period, BNL responded to a question from the staff on the HRA and procedure elements. On January 26, 2011 and 28, 2011, BNL submitted revisions of the Task Analysis section of the SER.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 15: EPR Design Certification Amendment – Technical Assistance in Support of Advanced Reactor Human Factors Review

Project Number: 15414

Activity Number: 10914

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Travel

None.

Anticipated and Encountered Problem Areas

This Task Order was extended to June 30, 2011.

Plans for the Next Reporting Period

We will support phone calls with AREVA as needed.

Variance

None.

Financial Status

On February 25, 2011, BNL received an additional \$15.6K funding for this task.

Spending Plan Update

The spending plan for the next six months follows:

\$10,000 \$10,000 \$10,000 \$10,000 \$9,000 \$7,000

DOE Laboratory Acquired Equipment

None.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 16: Evaluation of the EPR Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10906

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NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John-Chau Nguyen (301-415-1177)
NRC Technical Monitor: Yueh-Li (Renee) C. Li (301-415-2772)
BNL Principal Investigator: M. Subudhi (631-344-2429)
Period of Performance: April 14, 2008 through April 30, 2012
Authorized Budget Ceiling: \$160,600
TAC Number: RX0086
Licensee: AREVA

Objective

The objective of this task order is to obtain technical assistance from Brookhaven National Laboratory (BNL) to assist the staff in determining the technical adequacy of the AREVA US-EPR DCD Sections (DCD Section 3.6.2 including other related sections of DCD Section 3.6 and Appendices) related to the evaluation of the effects of postulated rupture in high and moderate energy piping.

Subtask	Description	Scheduled Completion Date	Actual Date
Subtask 1	Become familiar with SRP Section 3.6.2 and USAPWR design.	May 9, 2008	May 9, 2008
Subtask 2	Participate in an orientation/kick-off conference call (or meeting, if needed) with the NRC staff to discuss the scope of the work, expectations and task order management.	TBD	Not Required
Subtask 3	Using NRC acceptance criteria documented in the General Design Criteria (GDC), Standard Review Plan (SRP Section 3.6.2), "Determination of Break Locations and Dynamic Effects Associated with the Postulated Rupture of Piping," including other related sections of DCD Section 3.6, and Appendix and determine the adequacy of the applicant's design criteria, as it relates to structures, systems, and components important to safety being designed to accommodate the dynamic effects of postulated pipe rupture. This effort includes reviewing the		

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 16: Evaluation of the EPR Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10906

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Subtask	Description	Scheduled Completion Date	Actual Date
	applicant's design criteria for the postulation of pipe rupture/crack locations; break and crack characteristics, analytic methods to define blowdown forcing functions related to pipe whip dynamic response analyses and pipe whip effects on nearby safety-related structures, systems, and components. Identify issues and the need for any additional or clarifying information (request for additional information, RAIs). Participate in conference calls with NRC and ARL as needed to complete this review task. a. Prepare draft questions as input to a formal Request for Additional Information (RAI). b. Prepare a draft Technical Evaluation Report (TER).	June 20, 2008 June 20, 2008	June 20, 2008 Sept. 17, 2008 June 20, 2008
Subtask 4	Review responses to the RAI questions to determine if they adequately resolve the outstanding issues. Participate in conference calls with NRC and ARL as needed to complete this review task. Prepare a technical letter report. Identify any other open items.	RAI response disposition – December 19, 2008 Draft TER – February 10, 2009	February 10, 2009 Revised March 11, 2009 Revised October 15, 2009
Subtask 5	Prepare for and travel to NRC Headquarters and participate in an NRC review team meeting with the applicant to evaluate and discuss the open items	Two weeks after the trip.	

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 16: Evaluation of the EPR Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10906

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Subtask	Description	Scheduled Completion Date	Actual Date
	identified in Task 4: a. Evaluate and discuss the applicant's responses to the unresolved issues identified in Task 4 to determine if the outstanding issues are adequately resolved. b. Prepare a trip report to summarize the information reviewed, results of the meeting discussions.		
Subtask 6	Review the applicant's response to the open items identified as a result of the review team meeting (Task 5). Identify any unresolved issues. Prepare a technical evaluation report (TER). a. Draft report. b. Participate in conference calls with NRC and ARL as needed to attempt in resolving the open items. c. Incorporate NRC comments and prepare a final technical letter report.	Three weeks after receipt of the responses. By mutual agreement. Two week after receipt of NRC comments.	
Subtask 7	As needed and requested by the staff, provide technical support to the staff during related ACRS meetings and hearing proceedings. This effort includes preparing presentation materials and attending meetings, if requested.	TBD	

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 16: Evaluation of the EPR Design Certification Application
Section 3.6.2 Regarding the Determination of Break/Crack Locations and the Evaluation of the Effects of
Postulate Rupture in High/Moderate Energy Pipes

Project Number: 15414

Activity Number: 10906

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Progress during Reporting Period

BNL reviewed the applicant's response to RAI 03.06.02-40 and found it acceptable.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will finalize the TER reflecting all RAI responses by the applicant.

Variance

None.

Financial Status

The authorized budget ceiling for Task Order 16 is \$160,600. The NRC 173 dated April 8, 2008 provided full funding for Task Order 16 in the amount of \$160,600. However, Form 173, dated April 21, 2009 de-obligated FY 2008 funding of 40K. Then, on May 22, 2009, \$25K of FY09 funds was provided for this TO. NRC Form 173 dated August 21, 2009 obligated another \$10K of FY09 funds for this TO. Form 173 dated 6/29/10 de-obligated \$10.4K. Thus, total funds obligated to this TO is \$145.2K.

Spending Plan Update

The spending plan for the next six months follows:

\$5,000 \$5,000 \$5,000 \$5,000 \$0 \$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 17: Review of APWR DCD Section 3.12 Pertaining to Piping Design

Project Number: 15414

Activity Number: 10925

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NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John-Chau Nguyen (301-415-1177)
NRC Technical Monitor: Kaihwa (Robert) Hsu (301-415-4088)
BNL Principal Investigator: M. Subudhi (631-344-2429)
Period of Performance: 7/23/08 to 3/31/2011
TAC Number: RX0156
Authorized Budget Ceiling: \$228,900
Licensee: Mitsubishi Heavy Industries

Objective

The objective of this task order is to obtain technical expertise from the laboratory to assist the NRC staff in determining whether or not the subject DC application meets appropriate regulatory requirements. Specifically, technical assistance is required to review of US APWR DCD Section 3.12 pertaining to piping design.

Tasks/Standards	Scheduled Completion	Actual Date/ Work Products
1. REQUIREMENT: Become familiar with SRP Section 3.12. In addition, become familiar with Sections of DCD Section 3.12 and related sections and Appendices or Topical Reports. STANDARD: Written confirmation that familiarization is complete	August 8, 2008	August 8, 2008
2. REQUIREMENT: Using NRC acceptance criteria documented in the General Design Criteria (GDC), Standard Review Plan (SRP Section 3.12) as guidelines, review APWR Section 3.12, "ASME Code Class 1, 2 and 3 Piping Systems, Piping Components, and their Associated Supports" including other related sections of DCD Section 3.7.3 "Seismic Subsystem Analysis" and 3.9 "Mechanical Systems and Components" and determine the adequacy of the		

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 17: Review of APWR DCD Section 3.12 Pertaining to Piping Design

Project Number: 15414

Activity Number: 10925

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Tasks/Standards	Scheduled Completion	Actual Date/ Work Products
<p>applicant's piping analysis methods and design criteria. Identify issues and the need for any additional or clarifying information (Requests for Additional Information (RAIs)). Participate in conference calls with NRC as needed to complete this review task.</p> <p>a. Prepare draft questions as input to a formal request for additional information (RAI).</p> <p>b. Prepare a draft Technical Evaluation Report (TER).</p> <p>STANDARD: Completed Technical Evaluation Report that follows the NRC provided template without deviation. No deviation from the guidance defined in Section III, RAI Guidance of Attachment 1. One round of comment incorporation is acceptable.</p>	<p>Sept. 12, 2008</p> <p>Sept. 12, 2008</p>	<p>Sept. 11, 2008</p> <p>Sept. 11, 2008</p> <p>REVISED October 10, 2008</p>
<p>3. REQUIREMENT: Review responses to the RAI questions to determine if they adequately resolve the outstanding issues. Participate in conference calls with NRC and the applicant as needed to complete this review task. Prepare a technical letter report. Identify any other open items.</p> <p>STANDARD: Completed Technical Evaluation Report that follows the NRC provided template without deviation. No deviation from the guidance defined in Section III, RAI Guidance of Attachment 1. One round of comment incorporation is acceptable.</p>	<p>April 23, 2009</p> <p>Nov. 23, 2009</p>	<p>May 15, 2009</p>
<p>4. REQUIREMENT: (If Piping DAC is addressed) Prepare for and travel to applicants office to participate in an NRC review team audit to:</p> <ul style="list-style-type: none">Audit the piping and pipe support design procedures, design specifications and the	<p>Two weeks after the trip.</p>	<p>Trip Report</p>

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 17: Review of APWR DCD Section 3.12 Pertaining to Piping Design

Project Number: 15414

Activity Number: 10925

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Tasks/Standards	Scheduled Completion	Actual Date/ Work Products
<p>completed piping and pipe support analyses and design calculations.</p> <ul style="list-style-type: none">• Evaluate and discuss response's to the open items identified in Task 2 to determine if the open items are adequately resolved.• Review a sample of the piping design (or if the piping design is completed to the point that ASME design reports are available, select a sample of the completed design). Verify the design was completed in accordance with the procedures, design specifications and analysis.• If necessary, review an existing piping analysis model and identify the input information necessary to perform a confirmatory analysis. <p>STANDARD: Complete evaluation as defined in task. Submit Trip Report within two weeks of site review.</p>		
5. Deleted in Rev. 1 Of Task Order		
6. REQUIREMENT: (as needed) Prepare to participate in an NRC review team meeting with the applicant to evaluate and discuss the open items identified in Tasks 4 and 5 and (as needed) perform additional audits to piping design stress packages. a. Evaluate and discuss the applicant's responses to the unresolved issues identified in Tasks 4 and 5 as applicable to determine if the outstanding issues are adequately resolved. b. (As needed) Resolve issues during additional Audits.	Two weeks after receipt of responses	Safety Evaluation Report Input with open items

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011
 (Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 17: Review of APWR DCD Section 3.12 Pertaining to Piping Design

Project Number: 15414
 Activity Number: 10925

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Tasks/Standards	Scheduled Completion	Actual Date/ Work Products
c. Prepare a trip report (as an input to NRC Audit Report) to summarize the information reviewed, results of the meeting discussions. STANDARD: Complete Technical Evaluation Report that follows the NRC provided template without deviation.		
7. REQUIREMENT: Review the applicant's response to the open items identified as a result of the review team meeting (Task 6). Identify any unresolved issues. Prepare a TER. a. Draft report. b. Participate in conference calls with NRC and BNL as needed to attempt in resolving the open items. c. Incorporate NRC comments and prepare a final technical letter report. STANDARD: Complete Technical Evaluation Report that follows NRC provided template without deviation.	Three weeks after receipt of the responses for respective tasks. By mutual agreement. Two week after receipt of NRC comments for respective tasks.	Technical Evaluation Report

Progress during Reporting Period

No work was performed during this period.

Travel

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 17: Review of APWR DCD Section 3.12 Pertaining to Piping Design

Project Number: 15414

Activity Number: 10925

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Anticipated and Encountered Problem Areas

Based on an email dated 2-23-11 from the technical monitor to Jim Higgins of BNL, the remaining tasks associated with this task order will be completed by the staff and no additional work is anticipated for BNL.

Plans for the Next Reporting Period

This is the last monthly for this task order.

Variance

Based on an e-mail dated 2-23-11 from the technical monitor to Jim Higgins of BNL, the remaining funds of approximately 24K will be de-obligated.

Financial Status

The authorized budget ceiling for Task Order 17 is \$228,900. The NRC Form 173 dated July 9, 2008 provided funding for Task Order 17 in the amount of \$186,000. The NRC Form 173 dated August 21, 2009 provided funding for Task Order 17 in the amount of \$20,000. The NRC Form 173 dated April 2, 2010 de-obligated \$40K and the total funds obligated is now \$166K.

Spending Plan Update

None.

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 19: Evaluation of the Mitsubishi Heavy Industries Ltd.
APWR Design Certification Application Section 3.9.3 Regarding ASME Code Class 1, 2, and
3 Components, Component Supports, and Core Support

Project Number: 15414

Activity Number: 10798

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NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John-Chau Nguyen (301-415-1177)
NRC Technical Monitor: Tuan Le (301-415-2297)
BNL Principal Investigator: M. Subudhi (631-344-2429)
Period of Performance: June 30, 2008 to September 30, 2011
TAC Number: RX0159
Authorized Budget Ceiling: \$203,400
Licensee: Mitsubishi Heavy Industries, Ltd.

Objective

The objective of this task order is to obtain technical expertise from the laboratory to assist the NRC staff in determining whether or not the subject DC application meets appropriate regulatory requirements.

Tasks/Standards	Scheduled Completion	Actual Date/Product
1. REQUIREMENT: Become familiar with SRP Sections 3.7.2, 3.7.3, 3.9.2, and 3.9.3, as well as Regulatory Guides (RG) 1.124 and 1.130 STANDARD: Written confirmation that familiarization is complete	July 11, 2008	July 11, 2008
2. REQUIREMENT: Participate in an orientation /kick-off meeting with the NRC staff to discuss the scope of the work, expectations and task order management. STANDARD: Attendance by individuals designated by NRC	Not Required	N/A
3. REQUIREMENT: Review the DC application Section 3.9.3 to determine the adequacy of the technical information submitted. This includes loading combinations, system operating transients, stress limits, design and installation of pressure relief devices, and component supports. Determine if the	August 8, 2008	August 8, 2008

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 19: Evaluation of the Mitsubishi Heavy Industries Ltd.
APWR Design Certification Application Section 3.9.3 Regarding ASME Code Class 1, 2, and
3 Components, Component Supports, and Core Support

Project Number: 15414

Activity Number: 10798

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Tasks/Standards	Scheduled Completion	Actual Date/Product
<p>methods and approach proposed by the applicant meet the appropriate review guidance. Identify issues and those aspects of the application that need additional or clarifying information.</p> <p>a. Prepare draft questions as input to a formal Request for Additional Information (RAI).</p> <p>b. Prepare a draft Technical Evaluation Report (TER) or environmental review.</p> <p>STANDARD: Completed Technical Evaluation Report that follows the NRC provided template without deviation. No deviation from the guidance defined in Section III, RAI Guidance of Attachment 1. One round of comment incorporation is acceptable.</p>		
<p>4. REQUIREMENT: Review responses to the RAI questions to determine if they adequately resolve the outstanding issues. Identify any other open items.</p> <p>STANDARD: Completed Technical Evaluation Report that follows the NRC provided template without deviation. No deviation from the guidance defined in Section III, RAI Guidance of Attachment 1. One round of comment incorporation is acceptable.</p>	June 19, 2009	June 19, 2009 December 4, 2009
<p>5. REQUIREMENT: <i>(If necessary)</i> Prepare for and travel to the applicant's office and participate in the following NRC audit activities:</p> <p>a. Using NRC accepted component design criteria described in SRP sections 3.7.3 and 3.9.3, audit the design specifications and design reports for ASME Code Class 1, 2, and 3 components, and to verify the completeness of the component design, as committed by the design certification.</p>	*Three weeks after the trip	Trip report

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 19: Evaluation of the Mitsubishi Heavy Industries Ltd.
APWR Design Certification Application Section 3.9.3 Regarding ASME Code Class 1, 2, and
3 Components, Component Supports, and Core Support

Project Number: 15414

Activity Number: 10798

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Tasks/Standards	Scheduled Completion	Actual Date/Product
<p>b. Discuss and resolve any significant issues that may be identified as a result of the audit. While in the audit, also discuss the applicant's responses to the unresolved outstanding issues identified in Task 4 to determine if these issues are adequately addressed by the applicant. Provide the applicant with a list of remaining open issues, at the conclusion of the audit, that still require responses.</p> <p>c. Prepare a technical report that summarizes the findings of the audit including a detailed discussion of how some issues are resolved, and how others would still require further responses.</p> <p>STANDARD: Complete evaluation as defined in task. Submit trip report within 3 weeks of site review</p>		
<p>6. REQUIREMENT: Review the applicant's response to the remaining open items, identified as a result of the design review and audit (Tasks 4 and/or 5). Resolve all issues if possible. Prepare a technical evaluation report (TER) with open items, if any.</p> <p>STANDARD: Completed Technical Evaluation Report that follows the NRC provided template without deviation</p>	<p>* Three weeks after receipt of responses</p>	<p>Safety Evaluation Report Input with open items</p>
<p>7. REQUIREMENT: As <i>needed and</i> requested by the staff, provide technical support to the staff during related ACRS meetings and hearing proceedings.</p> <p>STANDARD: Ensure presentation materials are reviewed and approved by NRC staff</p>	<p>TBD</p>	<p>Prepare presentation materials, attend meetings, if required</p>

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 19: Evaluation of the Mitsubishi Heavy Industries Ltd.
APWR Design Certification Application Section 3.9.3 Regarding ASME Code Class 1, 2, and
3 Components, Component Supports, and Core Support

Project Number: 15414

Activity Number: 10798

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Progress during Reporting Period

No work was performed during this period.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will continue reviewing the reactor cavity seal design and compare with other designs associated with EPR and ESBWR plants. BNL will assist the staff in resolving the design issues of these seals.

Variance

None.

Financial Status

The authorized budget ceiling for Task Order 19 is \$203,400. The NRC Form 173 dated May 21, 2008 provided funding for Task Order 19 in the amount of \$195,000. The remaining \$8,400 was sent by NRC Form 173 dated July 1, 2008. However, Form 173, dated April 21, 2009 de-obligated FY 2008 funding of 70K and this brings the total funds of \$133,400 obligated to date. Form 173 dated August 21, 2009 obligated \$60K for this TO. Form 173 dated May 14, 2010 de-obligated \$5100 to a to-date amount of \$188,300. Form 173 dated 6/29/10 de-obligated \$22K. Total funds obligated is \$166.3K.

Spending Plan Update

The spending plan for the next six months follows:

\$15,000 \$5,000 \$5,000 \$5,000 \$0 \$0

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 19: Evaluation of the Mitsubishi Heavy Industries Ltd.
APWR Design Certification Application Section 3.9.3 Regarding ASME Code Class 1, 2, and
3 Components, Component Supports, and Core Support

Project Number: 15414

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DOE Laboratory Acquired Equipment

None.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 20: US-APWR DC – Review of MHI Technical Reports MUAP-07019P,
MUAP-07020P, and MUAP-07021P

(Project Number: 15414)

(Activity Number: 10927)

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Fred Forsaty	(301) 415-8523
BNL Principal Investigator:	Hans Ludewig	(631) 344-2624
Period of Performance:	July 21, 2008 - September 15, 2011	
TAC Number:	RX0305	

Objective

The objective of this task order is to obtain technical expertise from BNL to assist the NRC staff in determining whether or not the subject topical report application meets appropriate regulatory requirements.

Progress During Reporting Period

BNL received RAI responses from the NRC Project Manager. The RAI responses were integrated into the SER. The completed SER has been forwarded to the NRC technical monitor for comment. BNL staff will incorporate any comments and changes suggested by the NRC technical monitor following the review.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

The SER will be modified in accordance with any future changes sent by the NRC Technical Monitor.

Variance

None.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 20: US-APWR DC – Review of MHI Technical Reports MUAP-07019P,
MUAP-07020P, and MUAP-07021P

(Project Number: 15414)

(Activity Number: 10927)

(Page 2 of 2)

Financial Status

Project and actual costs are consistent.

Spending Plan Update

The spending plan for the next six months follows:

\$10,000 \$10,000 \$10,000 \$6,500 \$10,000 \$10,000

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 25: Review of EPR Standard Design Certification Application FSAR Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 for the Design of Seismic Category I Structures

Project Number: 15414

Activity Number: 10941

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitors:	Jim Xu	(301) 415-3024
	Samir Chakrabarti	(301) 415-1106
BNL Principal Investigator:	Joseph Braverman	(631) 344-2186
Period of Performance:	September 29, 2008 to December 28, 2011	
TAC Number:	RX0139	
Authorized Budget Ceiling:	\$980,600	

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory (BNL) to assist the NRC staff in determining whether or not the subject design certification (DC) application meets appropriate regulatory requirements relating to Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 and to ensure that analysis, design, construction, and in-service inspection of seismic Category I structures meet the applicable requirements of 10 CFR 50.55a, 10 CFR 50, Appendix A, General Design Criteria (GDC) 1, 2, 4, 5, 16, 50, 51, and 53 and other applicable regulations. The review shall focus on the (1) materials, (2) geometry, (3) codes, standards, and specifications, (4) loadings and load combinations, (5) design and analysis procedures, (6) structural acceptance criteria, and (7) testing and in-service surveillance requirements, as appropriate.

Progress During Reporting Period

BNL prepared for and participated in the structural audit of the EPR design related to FSAR Section 3.8 held at AREVA's offices in Charlotte, NC, on February 14-17, 2011. A path forward to the resolution of open RAIs was discussed and agreed with AREVA and NRC staff during the audit.

BNL completed its assessment of AREVA's responses to RAI Nos. 3.8.1-35, 1-37, 1-47, 1-48, 2-14, 2-15, 2-16, 3-21, 3-22, 3-24, 5-20, 5-21, 5-27, and 5-30. This information was transmitted to the NRC Technical Monitor via email dated February 10, 2011.

BNL participated in a telephone conference with NRC staff and AREVA, on February 3, 2011, to discuss RAI Nos. 3.8.4-9, 3.8.5-23, and 3.4.2-1, which relate to the design of the spent fuel pool, table of key soil parameters, and coefficients of friction at the interface between the Nuclear Island foundation basemat and the supporting soil.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 25: Review of EPR Standard Design Certification Application FSAR Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 for the Design of Seismic Category I Structures

Project Number: 15414

Activity Number: 10941

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Progress During Reporting Period (Cont'd)

BNL completed its review of AREVA's revision to FSAR Sections 3.7.1 and 3.7.2, prepared in response to RAI 320, Question 03.07.02-63. BNL participated in a telephone conference with NRC staff and AREVA, on January 27, 2010, to discuss the findings of this assessment.

Travel

J. Braverman and M. Miranda of BNL traveled to AREVA's offices in Charlotte, NC, on February 14-17, 2011, to participate in the structural audit. All expenses are reflected on the Financial Status report.

Anticipated and Encountered Problem Areas

The NRC Technical Monitor was informed that additional funding would be needed in the next reporting period to permit the work to continue as planned.

Plans for the Next Reporting Period

Continue to review RAI responses that AREVA transmits to the NRC related to FSAR Sections 3.8.1 through 3.8.5. Prepare and participate in upcoming meetings and telephone conferences with NRC staff and AREVA. Continue the preparation of Technical Evaluation Report (input to SER) corresponding to EPR FSAR Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5.

Variance

None

Financial Status

The authorized cost ceiling for Task Order 25 is \$847,200. NRC Form 173, dated September 16, 2008, provided incremental funding of \$150,000 for work on this project. NRC Form 173, dated December 20, 2008 provided additional incremental funding of \$150,000 for work on this project. NRC Form 173, dated July 17, 2009, provided additional incremental funding of \$60,000 for work on this project. NRC Form 173, dated August 21, 2009, provided additional incremental funding of \$240,000 for work on this project. The total obligated funds to date are \$600,000. NRC Form 173, dated April 2, 2010, provided additional funding of \$100,000 for work on this project and extended the period of performance to

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 25: Review of EPR Standard Design Certification Application FSAR Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 for the Design of Seismic Category I Structures

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Financial Status (Cont'd)

December 28, 2010. The total authorized cost ceiling was raised to \$969,900 and the total obligated funding to date was raised to \$700,000. NRC Form 173, dated August 3, 2010, provided additional incremental funding of \$63,400 for work on this project and extended the period of performance to December 28, 2011. NRC Form 173, dated September 1, 2010, provided additional incremental funding of \$50,000 for work on this project. The total authorized cost ceiling was raised to \$980,600 and the total obligated funding to date was raised to \$813,400. NRC Form 173, dated January 19, 2011, provided additional incremental funding of \$68,000 for work on this project. The total obligated funding to date was raised to \$881,400.

Spending Plan Update

The spending plan for the next six months follows:

\$40,000 \$40,000 \$40,000 \$40,000 \$0 \$0

DOE Laboratory Acquired Equipment

None

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 26: Review Westinghouse AP1000 Pre COL Application work Tech Reports APP-GW-GLR-05 (TR # 9), APP-GW-GLR-021 (TR #6), APP-GW-GLR-026 (TR # 44), and APP-GW-GLR-033 (TR # 54)

Project Number: 15414

Activity Number: 10949

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Pravin Patel	(301) 415-1505
BNL Principal Investigator:	Richard Morante	(631) 344-5860
Period of Performance:	November 1, 2008 to October 31, 2011	
TAC Number:	RX0094	
Authorized Budget Ceiling:	\$222,700	

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory to assist the NRC staff in determining the safety adequacy of the COL action item resolutions discussed in the following topical reports:

APP-GW-GLR-05 (TR # 9), "Containment Vessel Design Adjacent to Large Penetrations"
APP-GW-GLR-021 (TR #6), "AP1000 As-Built COL Information Items"
APP-GW-GLR-026 (TR # 44), "New Fuel Storage Rack Structure/Seismic Analysis"
APP-GW-GLR-033 (TR # 54), "Spent Fuel Storage Racks Structure/Seismic Analysis"

This project is a continuation and revision to Task Order 2 under JCN J-3309 (later Q4101, TO #2)

Progress During Reporting Period

A meeting was held on February 15-16, 2011 with the staff and WEC, to discuss the remaining technical issues related to Tr-09 and the detailed design of the major penetration reinforcement.

Resolved the significant changes between TR-09, Rev. 3, and TR-09, Rev. 4. WEC to submit TR-09 Rev. 5.

Resolved Tier 2* designations for the SCV major penetration details. WEC to submit DCD Rev. 19 changes to incorporate additional Tier 2* material.

Travel

R. Morante traveled to Rockville, MD on February 15-16, 2011 for a meeting with the staff and WEC, to resolve technical issues related to the SCV.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 26: Review Westinghouse AP1000 Pre COL Application work Tech Reports APP-GW-GLR-05 (TR # 9), APP-GW-GLR-021 (TR #6), APP-GW-GLR-026 (TR # 44), and APP-GW-GLR-033 (TR # 54)

Project Number: 15414

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Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Review draft Rev.5 of TR-09 and the DCD Rev.19 Tier 2* additions, when submitted.

Work with the staff and WEC, via written comments and teleconferences, to finalize TR-09, Rev. 5, and the DCD Rev. 19 additions.

Variance

None.

Financial Status

The authorized cost ceiling for Task Order 26 was initially \$99,800. NRC Form 173, dated October 24, 2008, provided incremental funding of \$40,000 for work on this project.

NRC Form 173, dated April 10, 2009, provided additional funding of \$50,000. The total obligated funding was \$90,000.

NRC Form 173, dated November 10, 2009, increased the authorized budget ceiling to \$222,700, and provided additional funding of \$50,000. The total obligated funding was \$140,000.

NRC Form 173, dated May 19, 2010, provided additional funding of \$82,700. The total obligated funding is \$222,700. This project is fully funded.

Spending Plan Update

The spending plan update for the next six months follows:

\$9,000 \$1,000 \$1,000 \$0 \$0 \$0

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 26: Review Westinghouse AP1000 Pre COL Application work Tech Reports APP-GW-GLR-05 (TR # 9), APP-GW-GLR-021 (TR #6), APP-GW-GLR-026 (TR # 44), and APP-GW-GLR-033 (TR # 54)

Project Number: 15414

Activity Number: 10949

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DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 27: US-APWR DC – Review of MHI Technical Reports MUAP-07032P

(Project Number: 15414)

(Activity Number: 10951)

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Christopher Van Wert	(301) 415-3217
BNL Principal Investigator:	Hans Ludewig	(631) 344-2624
Period of Performance:	January 15, 2009 – August 31, 2011	
TAC Number:	RX0616	

Objective

The objective of this task order is to obtain technical expertise from BNL to assist the NRC staff in determining whether or not the subject topical report application meets appropriate regulatory requirements.

Progress During Reporting Period

No work was performed.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will continue with the review of the document and interact with the NRC Technical Monitor as required.

Variance

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 27: US-APWR DC – Review of MHI Technical Reports MUAP-07032P

(Project Number: 15414)

(Activity Number: 10951)

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Financial Status

Project and actual costs are consistent.

Spending Plan Update

The spending plan for the next one month follows:

\$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 31: Review of Westinghouse Technical Report on
Spent Fuel Pool Criticality for the AP1000 DCD Section 9.1.1

(Project Number: 15414)
(Activity Number: 10954)

(Page 1 of 2)

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Christopher Van Wert	(301) 415-3217
BNL Principal Investigator:	Hans Ludewig	(631) 344-2624
Period of Performance:	May 1, 2009 – December 31, 2010	
TAC Number:	RX0640	

Objective

The objective of this task order is to obtain technical expertise from BNL to assist the NRC staff in determining whether or not the subject technical report meets appropriate regulatory requirements.

Progress During Reporting Period

During this reporting period, work continued at the request of the NRC Technical Monitor.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will continue to review the revised submission and interact with the NRC Technical Monitor.

Variance

None.

Financial Status

Project and actual costs are consistent.

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 31: Review of Westinghouse Technical Report on
Spent Fuel Pool Criticality for the AP1000 DCD Section 9.1.1

(Project Number: 15414)

(Activity Number: 10954)

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Spending Plan Update

Not applicable.

DOE Laboratory Acquired Equipment

None.

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(Reporting Period: January 21, 2011 –February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 32: Technical Assistance in Support of Technical Evaluation of ESBWR DCD Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5

Project Number: 15414

Activity Number: 10956

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Samir Chakrabarti	(301) 415-1106
BNL Principal Investigator:	Joseph Braverman	(631) 344-2186
Period of Performance:	June 1, 2009 to August 31, 2011	
TAC Number:	RX0651	
Authorized Budget Ceiling:	\$238,500	

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory (BNL) to assist the NRC staff in determining whether or not the subject DC application meets appropriate regulatory requirements. Specifically, technical assistance is required from BNL to assist the NRC staff in determining whether or not the subject design certification application meets appropriate regulatory requirements relating to Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5 and to ensure that analysis, design, construction, and in-service inspection of seismic Category I structures meet the applicable requirements of 10 CFR 50.55a, 10 CFR 50, Appendix A, General Design Criterion (GDG) 1, 2, 4, 5, 16, 50, 51, and 53 and other applicable regulations. The review shall focus on the (1) materials, (2) geometry, (3) codes, standards, and specifications, (4) loadings and load combinations, (5) design and analysis procedures, (6) structural acceptance criteria, and (7) testing and in-service surveillance requirements, as appropriate.

Progress During Reporting Period

None

Travel

None

Anticipated and Encountered Problem Areas

None

Plans for the Next Reporting Period

Provide technical support as directed by the NRC Technical Monitor.

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(Reporting Period: January 21, 2011 –February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 32: Technical Assistance in Support of Technical Evaluation of ESBWR DCD Sections 3.8.1, 3.8.2, 3.8.3, 3.8.4, and 3.8.5

Project Number: 15414

Activity Number: 10956

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Variance

None

Financial Status

The authorized cost ceiling for Task Order 32 was \$124,500. NRC Form 173, dated May 19, 2009, provided initial funding of \$80,000 for work on this project. NRC Form 173, dated November 3, 2009, provided initial funding of \$44,500 for work on this project. Total obligated funds are \$124,500. NRC Form 173, dated April 2, 2010 provided additional funding of \$46,900 and extended the period of performance to December 31, 2010. The authorized cost ceiling and the obligated funds for Task Order 32 has been increased to \$171,400. Form 173 dated August 18, 2010 provided an additional \$60,000. The authorized cost ceiling is \$238,500.

Spending Plan Update

The spending plan for the next six months follows:

\$6,000 \$5,500 \$5,000 \$0 \$0 \$0

DOE Laboratory Acquired Equipment

None

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 33: Technical Assistance in Support of Technical Evaluation of ESBWR DCD Sections 3.7.1, 3.7.2, and 3.7.3

Project Number: 15414

Activity Number: 10962

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NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	David Jeng	(301) 415-2727
BNL Principal Investigator:	Richard Morante	(631) 344-5860
Period of Performance:	July 27, 2009 to August 31, 2011	
Authorized Budget Ceiling:	\$117,800	

Objective

Review of ESBWR DCD Section 3.7 was being performed under the legacy contract JCN Q-4087, Task Order 1. The scope of review has significantly increased from what was anticipated in revision 4 of the task order. GEH has introduced new design and analysis methods, and provided significant amount of detailed information for review in response to some RAIs. The objective of this modified task order is to obtain BNL's assistance to complete review of ESBWR DCD Section 3.7 by performing the following remaining tasks:

- 1) Complete review of all remaining open RAIs including potential new RAIs from review of SASSI based SSI analyses and those resulting from review of Tier 2* designation. 10 RAIs are open at this time.
- 2) Update the TER with the changes resulting from completion of review of all RAIs.
- 3) Review Revision 6 of the DCD to be issued after all major issues are resolved.
- 4) Provide technical support to NRC staff during ACRS presentation.

Progress During Reporting Period

At the request of the TM, reviewed editorial changes to the FSER, to ensure that the technical content remained intact.

Travel

None.

Anticipated and Encountered Problem Areas

None

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(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 33: Technical Assistance in Support of Technical Evaluation of ESBWR DCD Sections 3.7.1, 3.7.2, and 3.7.3

Project Number: 15414

Activity Number: 10962

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Plans for the Next Reporting Period

Provide assistance to TM, as requested.

Variance

Period of performance extended to 08/31/2011, per NRC Form 173, dated February 4, 2011.

Financial Status

The authorized cost ceiling for Task Order 33 is \$ 117,800. NRC Form 173, dated July 24, 2009, provided initial funding of \$80,000 for work on this project.

NRC Form 173, dated August 3, 2010, de-obligated \$6,000, reducing obligated funding to \$74,000.

NRC Form 173, dated February 4, 2011, obligated \$5,000, increasing obligated funding to \$79,000.

Spending Plan Update

The spending plan for the next six months follows:

\$2,000 \$2,000 \$2,000 \$2,000 \$0 \$0

DOE Laboratory Acquired Equipment

None

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 35: Review of Nuclear Design Aspects of
Topical Report WCAP-16943, "Enhanced GRCA Rodlet Design"

(Project Number: 15414)

(Activity Number: 10965)

(Page 1 of 2)

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitor:	Christopher Van Wert	(301) 415-3217
BNL Principal Investigator:	Hans Ludewig	(631) 344-2624
Period of Performance:	September 21, 2009 – June 30, 2011	
TAC Number:	RX0697	

Objective

The objective of this task order is to obtain technical expertise from BNL to assist the NRC staff in determining whether or not the reactivity uncertainty analysis presented in the subject technical report (WCAP 16943-P) meets appropriate regulatory requirements.

Progress During Reporting Period

BNL continues to interact with the NRC Technical Monitor regarding the RAIs.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will continue revising the SER.

Variance

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4154

Task 35: Review of Nuclear Design Aspects of
Topical Report WCAP-16943, "Enhanced GRCA Rodlet Design"

(Project Number: 15414)

(Activity Number: 10965)

(Page 2 of 2)

Financial Status

Project and actual costs are consistent.

Spending Plan Update

The spending plan for the next four months follows:

\$10,000 \$10,000 \$5,500 \$8,000

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 36: Audit on AP1000 As-designed Pipe Rupture Hazard Analysis Prepared by Westinghouse for AP1000 DCD

Project Number: 15414

Activity Number: 10970

Page 1 of 4

NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John-Chau Nguyen (301-415-1177)
NRC Technical Monitor: Yueh-Li (Rence) Li (301-415-2772)
Ching Ng (Alternate) (301-415-8054)
BNL Principal Investigator: M. Subudhi (631-344-2429)
Period of Performance: September 28, 2009 to September 27, 2011
TAC Number: RX705
Authorized Budget Ceiling: \$70,500.00
Licensee: Westinghouse

Objective

The objective of this task order is to obtain technical expertise from the laboratory to assist the NRC staff in determining whether or not the methodologies and criteria delineated in the DCD are properly implemented in the as-designed pipe rupture hazard analysis.

Tasks/Standards	Scheduled Completion	Deliverables
1. REQUIREMENT: Become familiar with the AP1000 design by reviewing DCD Tier 2 Sections 3.6.2, as well as related sections of the safety evaluation report (SER) issued for the AP1000 design certification. STANDARD: The level of effort for Task 1 is based on the volume of materials to be reviewed; this task is for familiarity and not for evaluation.	November 20, 2009	November 4, 2009

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 36: Audit on AP1000 As-designed Pipe Rupture Hazard Analysis Prepared by Westinghouse for AP1000 DCD

Project Number: 15414

Activity Number: 10970

Page 2 of 4

Tasks/Standards	Scheduled Completion	Deliverables
<p>2. REQUIREMENT: Prepare for the audit of AP1000 pipe break hazard analysis. Select sample piping systems from the list of systems within the scope of SRP 3.6.2</p> <p>STANDARD: Select the sample systems and get ready for the audit.</p>	<p>* One week before the scheduled audit</p>	<p>NA</p>
<p>3. REQUIREMENT: Travel to Westinghouse's office in Monroeville, Pennsylvania, and participate in the following NRC audit activities:</p> <ul style="list-style-type: none">a. Using NRC accepted pipe break evaluation criteria described in SRP Sections 3.6.2, AP1000 SER Section 3.6.2, and AP1000 DCD Section 3.6.2, audit the as-designed pipe rupture hazard analysisb. Prepare a technical report that documents the findings of the audit including detailed discussion of any outstanding issues that require further review. Prepare a list of open issues (including the significance of these issues) identified during the audit. <p>STANDARD: Completed TER that follows the NRC provided template without deviation. No deviation from the guidance defined in Section III, RAI Guidance of Attachment 1 to the basic contract SOW. One round of comment incorporation acceptable.</p>	<p>* Four weeks after the audit trip</p>	<p>Technical Evaluation Report (TER) with open issues</p>

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 36: Audit on AP1000 As-designed Pipe Rupture Hazard Analysis Prepared by Westinghouse for AP1000 DCD

Project Number: 15414

Activity Number: 10970

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Tasks/Standards	Scheduled Completion	Deliverables
4. REQUIREMENT: Review the Westinghouse's responses to the identified open issues, and determine how and if any of the open issues can be resolved. Prepare a list of remaining open items. Update the technical report to incorporate the additional information provided by Westinghouse. STANDARD: Complete TER with open items	*Two weeks after receipt of Westinghouse's responses	Update TER with open items
5. REQUIREMENT: Review the Westinghouse responses to the remaining open items identified in Task 4. Participate in conference calls, if necessary, and resolve all remaining open items. STANDARD: Complete evaluation as defined in Task.	*Two weeks after receipt of Westinghouse's updated responses	Resolution of all open items
6. REQUIREMENT: Update the final technical report (draft SER) developed in Task 4. This technical letter report includes a summary of the review performed for all the open issues reviewed and resolved under Tasks 3, 4, and 5. a. Draft b. Incorporate NRC's comments and prepare a final TER (draft SER). STANDARD: Complete draft SER that follows NRC provided template.	*Draft: One week after completion of Task 5 *Final: One week after receipt of NRC comments on draft report	Draft TER and Final TER (draft SER) with open items resolved

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 36: Audit on AP1000 As-designed Pipe Rupture Hazard Analysis Prepared by Westinghouse for AP1000 DCD

Project Number: 15414

Activity Number: 10970

Page 4 of 4

Progress during Reporting Period

No work was performed during this period.

Travel

None.

Anticipated and Encountered Problem Areas

This will be the final Monthly. Task Order is closed per NRC Technical Monitor.

Plans for the Next Reporting Period

None.

Variance

None.

Financial Status

The authorized budget ceiling for Task Order 36 is \$70,500. The NRC 173, dated September 14, 2009, provided funding for Task Order 36 in the amount of \$35,000. Form 173 dated August 3, 2010 de-obligated \$28K and thus, the total funds obligated is 7K.

Spending Plan Update

None.

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 37: Review Westinghouse AP1000 Pre-COL Application Work Tech Report APP-GW-SWR-010,
"Extension of Nuclear Island Seismic Analysis to Soil Sites"

Project Number 15414

Activity Number 10971

Page 1 of 2

NRC Technical Assistance Project Manager:	K. Chapman (301) 415-3653
NRC Project Manager:	J. Chau Nguyen (301) 415-1177
NRC Technical Monitor:	P. Patel (301) 415-1505
BNL Principal Investigator:	R. Morante (631) 344-5860
Period of Performance:	September 28, 2009 to September 30, 2011
TAC Numbers:	RX706
Authorized Budget Ceiling:	\$158,800

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory (BNL) to assist the NRC staff in determining the safety adequacy of Westinghouse AP1000 Report APP-GW-SWR-010, "Extension of Nuclear Island Seismic Analysis to Soil Sites," related to seismic ground motion, site parameters, modeling of the nuclear island structures, computer code used, and seismic analyses and calculation of the seismic loadings for the design of AP1000 structures, systems and components (SSCs).

This project is a continuation from JCN Q-4101 Task Order 1.

Progress During Reporting Period

Evaluated whether new WEC submittal is consistent with the proposed resolutions for all remaining TR-03 technical issues, as agreed during the January 10-14, 2011 meeting.

Prepared comments on the submittal, for action by WEC.

Travel

None.

Anticipated and Encountered Problem Areas

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 37: Review Westinghouse AP1000 Pre-COL Application Work Tech Report APP-GW-SWR-010,
"Extension of Nuclear Island Seismic Analysis to Soil Sites"

Project Number 15414

Activity Number 10971

Page 2 of 2

Plans for the Next Reporting Period

Confirm that subsequent WEC submittal is consistent with the resolutions developed at the January 10-14, 2011 meeting.

Financial Status

NRC Form 173, dated September 14, 2009 accepted BNL proposal for Task Order 37 dated September 2, 2009 and provided \$75,000 for work on this project. The cost ceiling is \$158,800. The total obligated funding is \$75,000.

NRC Form 173, dated June 4, 2010 provided additional obligated funding of \$83,800, in order to fully fund this project. The cost ceiling is \$158,800. The total obligated funding was \$158,800.

NRC Form 173, dated June 29, 2010 de-obligated funding in the amount of \$25,000, reducing the obligated funding to \$133,800. The cost ceiling remains at \$158,800.

NRC Form 173, dated August 3, 2010 de-obligated funding in the amount of \$10,000, reducing the obligated funding to \$123,800. The cost ceiling remains at \$158,800.

Spending Plan Update

The spending plan for the next six months follows:

\$15,000 \$15,000 \$10,000 \$10,000 \$0 \$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 38: Review Westinghouse AP1000 Pre-COL Application Work Tech Report APP-GW-GLR-044,
"Basemat and Foundation Design Report" (TR-85)

Project Number 15414

Activity Number 10972

Page 1 of 2

NRC Technical Assistance Project Manager:	K. Chapman (301) 415-3653
NRC Project Manager:	J. Chau Nguyen (301) 415-1177
NRC Technical Monitor:	P. Patel (301) 415-1505
BNL Principal Investigator:	J. Braverman (631) 344-2186
Period of Performance:	September 28, 2009 to September 30, 2011
TAC Numbers:	RX707
Authorized Budget Ceiling:	\$ 227,900

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory (BNL) to assist the NRC staff in the review of a technical report submitted by Westinghouse for the AP1000 advanced reactor:

APP-GW-GLR-044, "Nuclear Island Basemat and Foundation" Technical Report No. 85

This project is a continuation from JCN Q-4101 Task Order 3.

Progress During Reporting Period

None.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Provide technical support as requested by the NRC Technical Monitor.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 38: Review Westinghouse AP1000 Pre-COL Application Work Tech Report APP-GW-GLR-044,
"Basemat and Foundation Design Report" (TR-85)

Project Number 15414

Activity Number 10972

Page 2 of 2

Variance

None.

Financial Status

NRC Form 173, dated September 14, 2009 accepted the BNL proposal for Task Order 38 dated September 11, 2009, but did not obligate any funds for work on this project. The authorized budget ceiling was \$125,400. The NRC 173 dated October 13, 2009 provided initial funding for Task Order 38 in the amount of \$50,000. The NRC 173 dated November 3, 2009 provided additional funding for Task Order 38 in the amount of \$40,000. The NRC 173 dated June 29, 2010 provided additional funding for Task Order 38 in the amount of \$35,400. The NRC 173 dated July 9, 2010 provided additional funding for Task Order 38 in the amount of \$102,500. The total obligated funding to date is \$227,900. The authorized budget ceiling is now \$227,900.

Spending Plan Update

The spending plan for the next six months follows:

\$0 \$0 \$0 \$0 \$0 \$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154.

Task 39: Technical Assistance in Support of US APWR Design Certification Relating to Human Factors Review

Project Number: 15414

Activity Number: 15816

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	Jacqwan Walker	(301-415-4035)
BNL Principal Investigator:	J. O'Hara	(631-344-3638)
Period of Performance:	6/15/10 to 6/14/11	
TAC No.:	RX0746	

Objective

The objective of this Task Order is to obtain expert technical assistance from BNL to assist NRC staff in the review and evaluation of the MHI US-APWR Design Control Document (DCD), and subsequent revisions, and any US-APWR License Technical Reports received (up to a total of ten and any subsequent revisions). The review will be guided by SRP Chapter 18, NUREG-0711, and related guidance documents. BNL will provide assistance in developing letter reports that request additional or clarifying information (RAI) and in providing technical input to the preliminary and final safety evaluation reports (SERs). BNL will also provide technical hearing support to the staff during ACRS meetings and ASLB proceedings, as needed by the staff.

Progress During Reporting Period

BNL worked on the review of the HRA integration element during August and September of 2010. On August 25, 2010, BNL submitted to NRC an RAI summary table containing an evaluation of the MHI responses and, where necessary, follow-up RAIs to address open areas in the review. On September 3, 2010, BNL forwarded the draft SER for the HRA integration element.

On September 13, 2010, BNL completed the review of the Staffing & Qualifications (S&Q) element and forwarded the RAIs and draft TER to NRC.

BNL performed portions of the review of the V&V element in November and December, 2010. This has not yet been finished.

In January, 2011, NRC sent to BNL/MHI RAI responses for the HRA element. All four RAI responses refer to parts of the US-APWR PRA/HRA (MUAP-07030). BNL, thus, requested the most recent Rev. of this document from NRC. BNL received the latest version of the HRA portion of the PRA from NRC and continued the review of the RAI responses. On February 25, 2011, BNL completed the review of the HRA RAI responses and sent to NRC the updated RAI table and SER.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - JCN Q-4005 (NRC 07-01)

JCN Q-4154

Task 39: Technical Assistance in Support of US APWR Design Certification Relating to Human Factors Review

Project Number: 15414

Activity Number: 15816

Page 2 of 2

During February 2011, BNL updated NRC on the status of the reviews.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Perform the review of the V&V Element. Participate in any calls with the vendor. Address NRC comments on RAIs or SER input. Review RAI responses when received.

Variance

None.

Financial Status

Initial funding has been received.

Spending Plan Update

The spending plan for the next six months follows:

\$10,000 \$11,000 \$11,000 \$11,000 \$11,000 \$11,000

DOE Laboratory Acquired Equipment

None.

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ODriscoll, James

From: Bernardo, Robert
Sent: Monday, March 21, 2011 2:47 PM
Subject: IOEB Clearinghouse Screening Summary for Monday, March 21, 2011

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
*****MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*****
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR

Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Nine (9)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

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**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
*****MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*****
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR

Attendees at Screening Meeting:

Mark King (by phone)
Bob Bernardo (by phone)
Steve Pannier
Joe Giantelli
Russ Haskell
Dave Garmon
Mary Wegner – RES (by phone)
Derek Scully – NRO (by phone)

ODriscoll, James

From: Jackson, Christopher
Sent: Monday, March 21, 2011 11:49 AM
To: Carneal, Jason; ODriscoll, James; McKirgan, John
Subject: RE: Reference to RG in Section 6.4 - followup action from Chapter Day.

Jason,

I have reviewed the guidance and I offer the following revision. Can you see if Bob agrees?

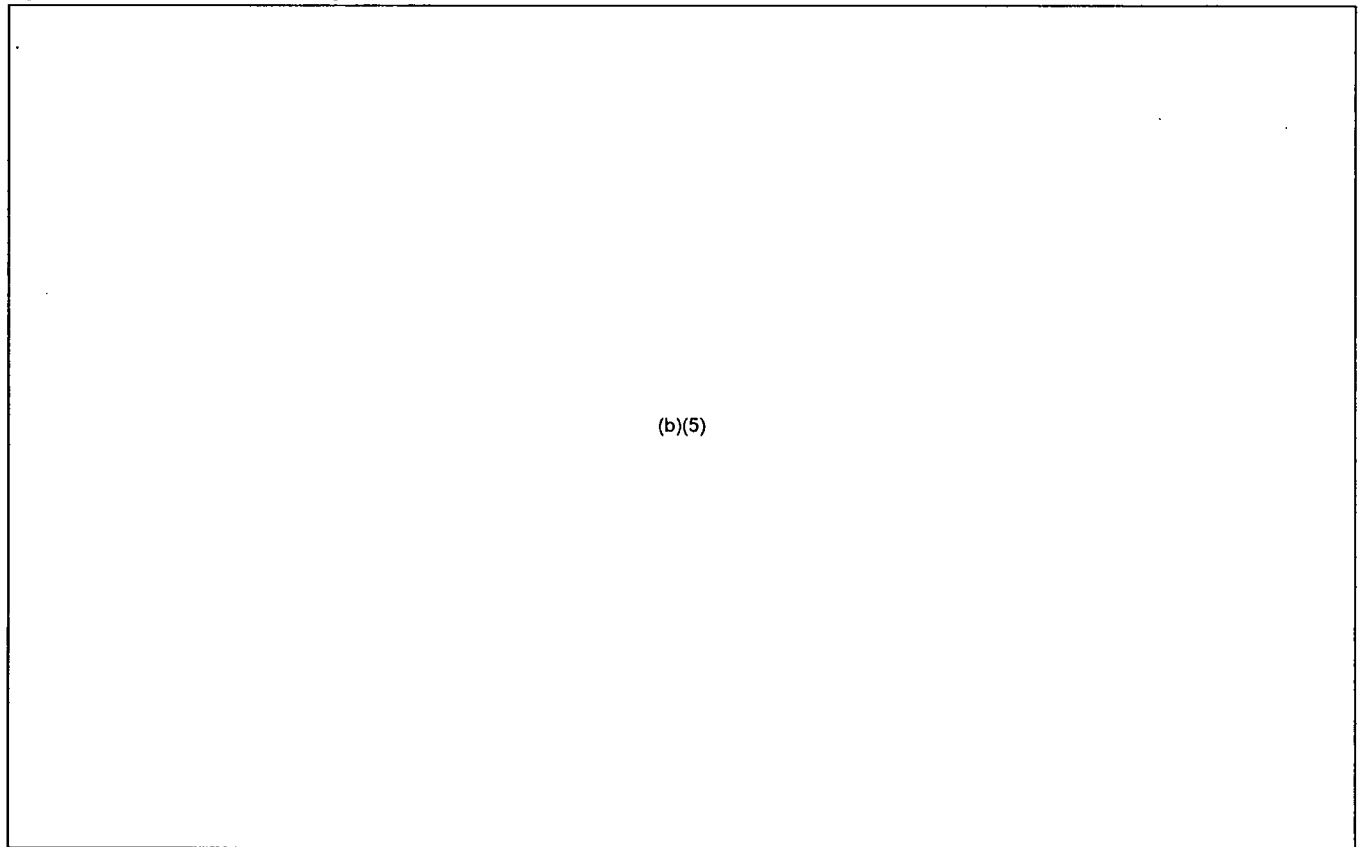
CJ

From: Carneal, Jason
Sent: Monday, March 21, 2011 2:33 PM
To: ODriscoll, James; Jackson, Christopher
Subject: Reference to RG in Section 6.4 - followup action from Chapter Day.

Chris and Jim:

The one follow-on for SPCV from Friday's Chapter Day was providing the correct RG to reference in the following paragraph:

Type of Pressurization System and CRE Zone



Thanks,

Jason

JASON CARNEAL
PROJECT MANAGER
U.S. NUCLEAR REGULATORY COMMISSION
NRO/DNRL/NARP (T-6J4)
301-415-3813

ODriscoll, James

From: Carneal, Jason
Sent: Tuesday, March 22, 2011 4:15 PM
To: ODriscoll, James
Subject: EPR Chapter 6 current version
Attachments: help?; Chapter 6 SER EPR - 03-22-11.doc

Jim:

Attached are the comments from Chris before Chapter Day, and a copy of the current SER for EPR Chapter 6 as of today, which includes all the changes made on Chapter Day (easiest to read in Review->Final)

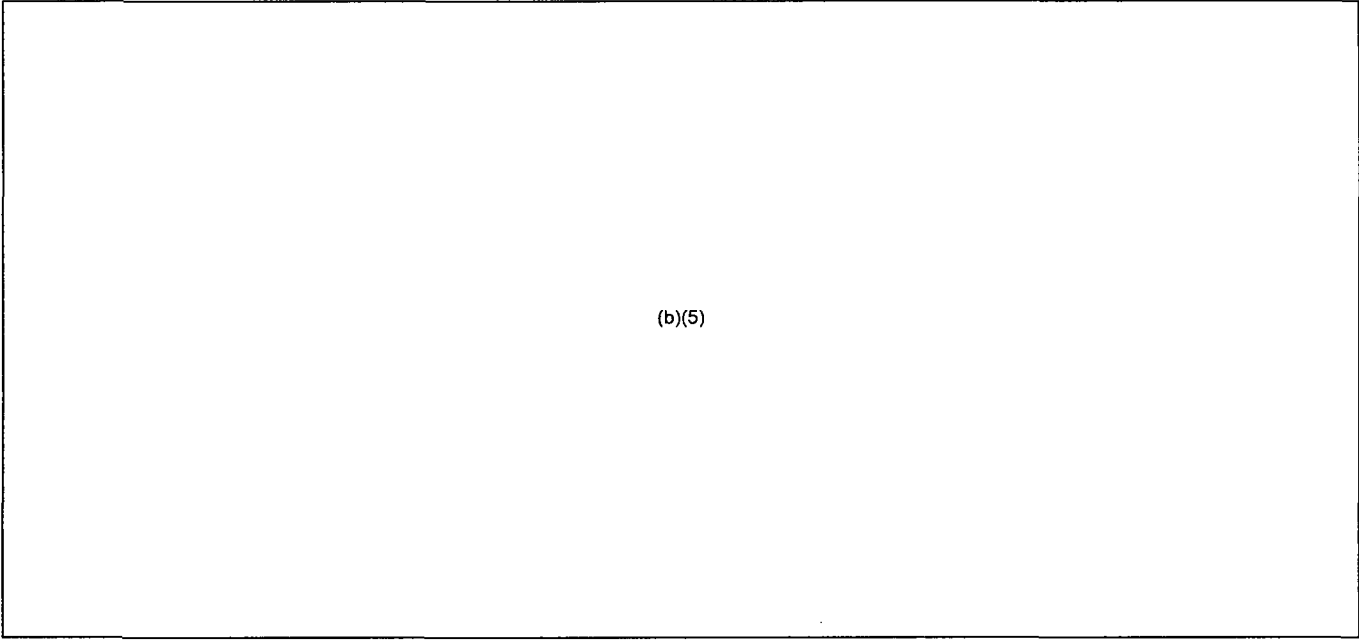
Thanks,

Jason

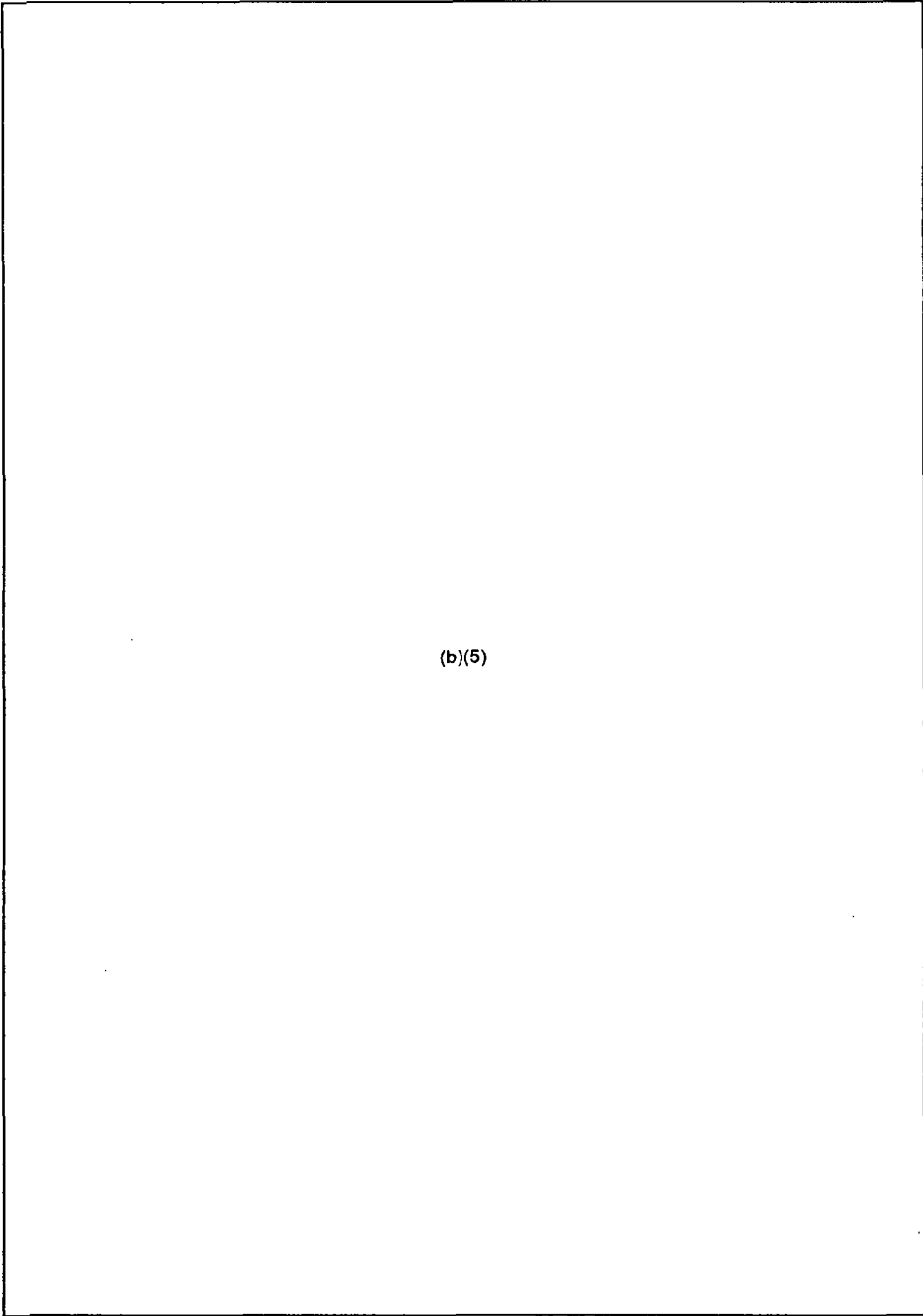
JASON CARNEAL
PROJECT MANAGER
U.S. NUCLEAR REGULATORY COMMISSION
NRO/DNRL/NARP (T-6J4)
301-415-3813

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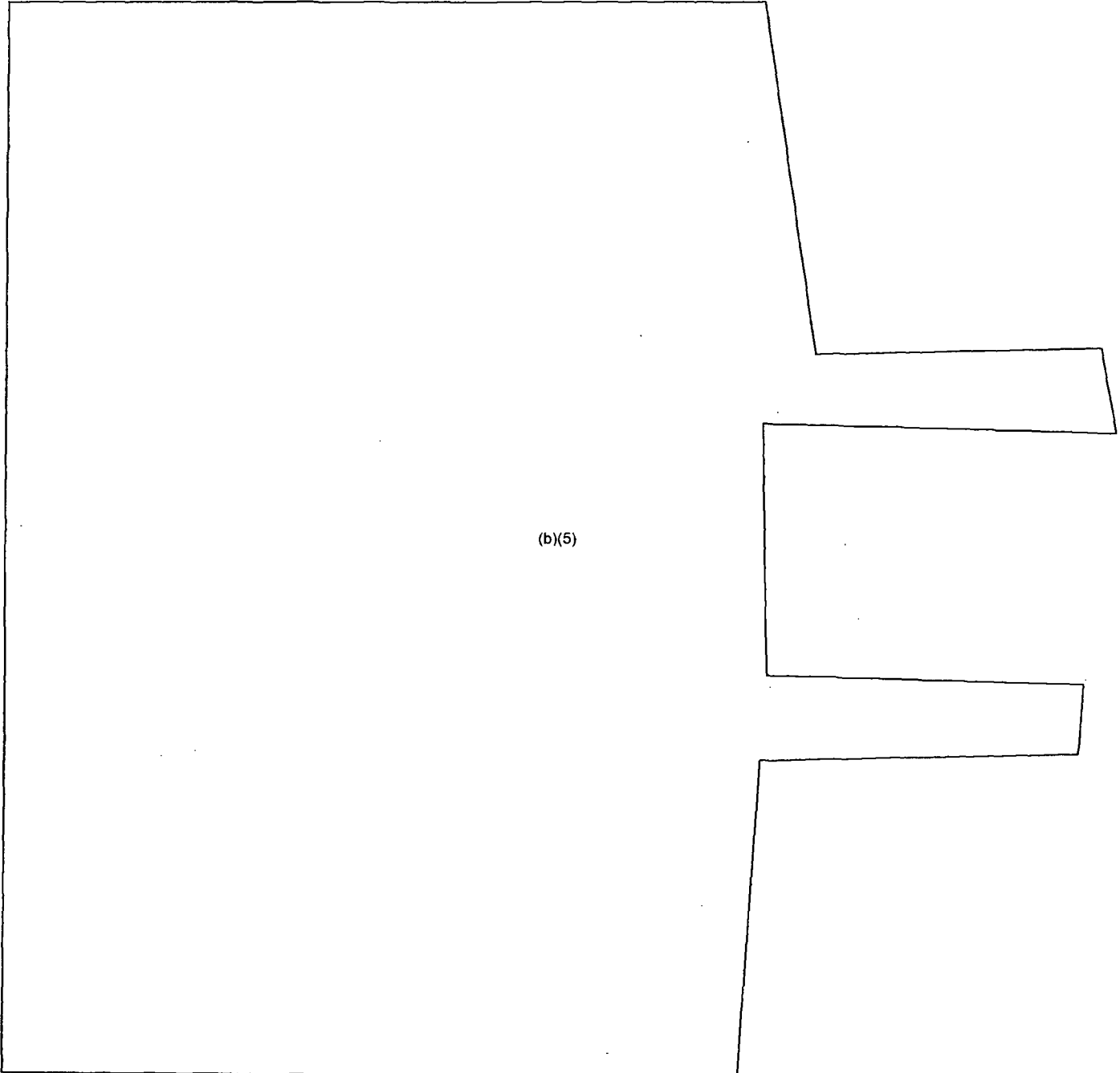


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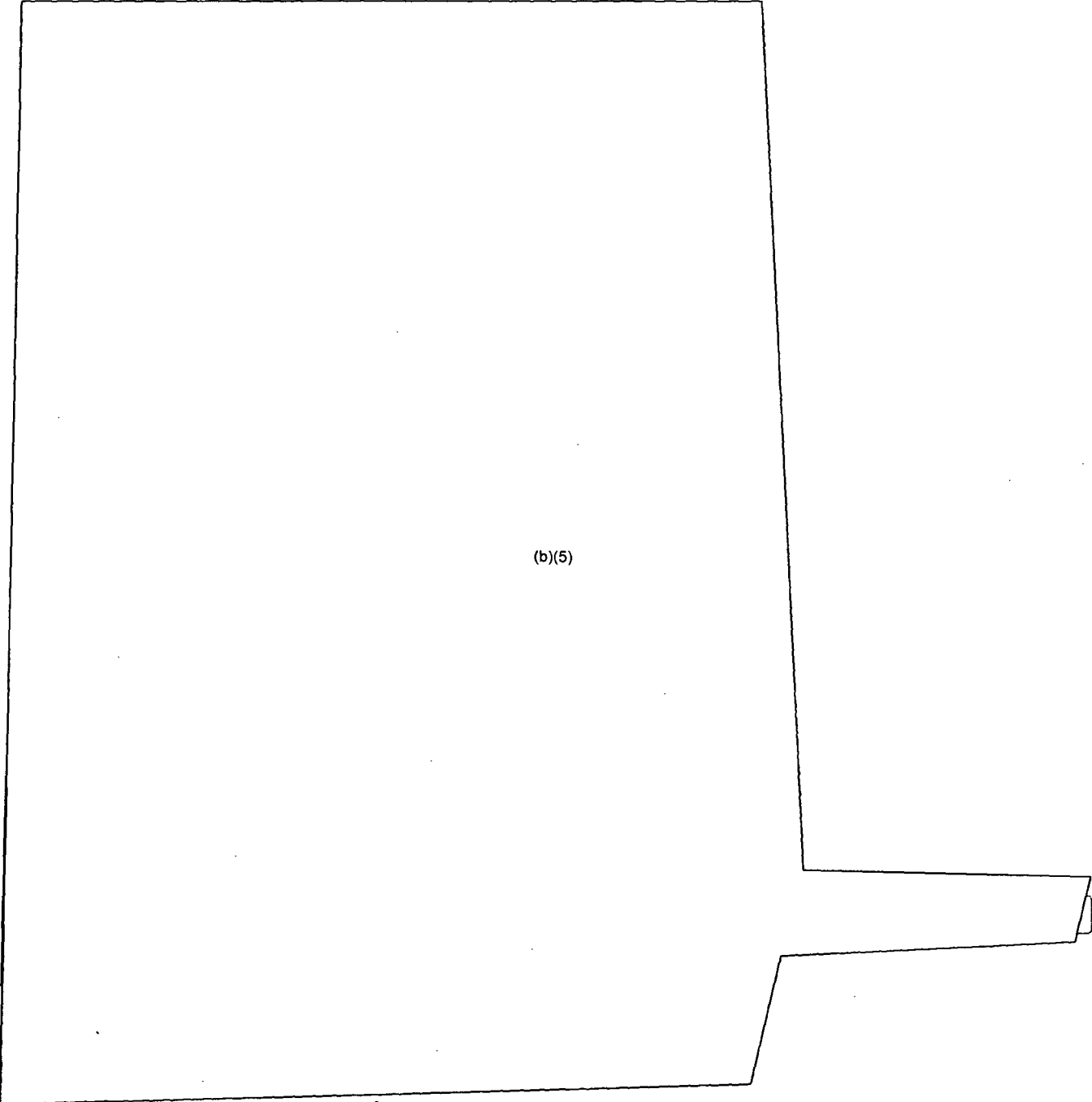


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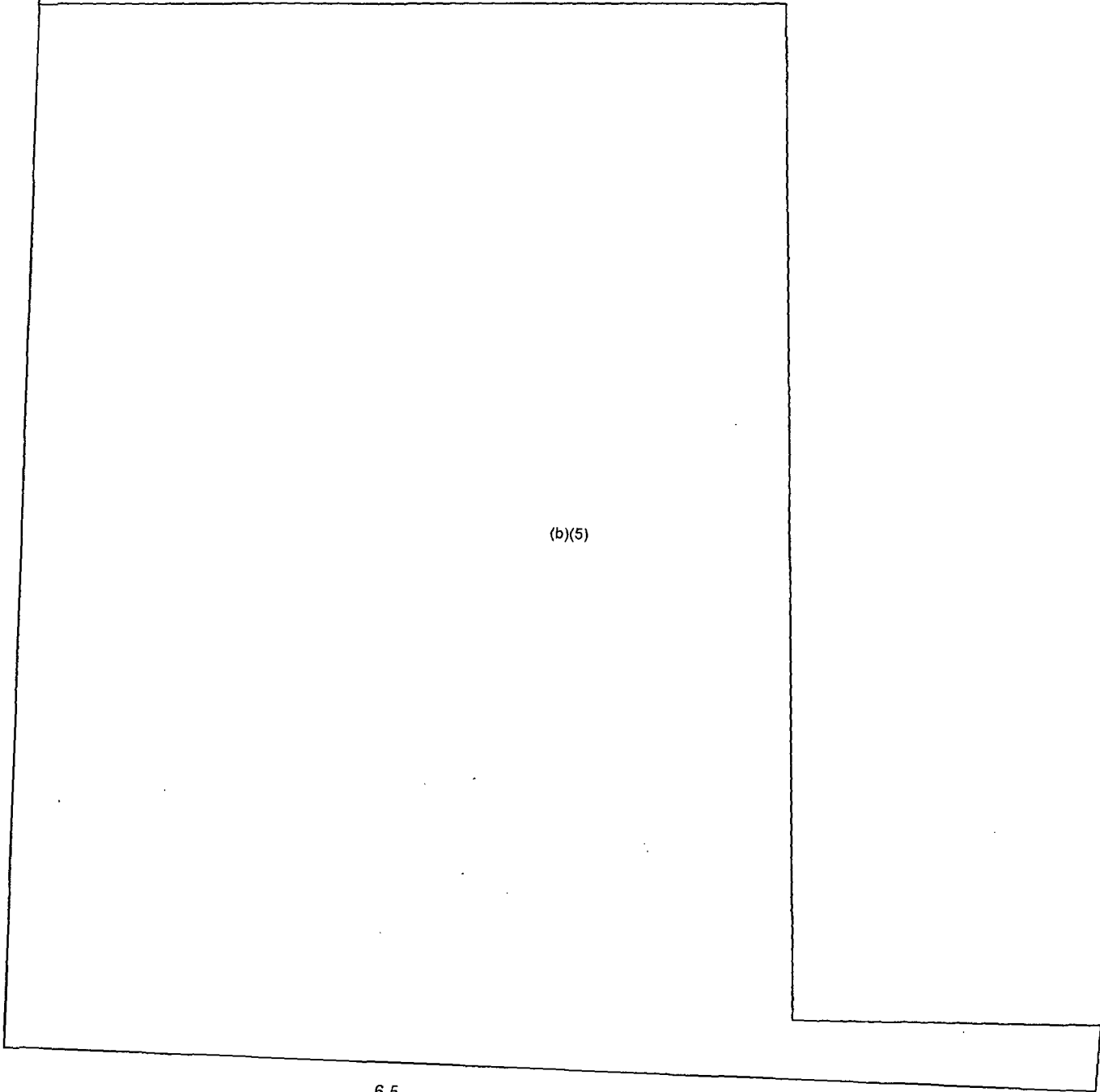
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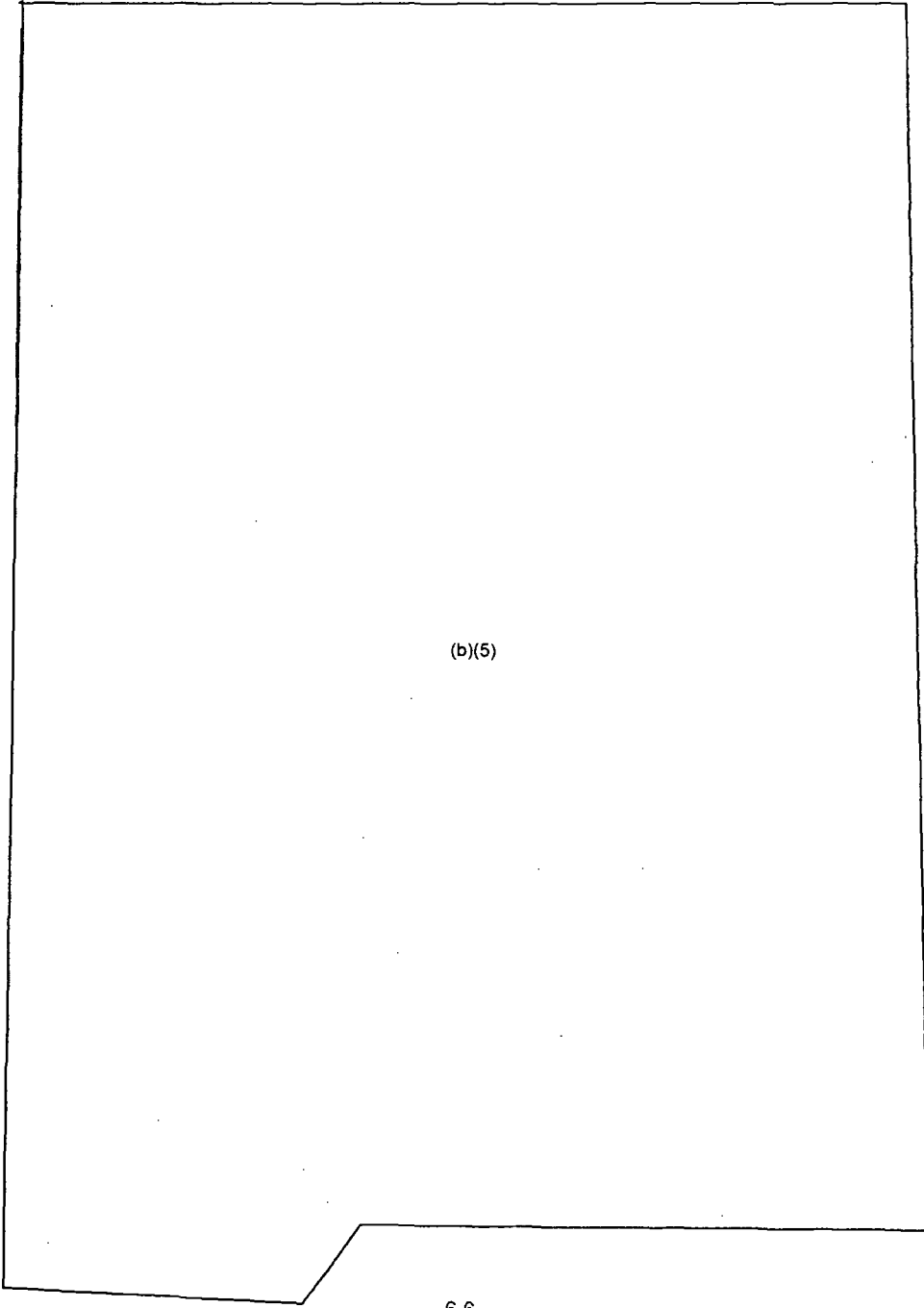
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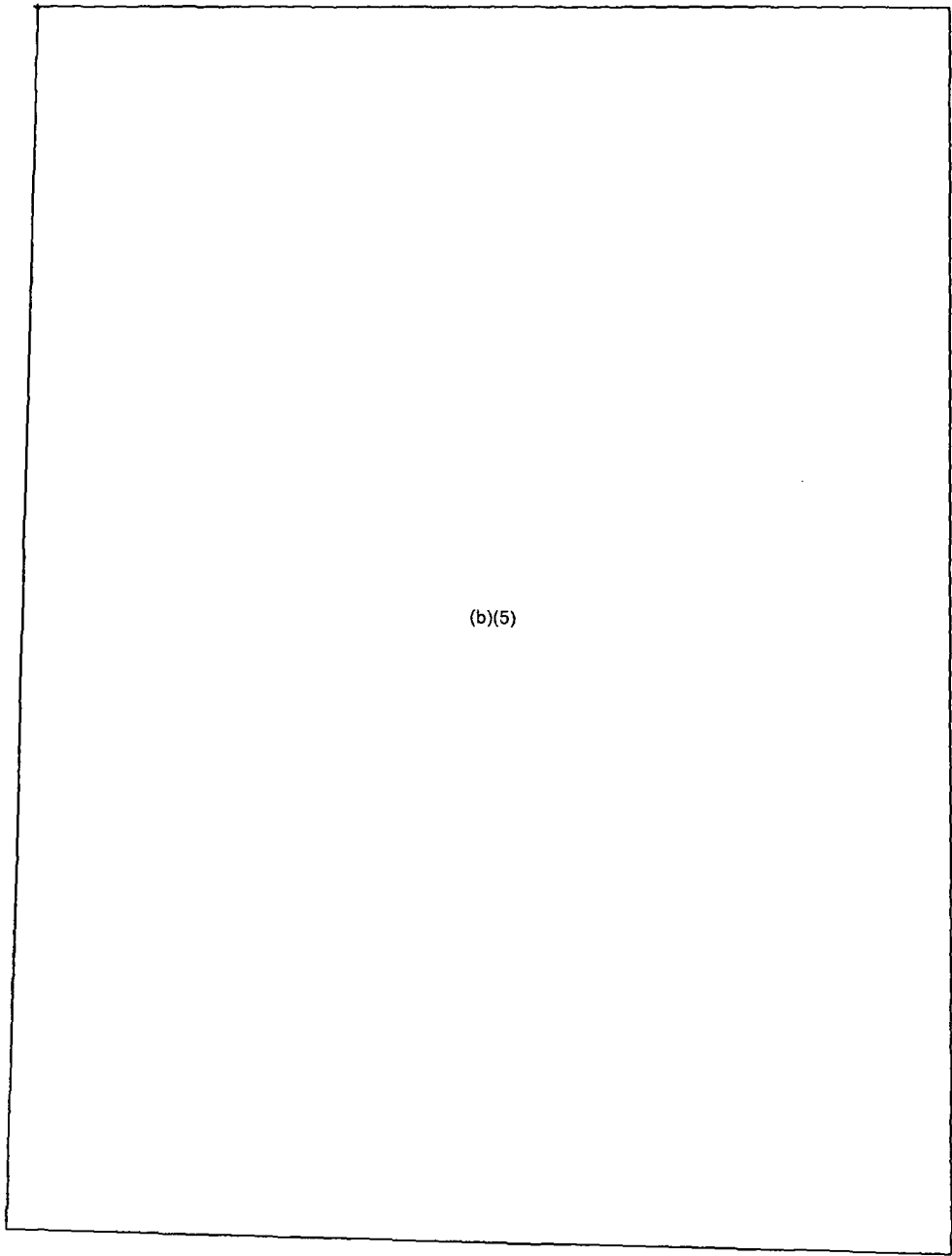
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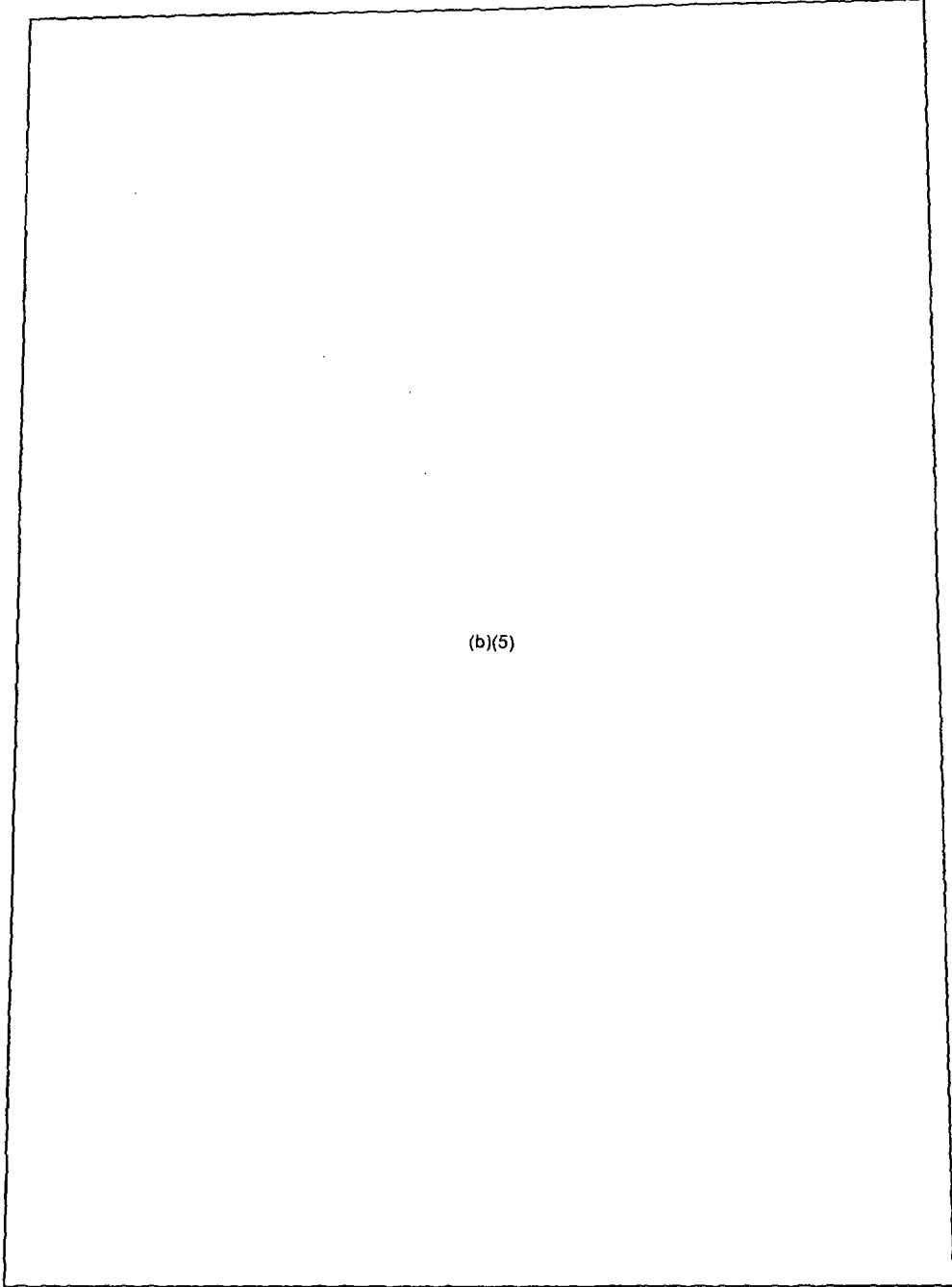
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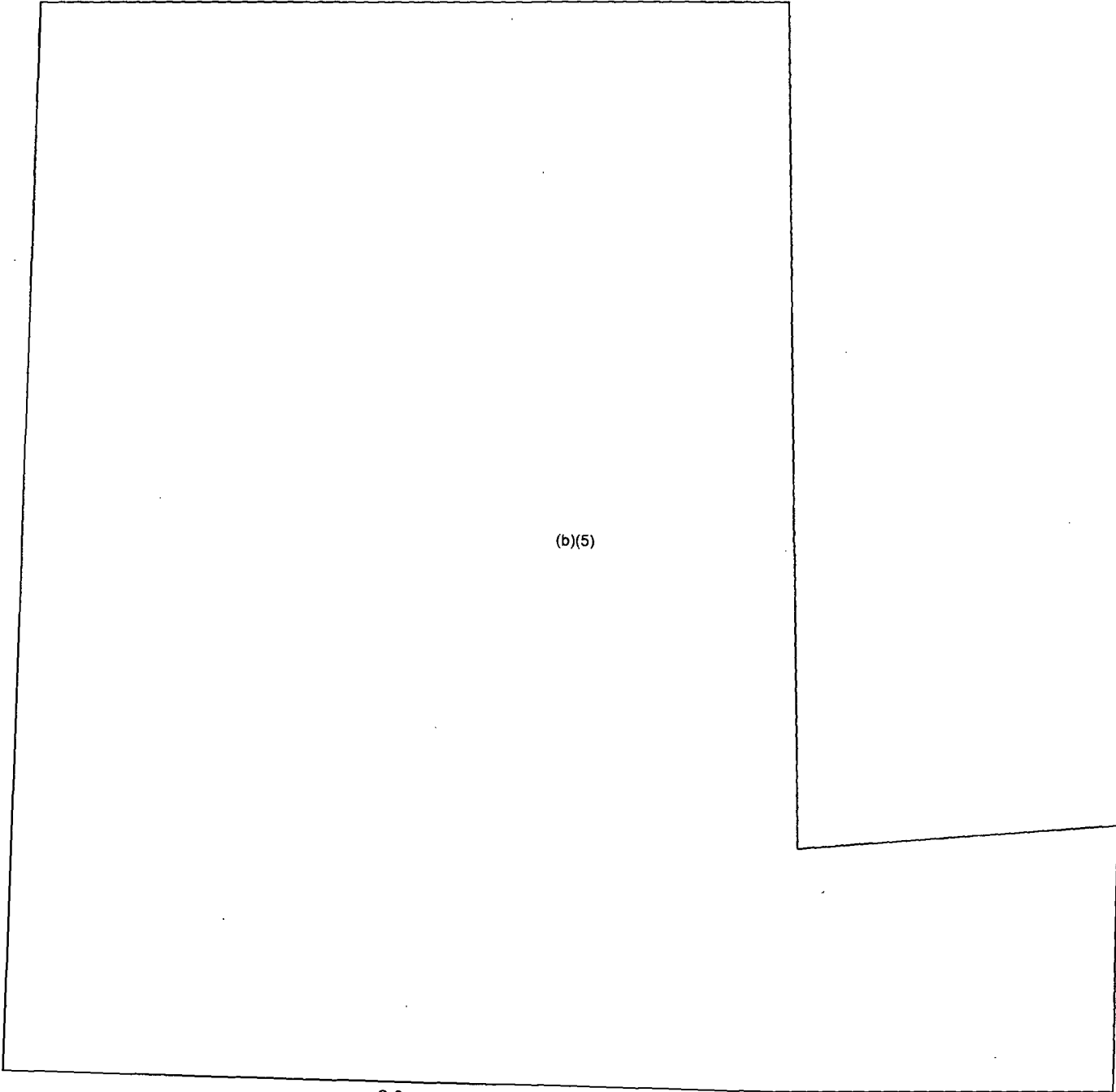
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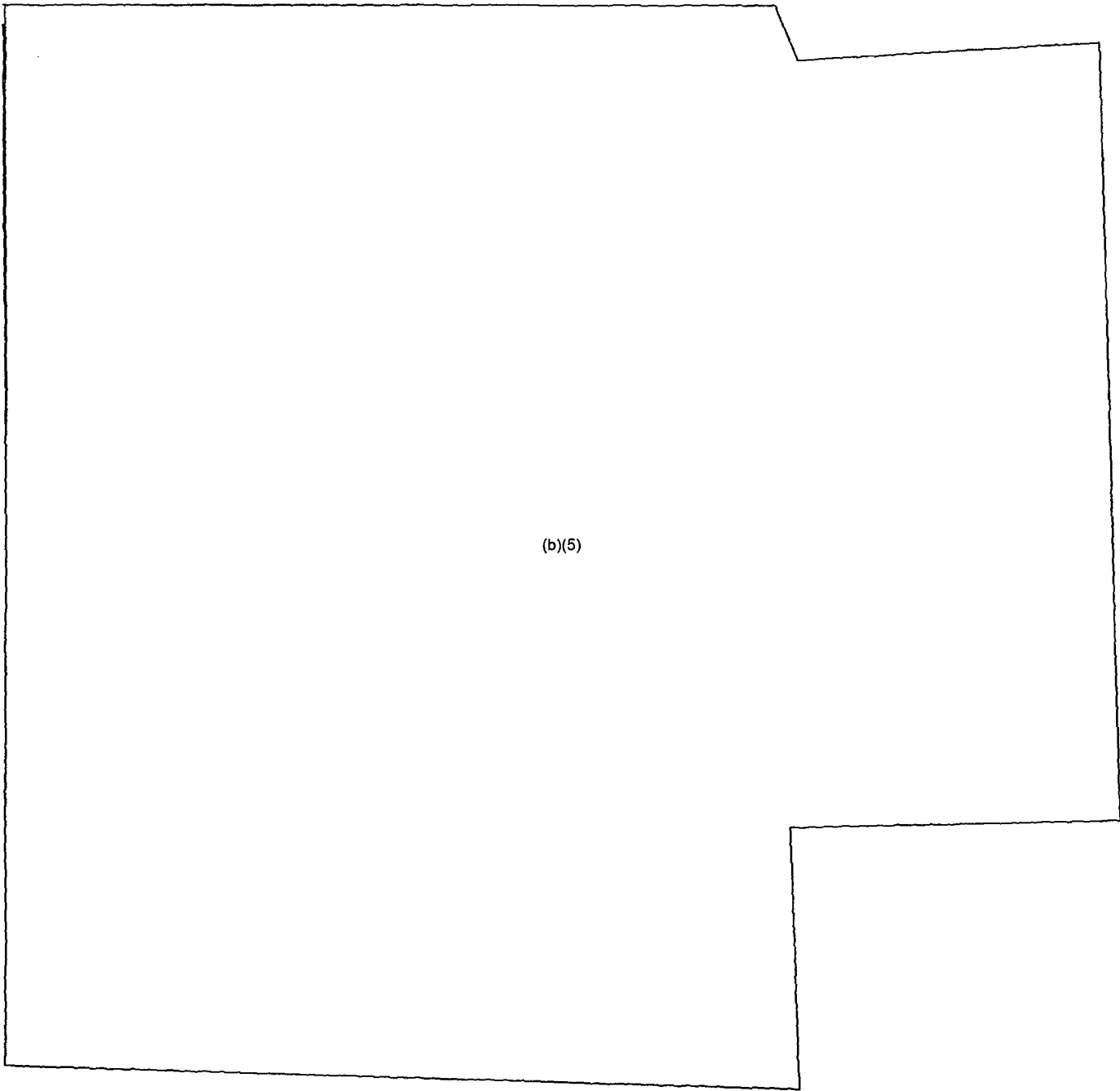
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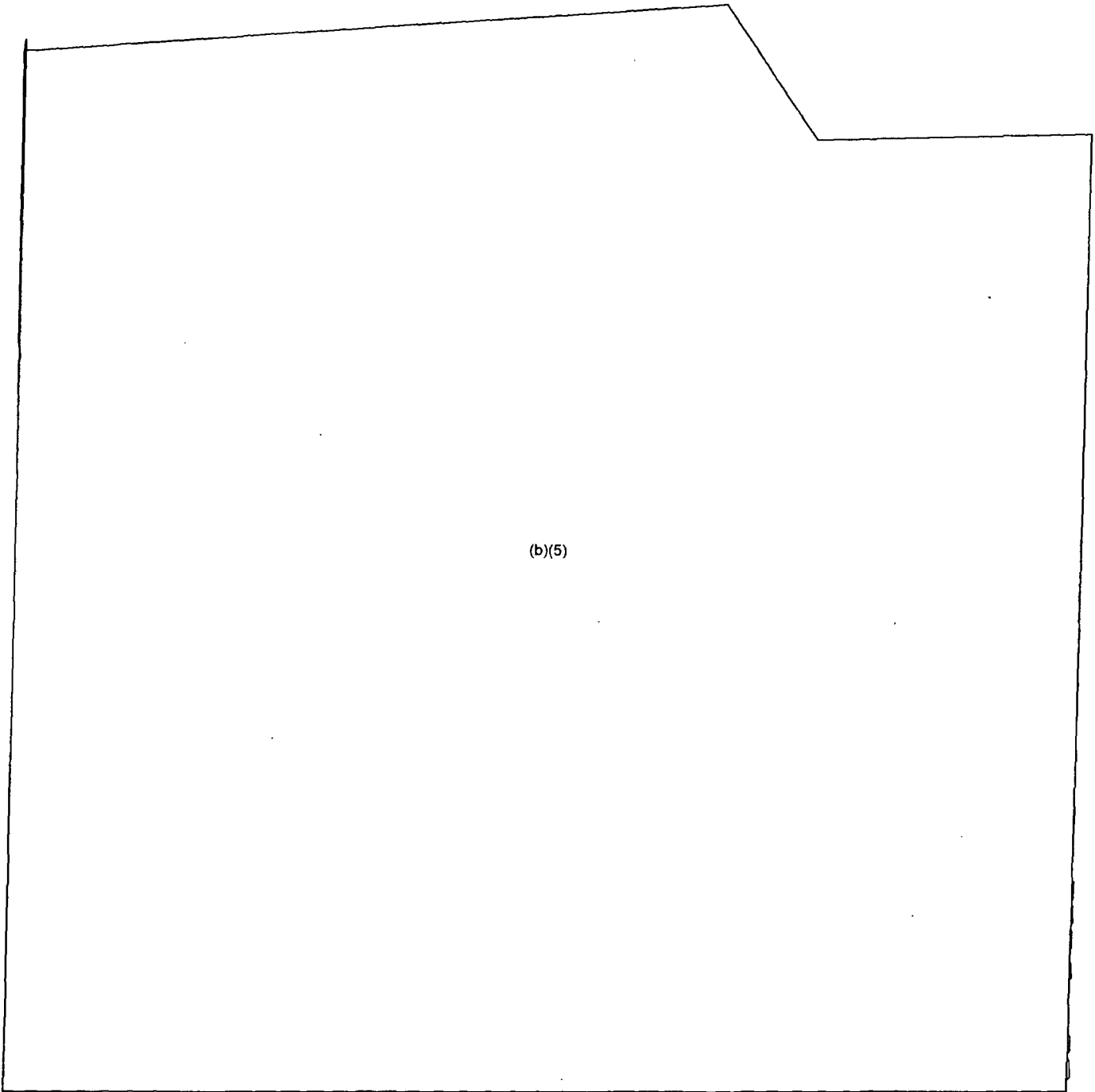


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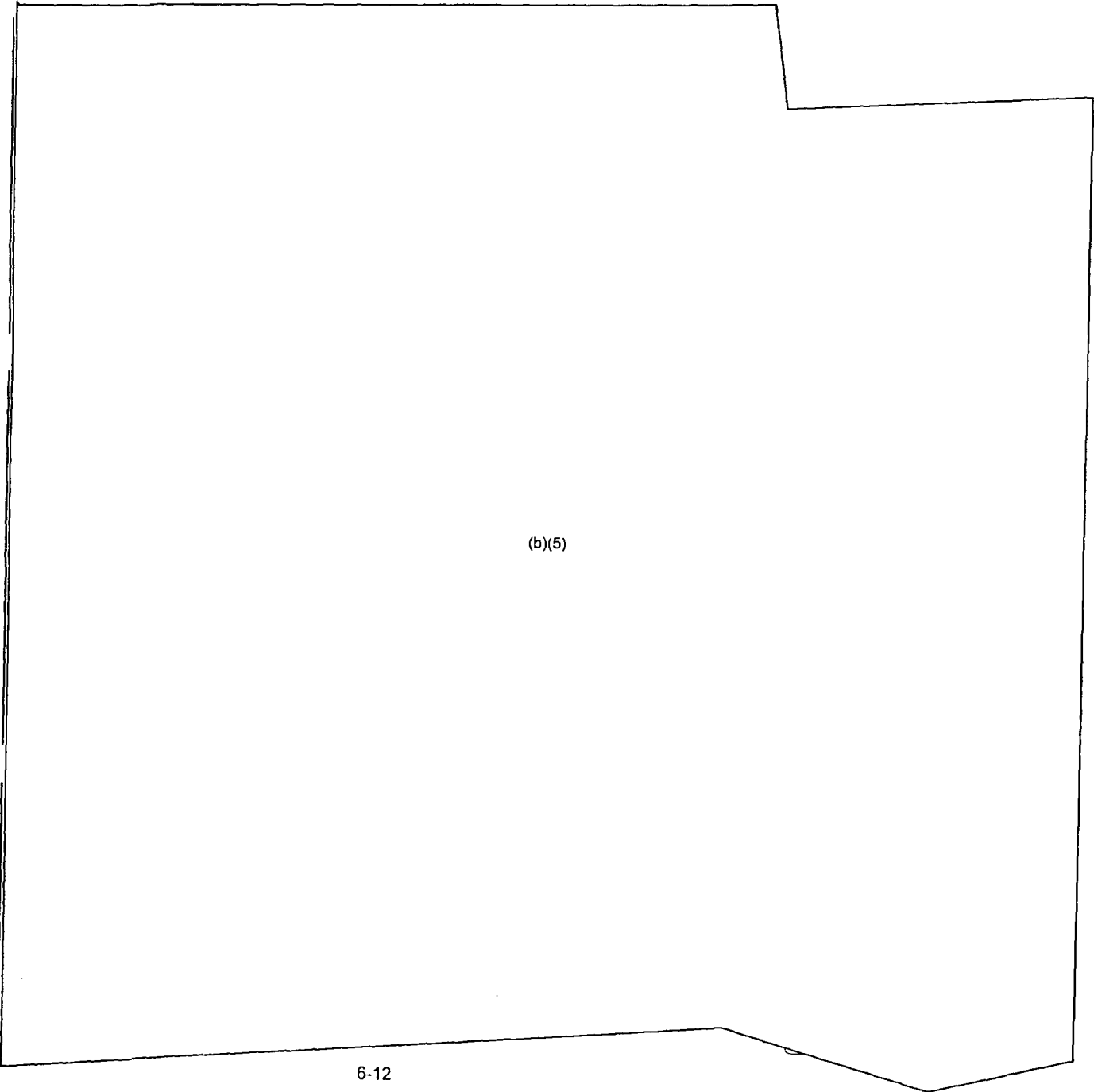


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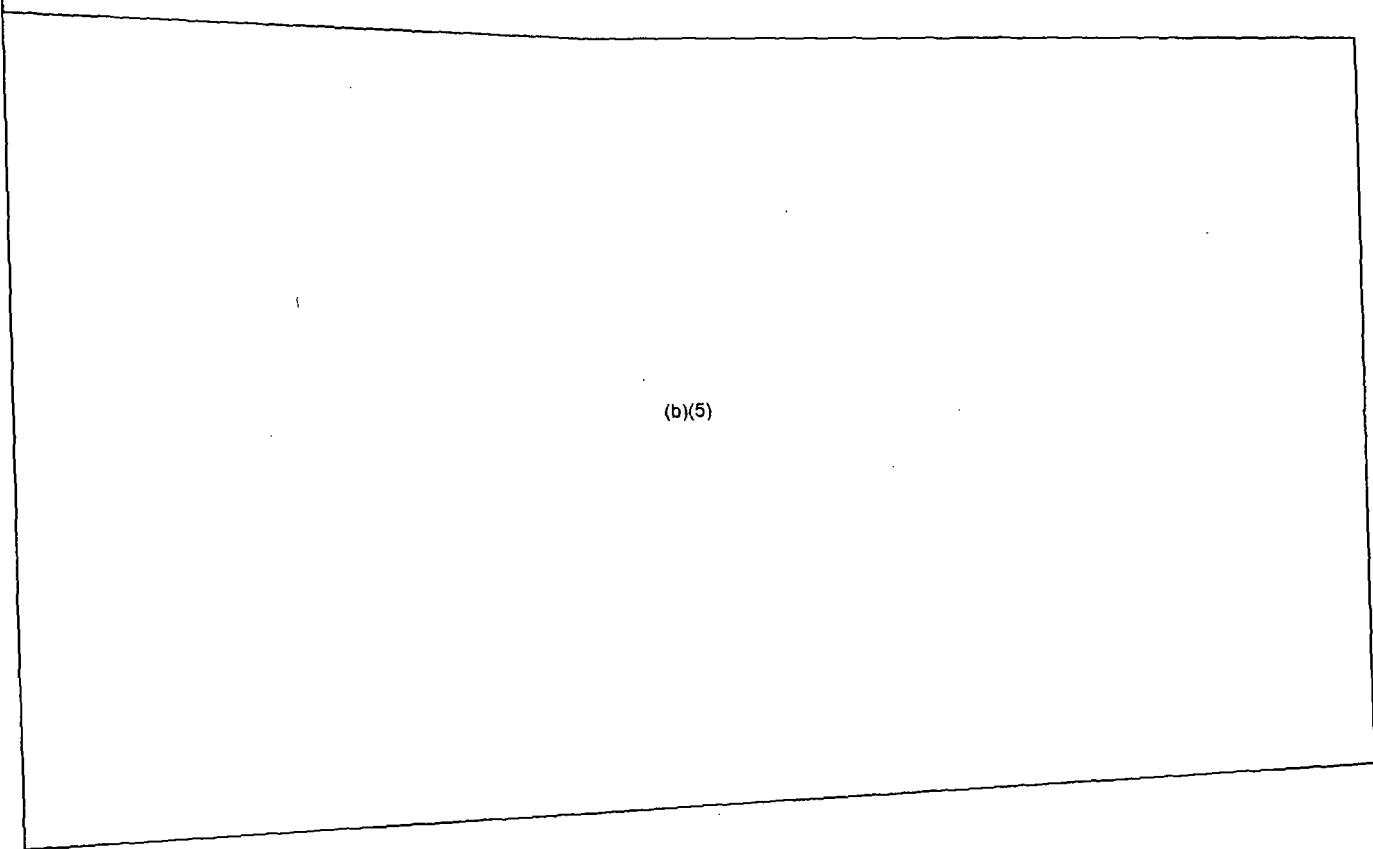


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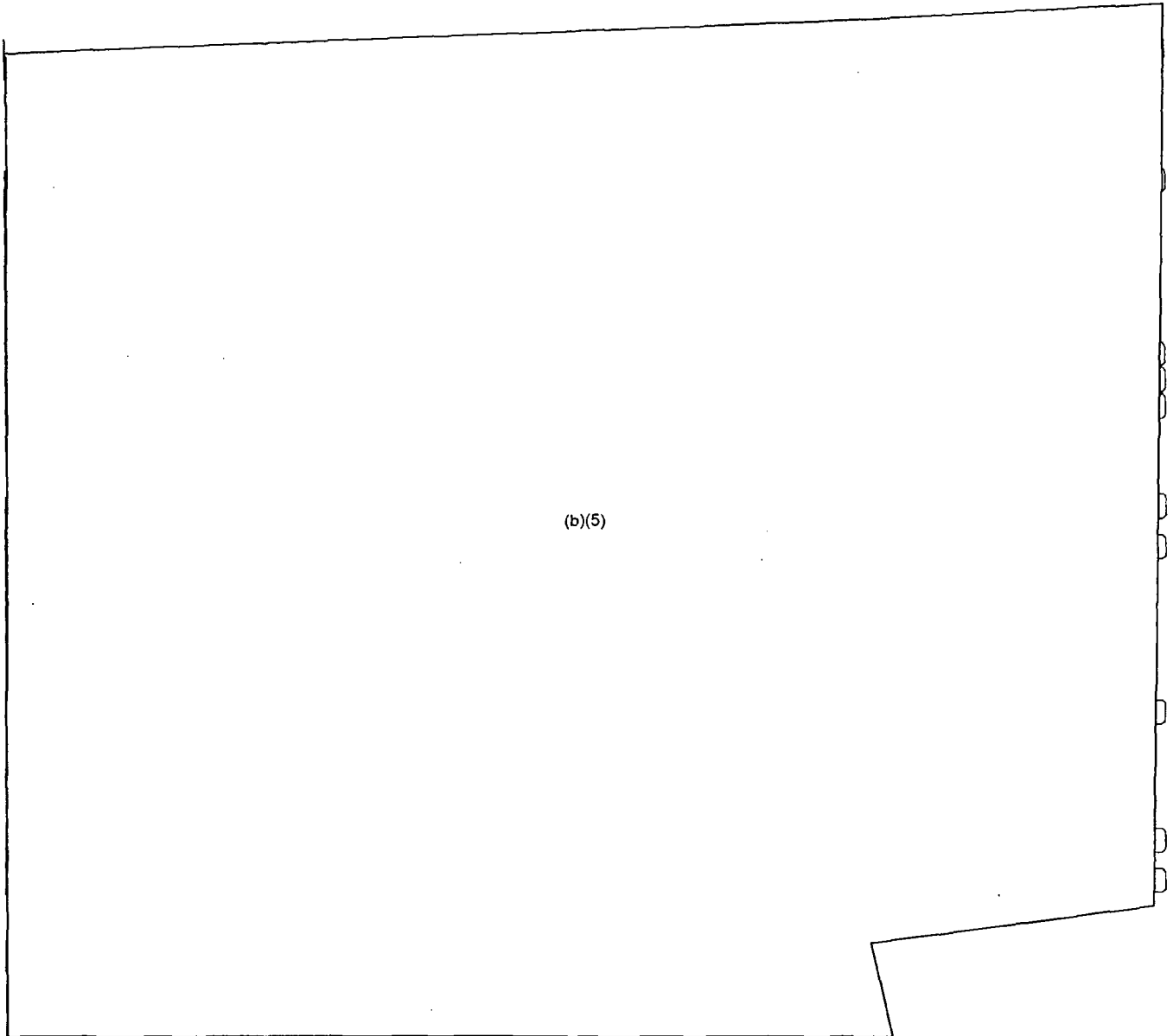


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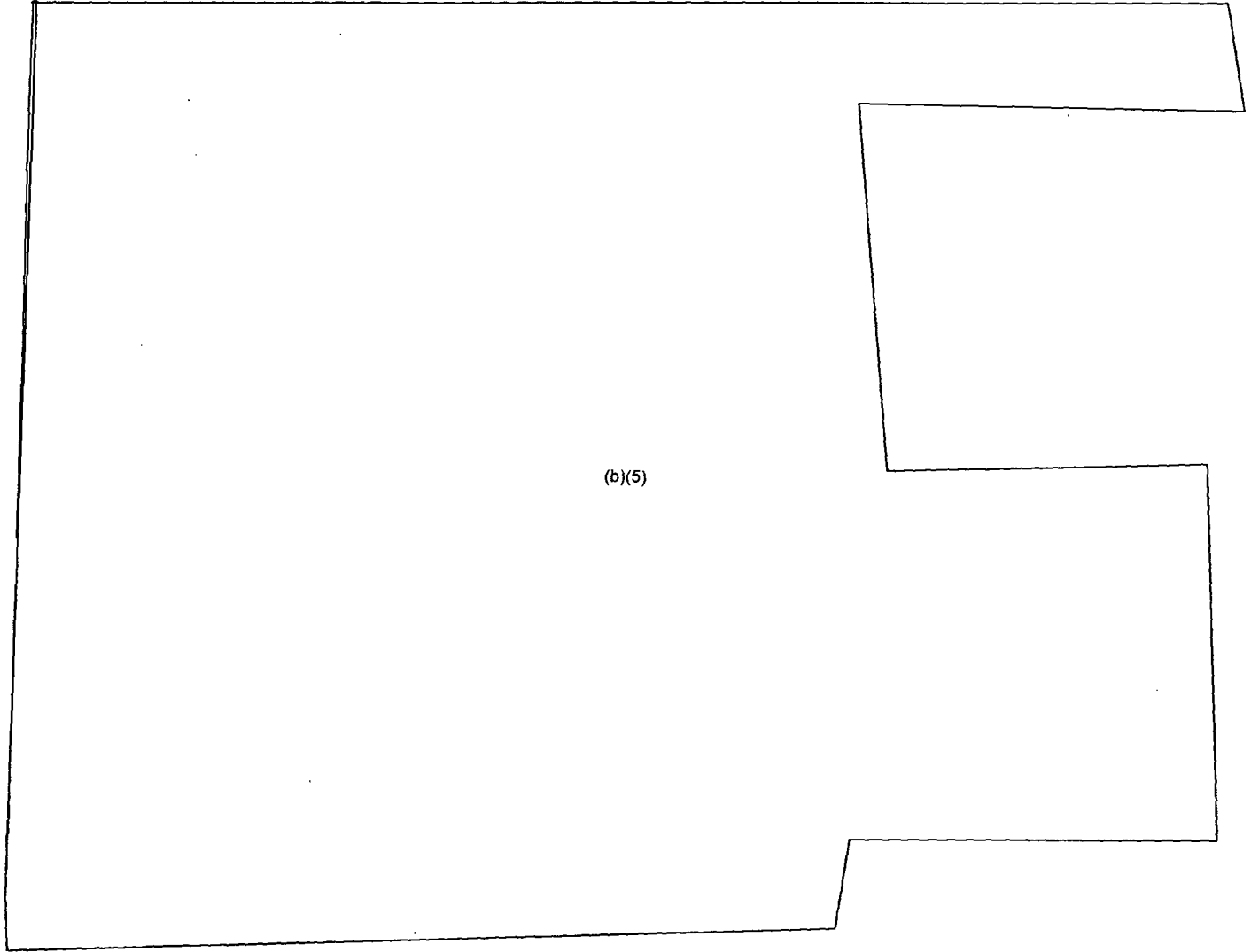
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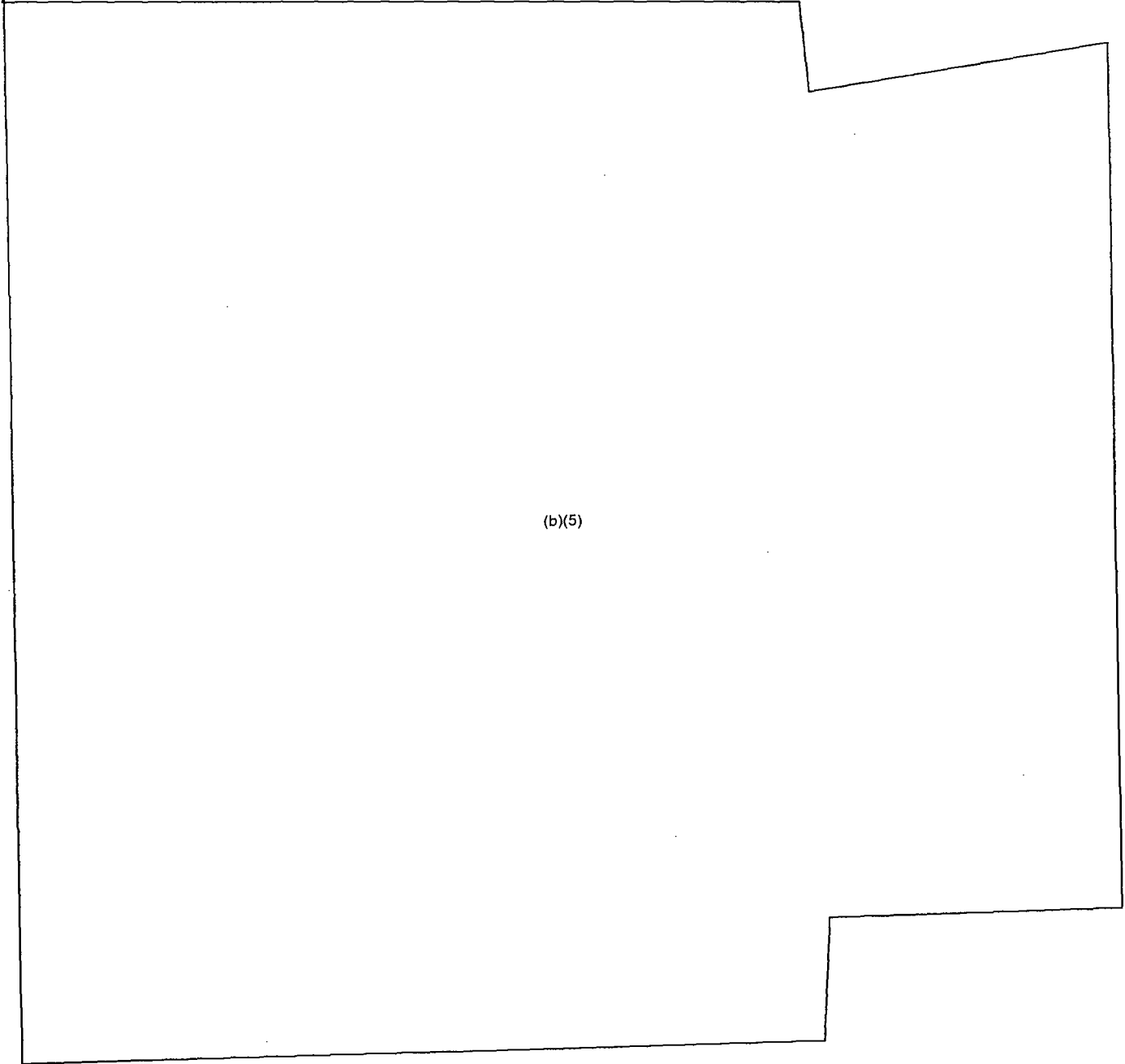
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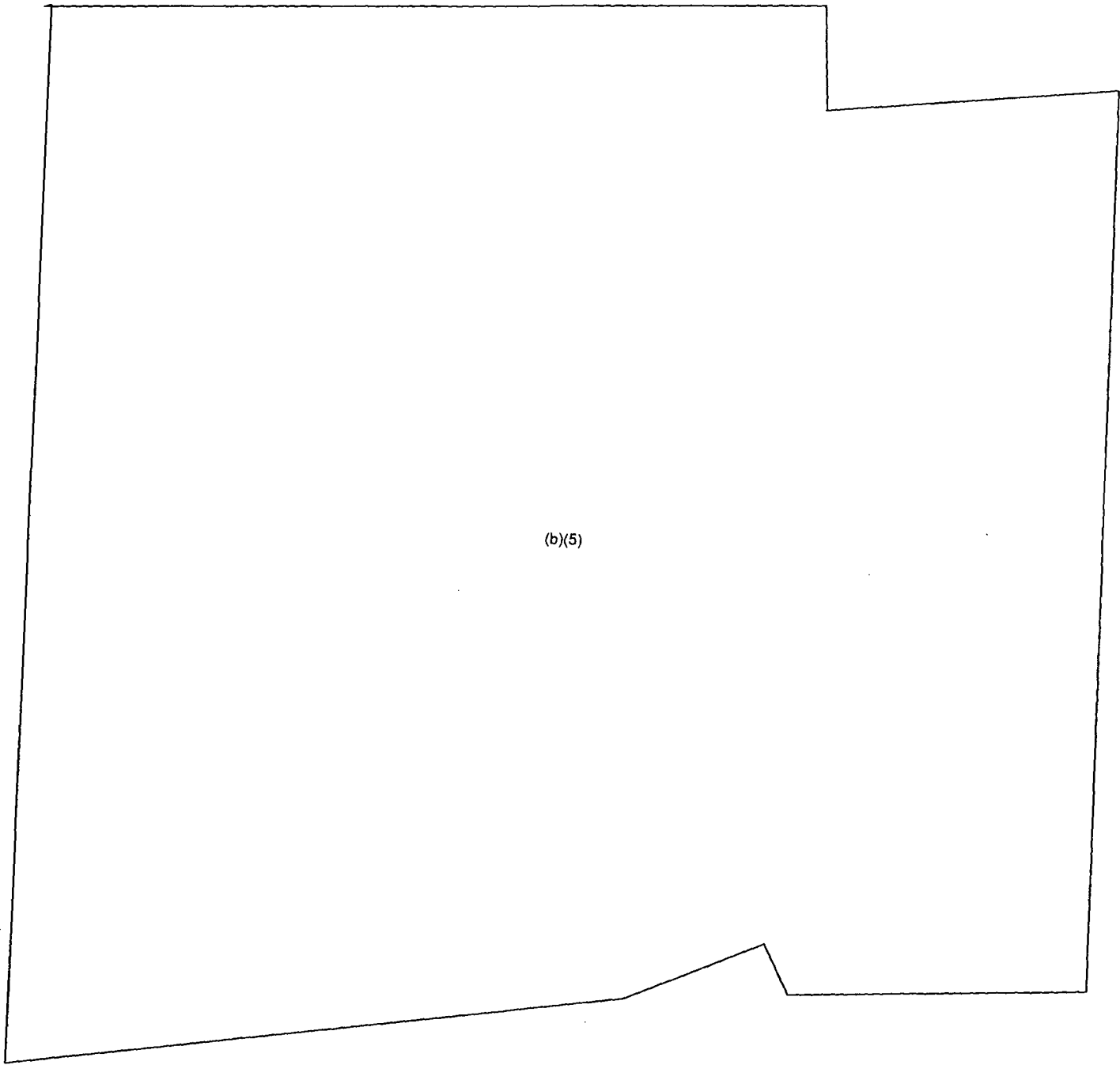
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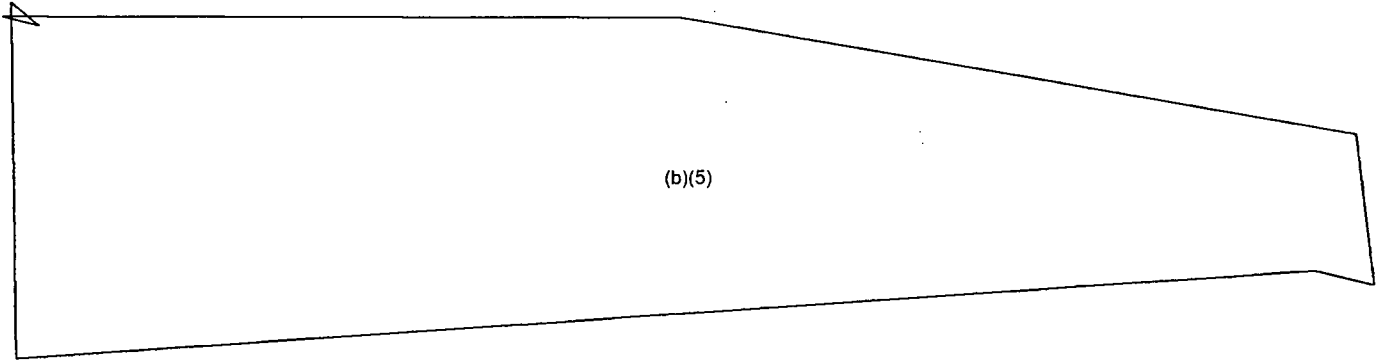
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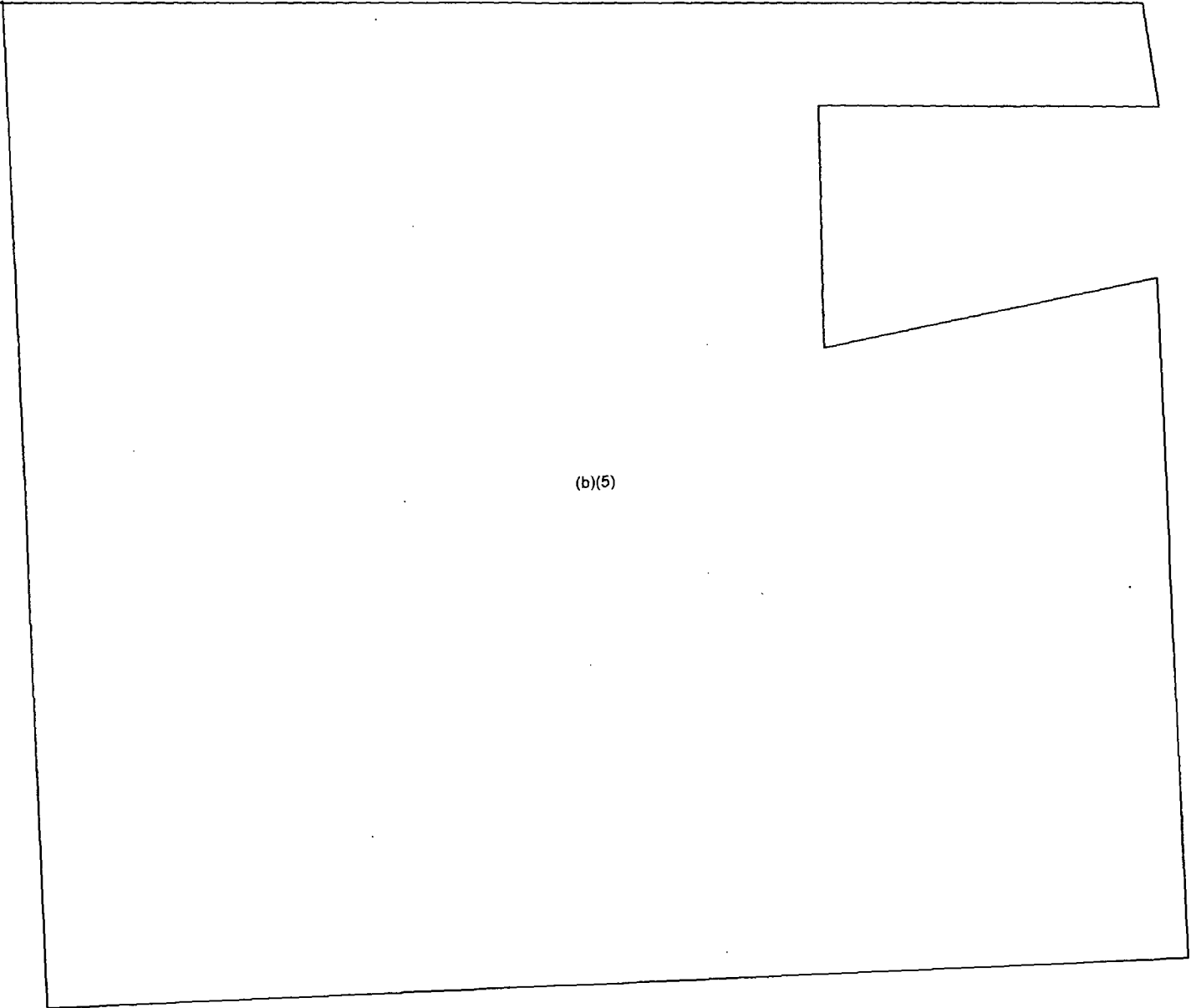


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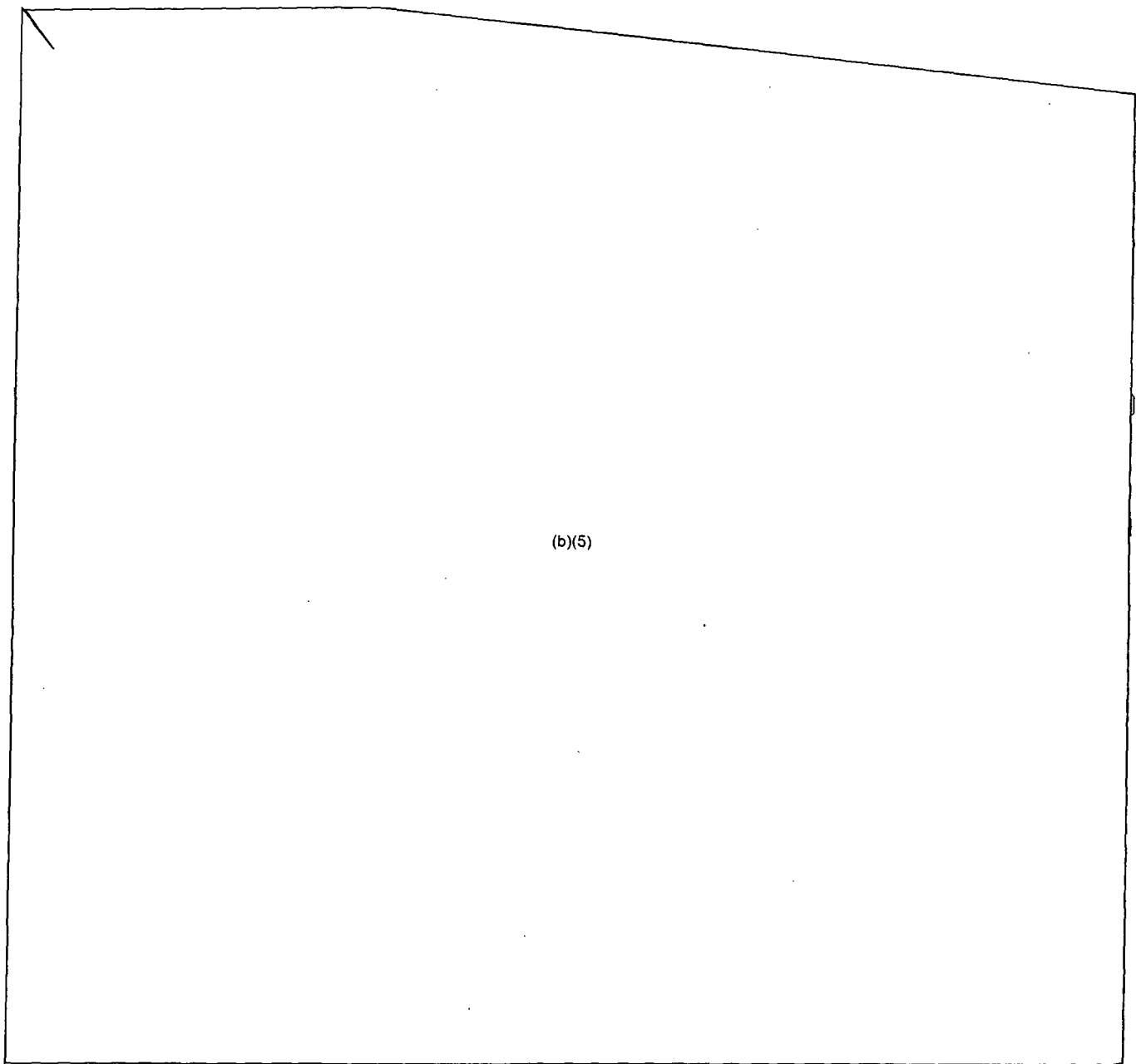


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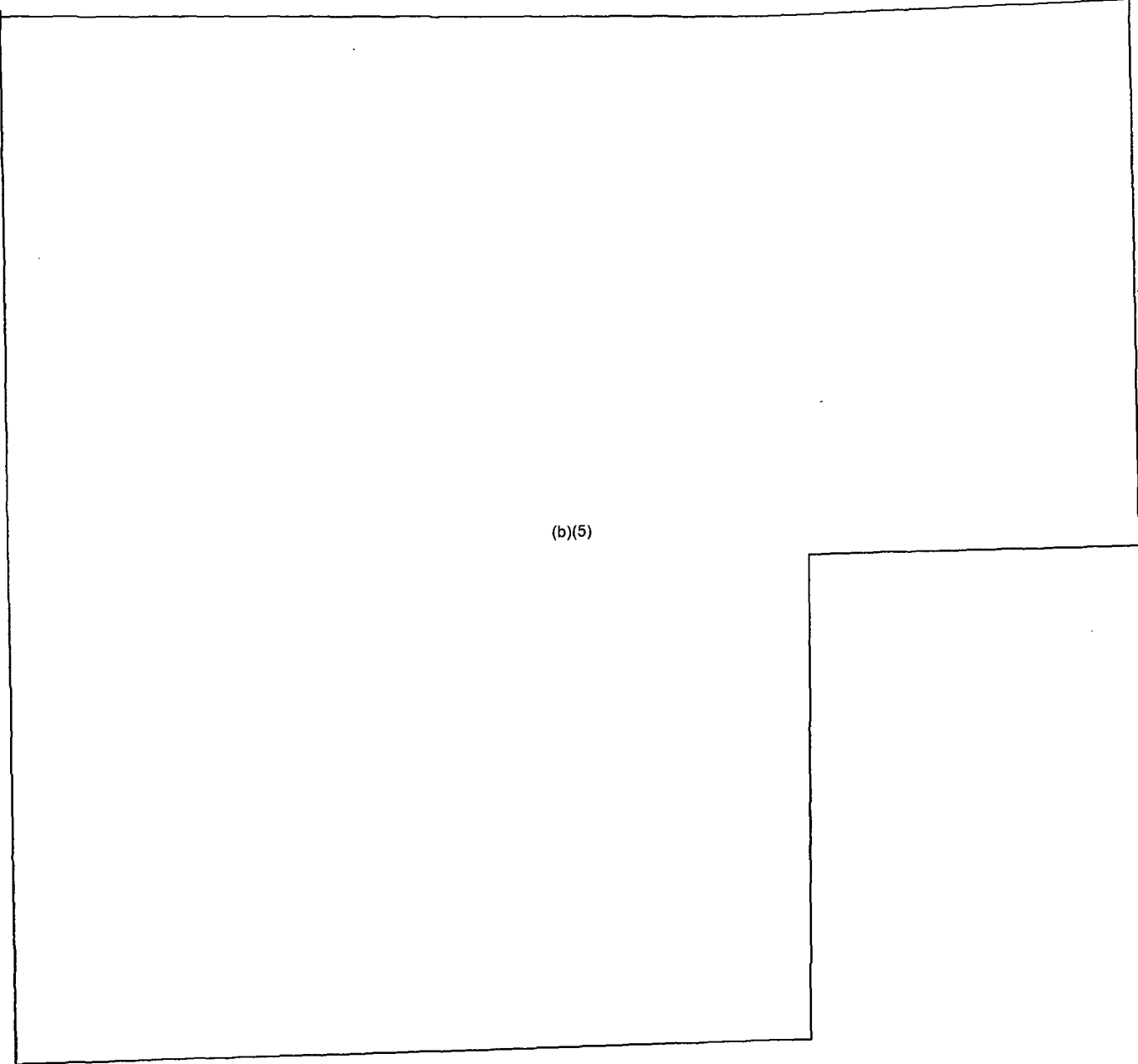




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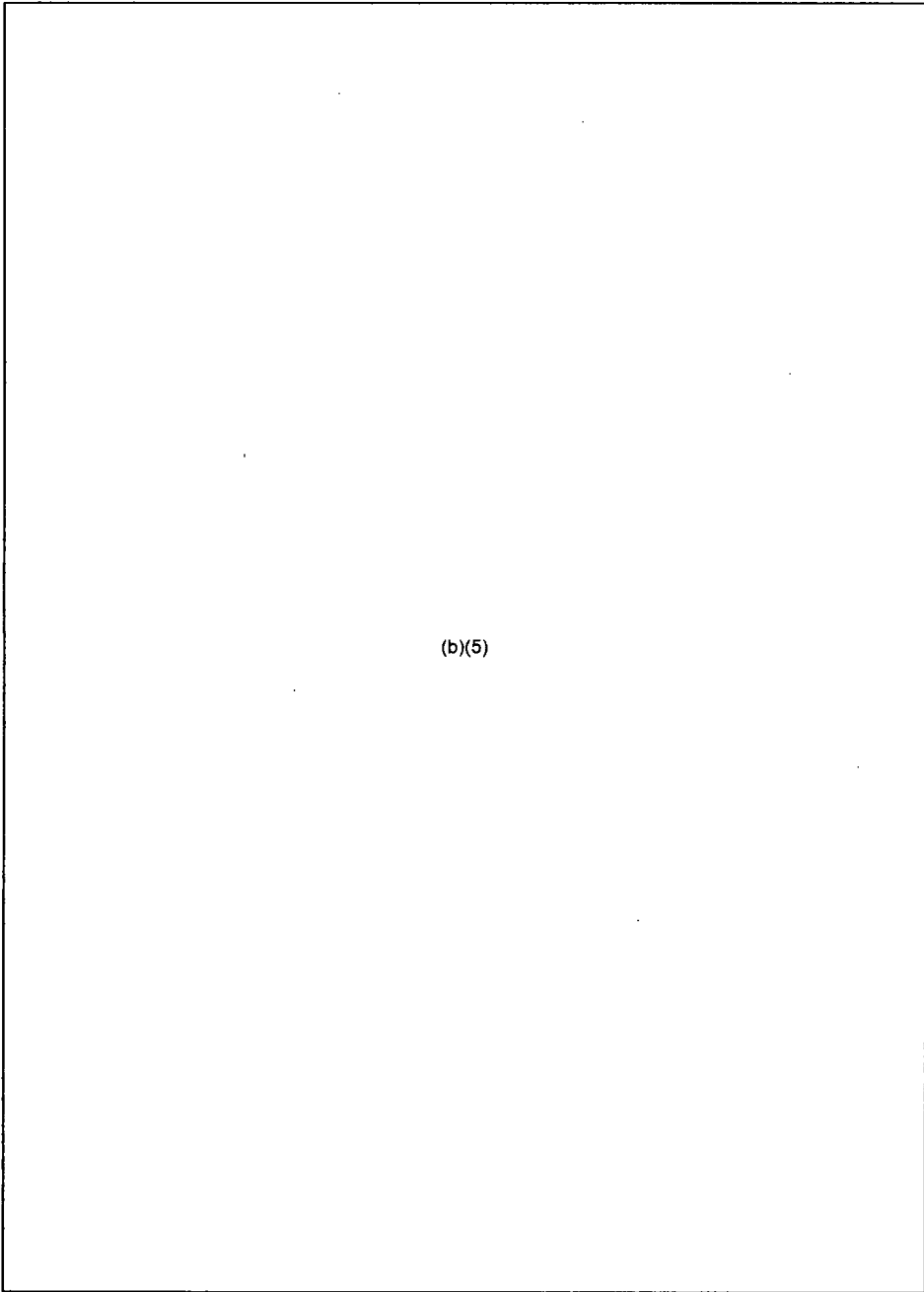
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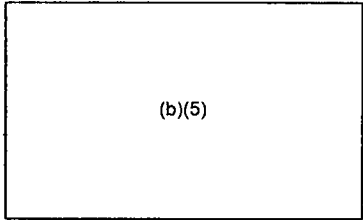
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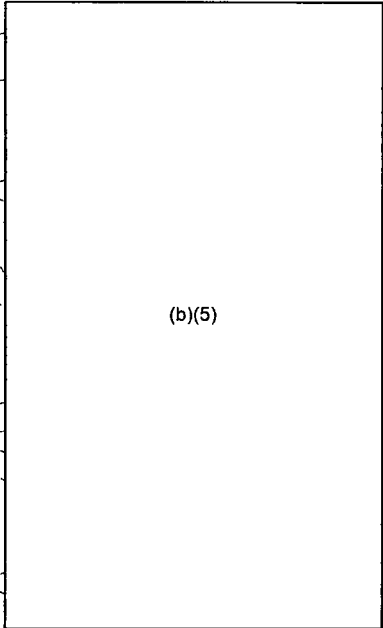
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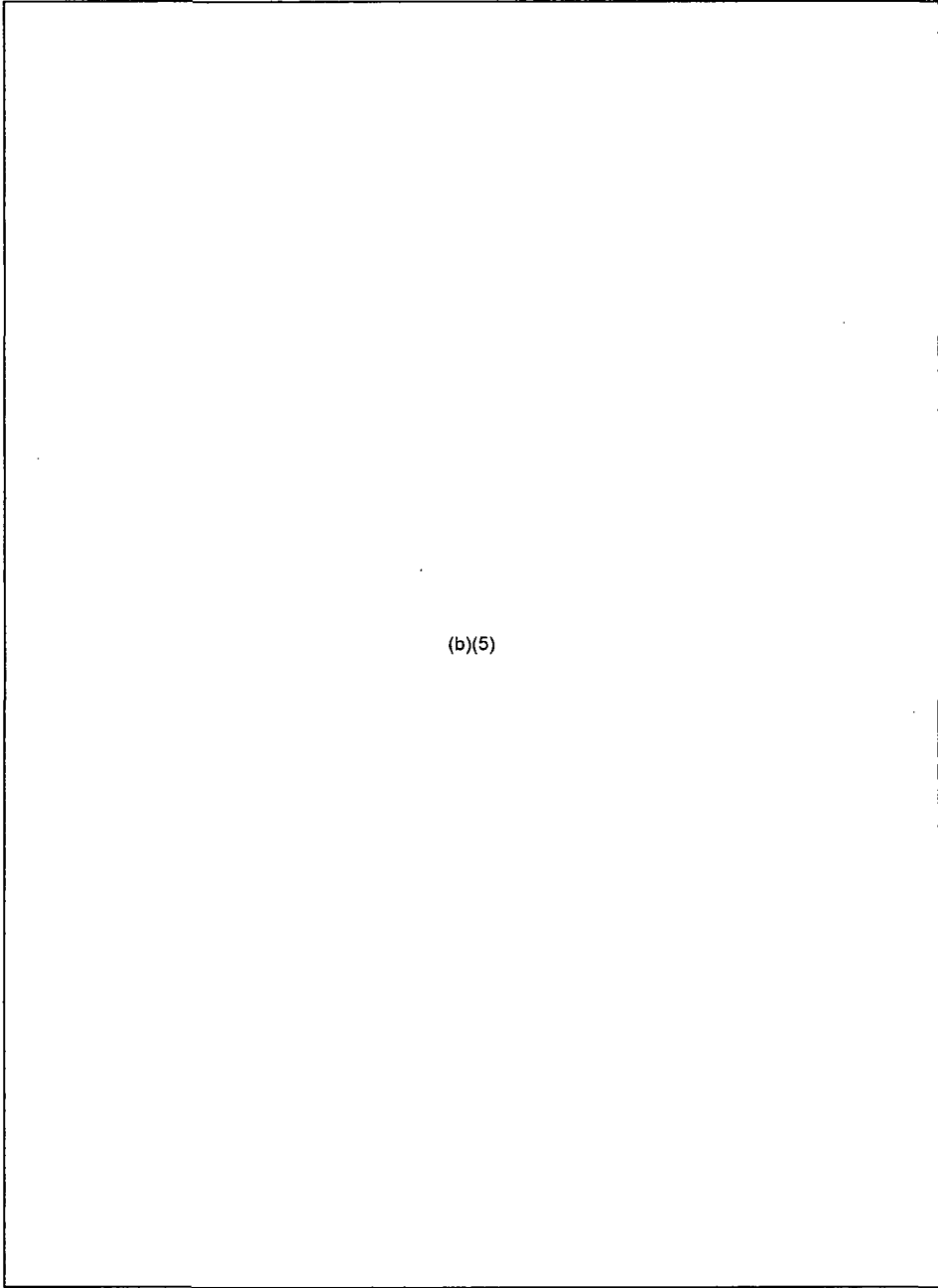
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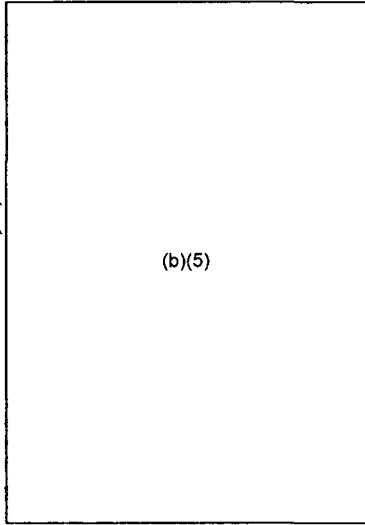
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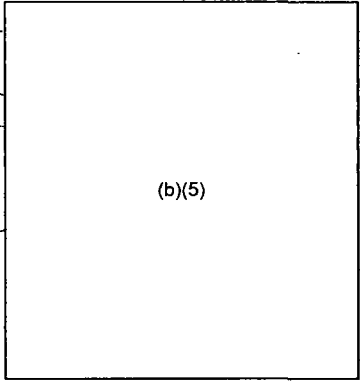
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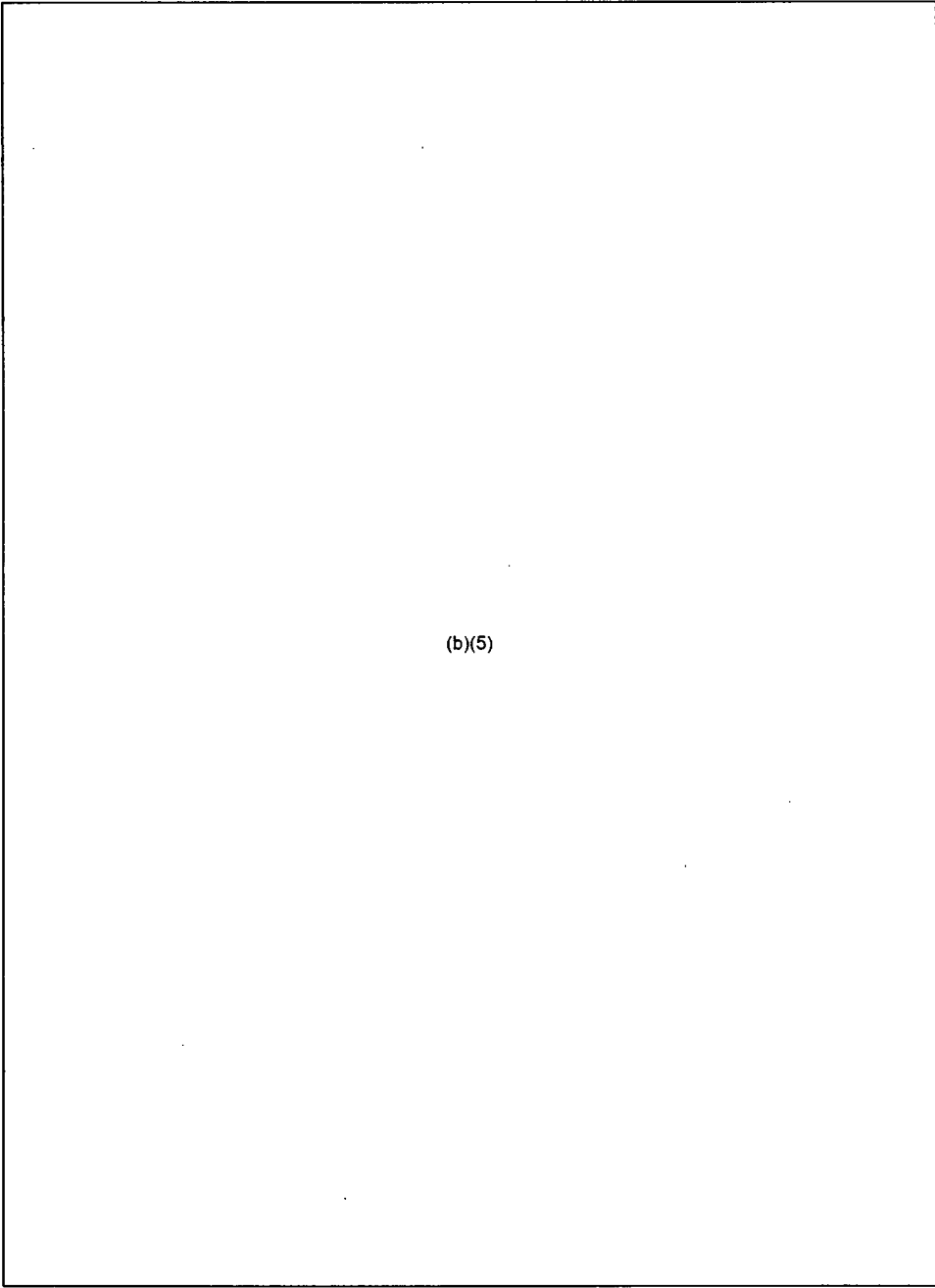
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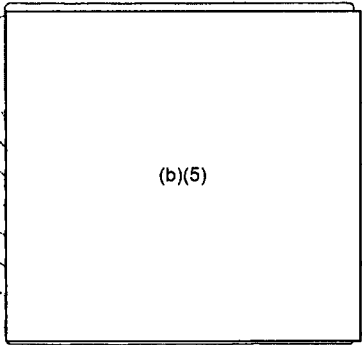
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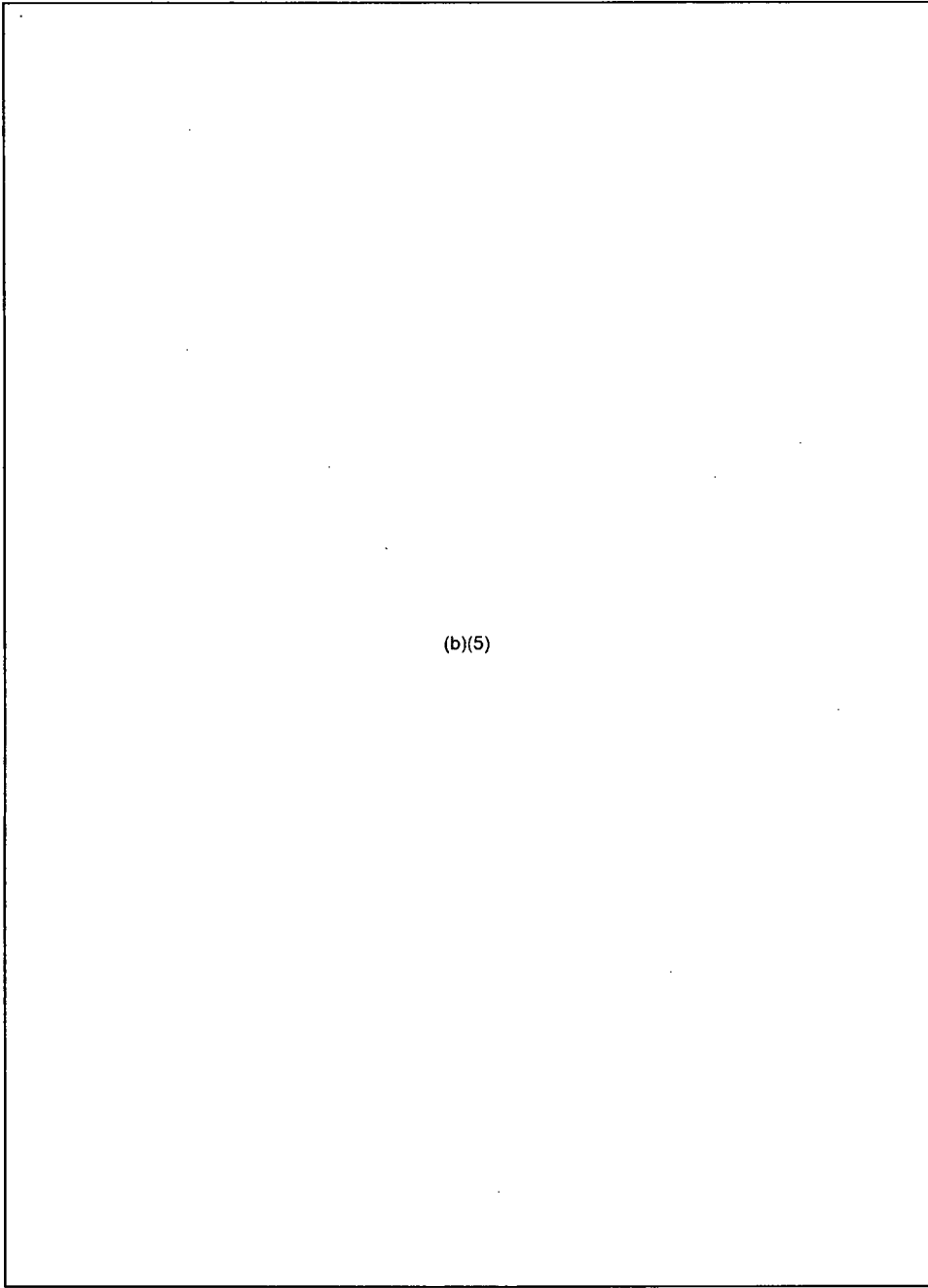
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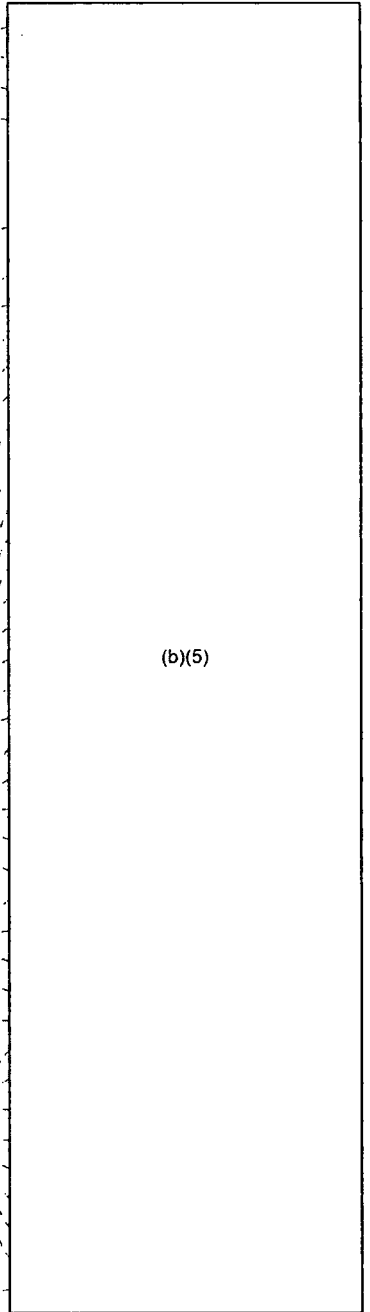
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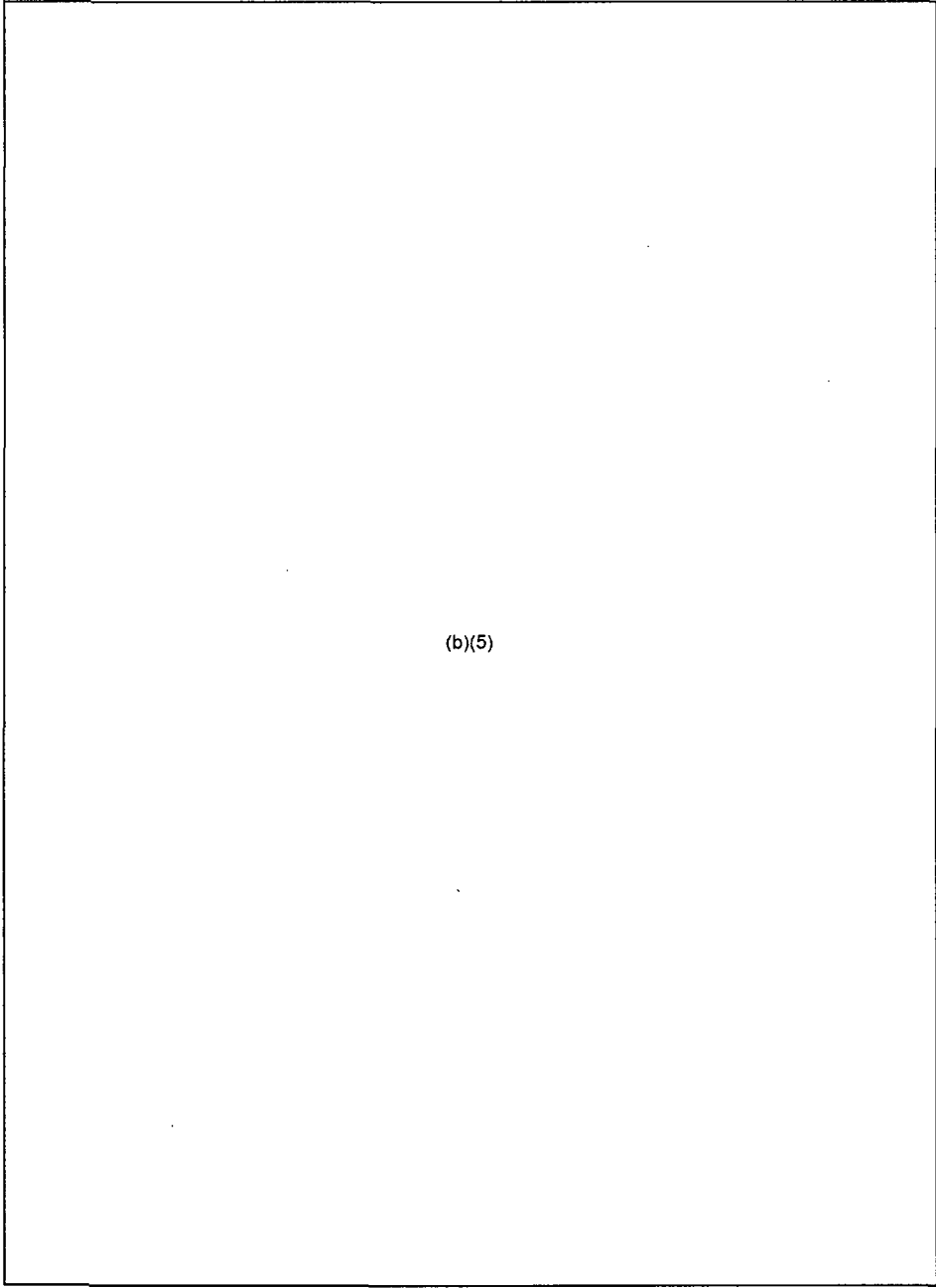
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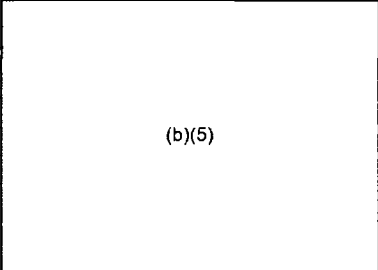
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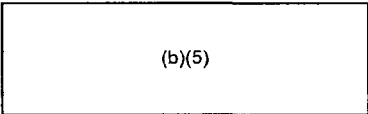
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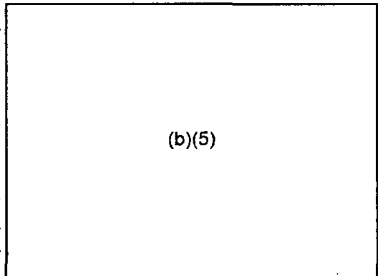
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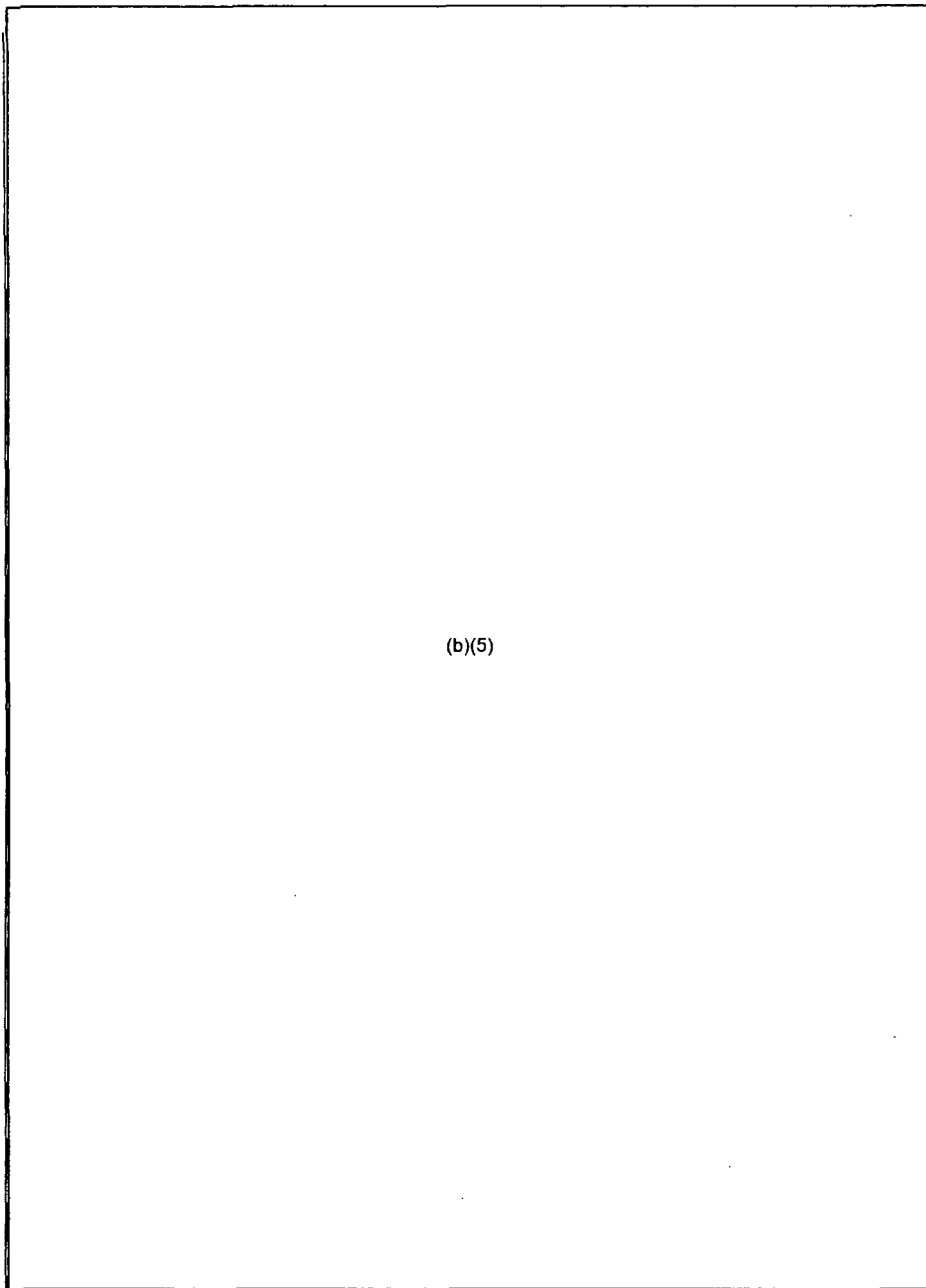
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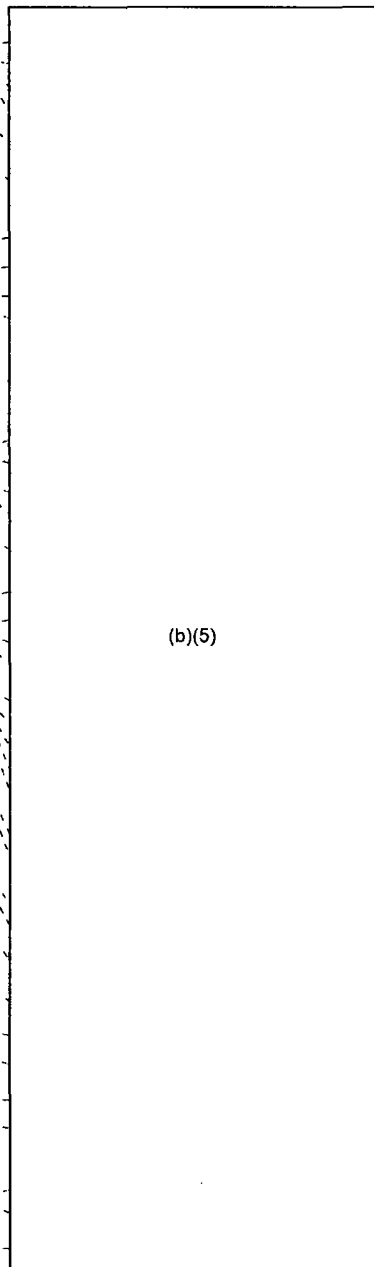
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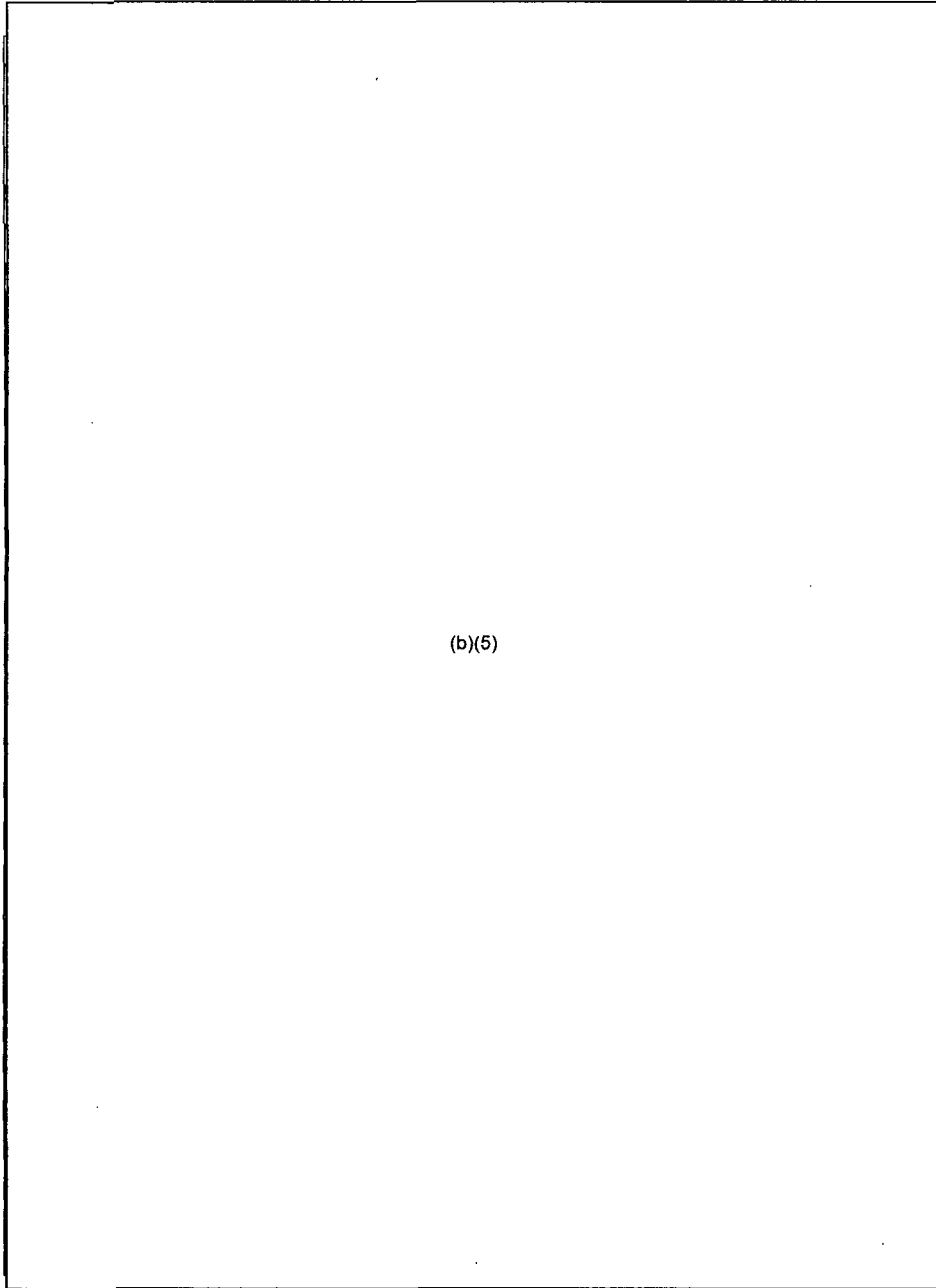
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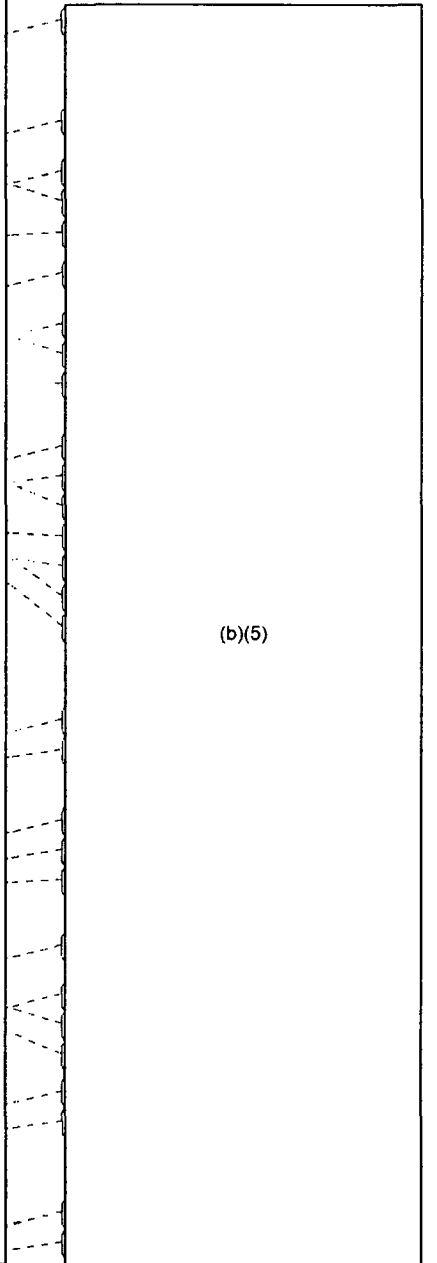
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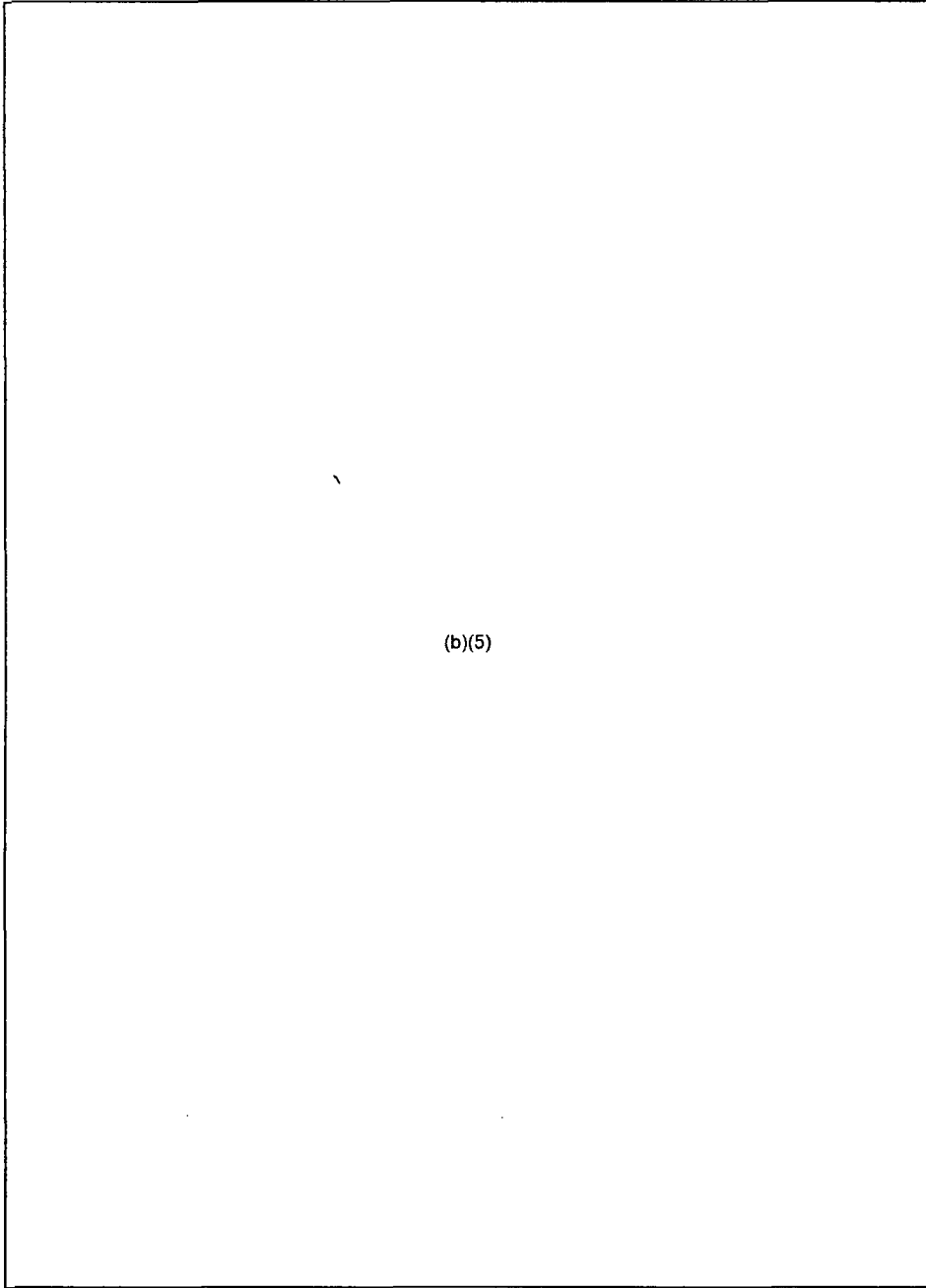
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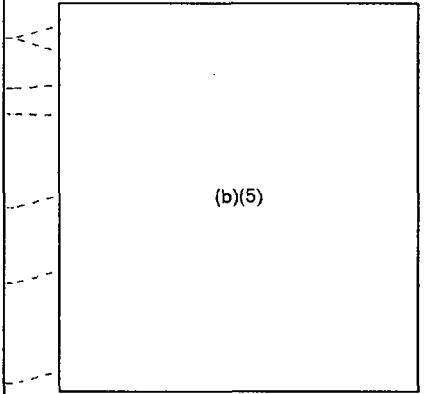
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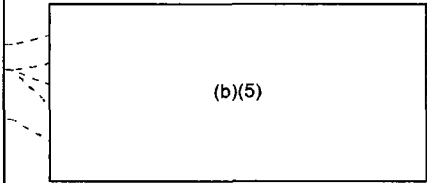
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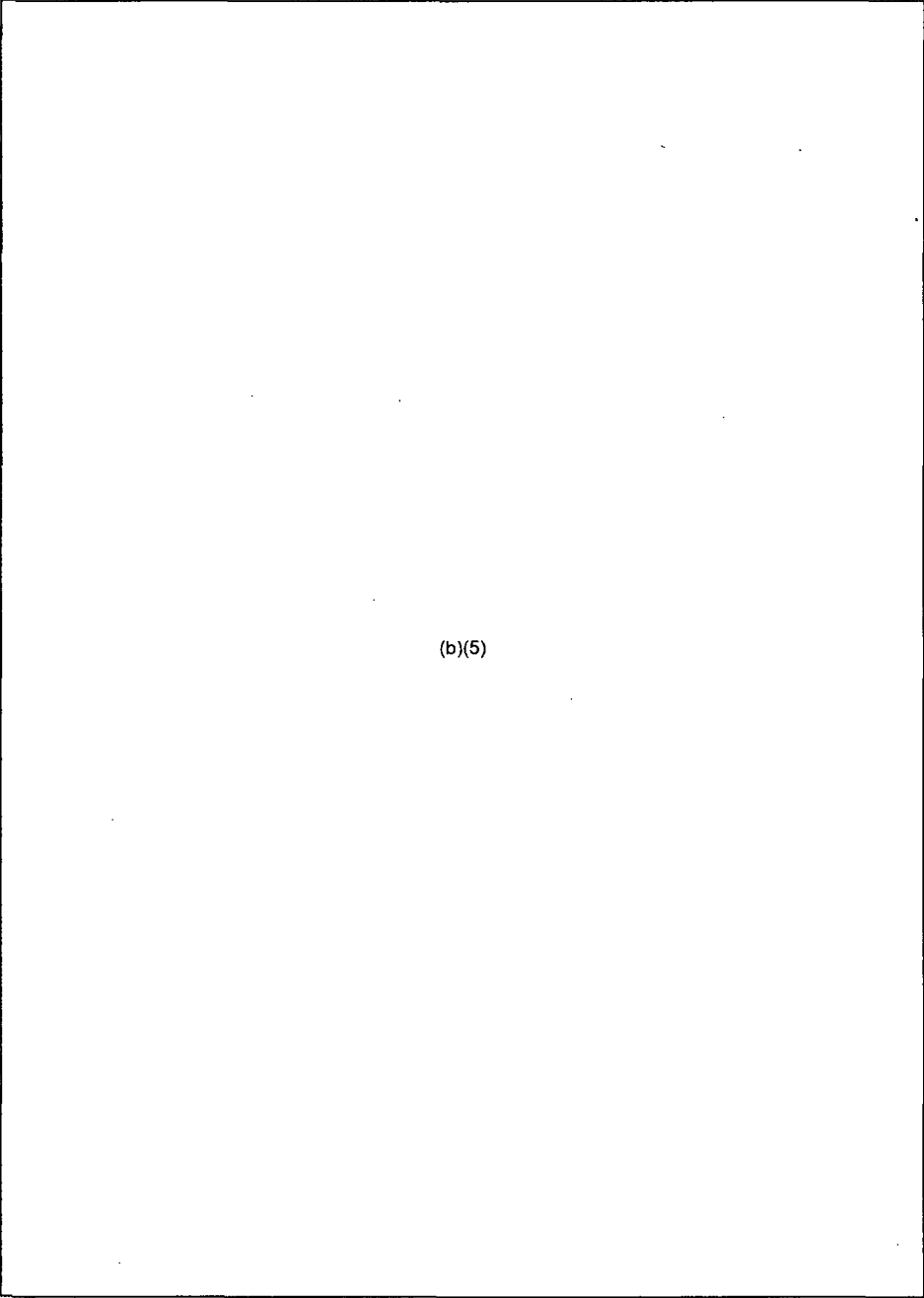
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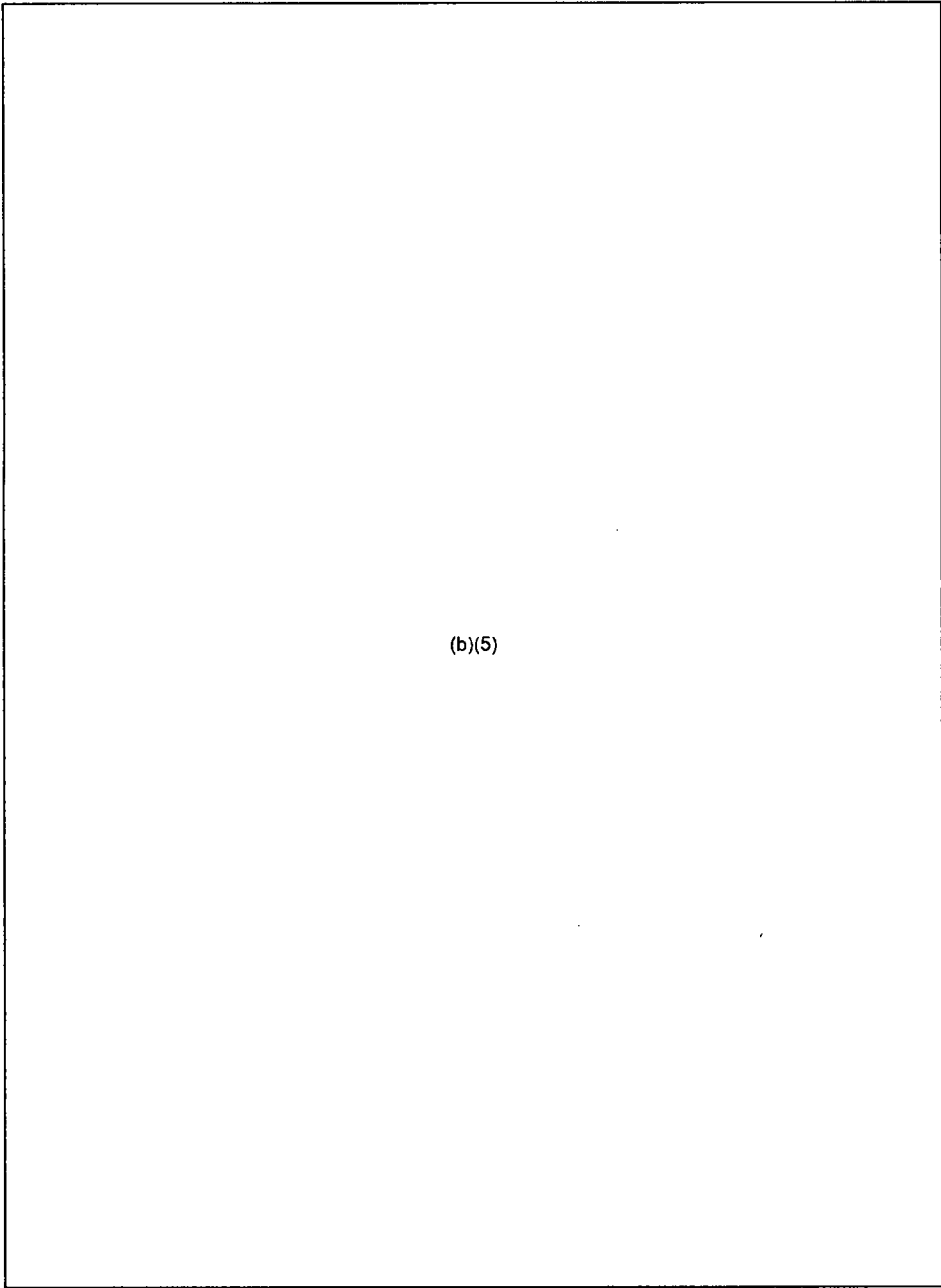


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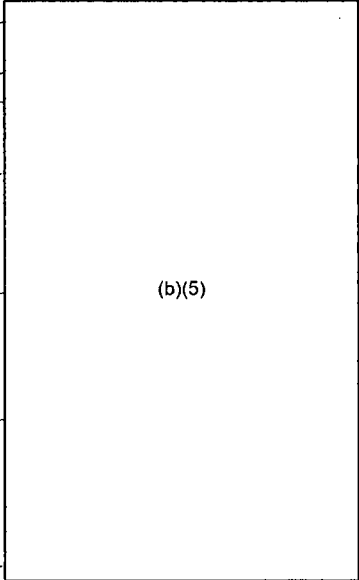
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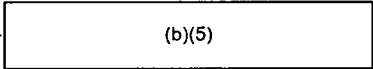
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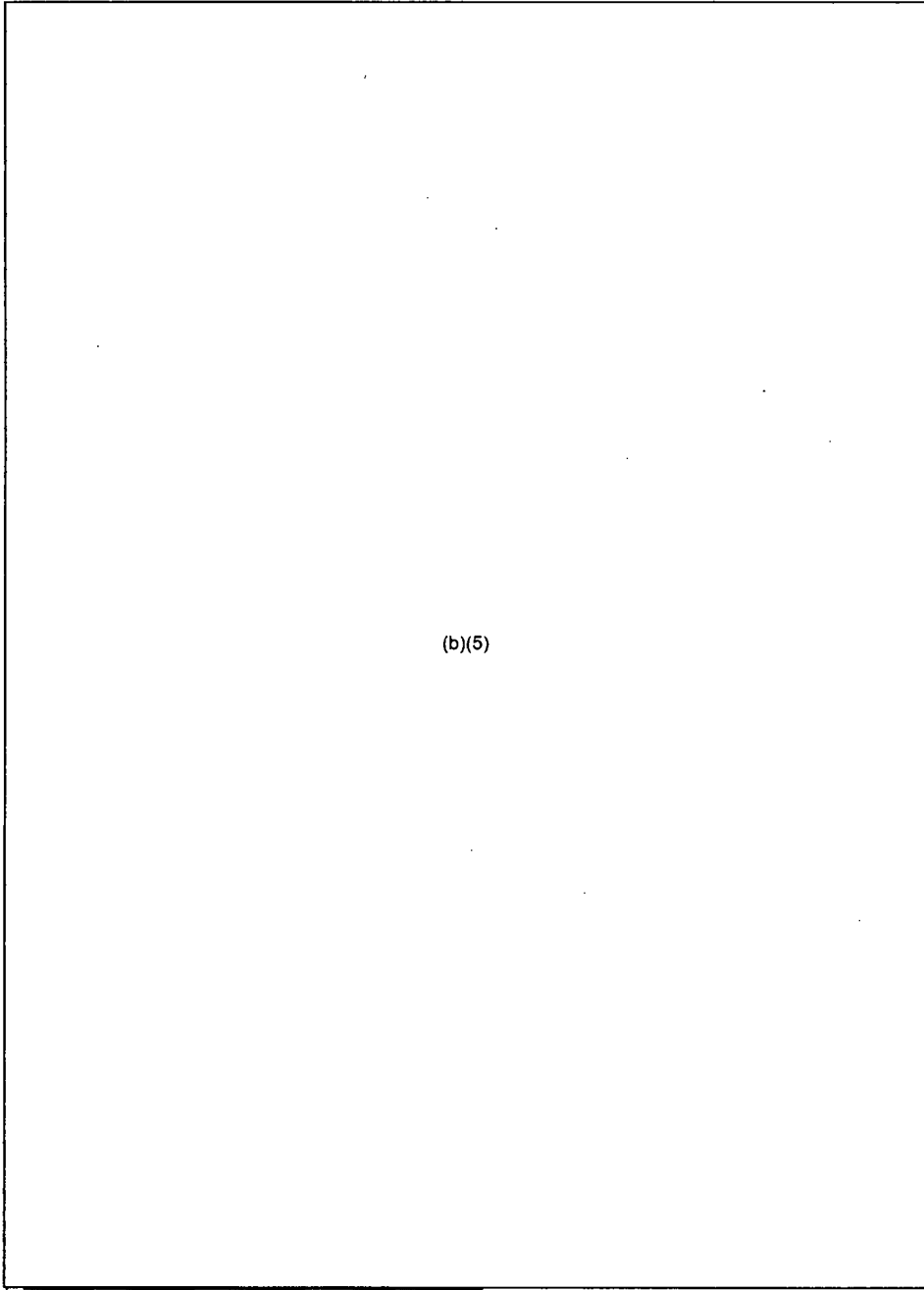
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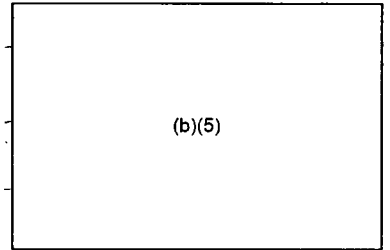
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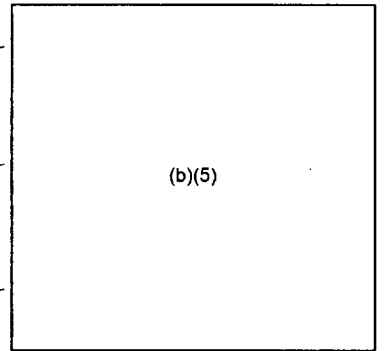
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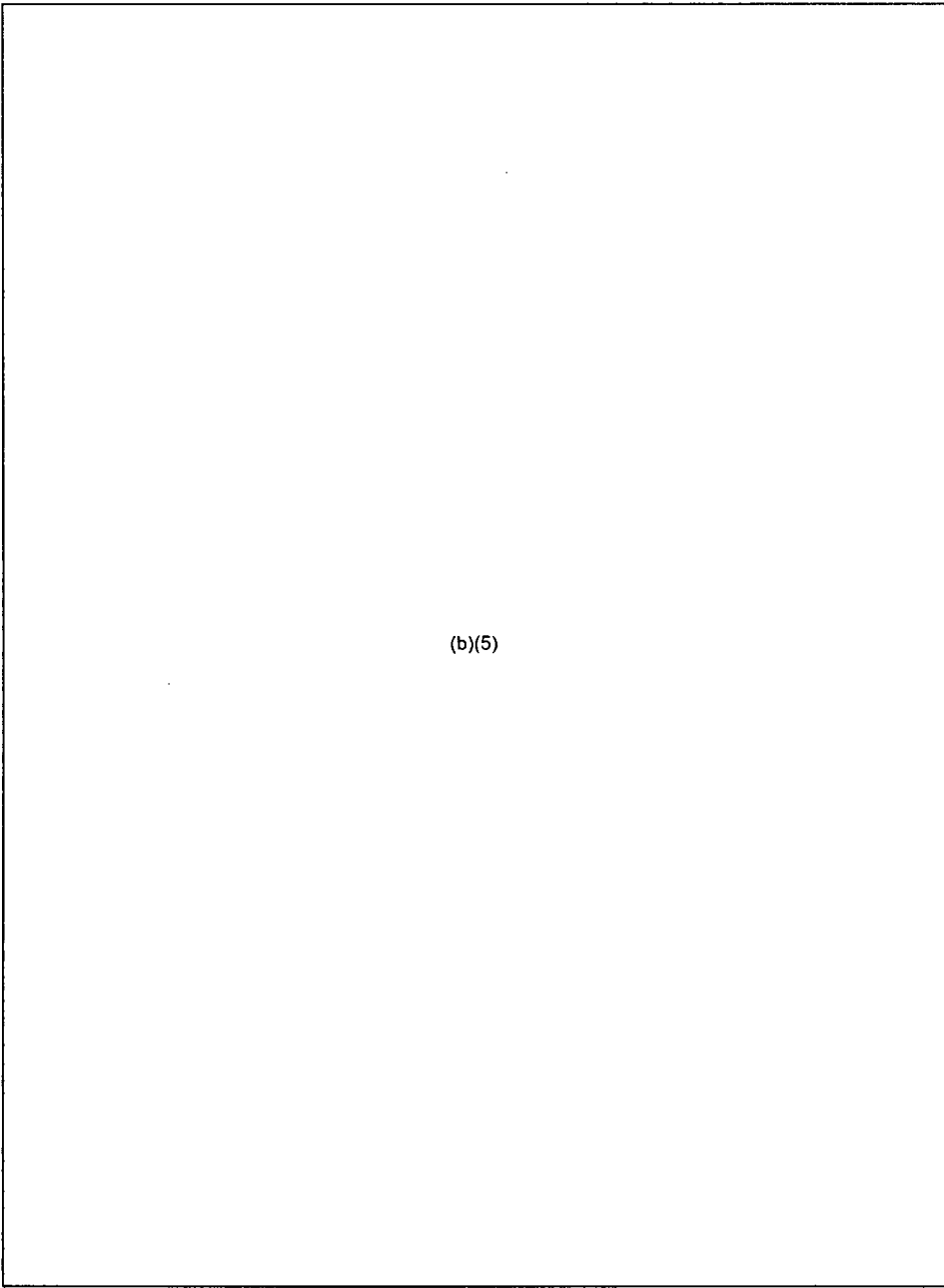
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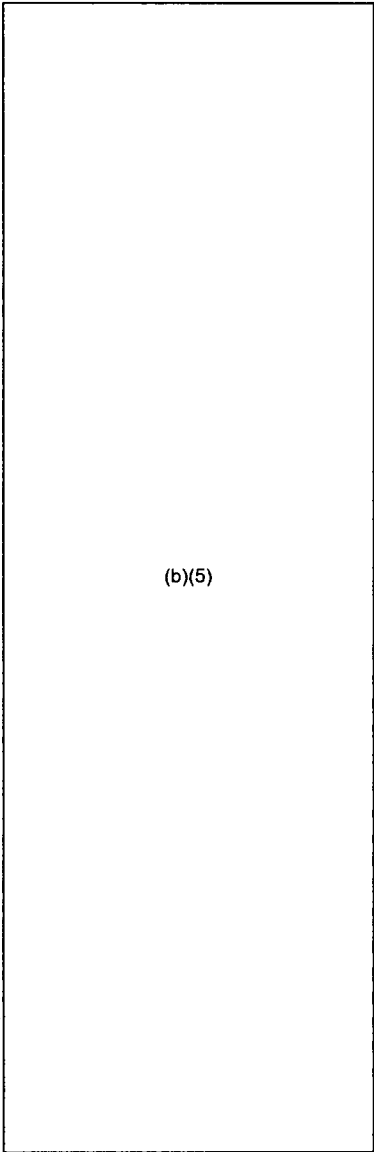
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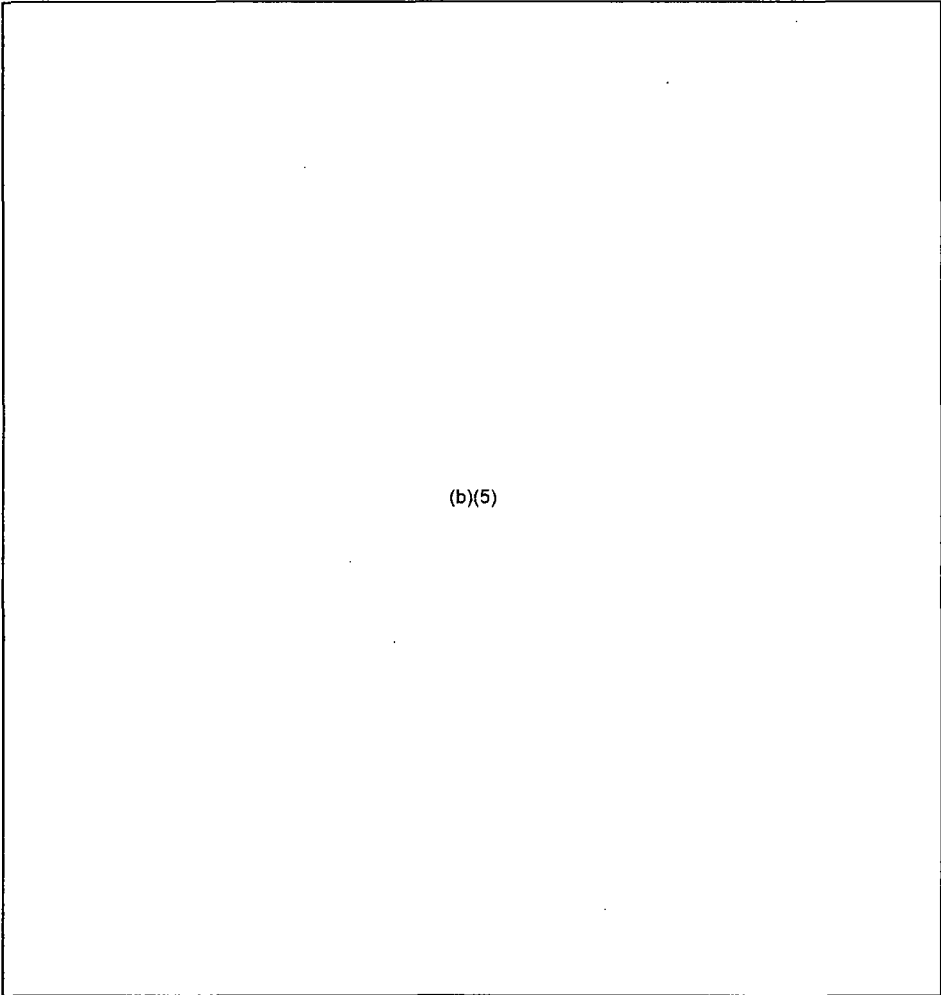
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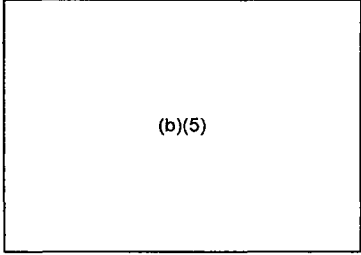
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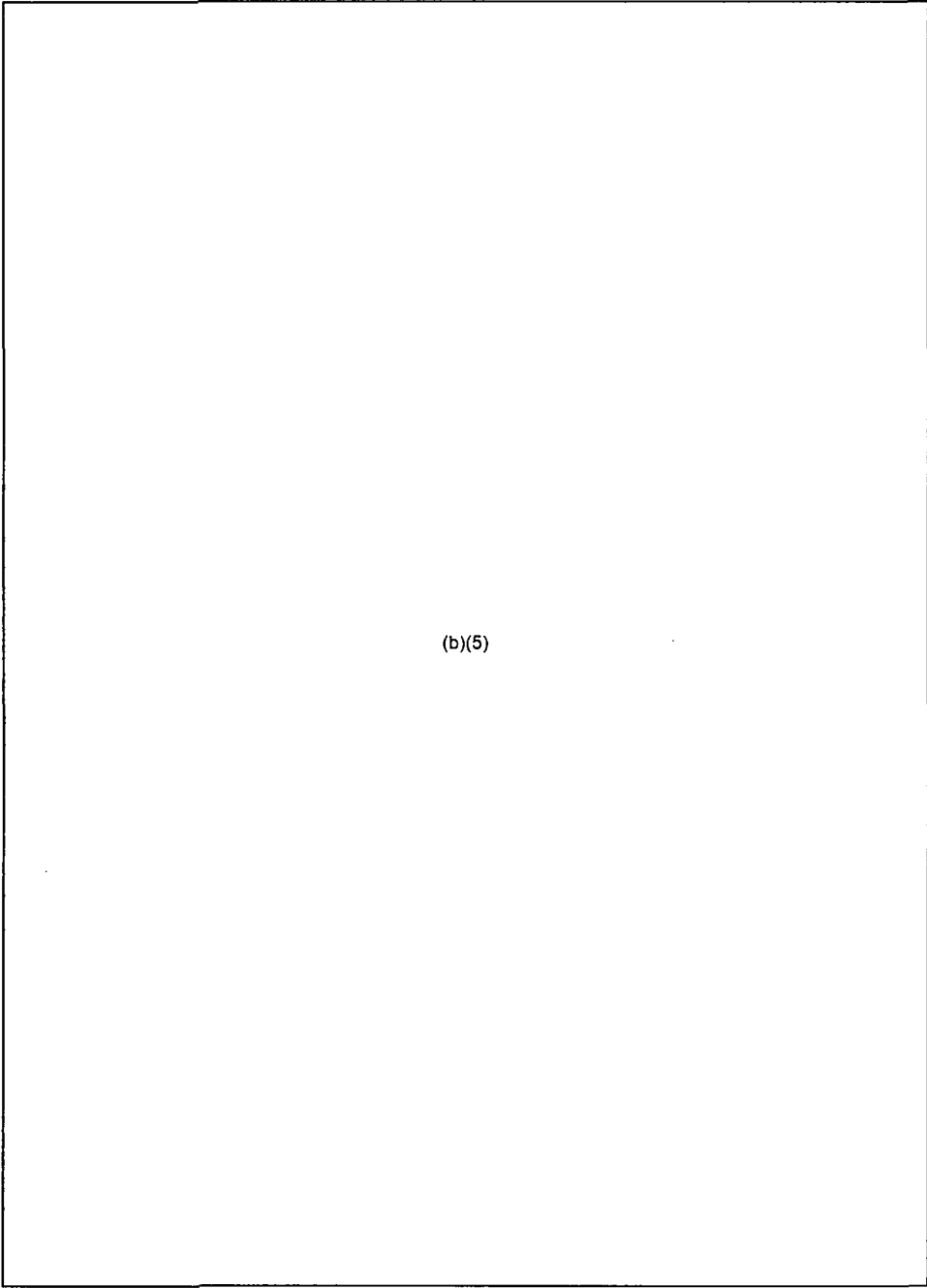
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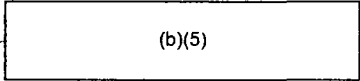
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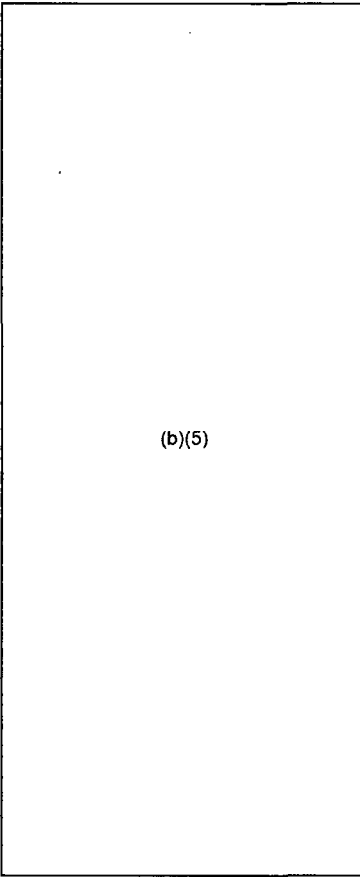
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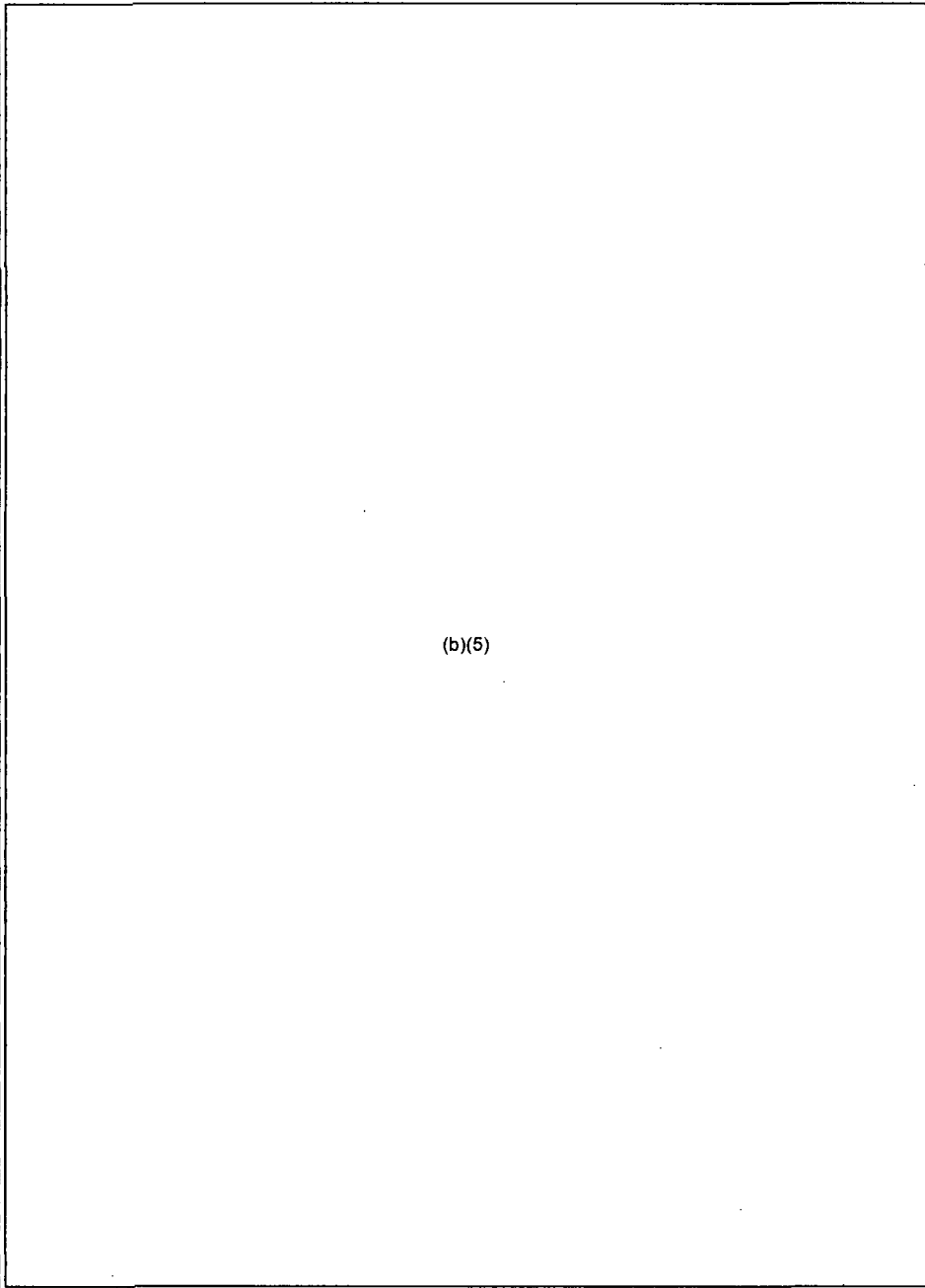
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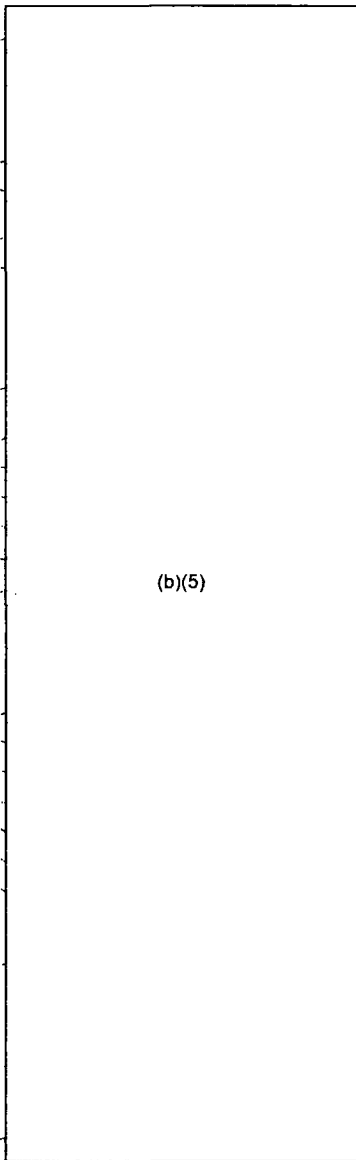
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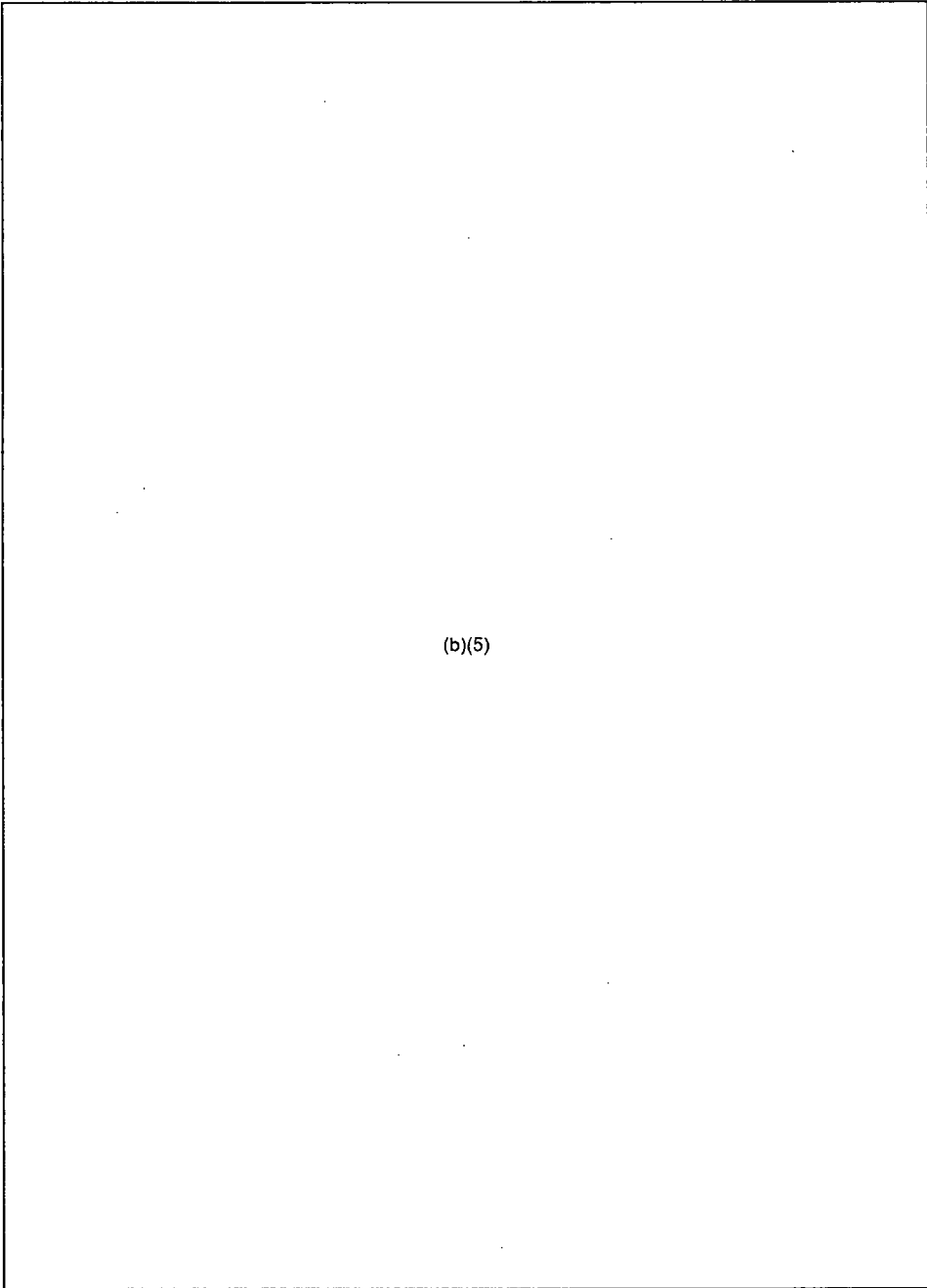
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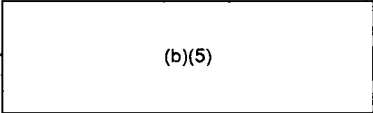
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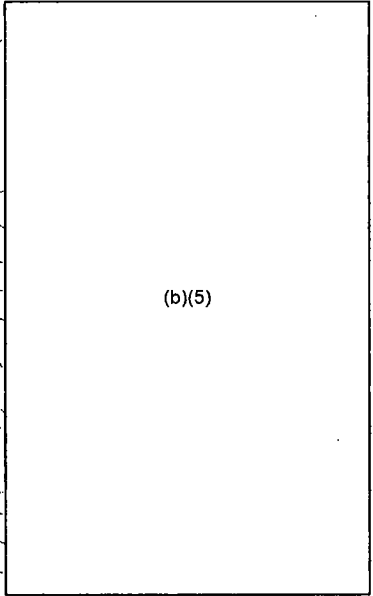
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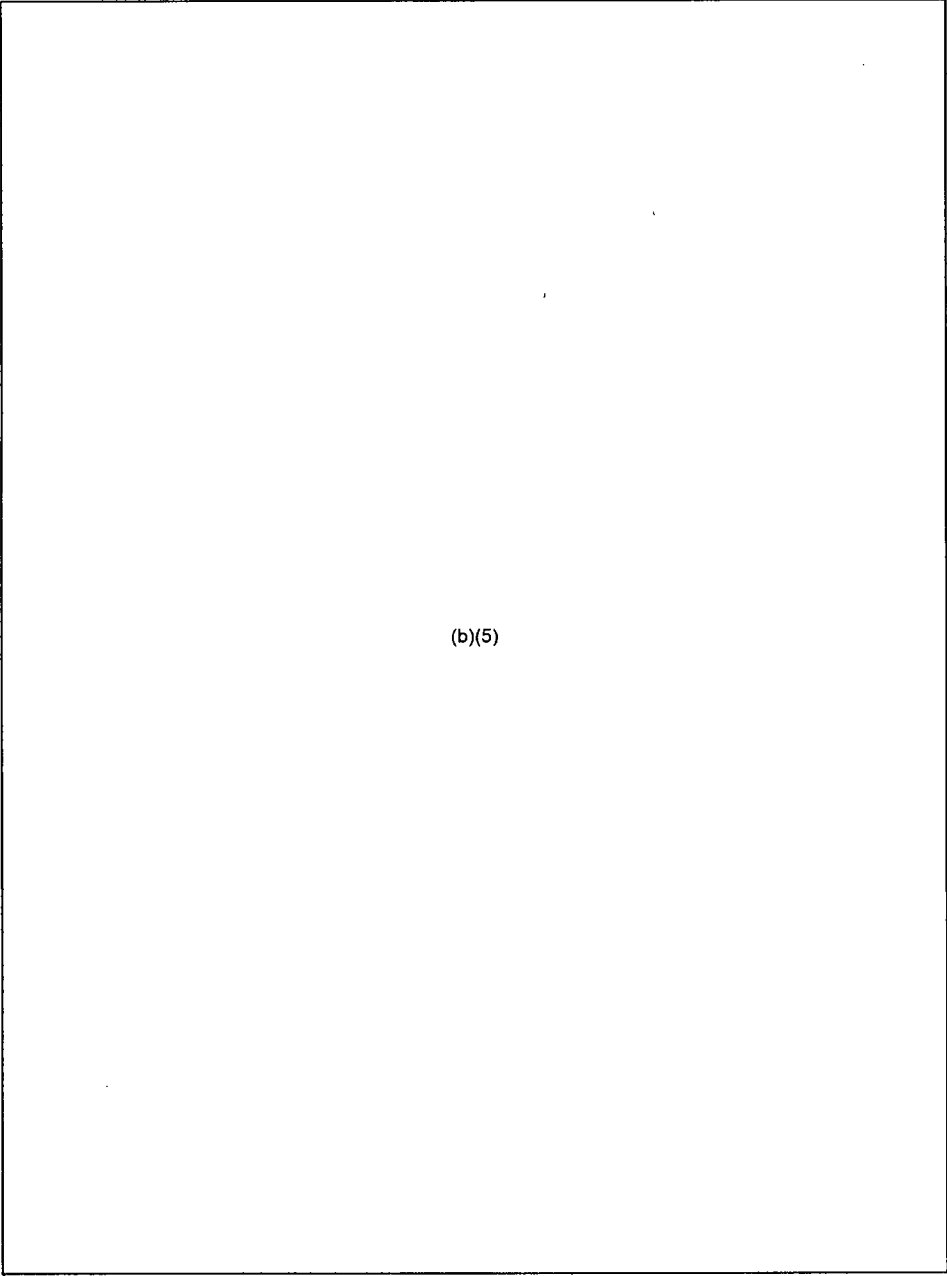
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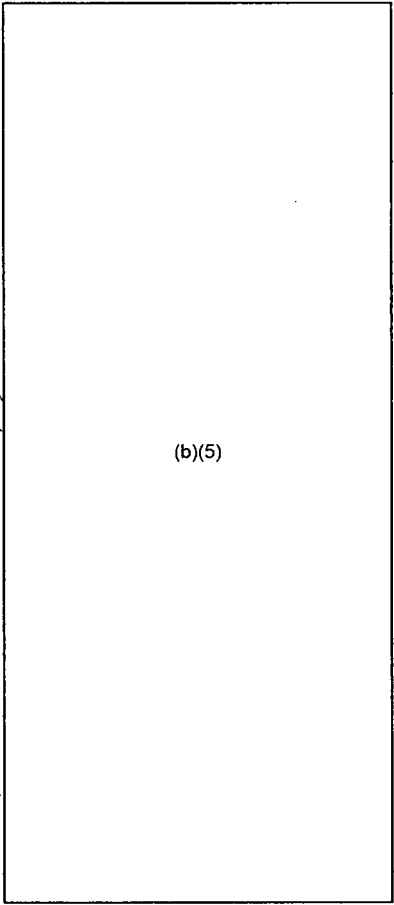
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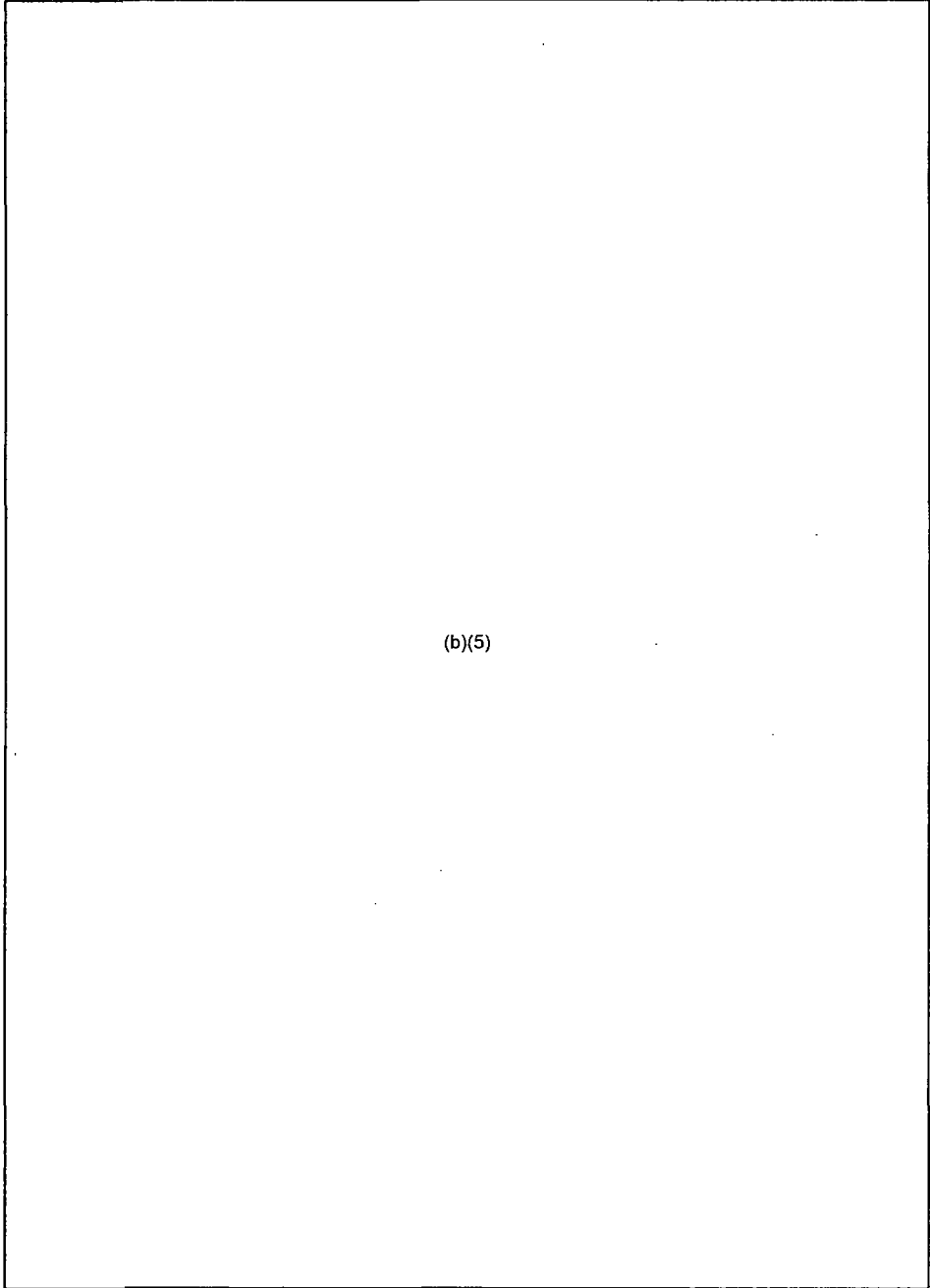


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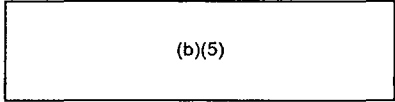
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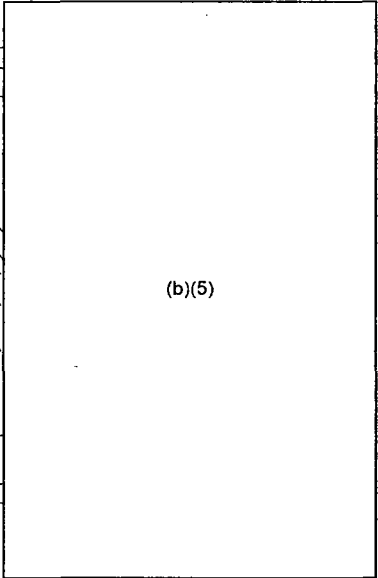
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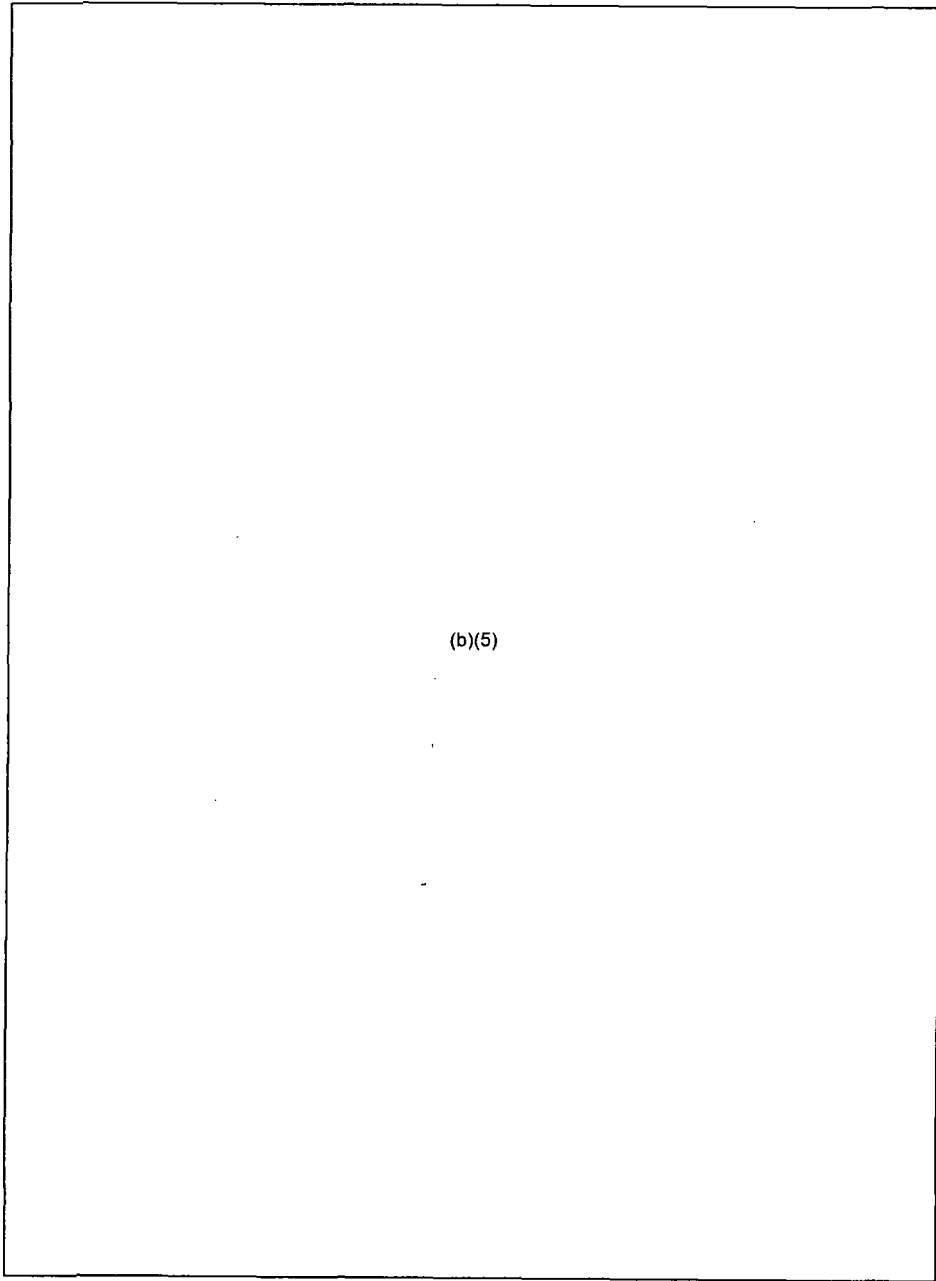
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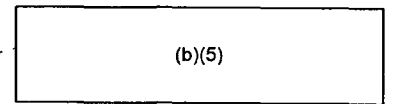
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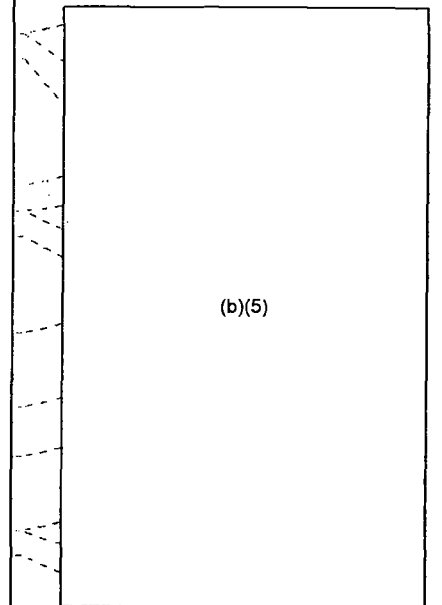
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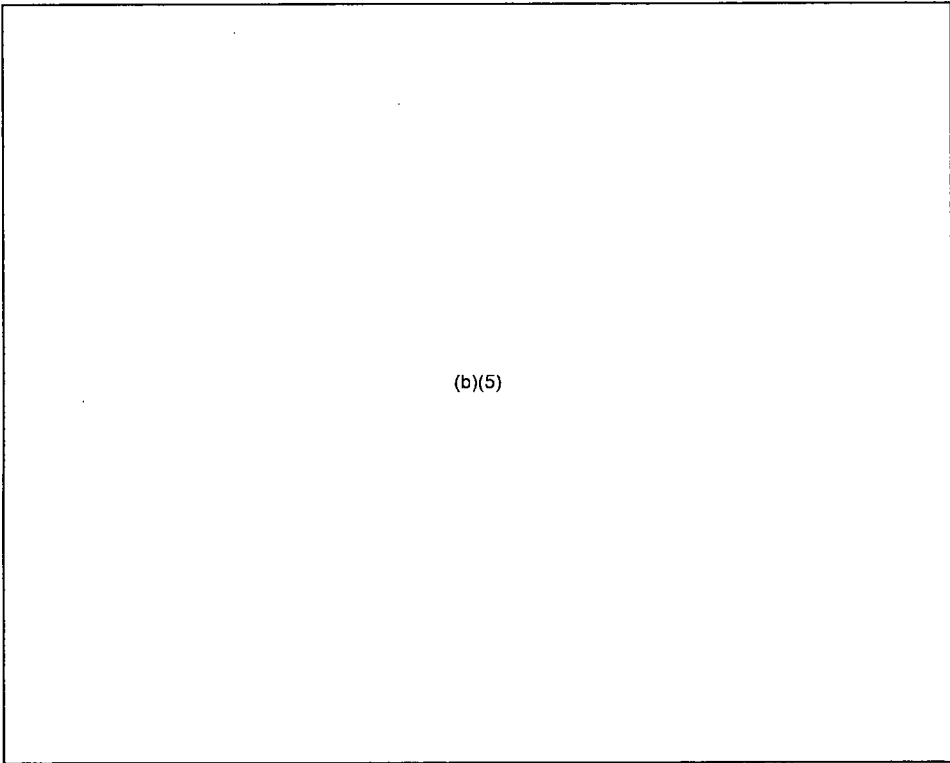
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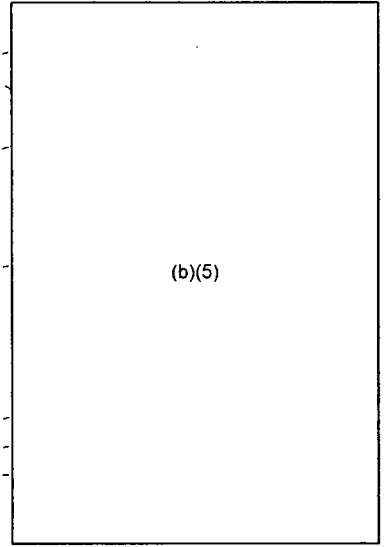
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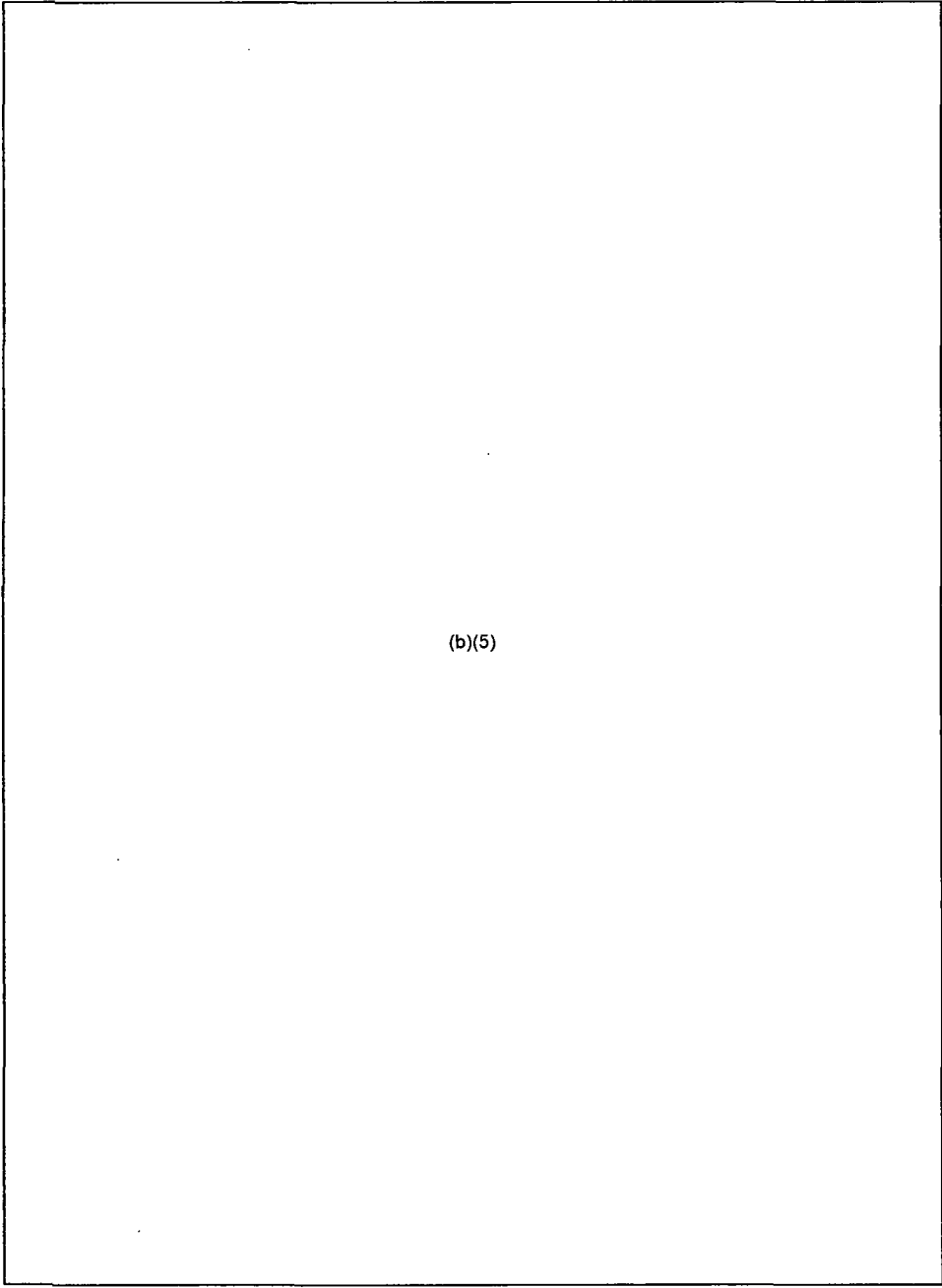
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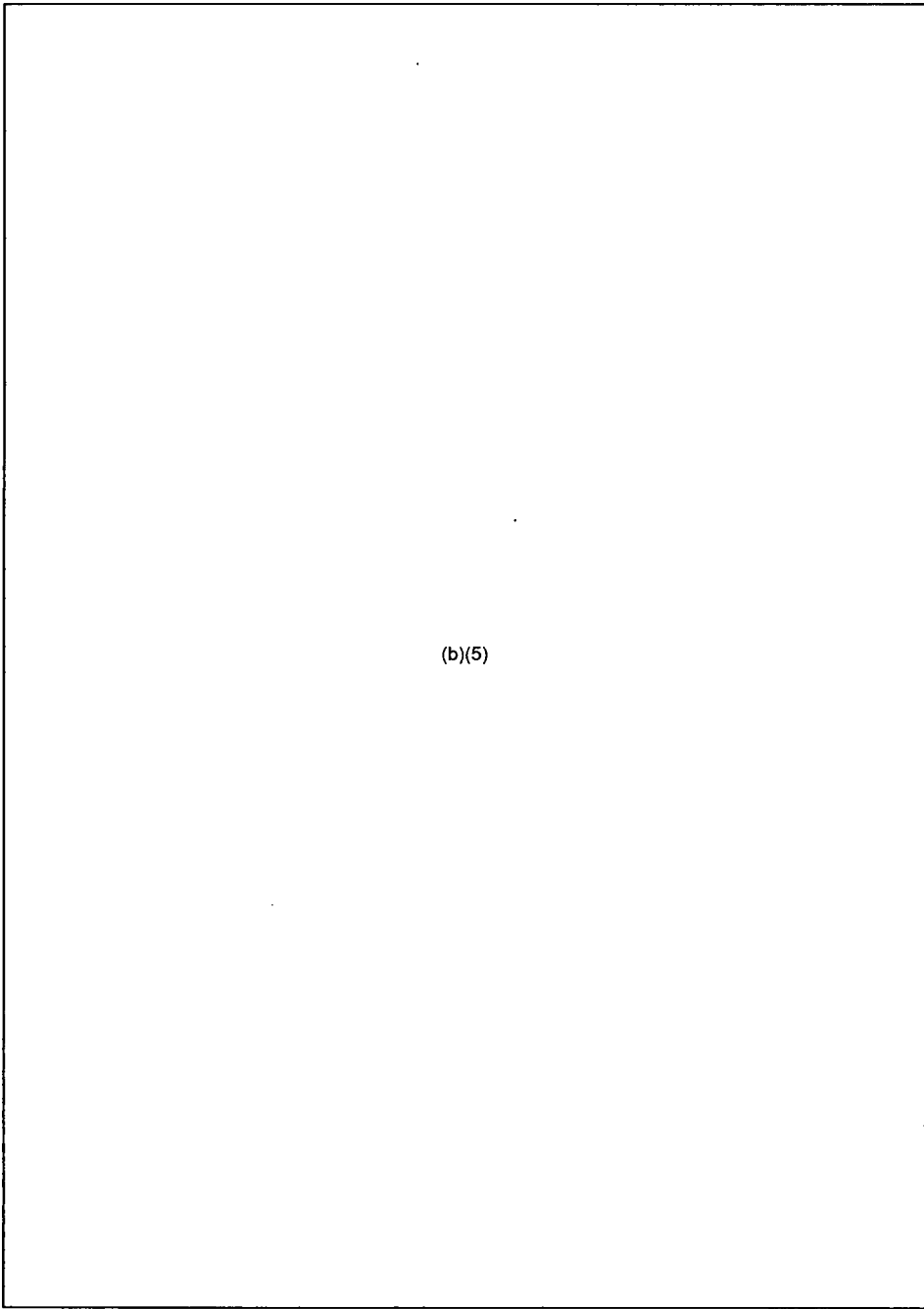
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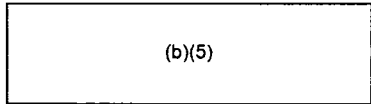
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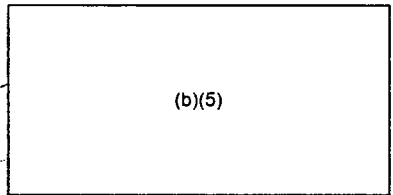
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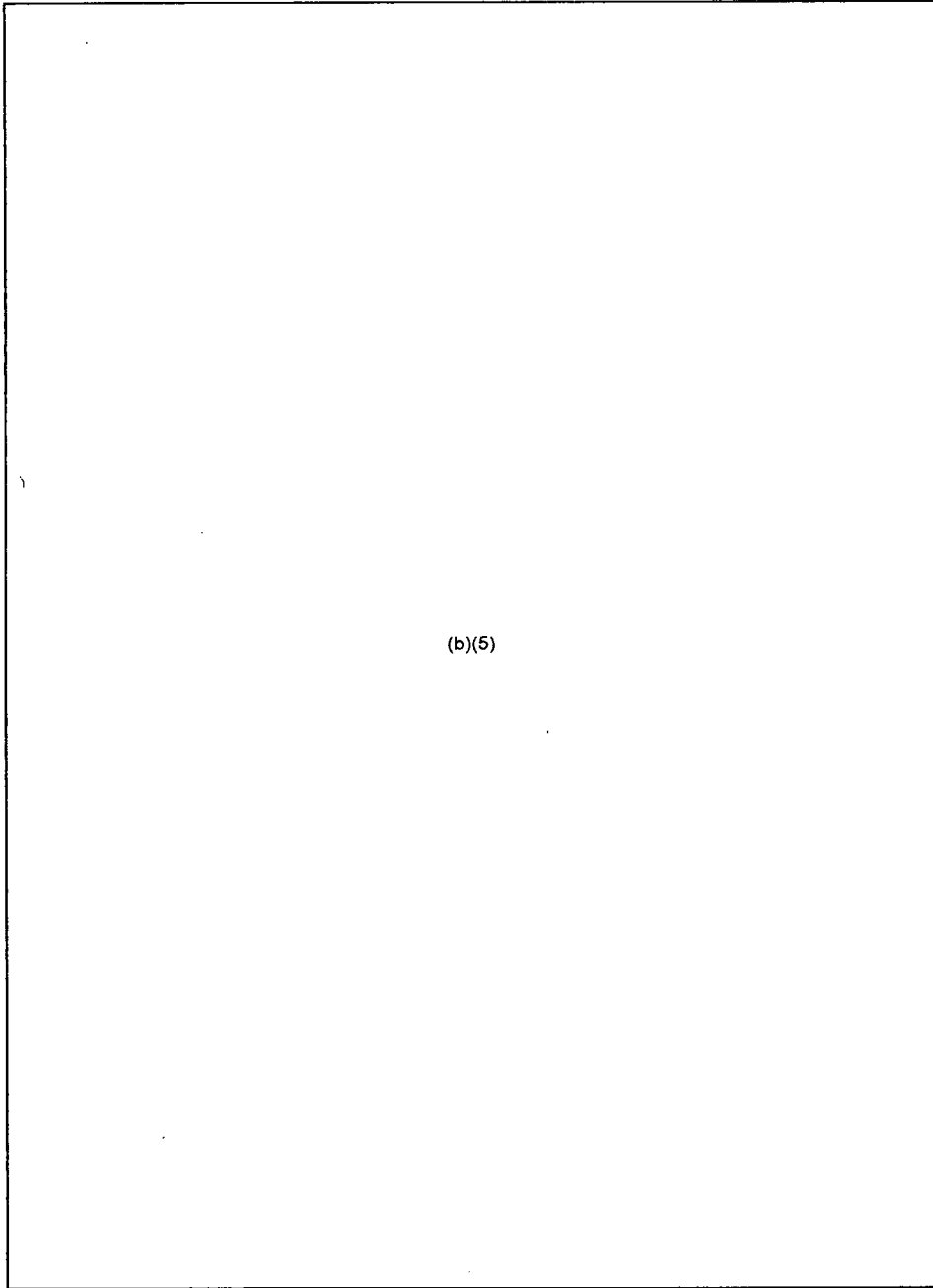
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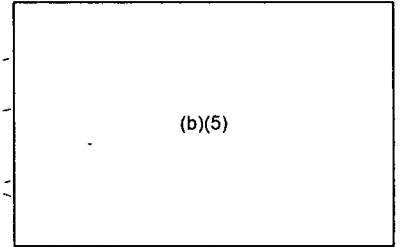
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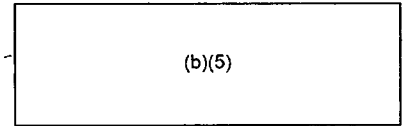
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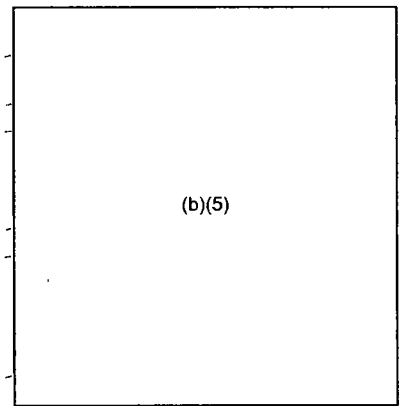
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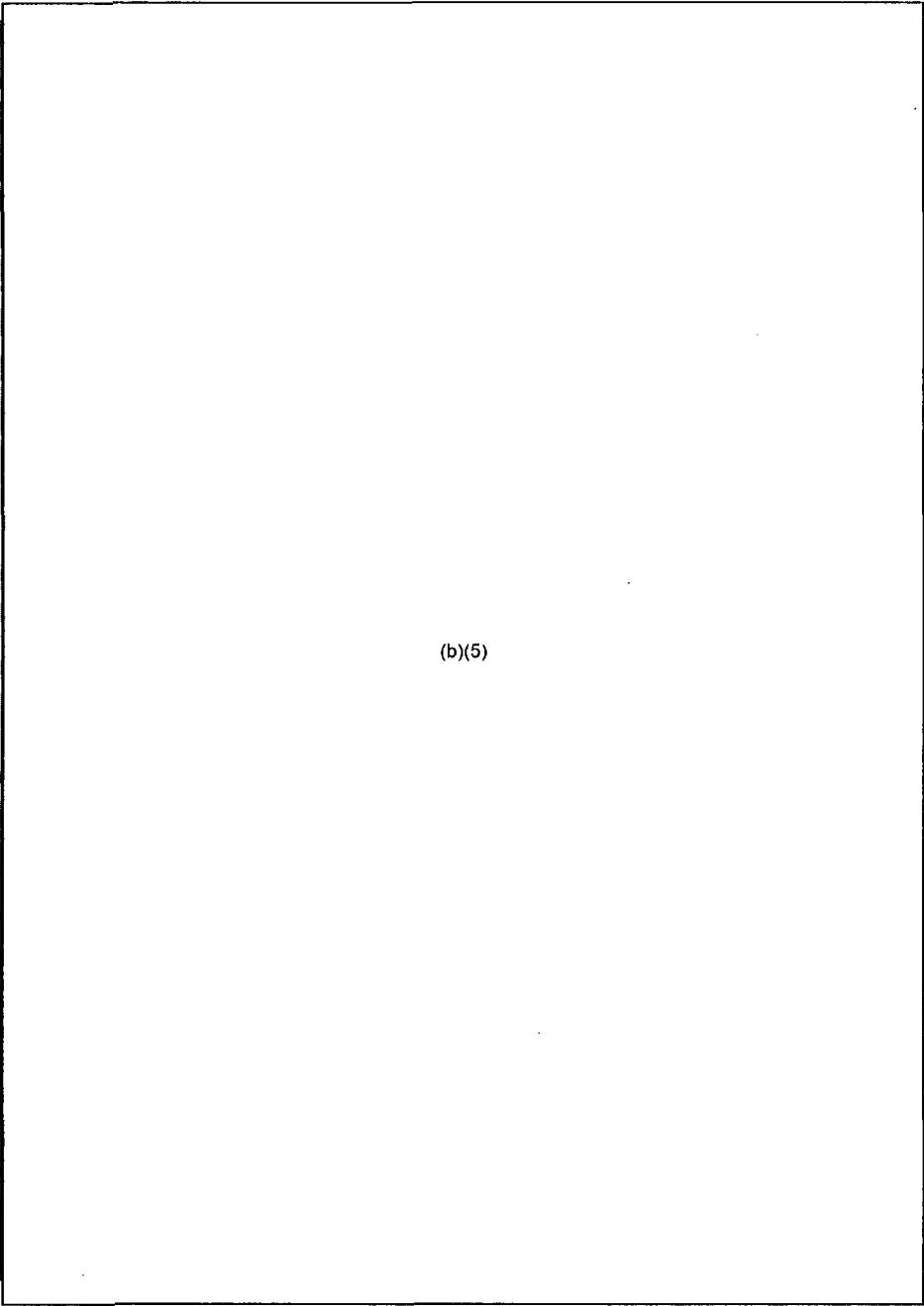
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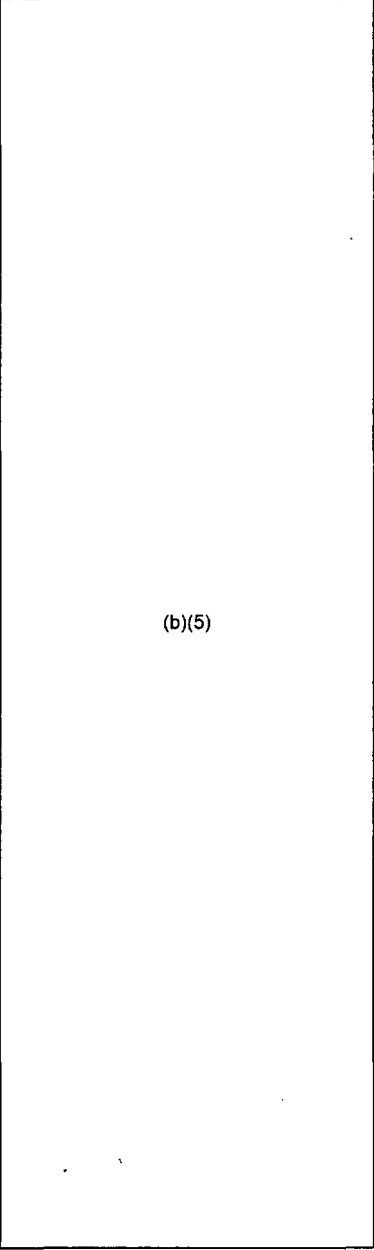
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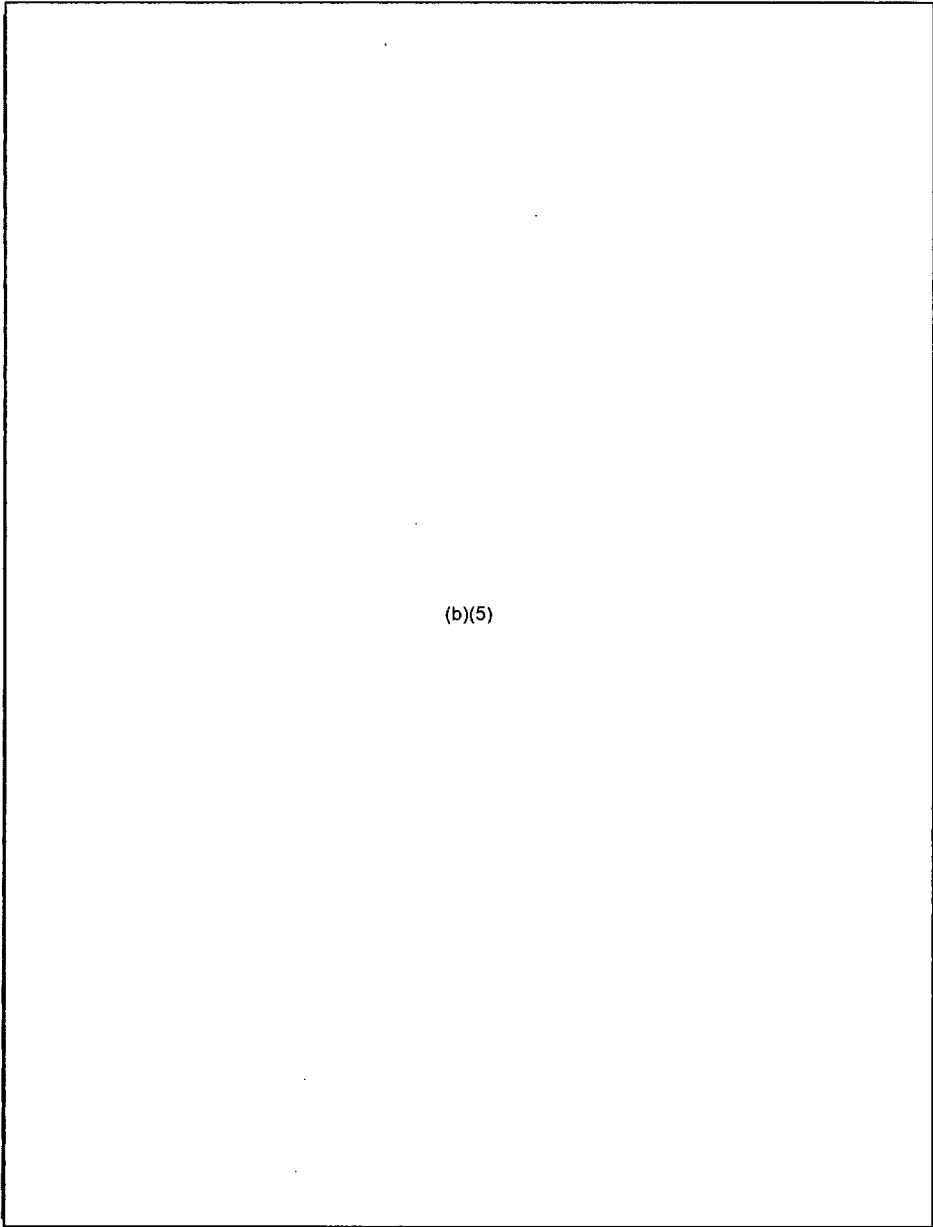
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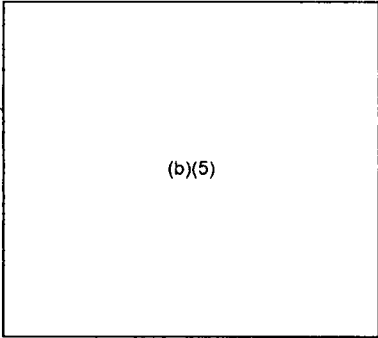
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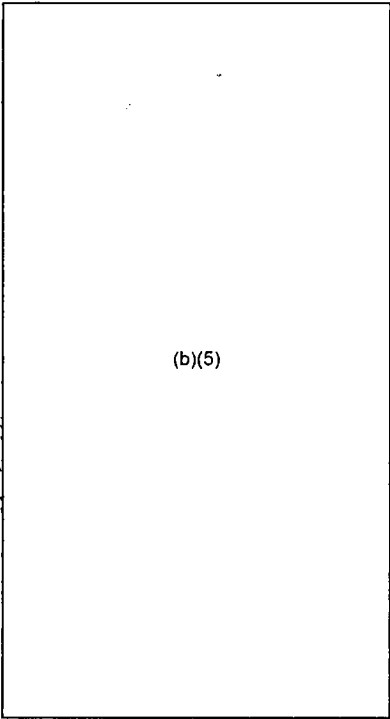
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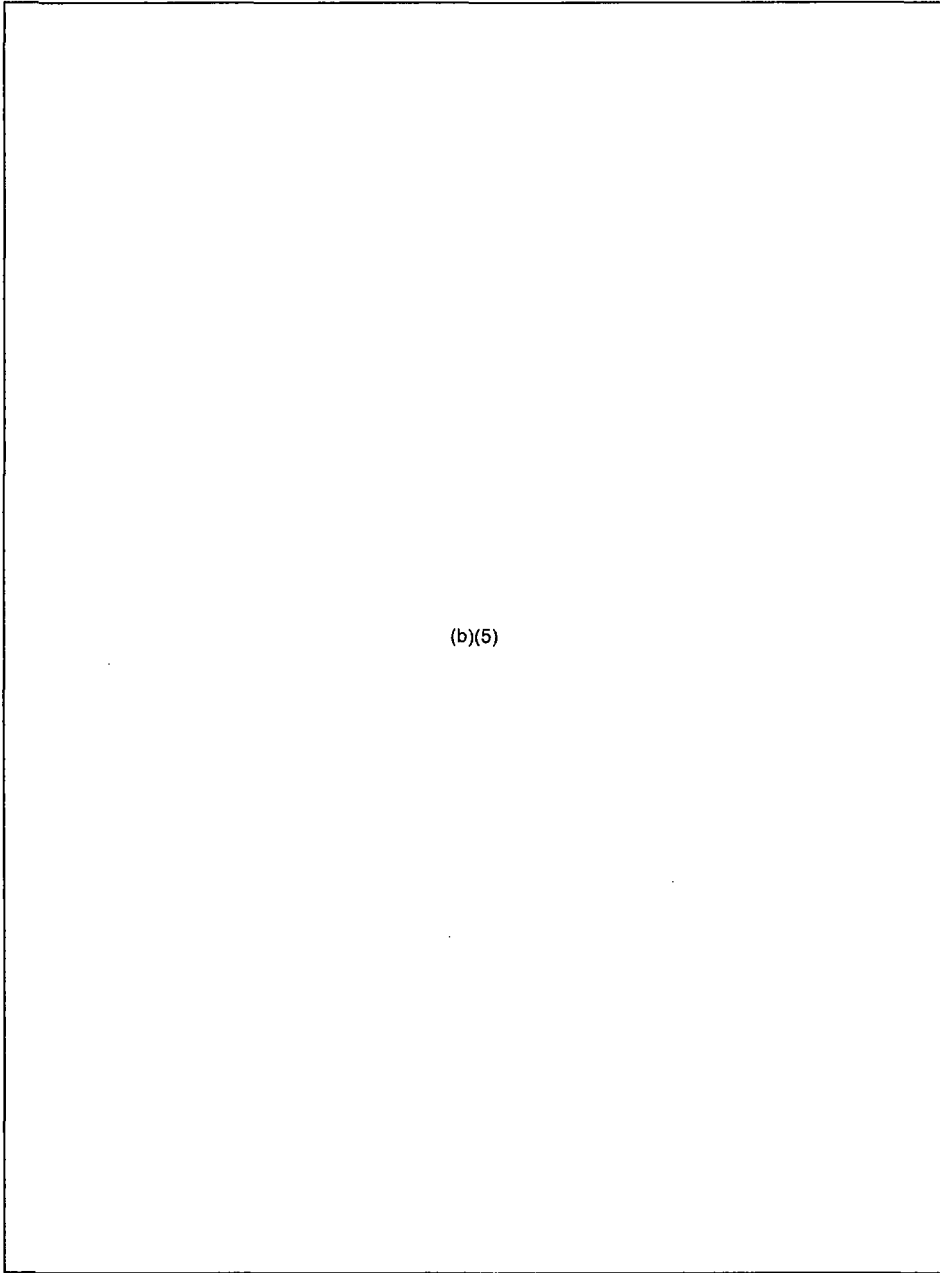
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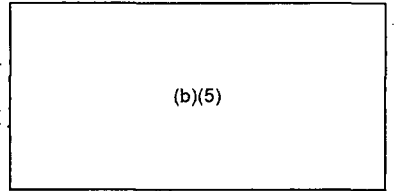
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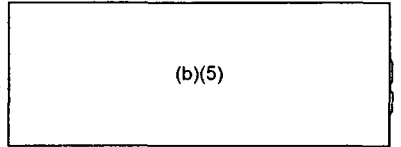
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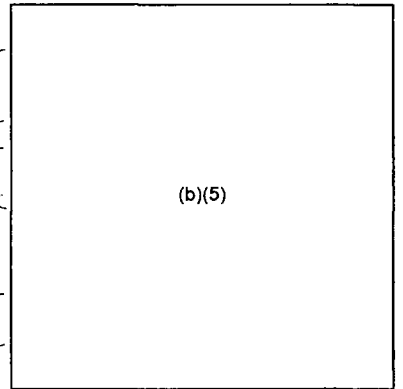
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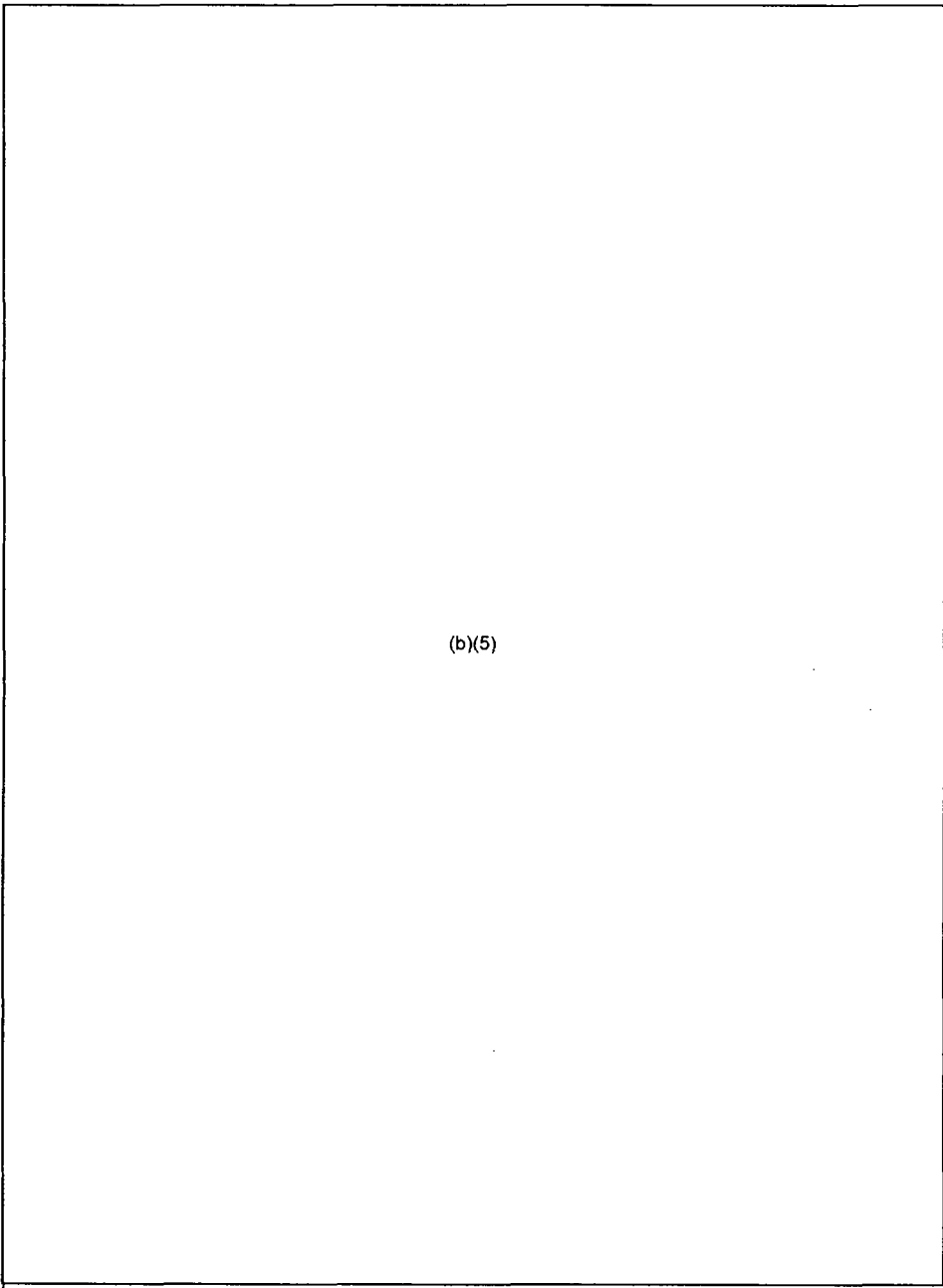
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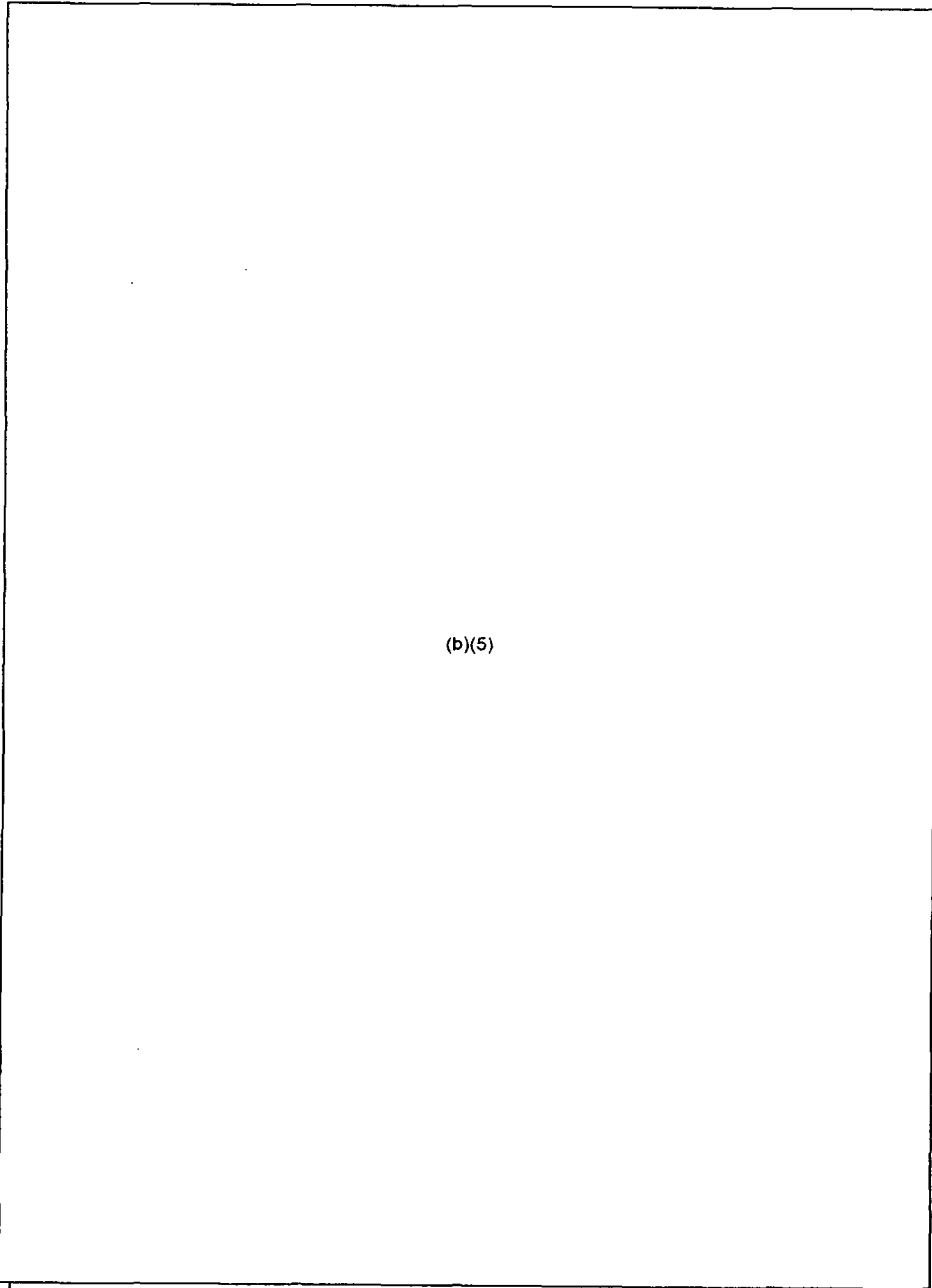


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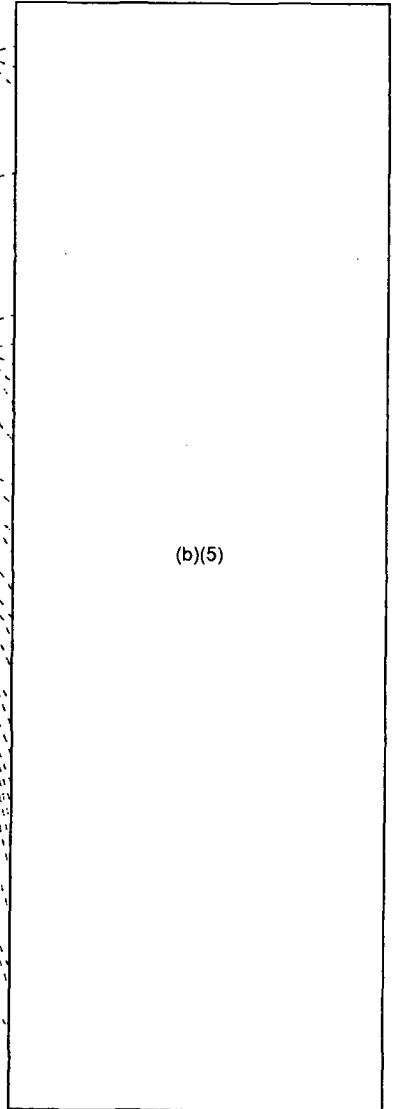
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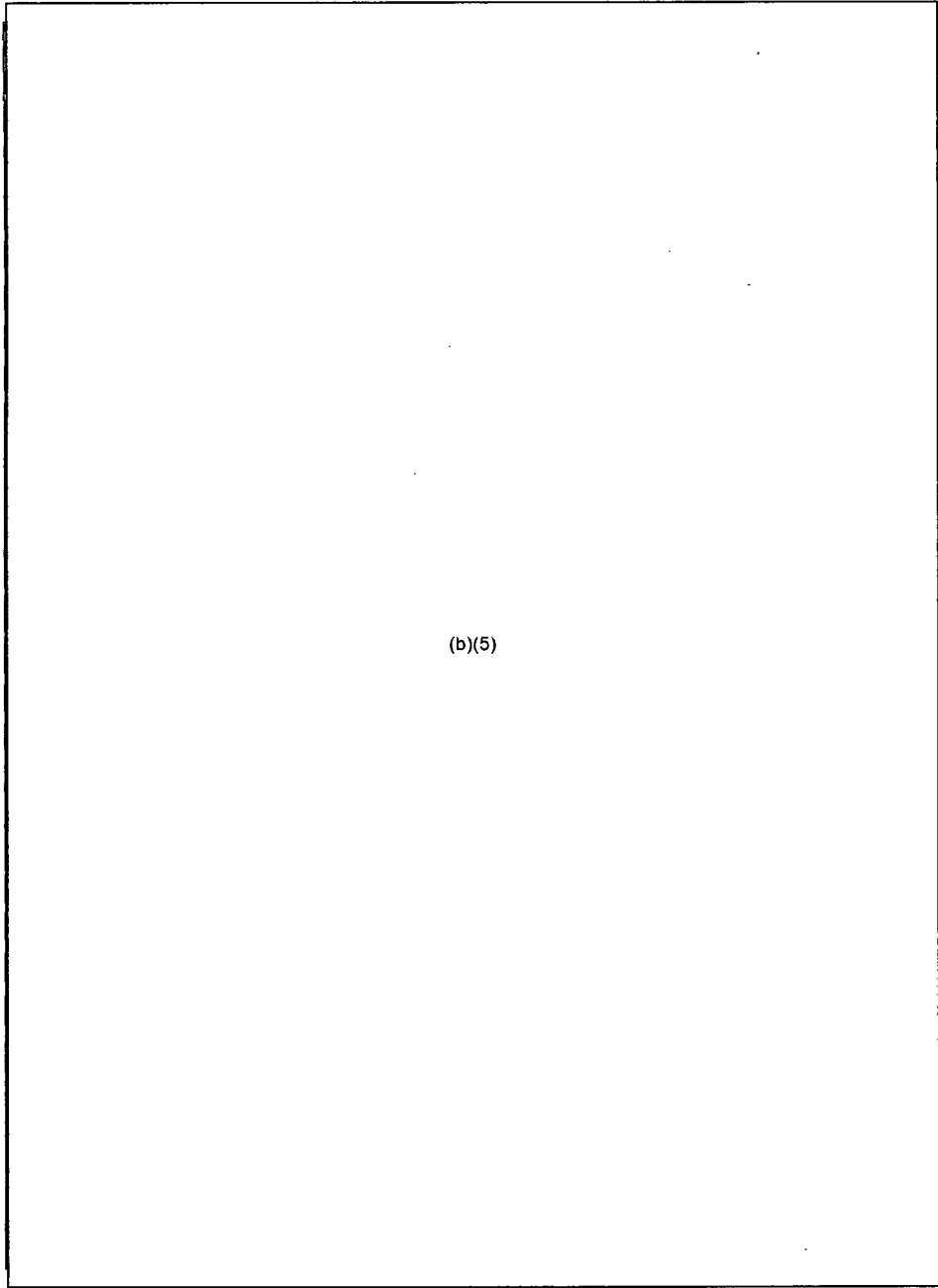
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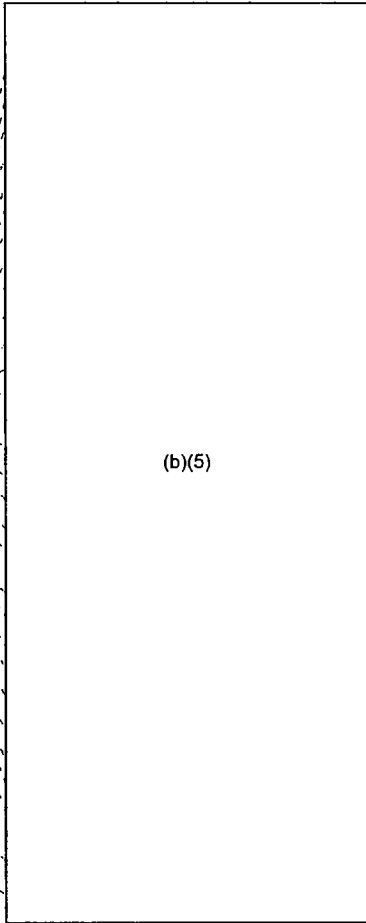
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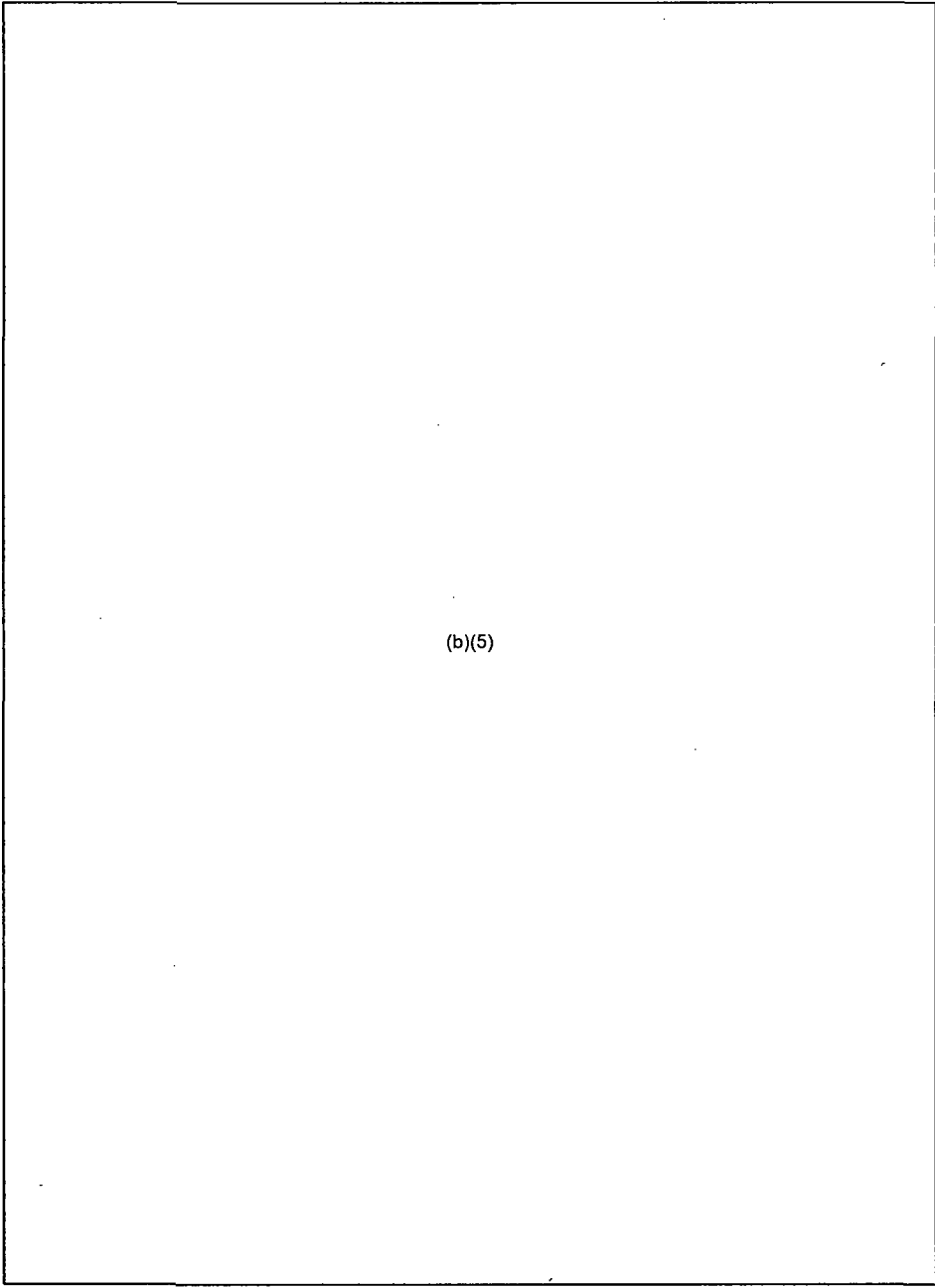
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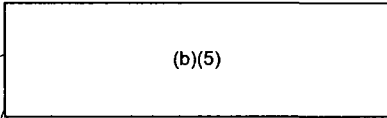
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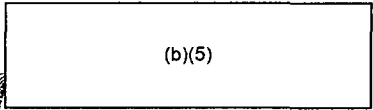
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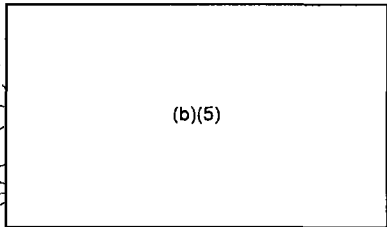
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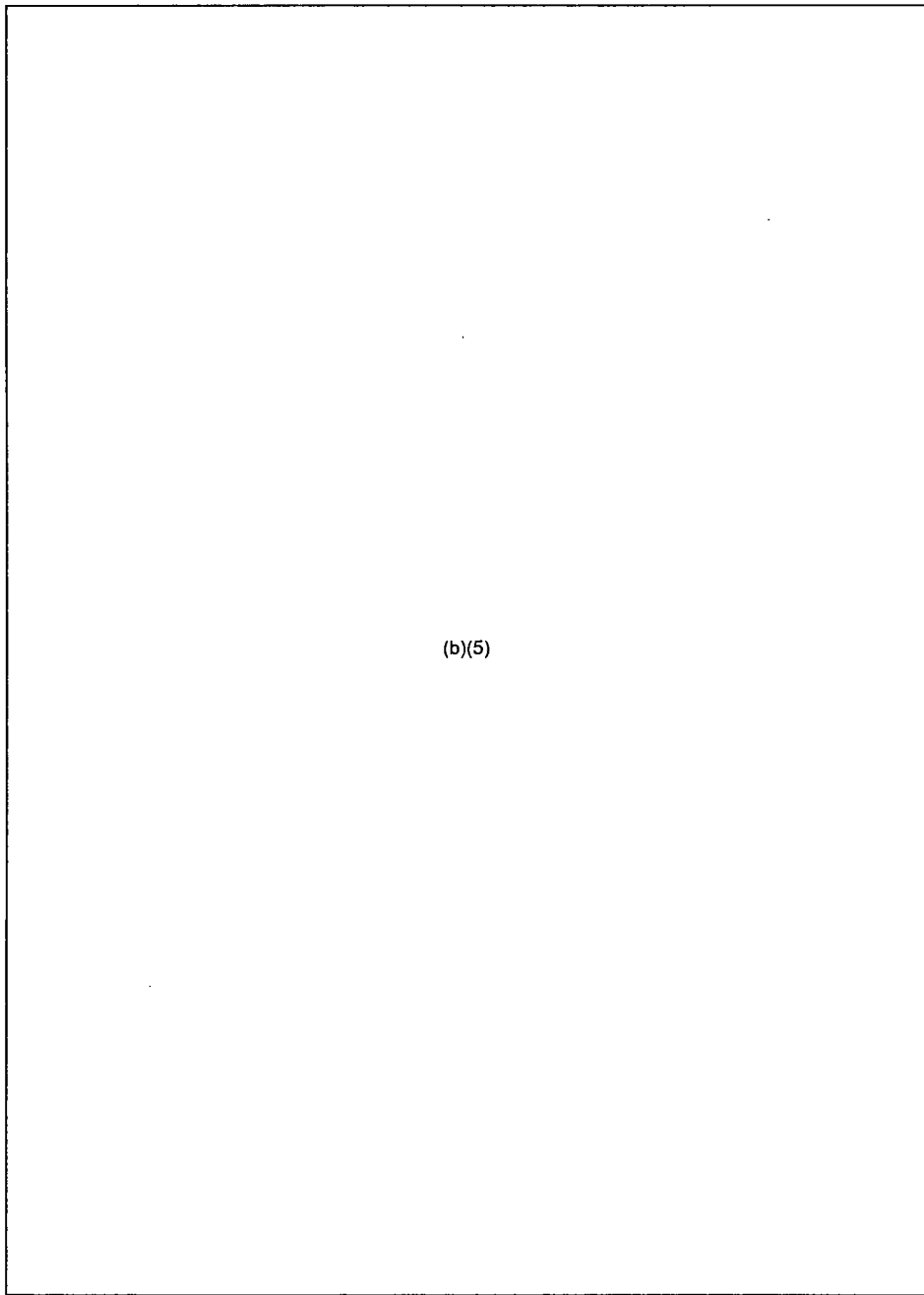
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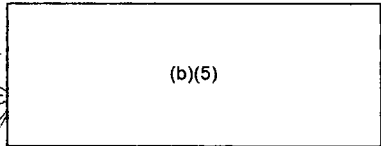
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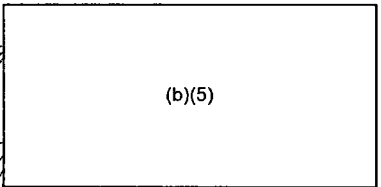
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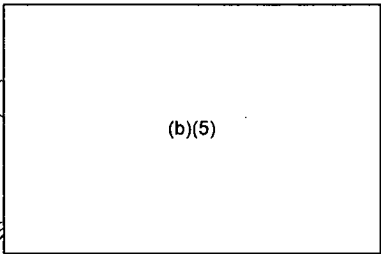
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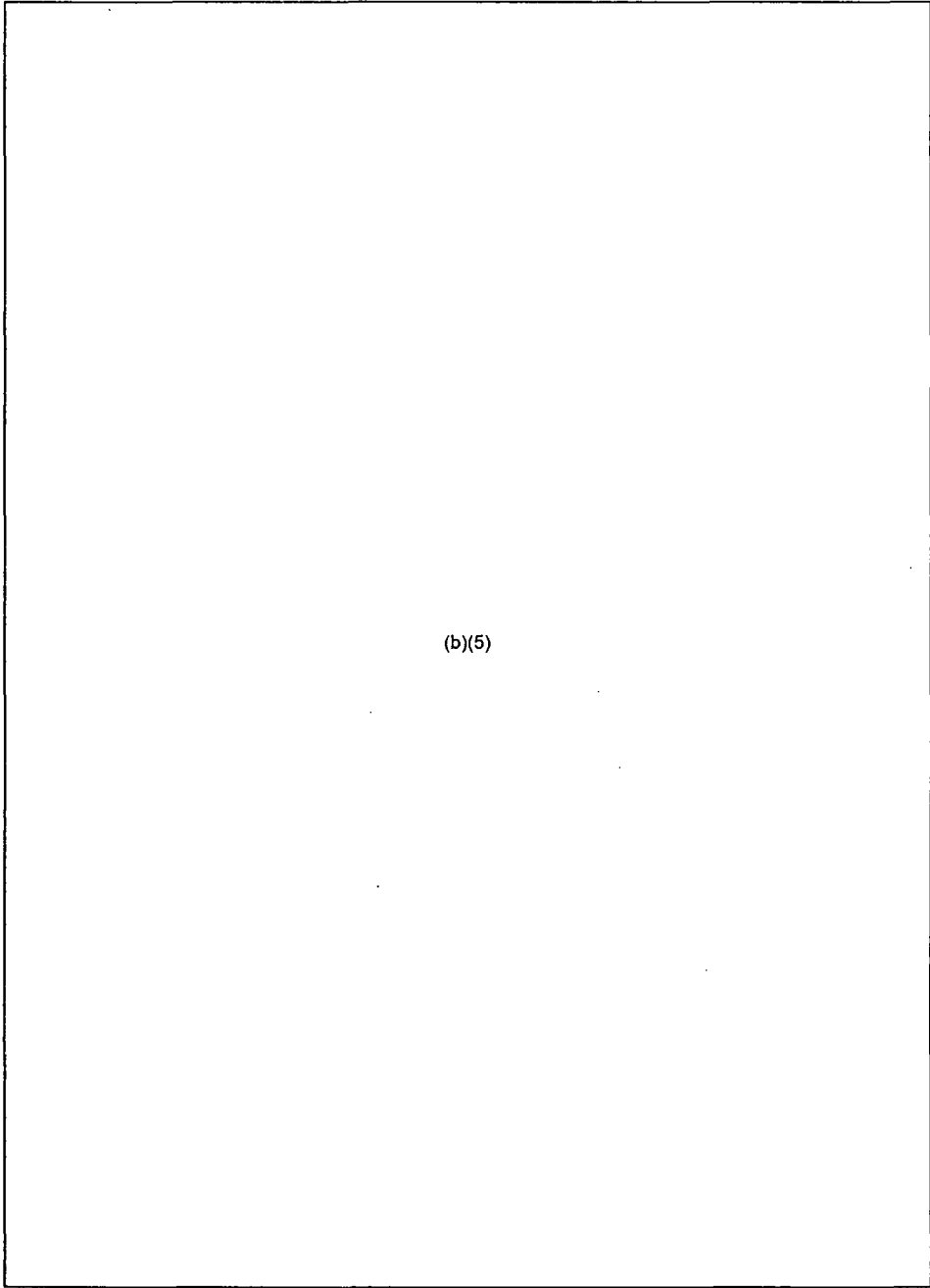
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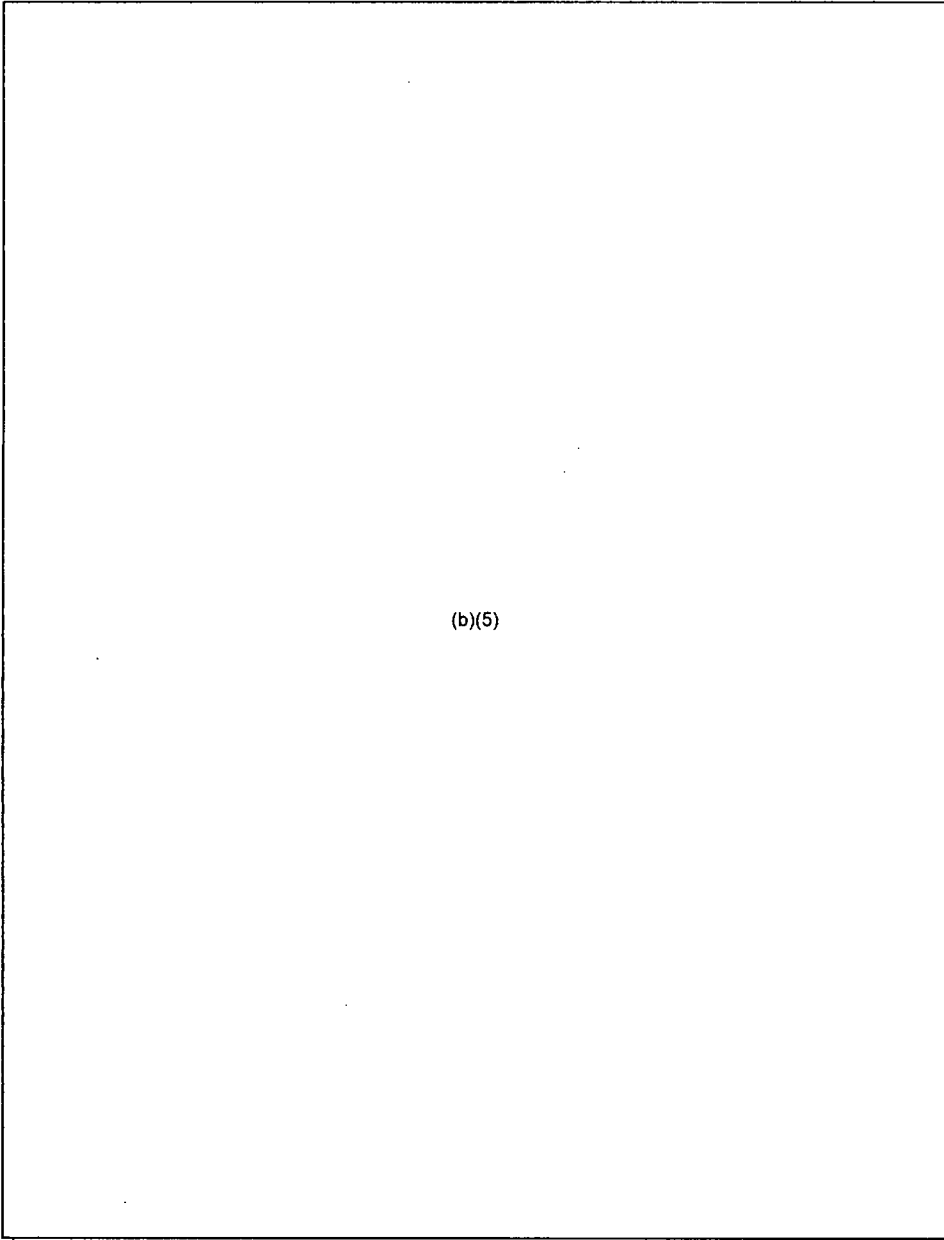
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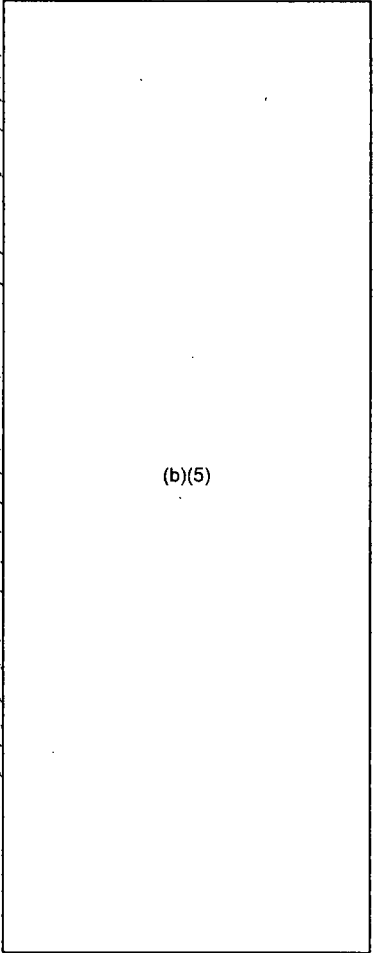
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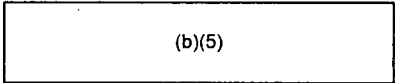
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(b)(5)

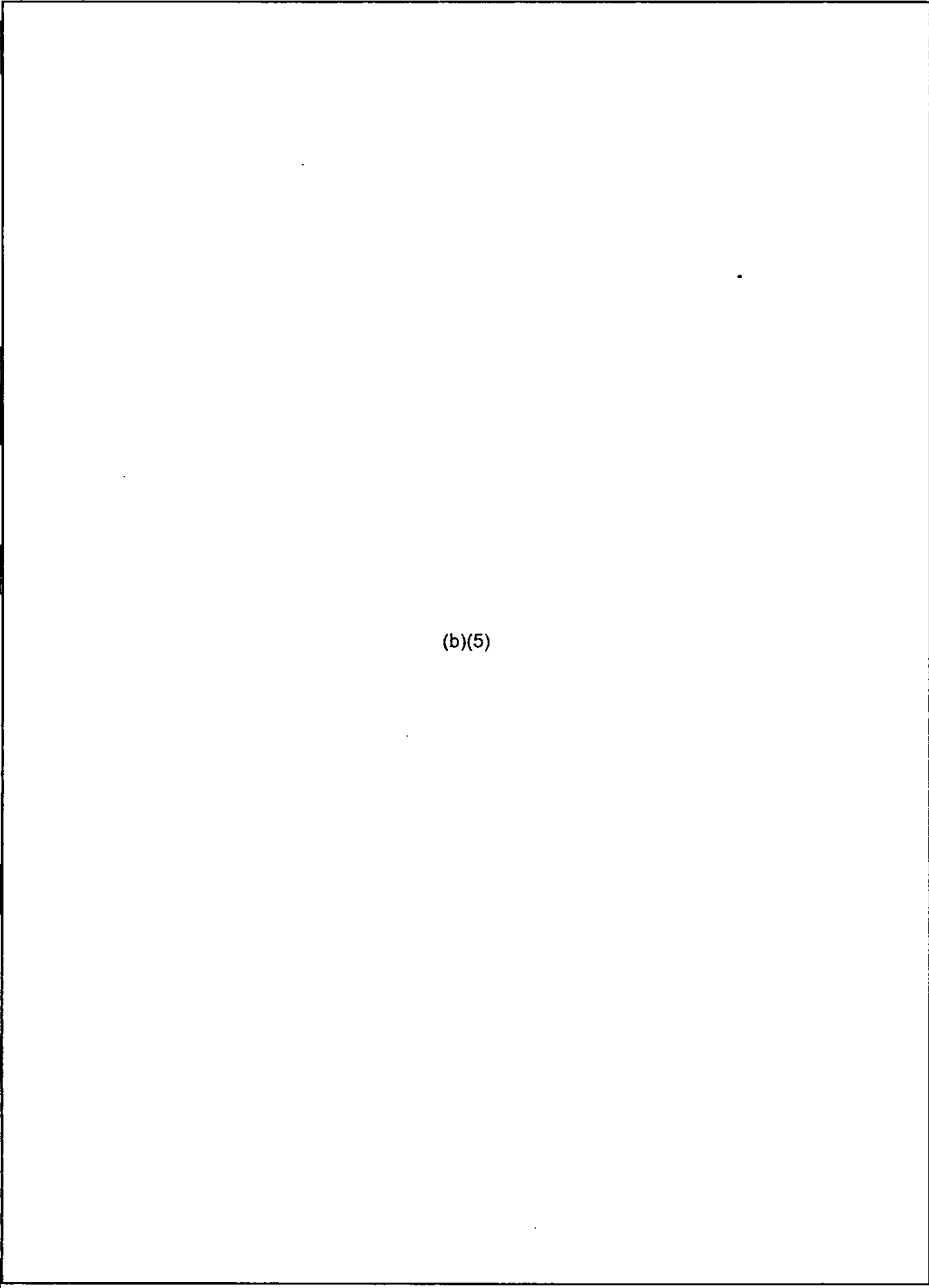


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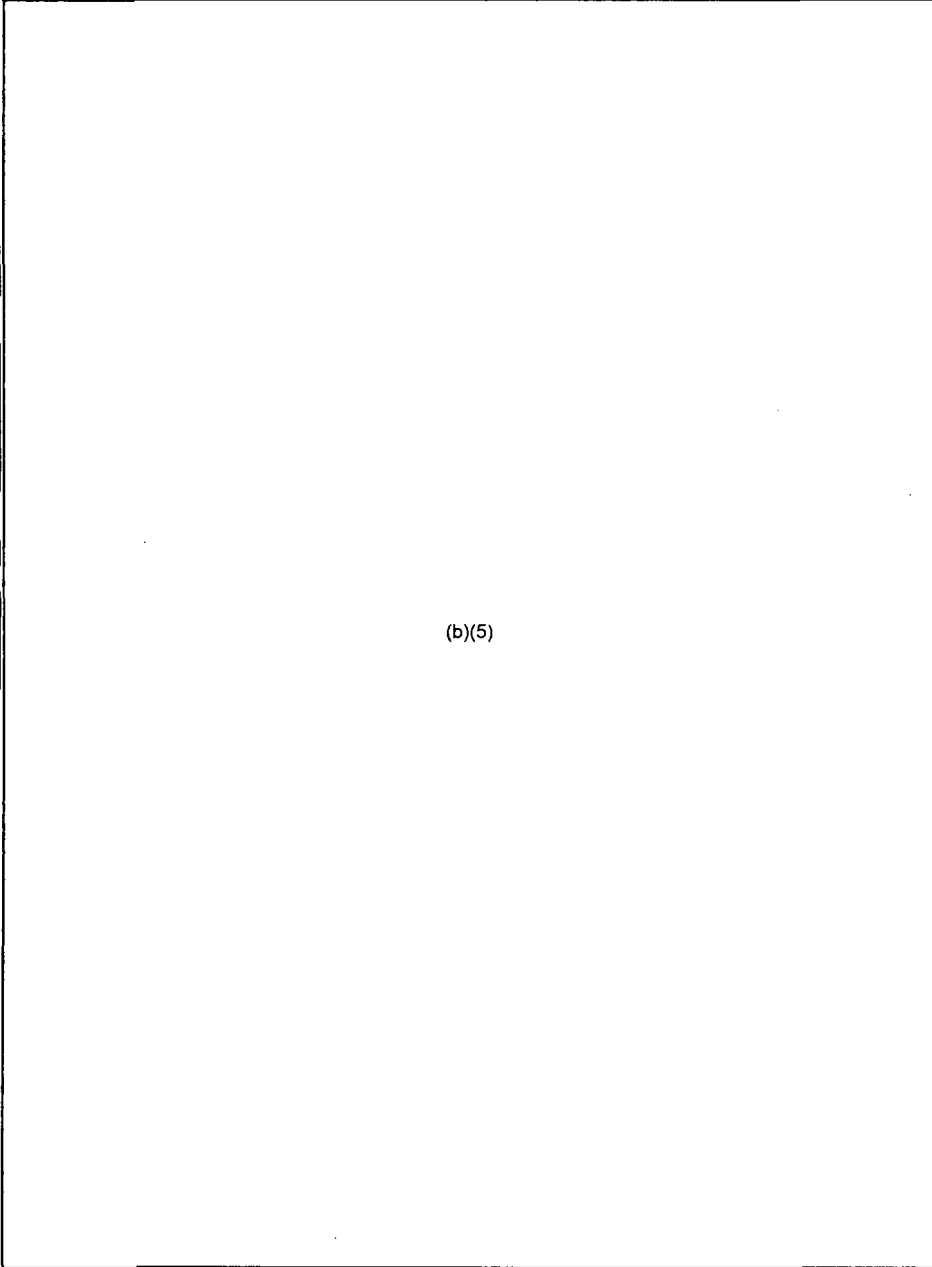
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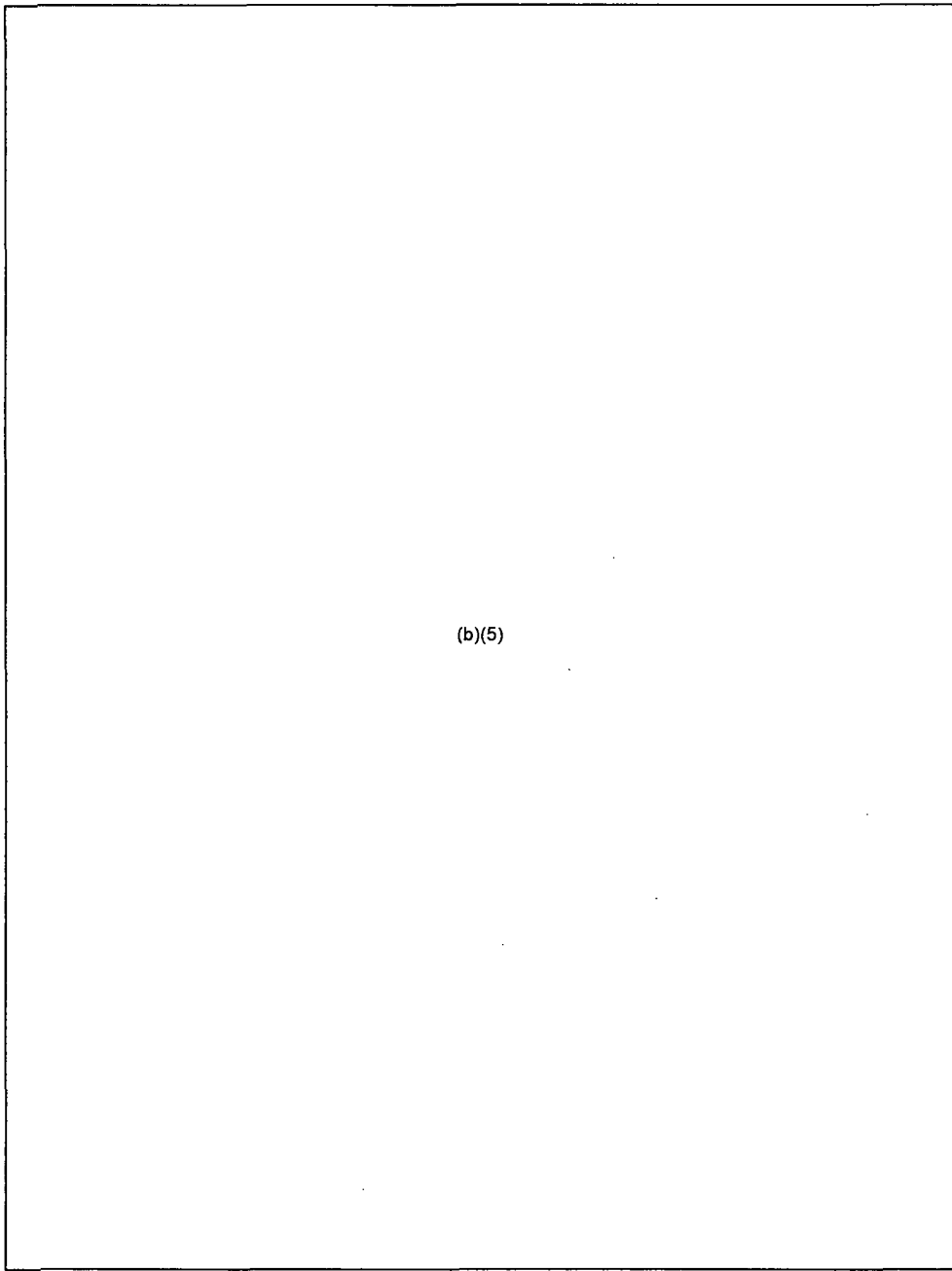


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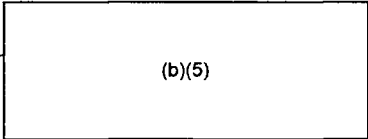
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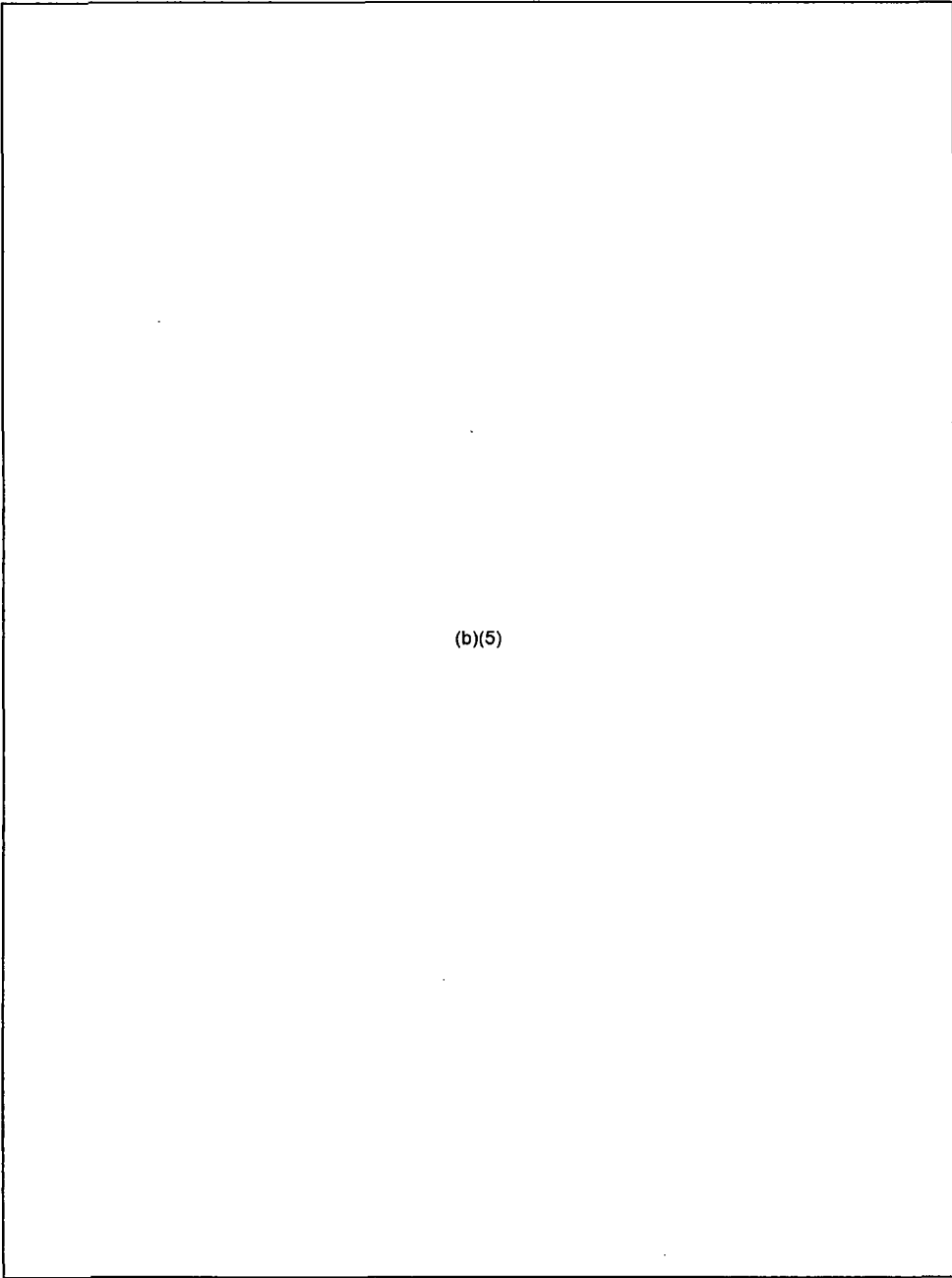


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6-110

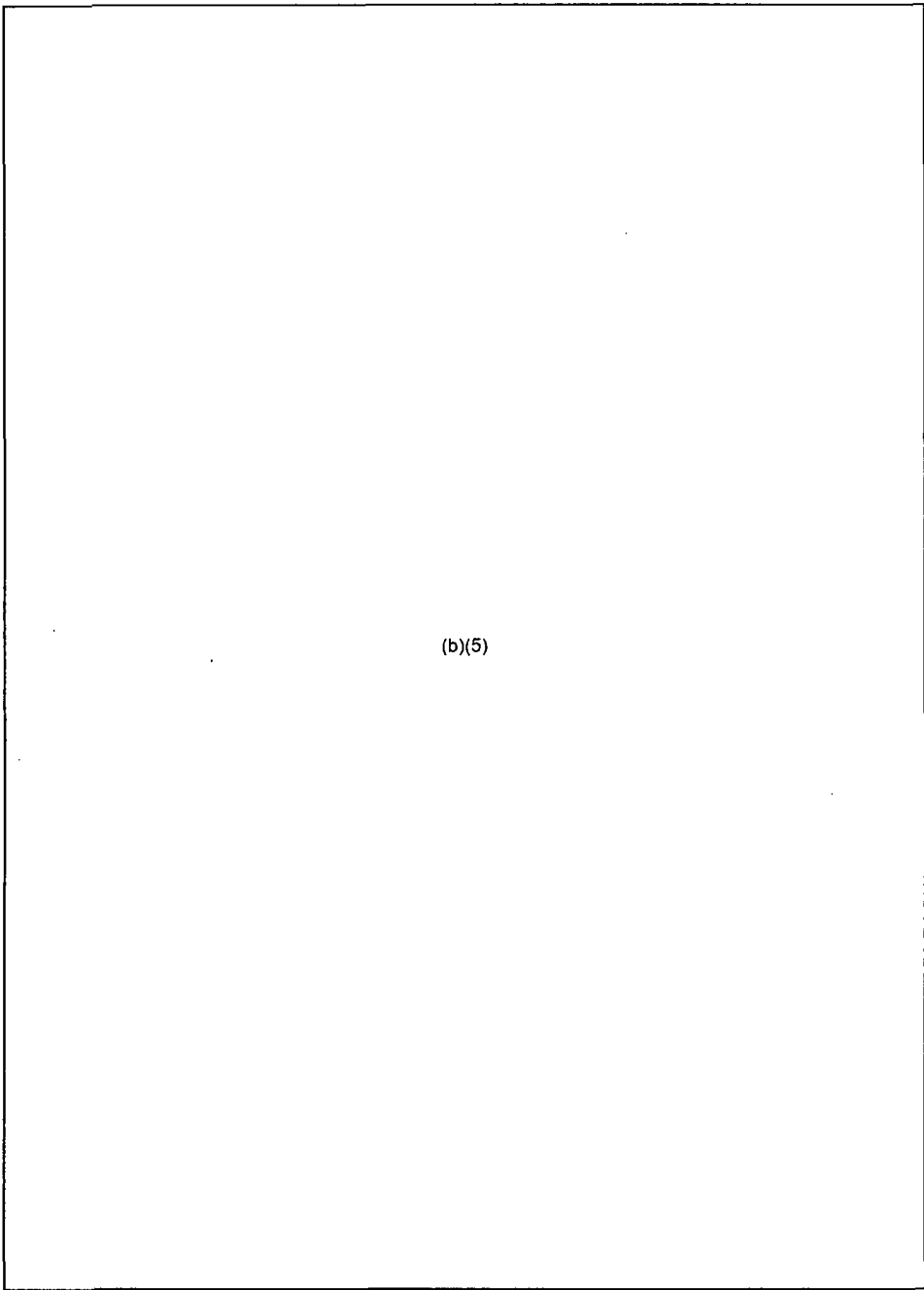
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6-111



(b)(5)

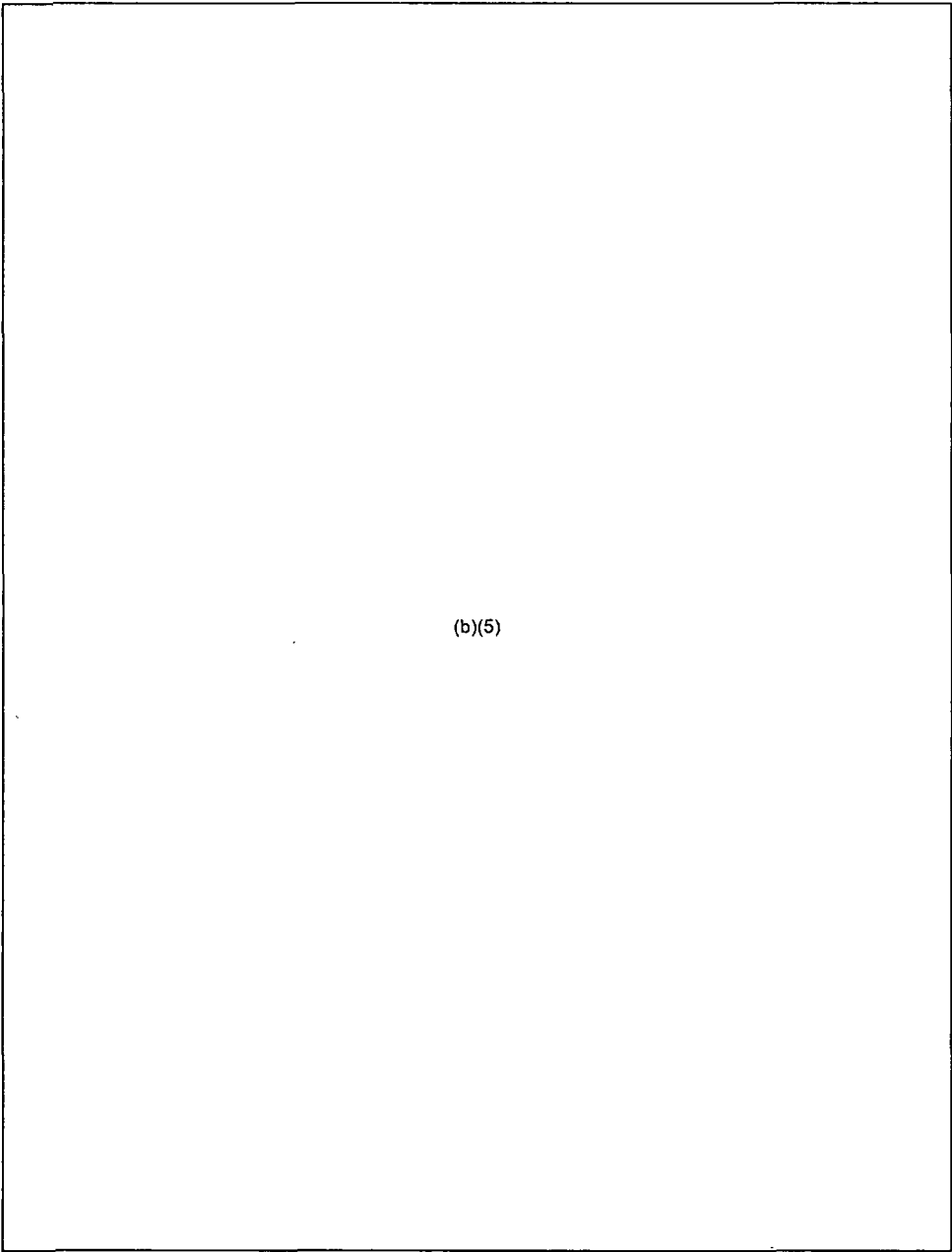
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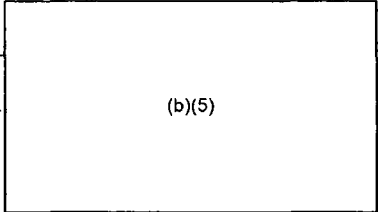
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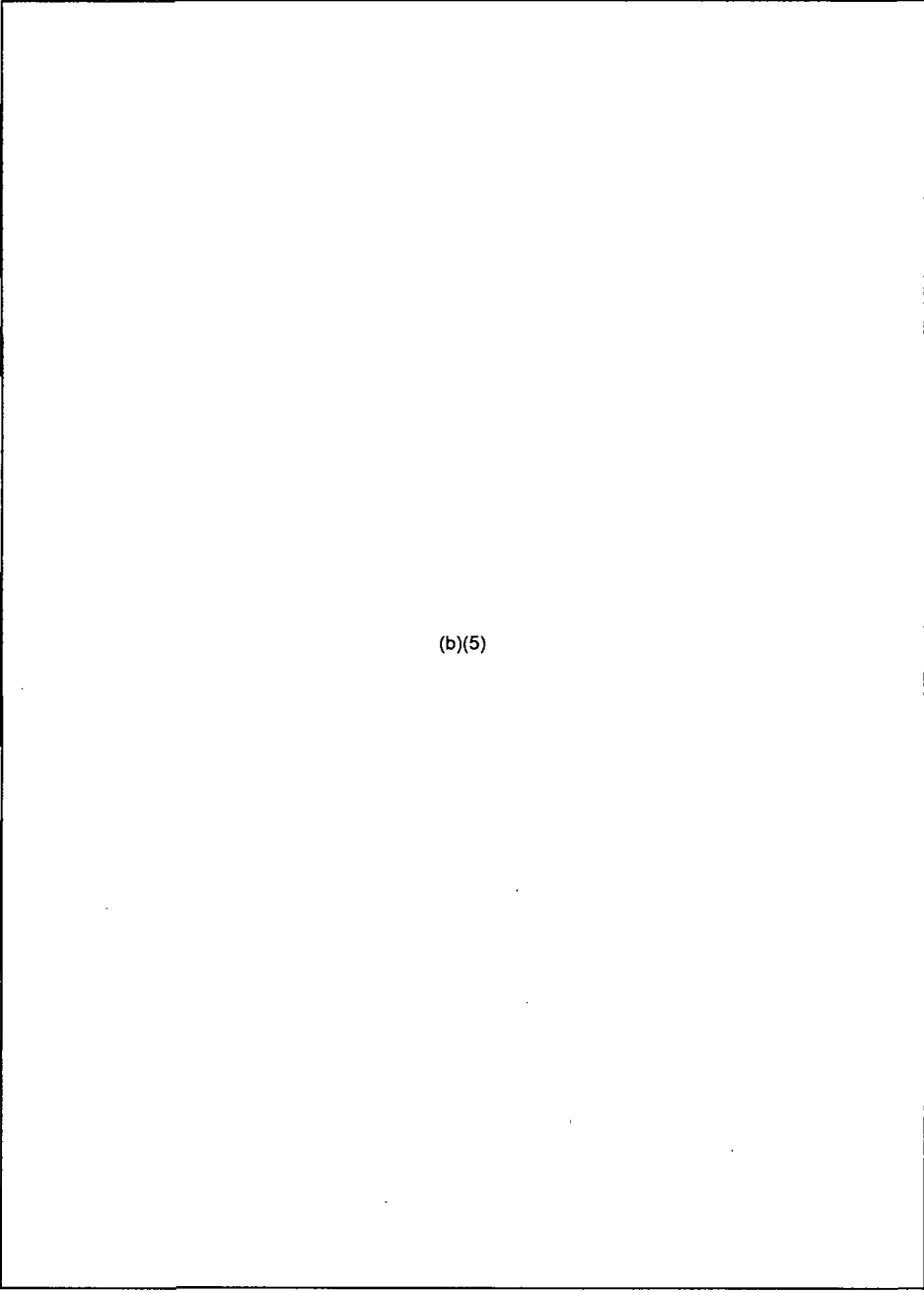
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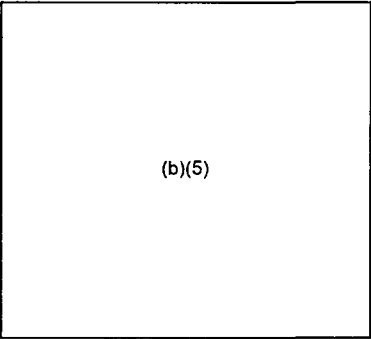
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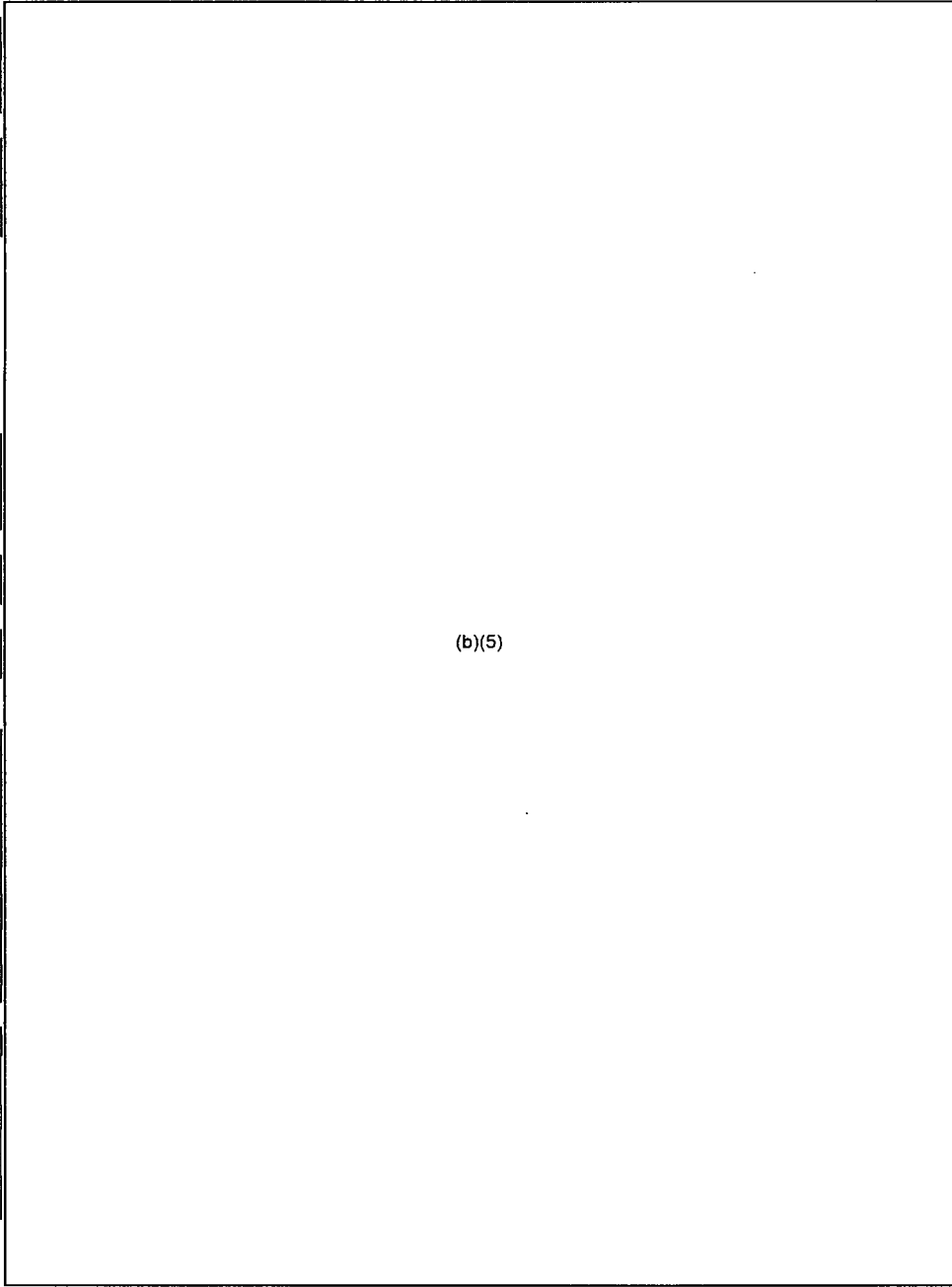


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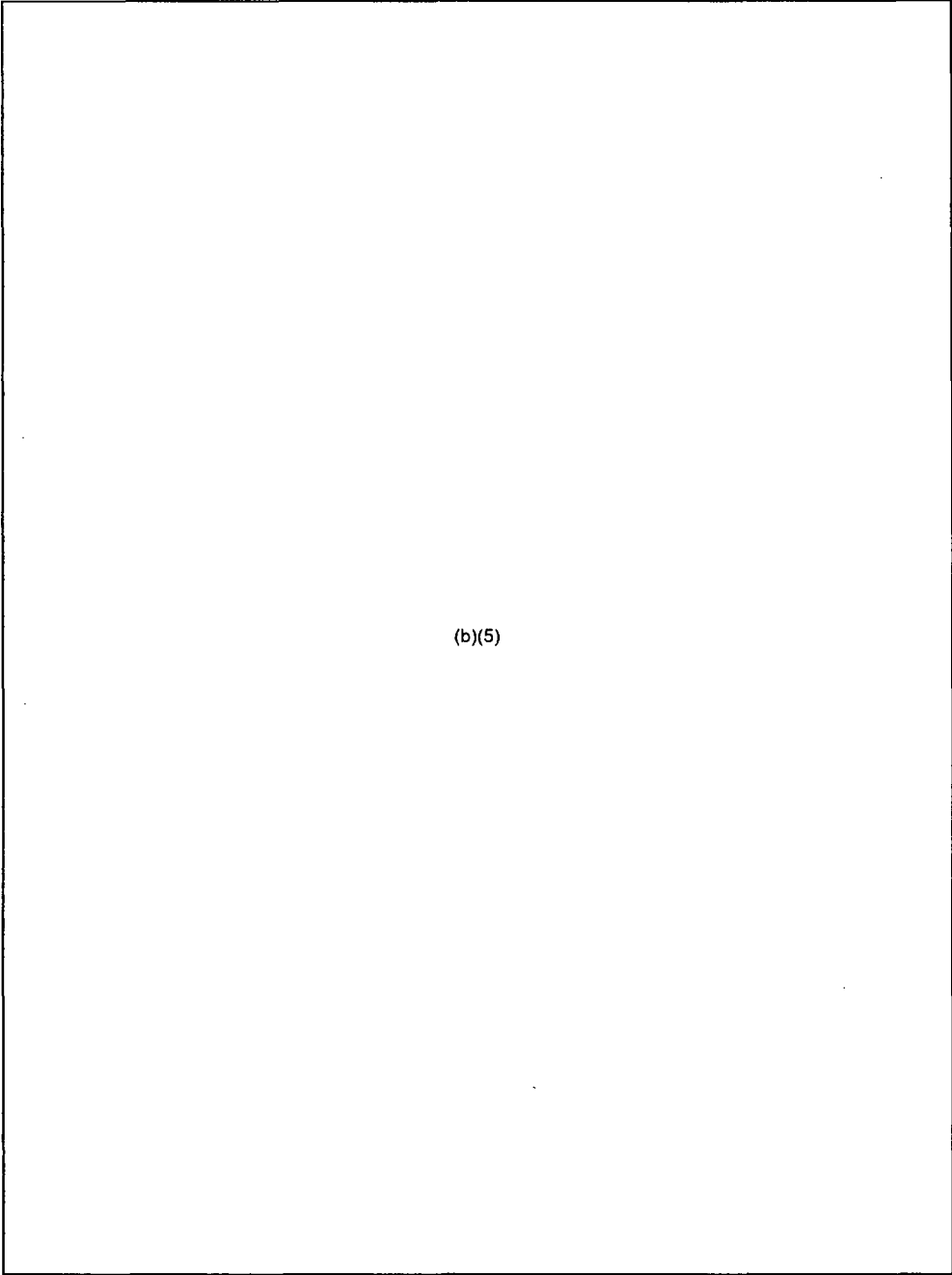
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6-115



(b)(5)

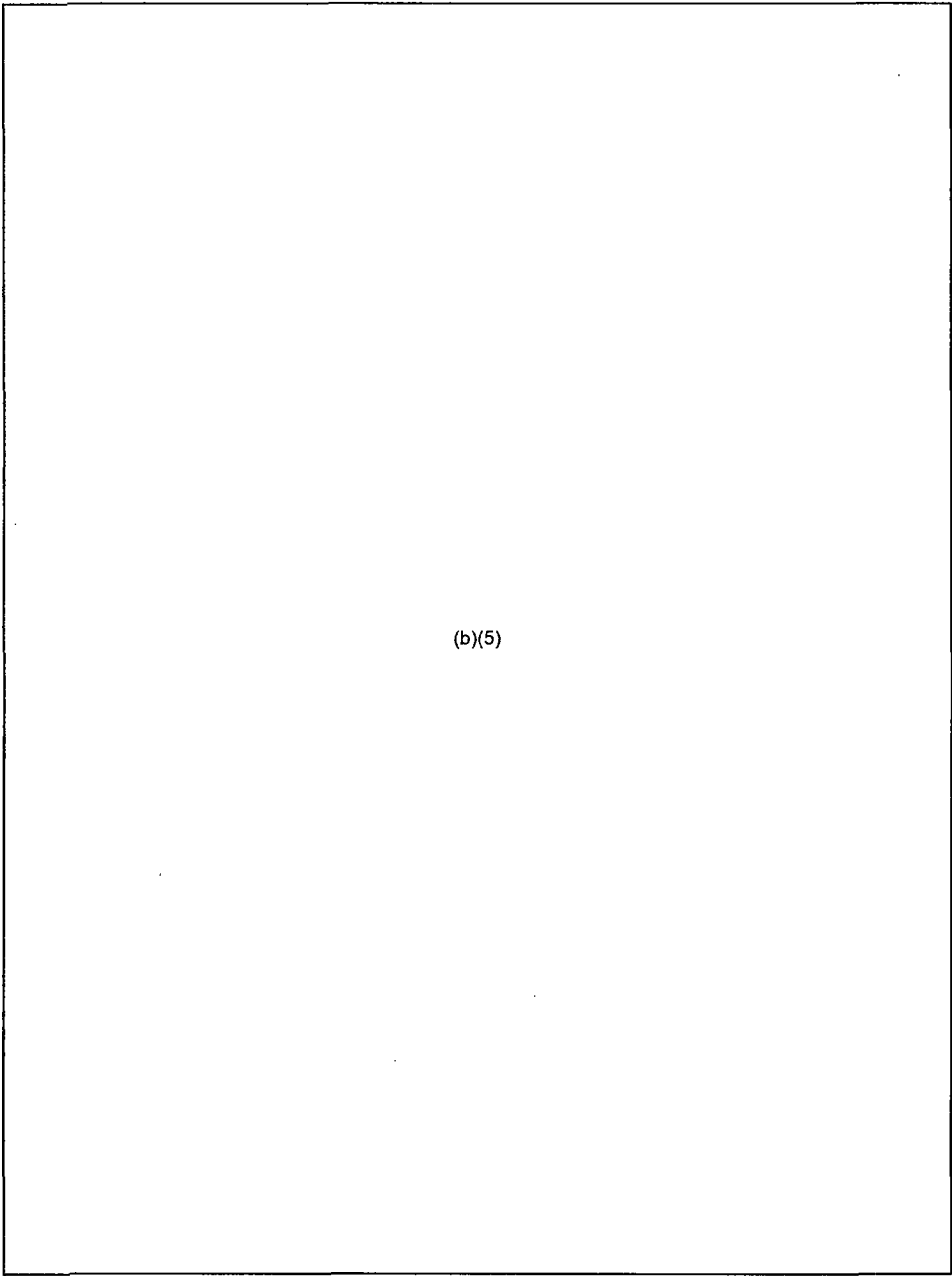
6-116



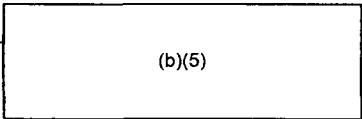
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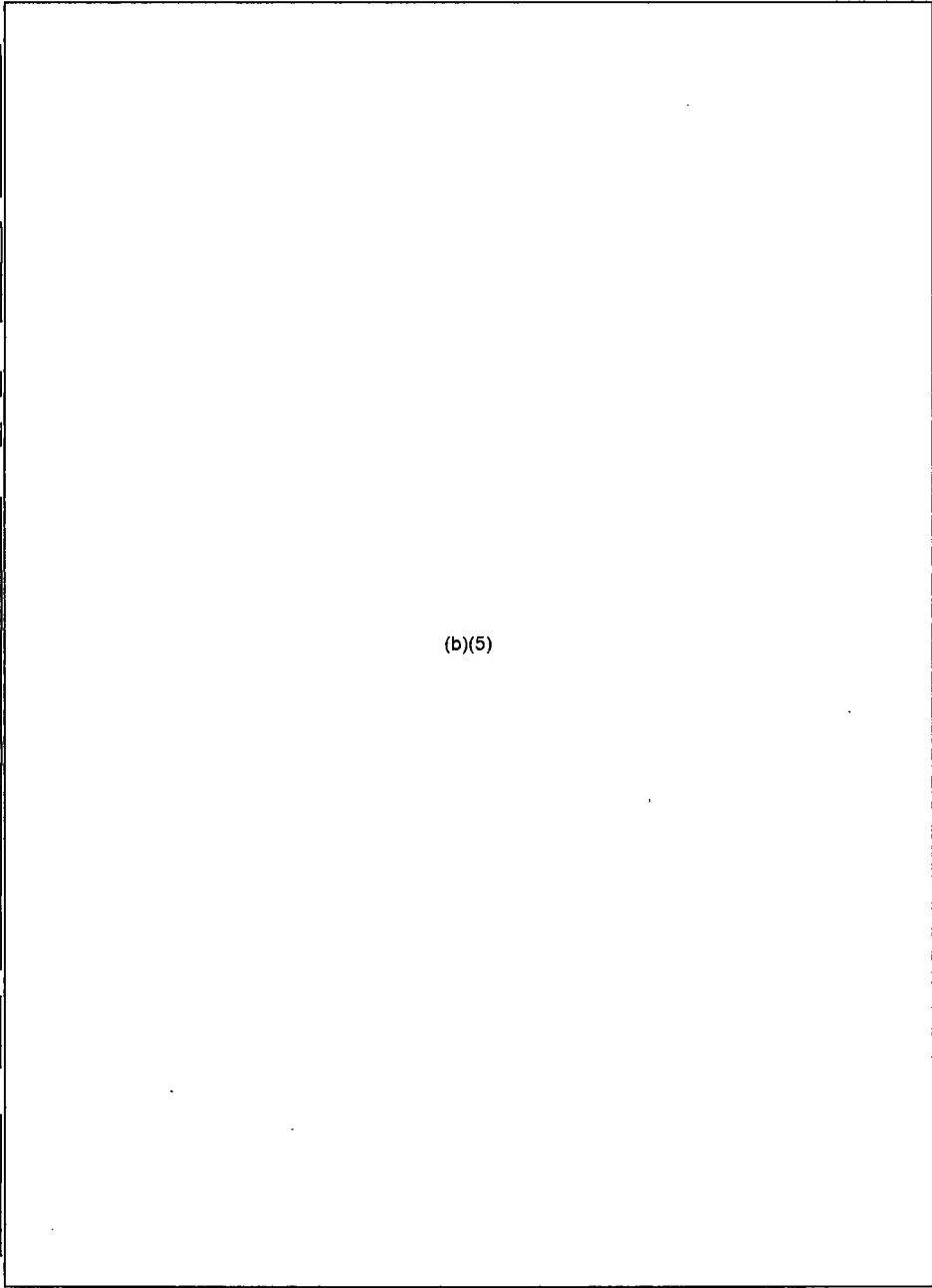
6-117



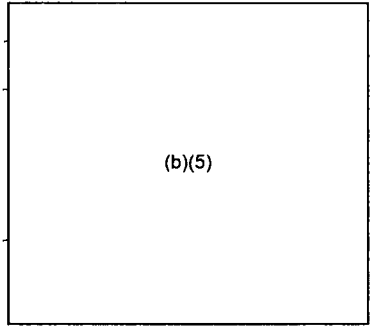
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(b)(5)



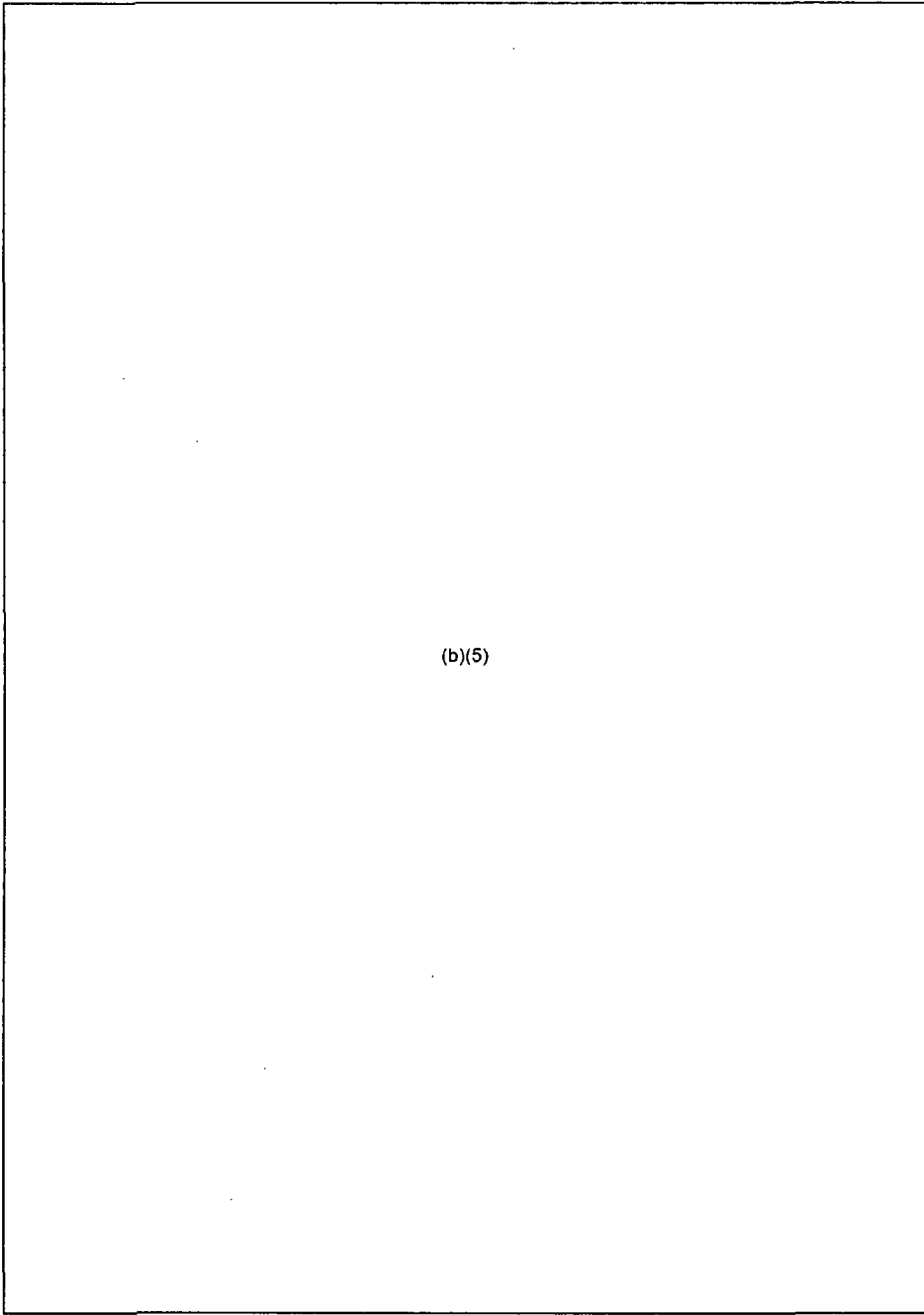
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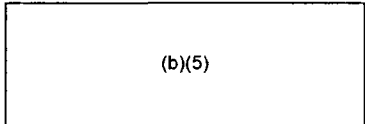
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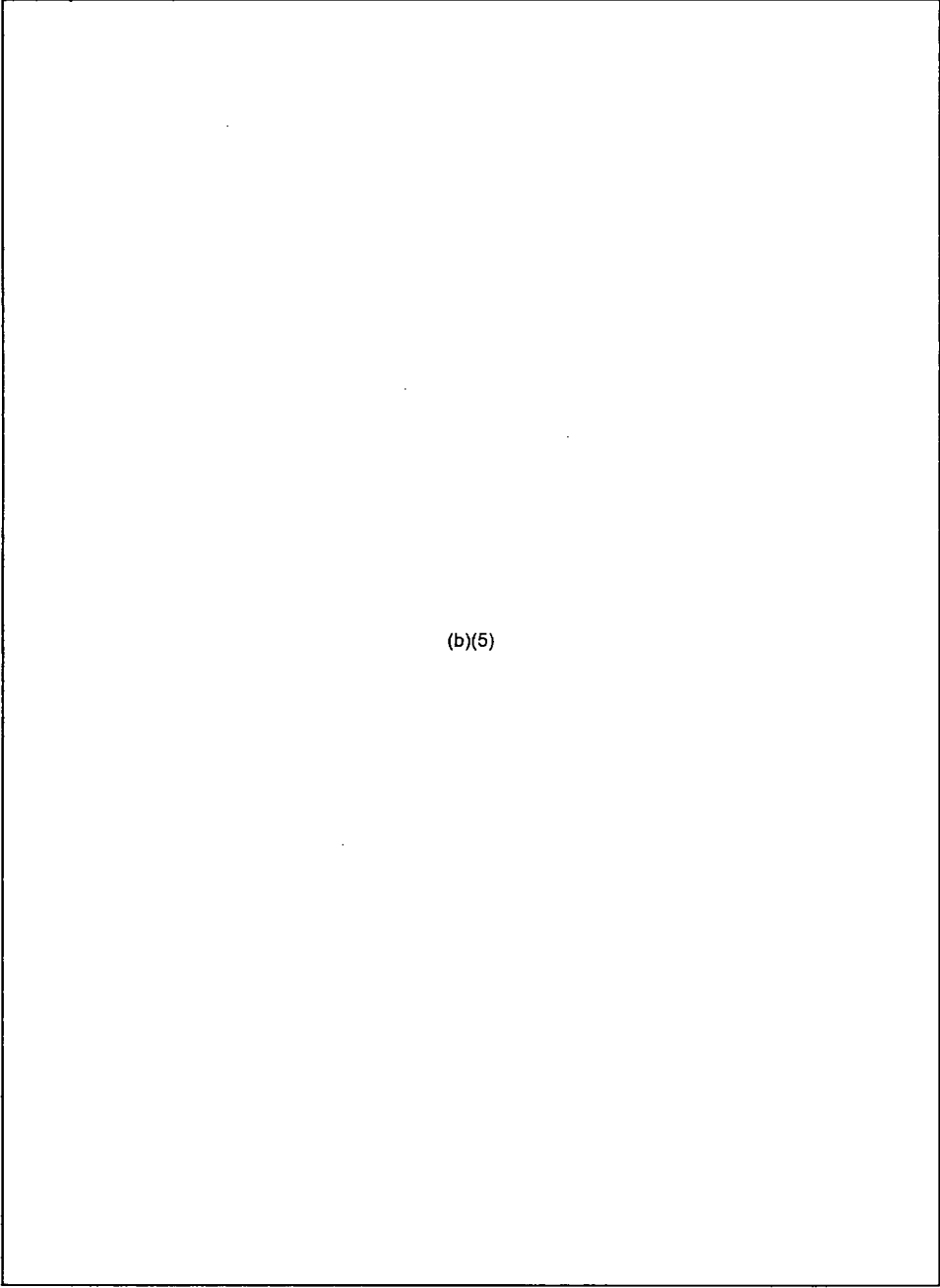
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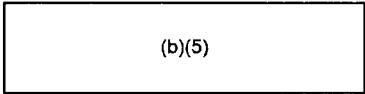
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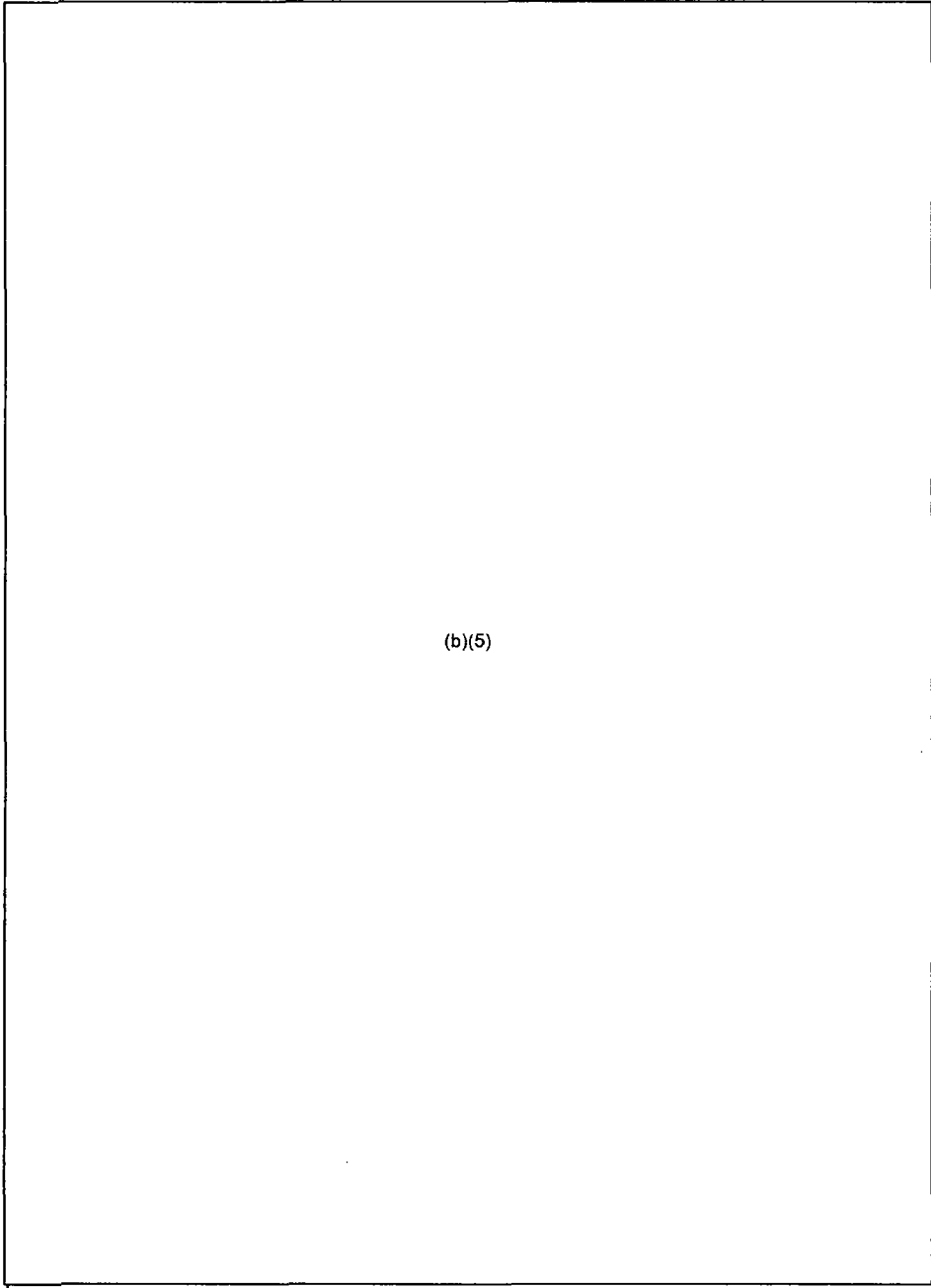
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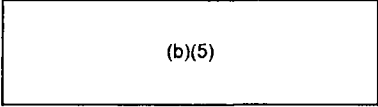
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(b)(5)



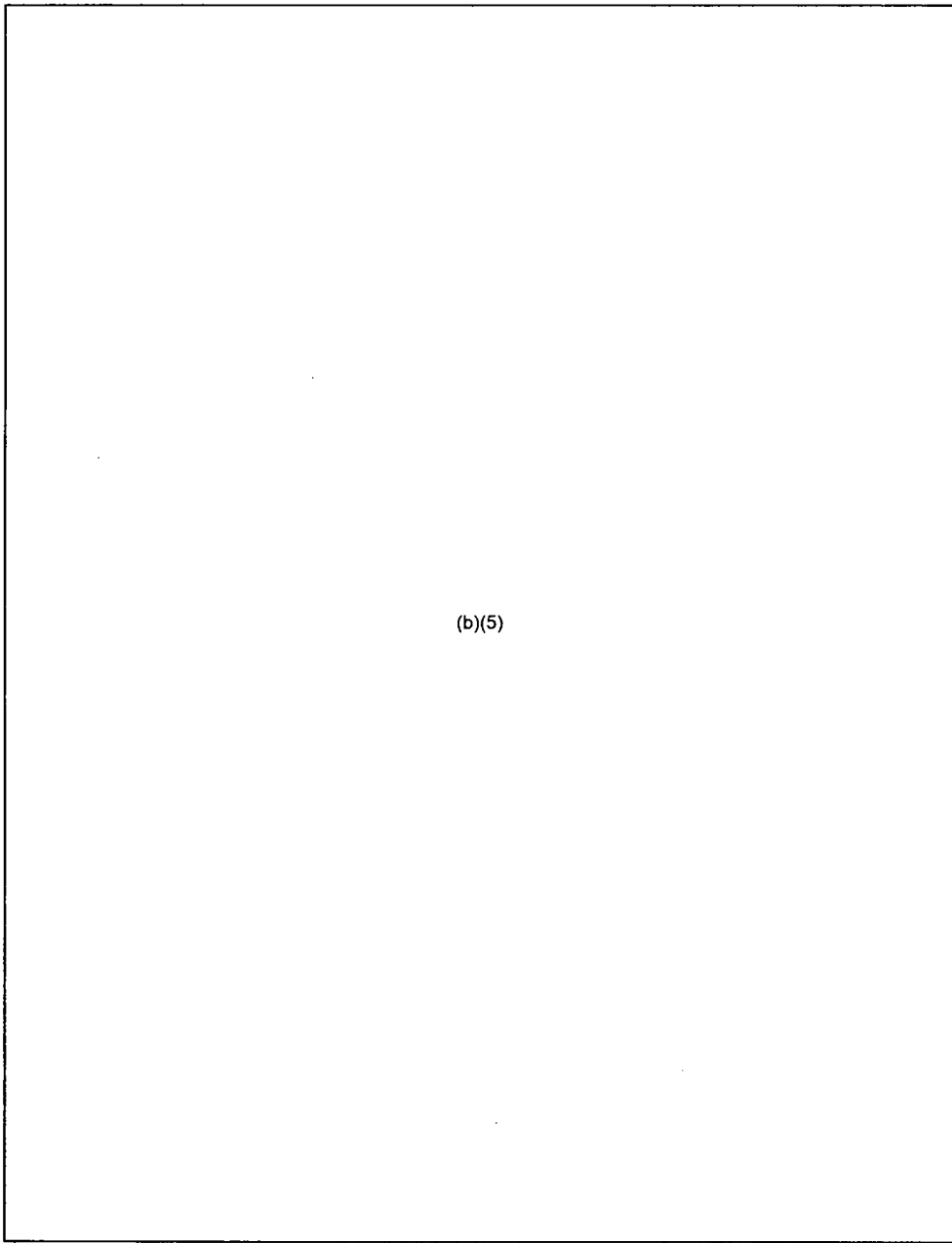
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(b)(5)

6-124

(b)(5)

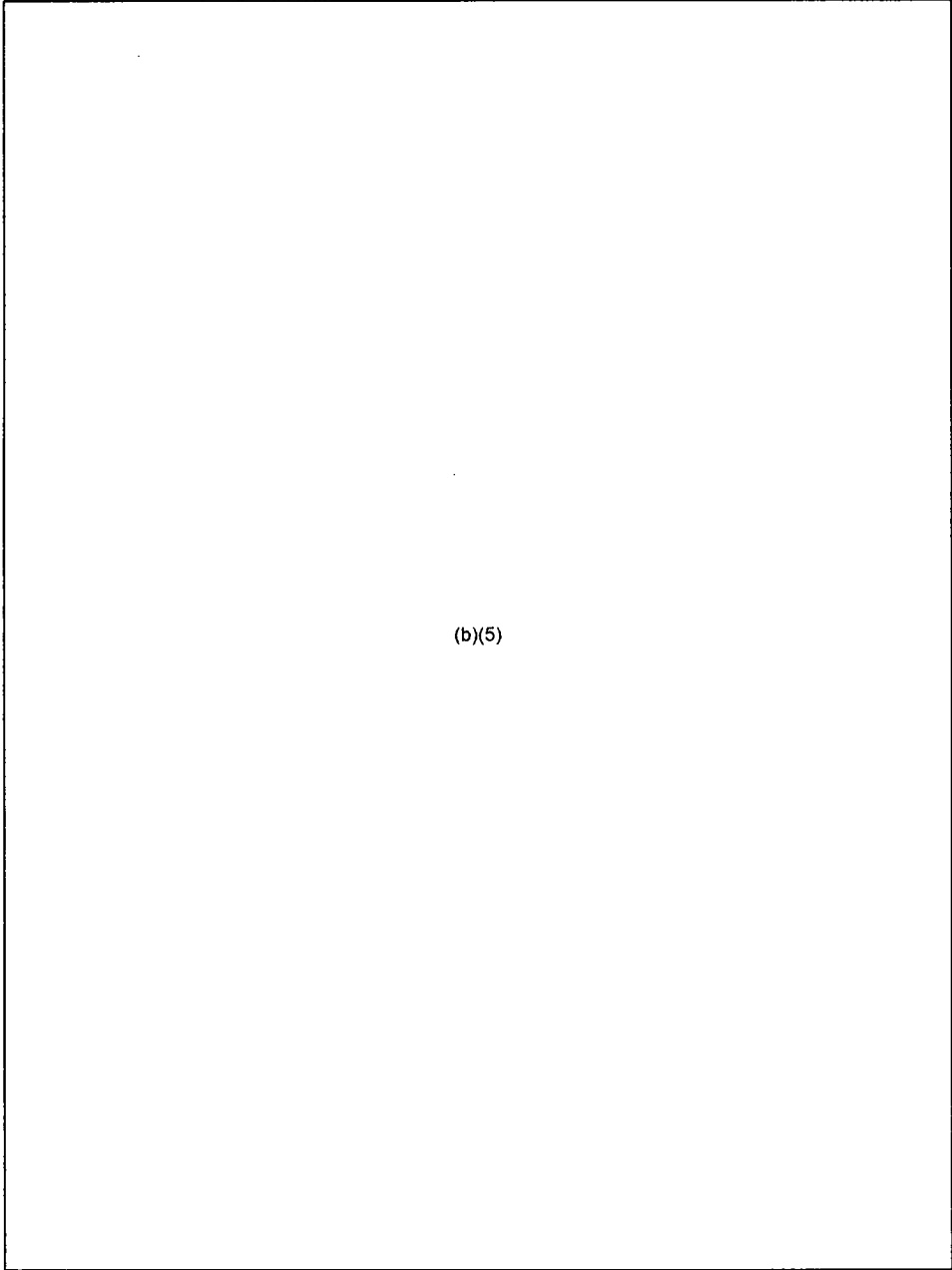
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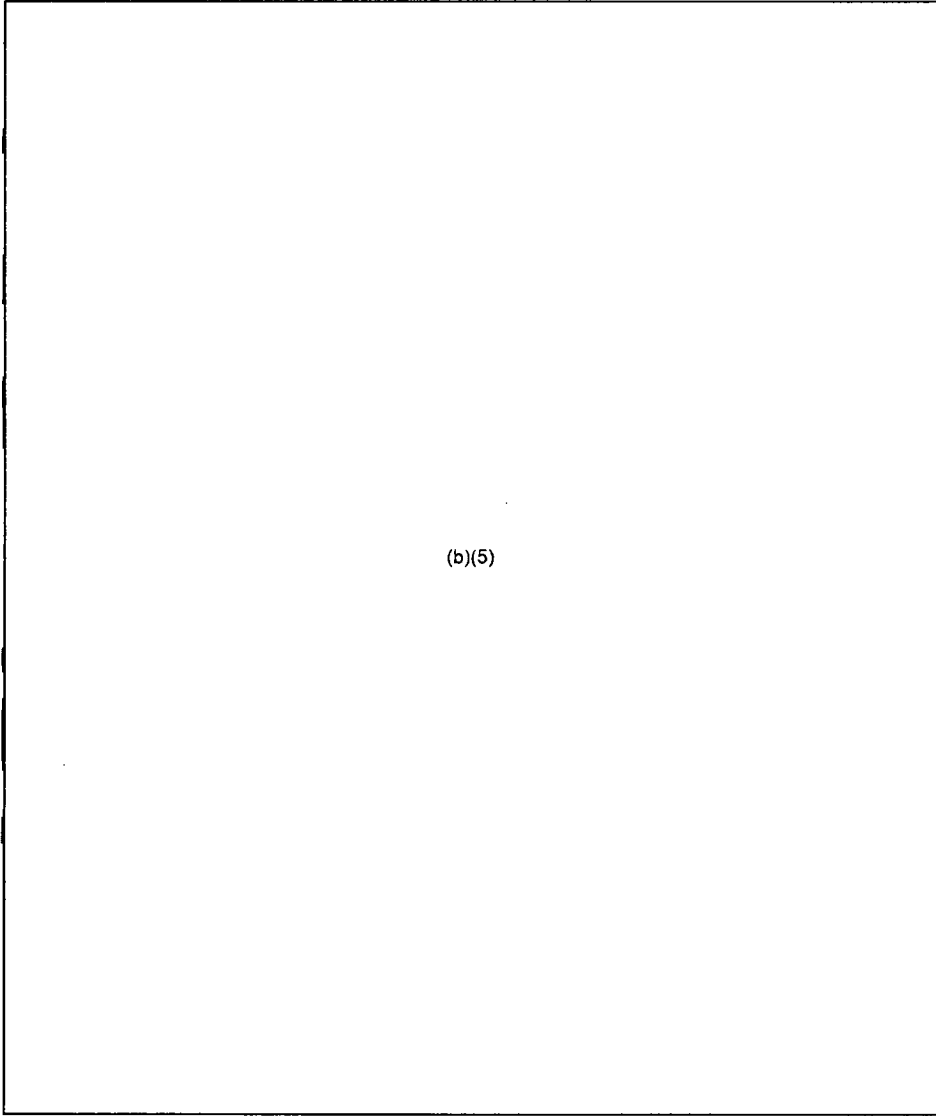
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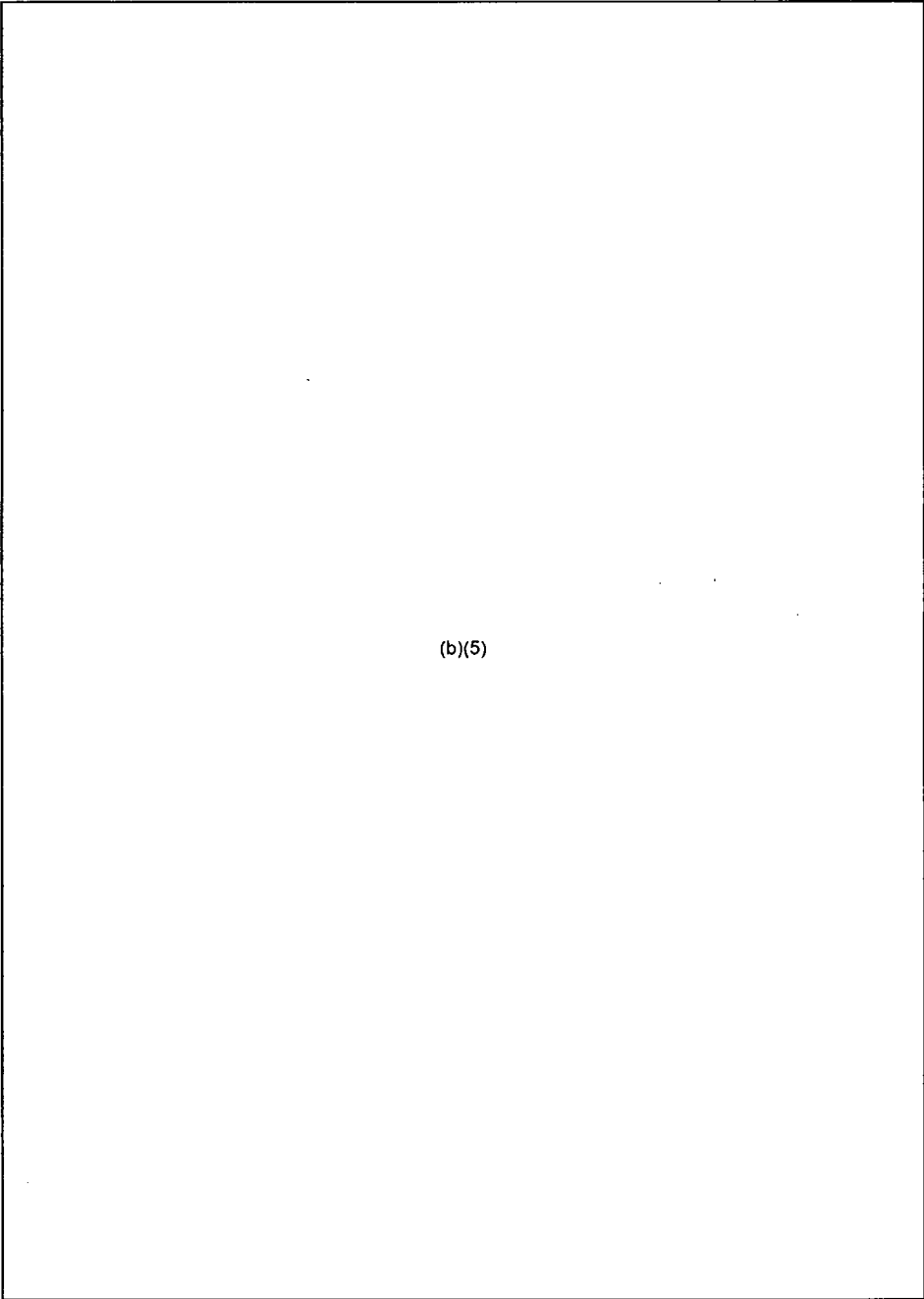
6-127



(b)(5)



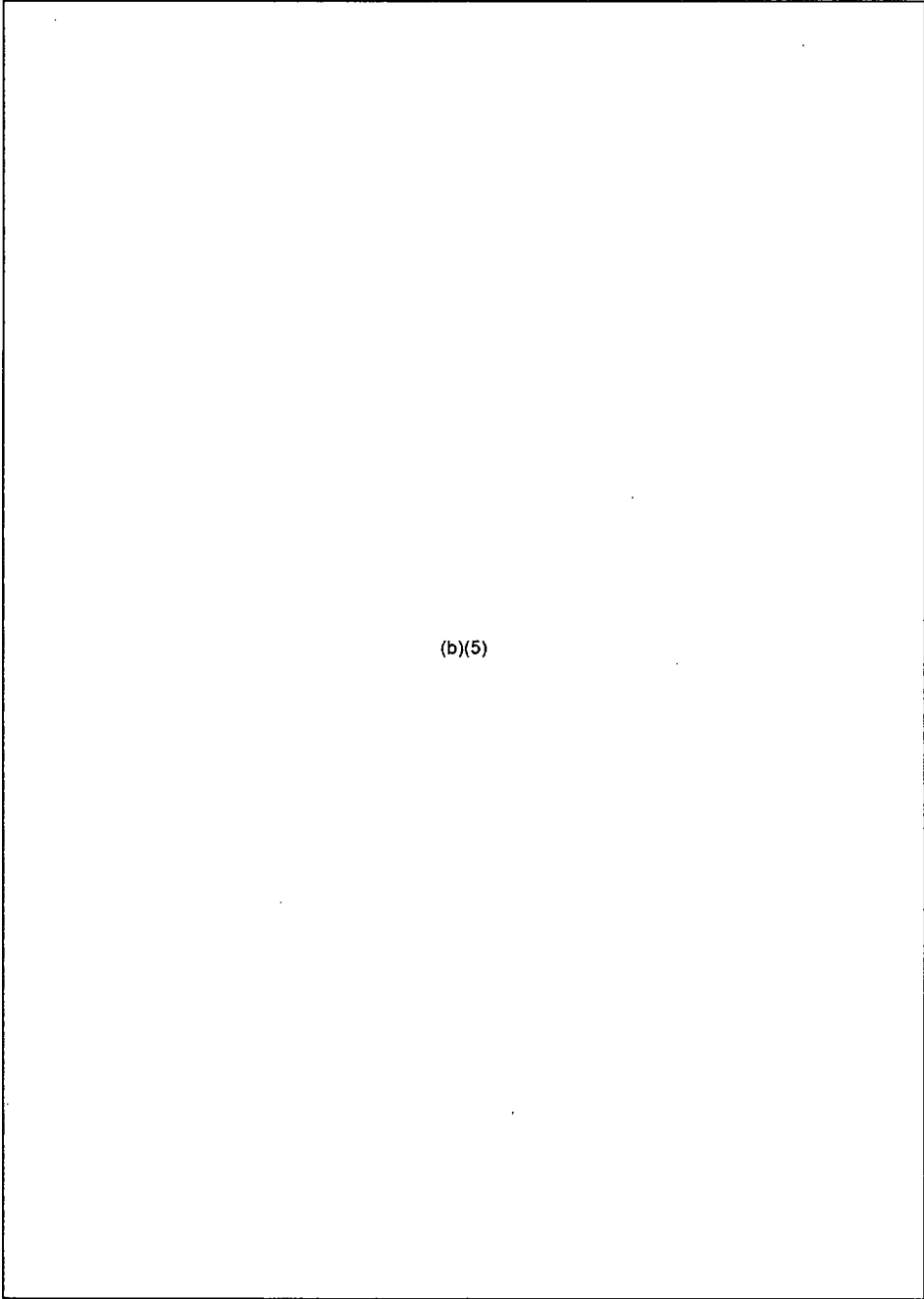
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(b)(5)

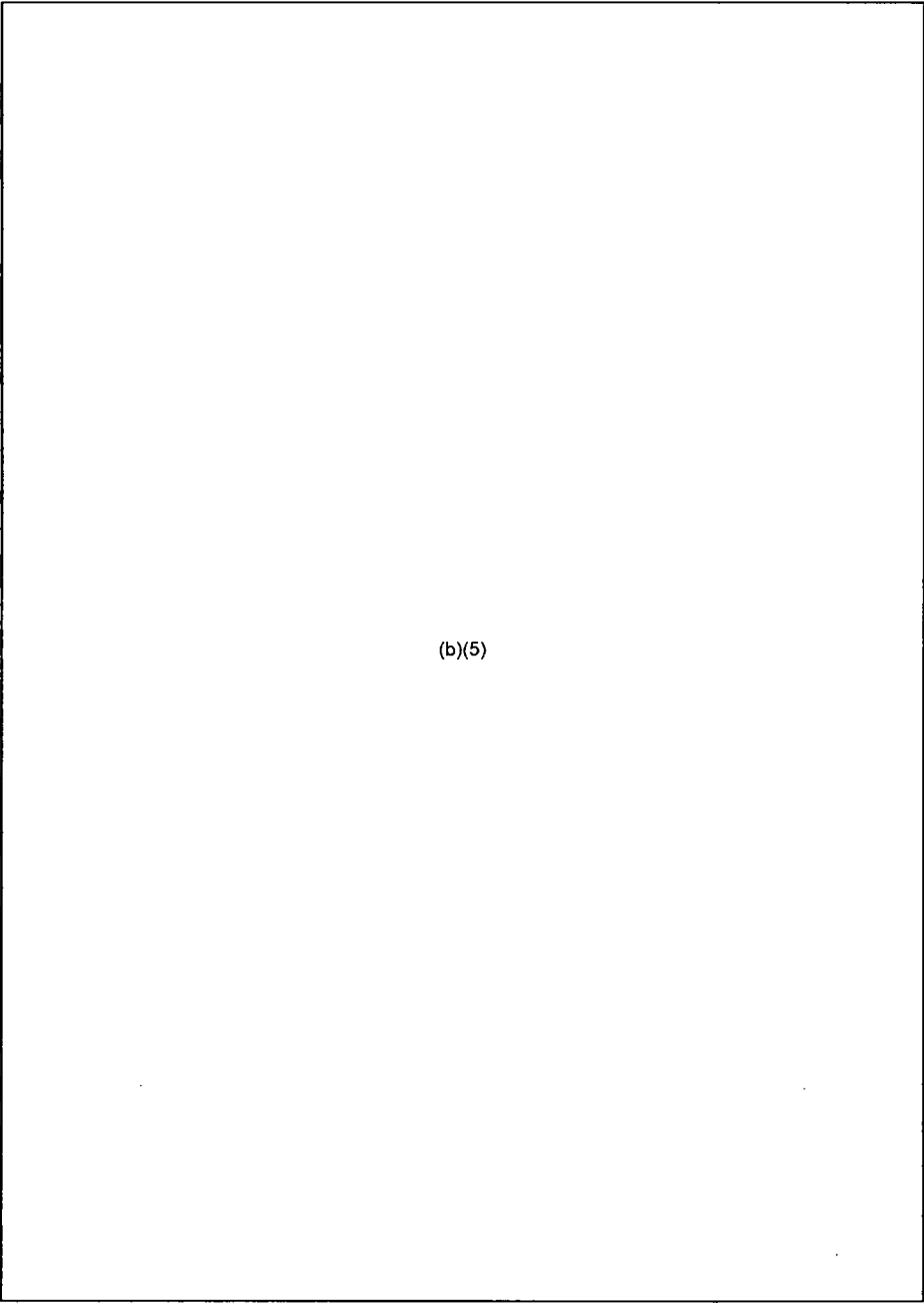
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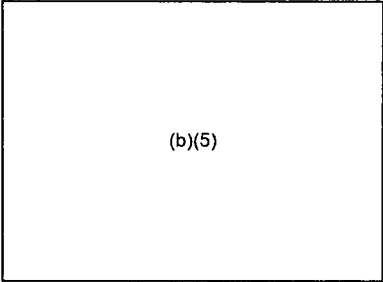
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(b)(5)

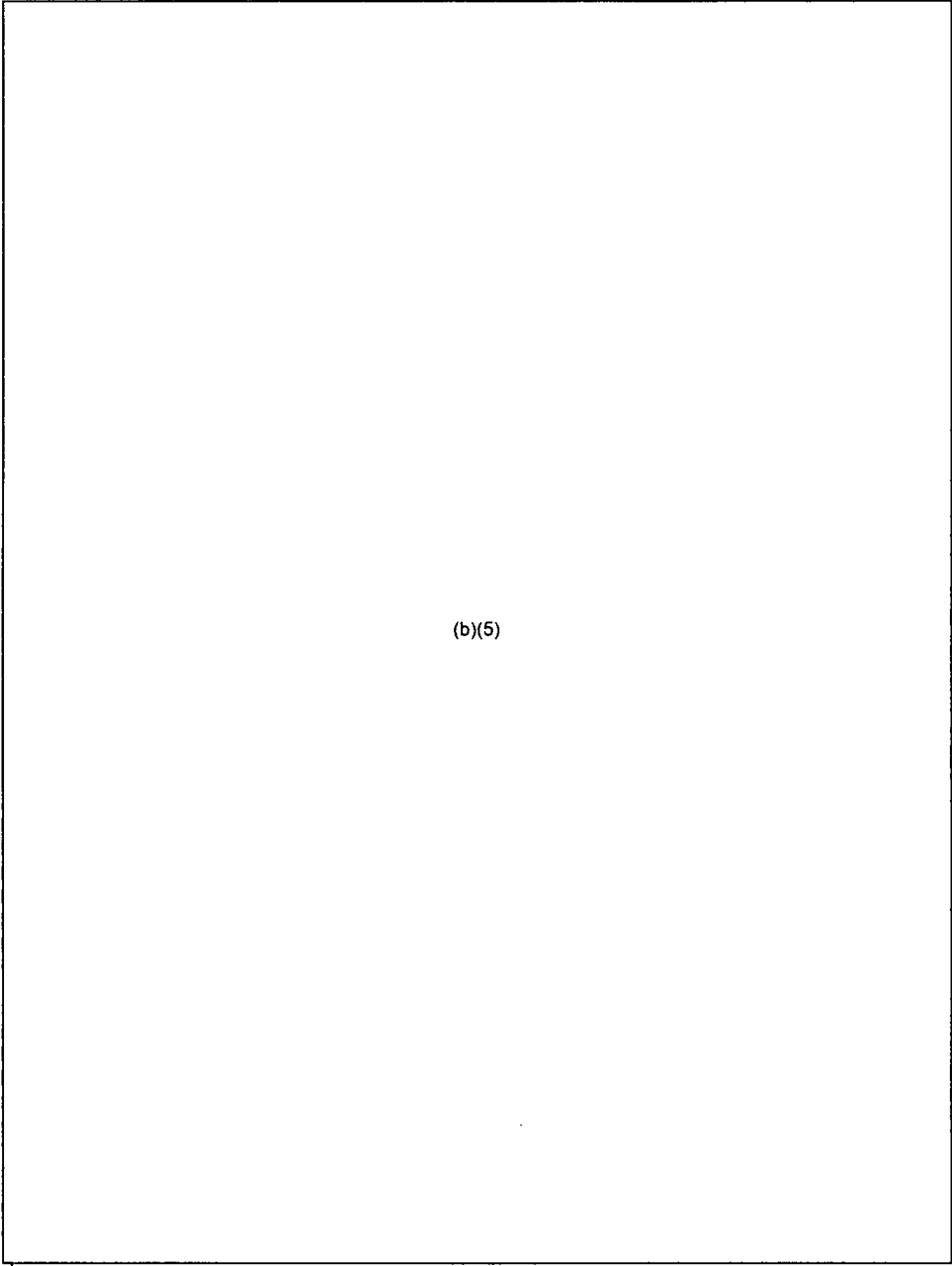
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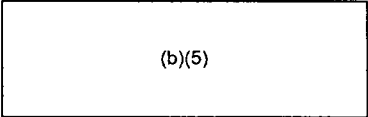
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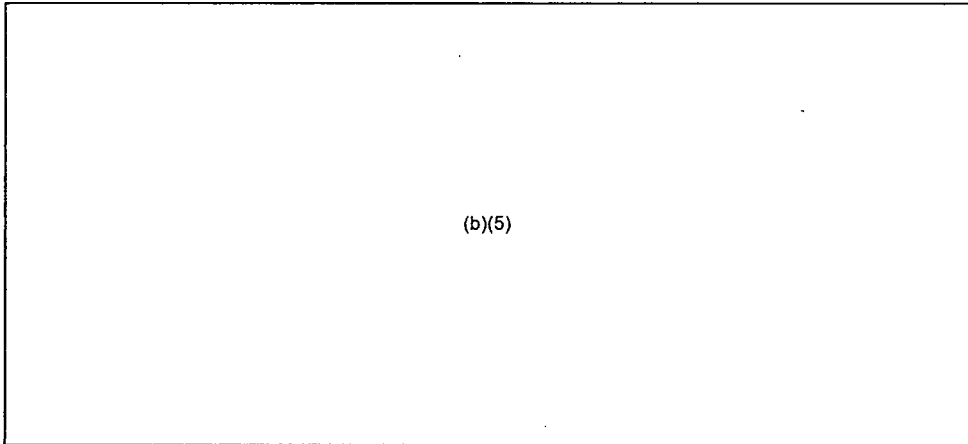
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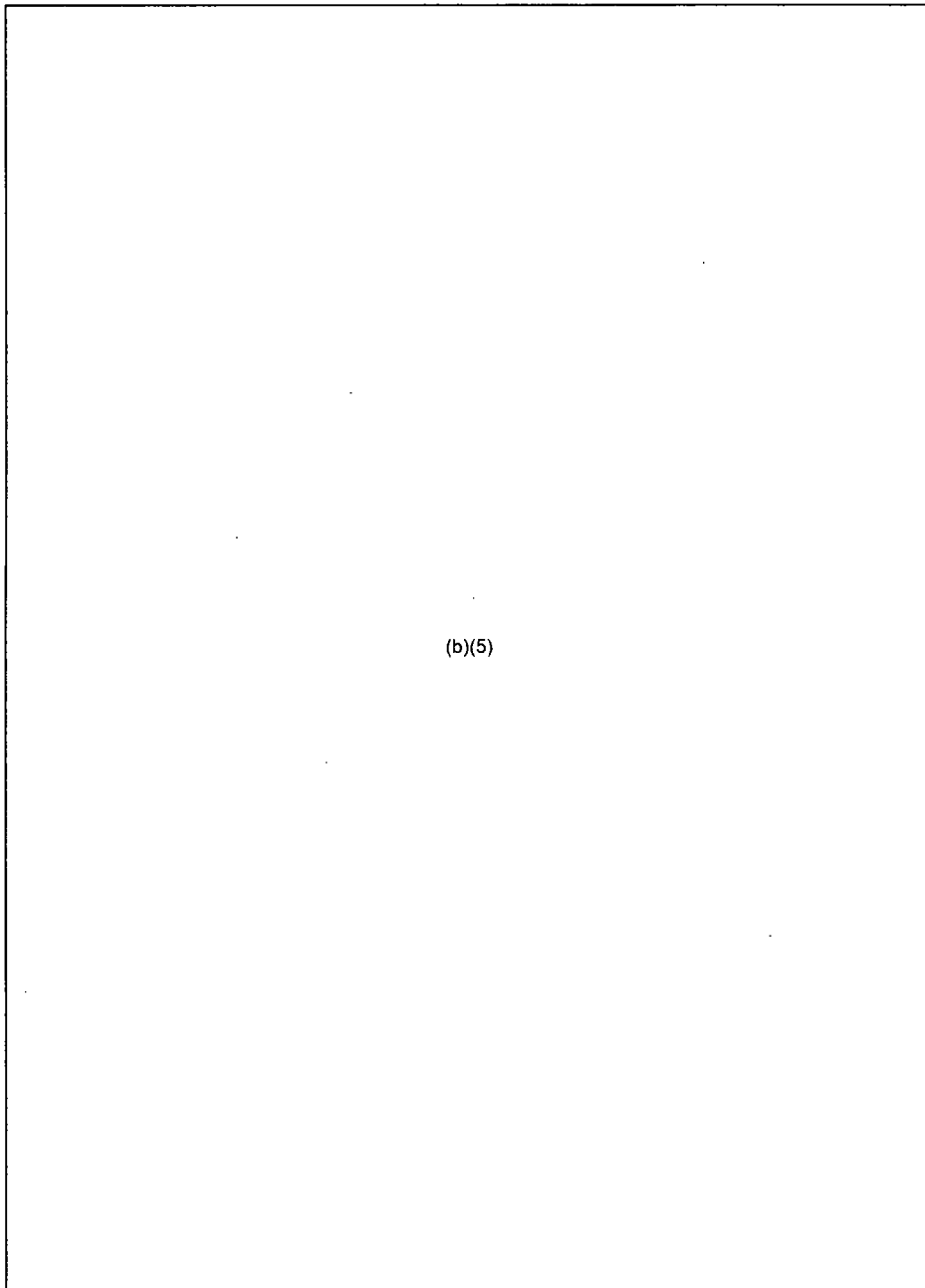
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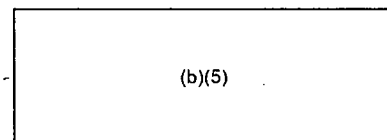
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(b)(5)

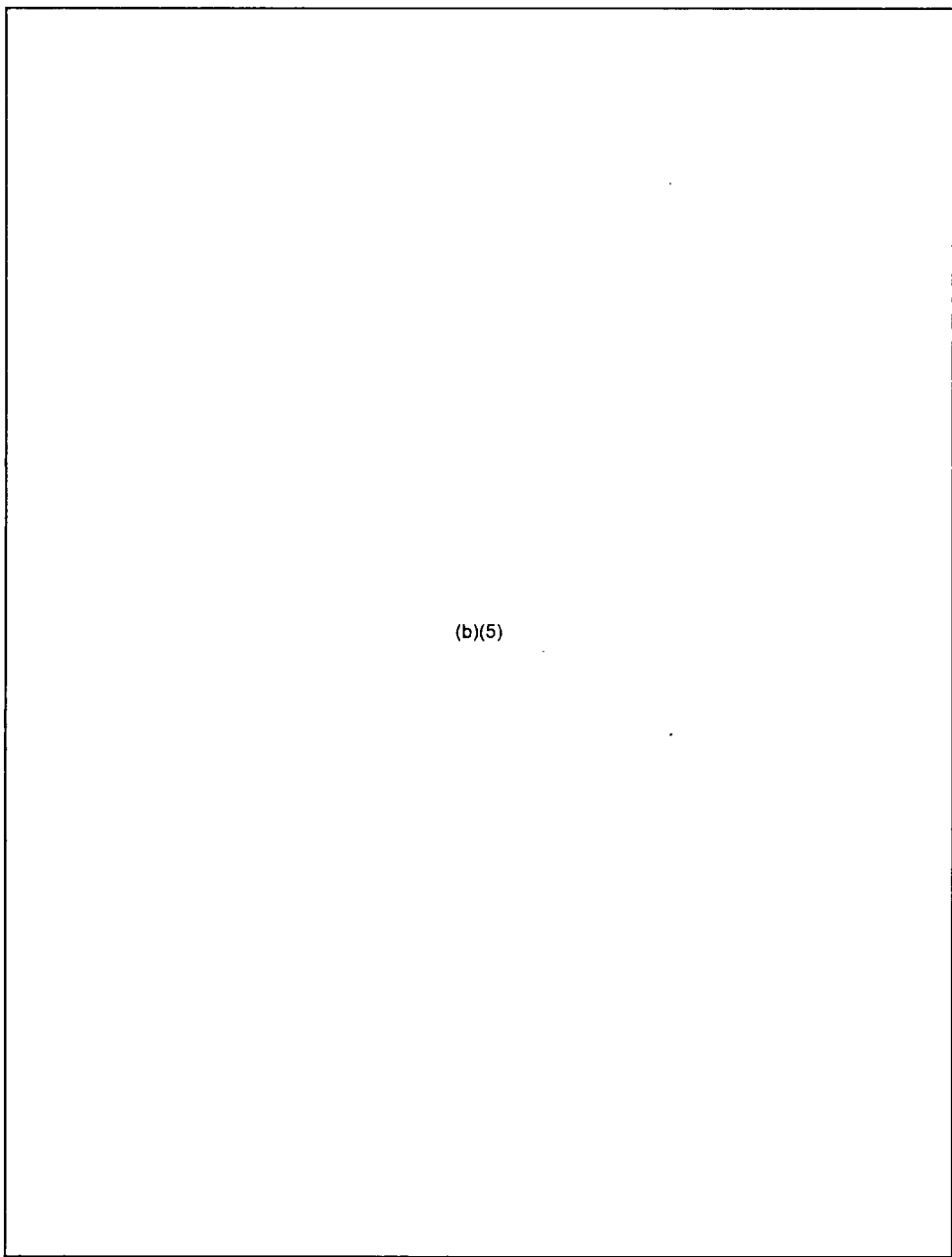


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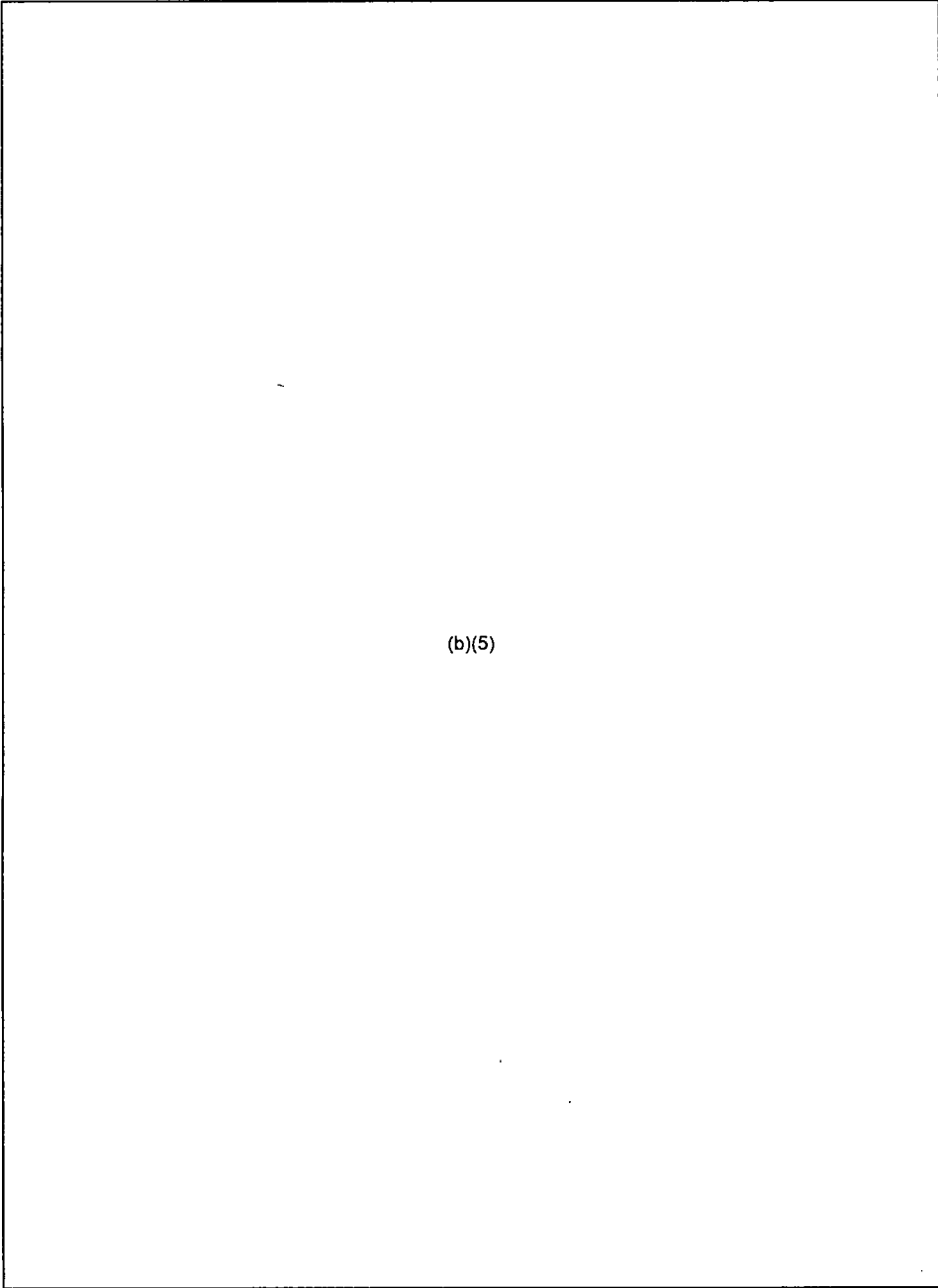
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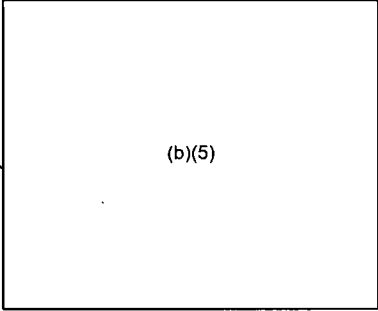
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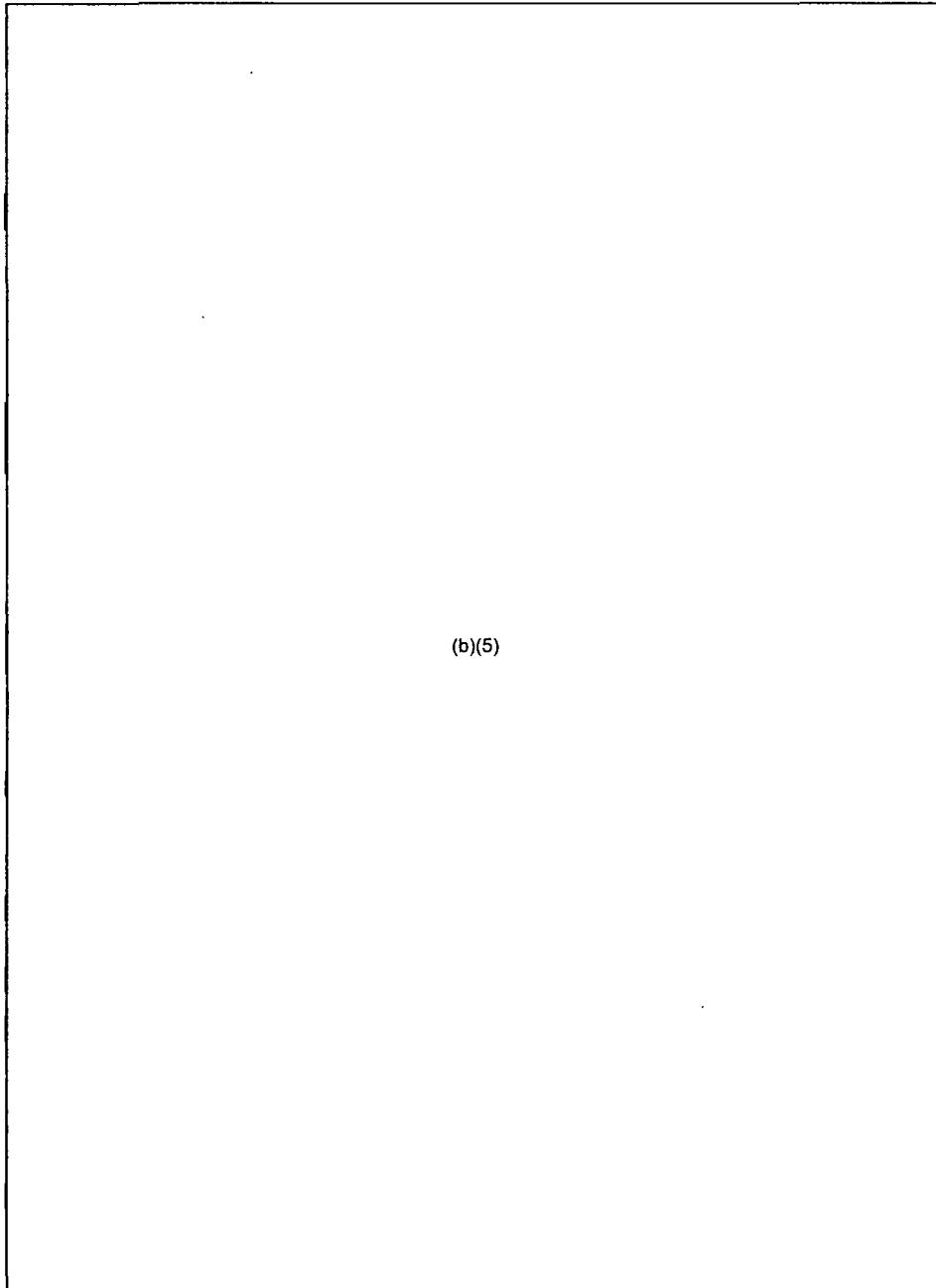
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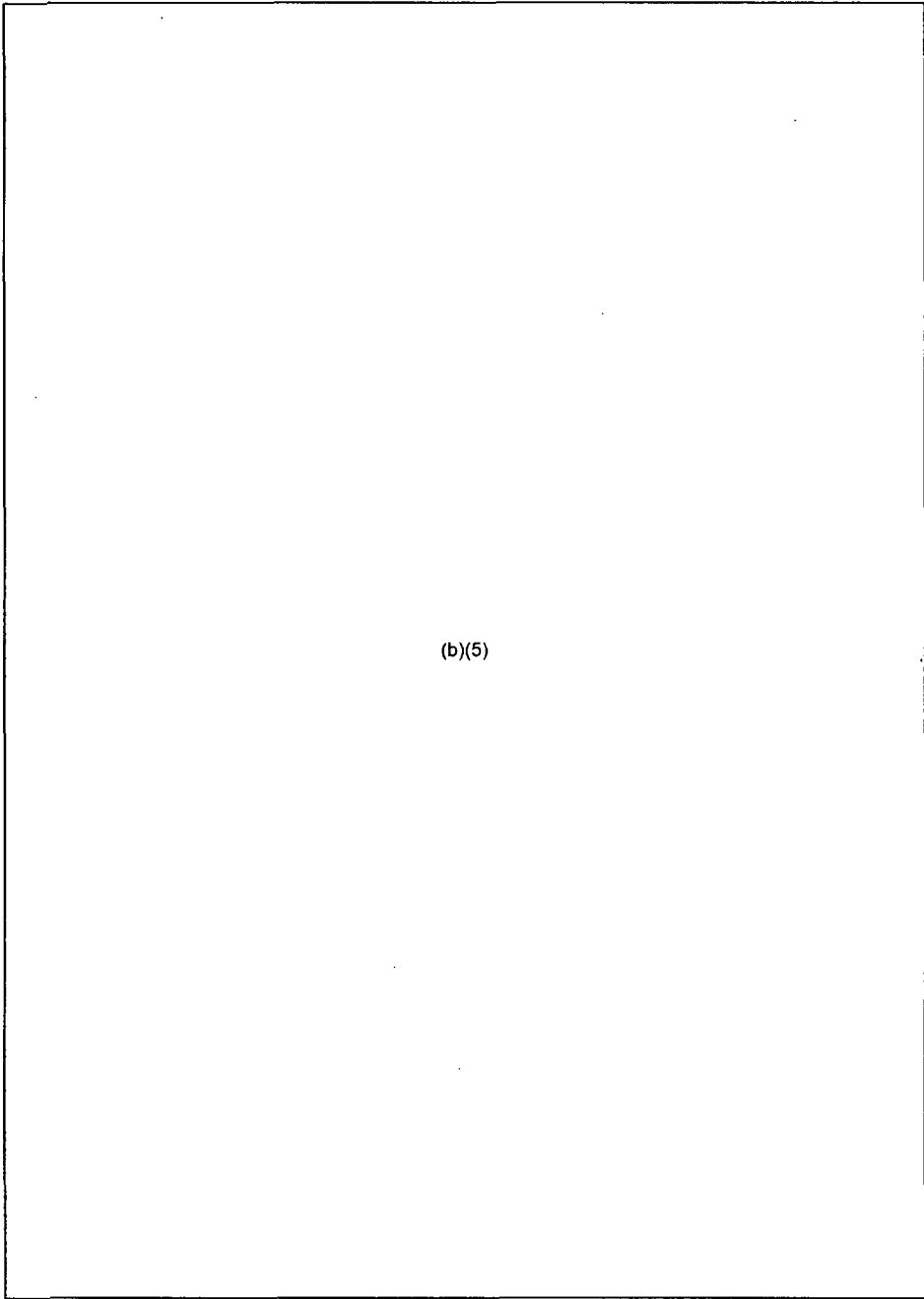
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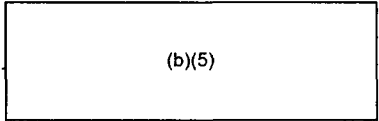
6-138



(b)(5)

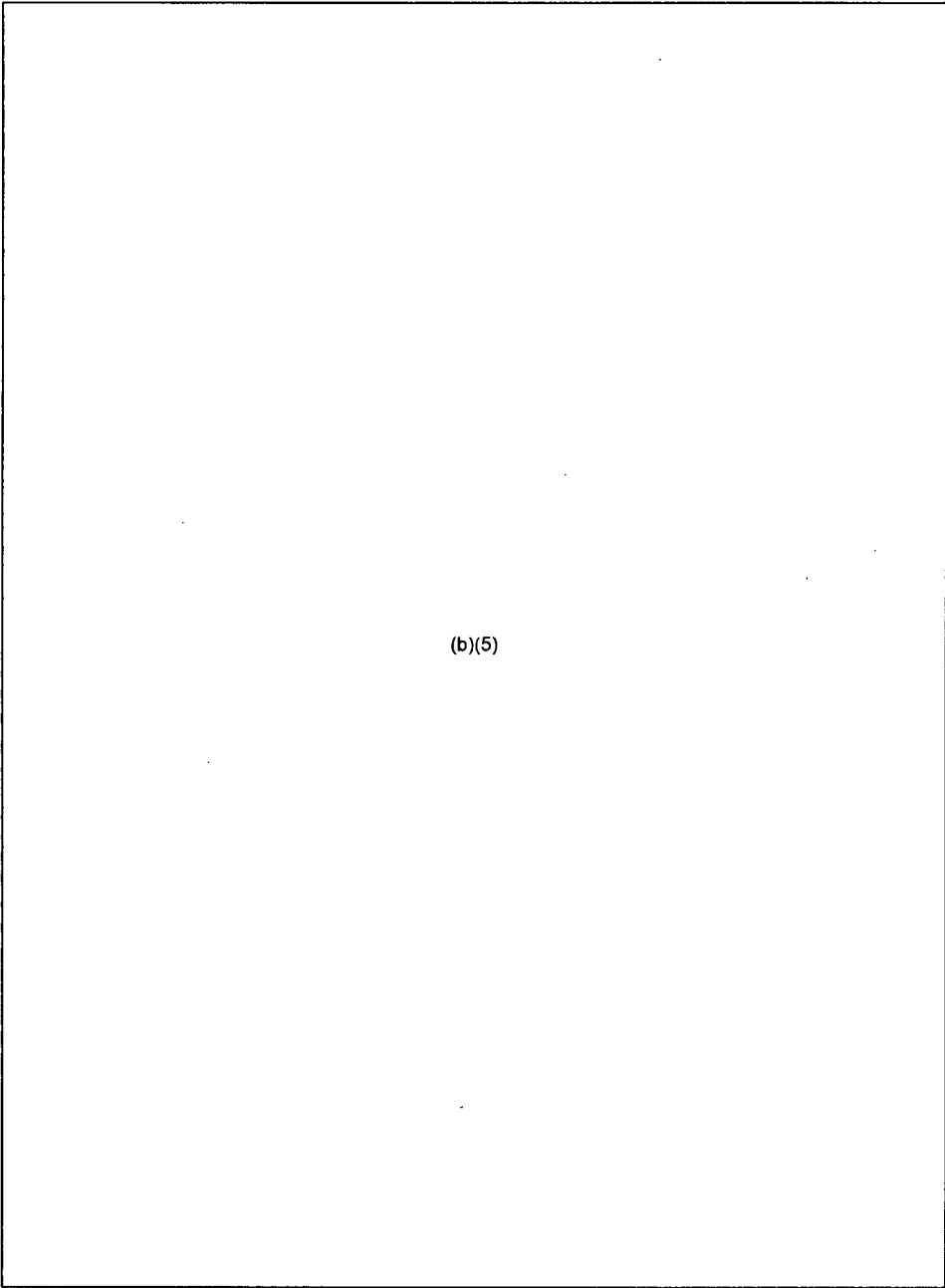


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(b)(5)

6-140

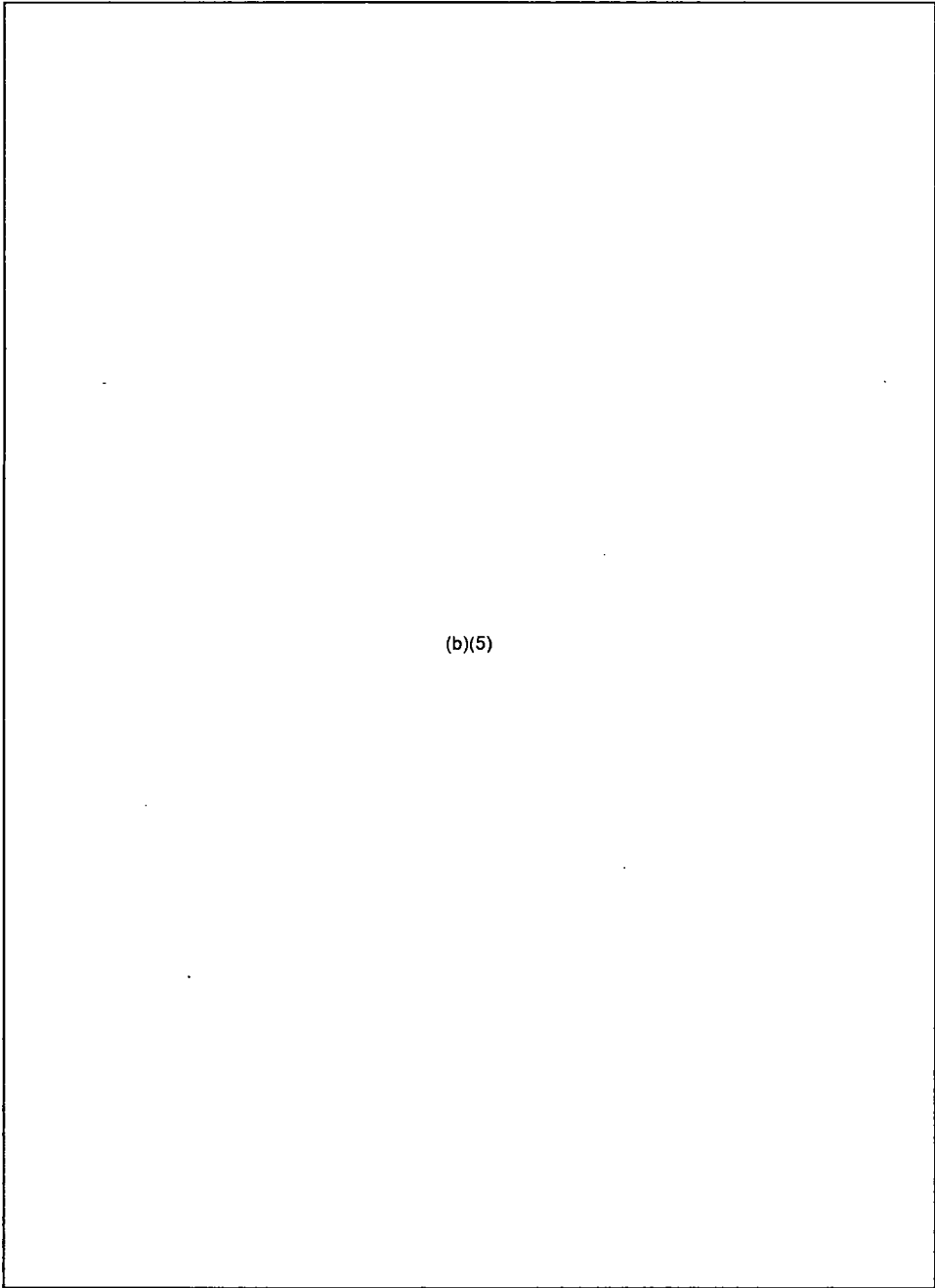


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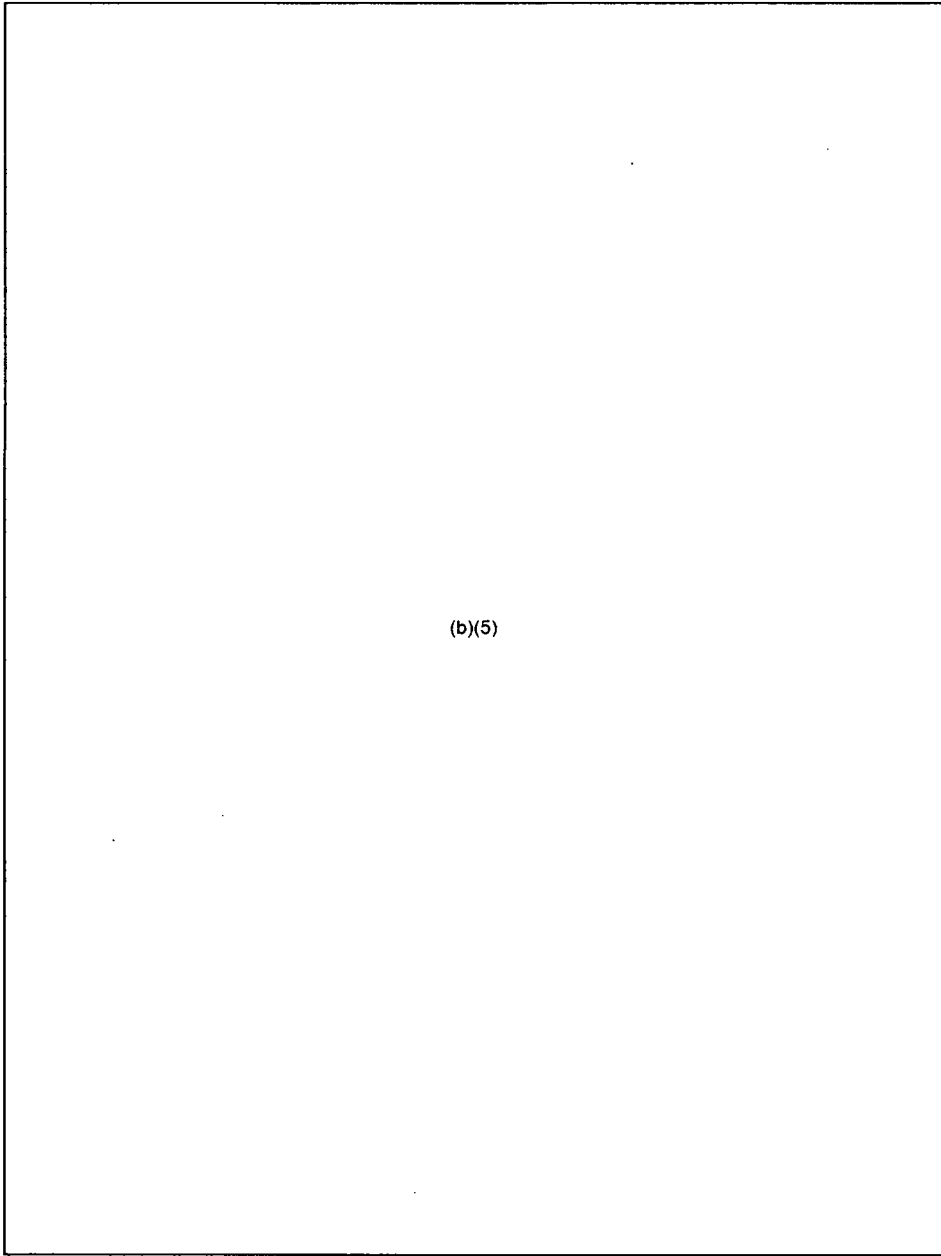
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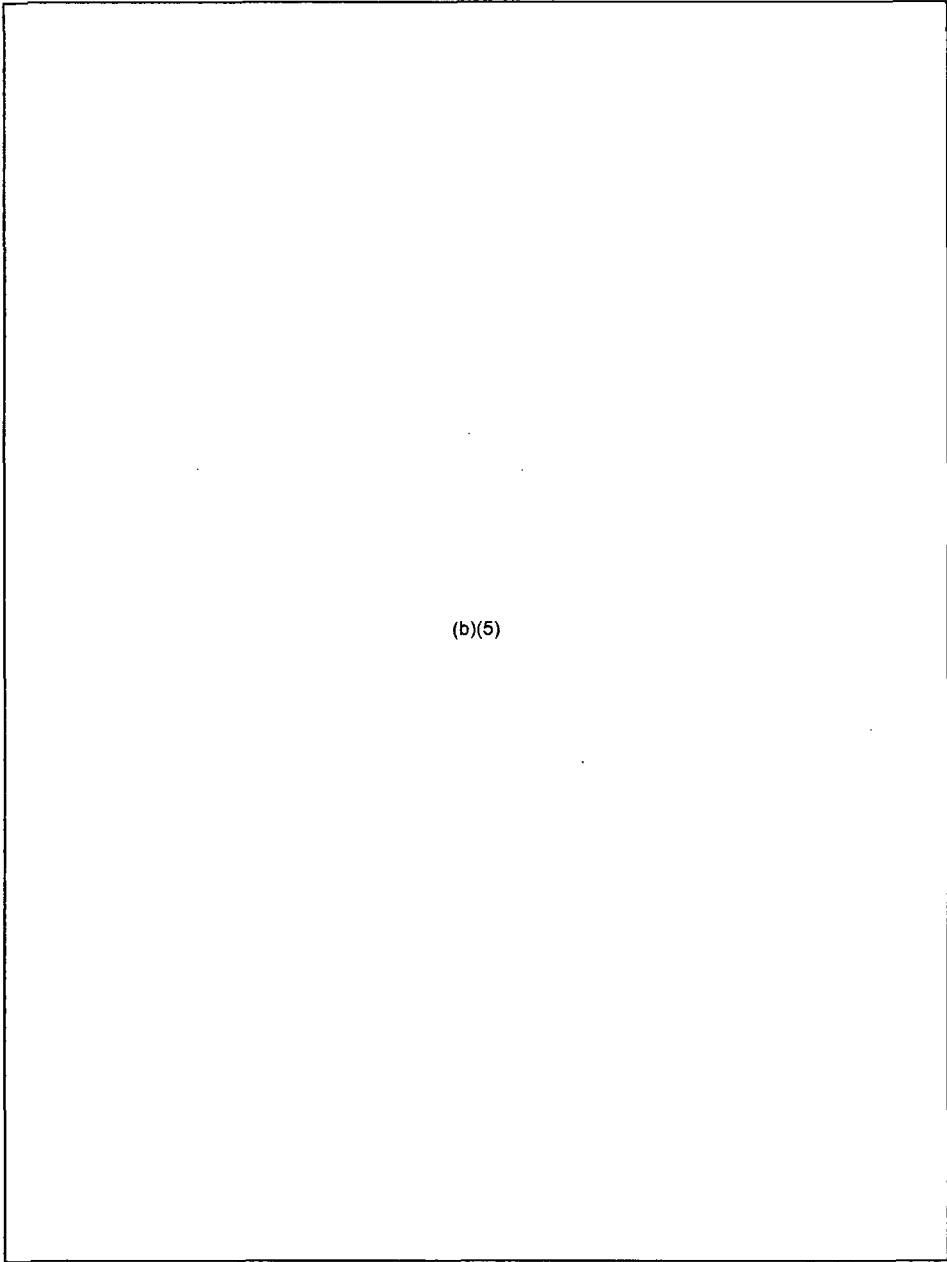


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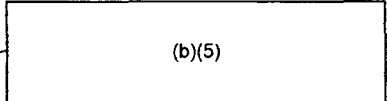
(b)(5)

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6-143



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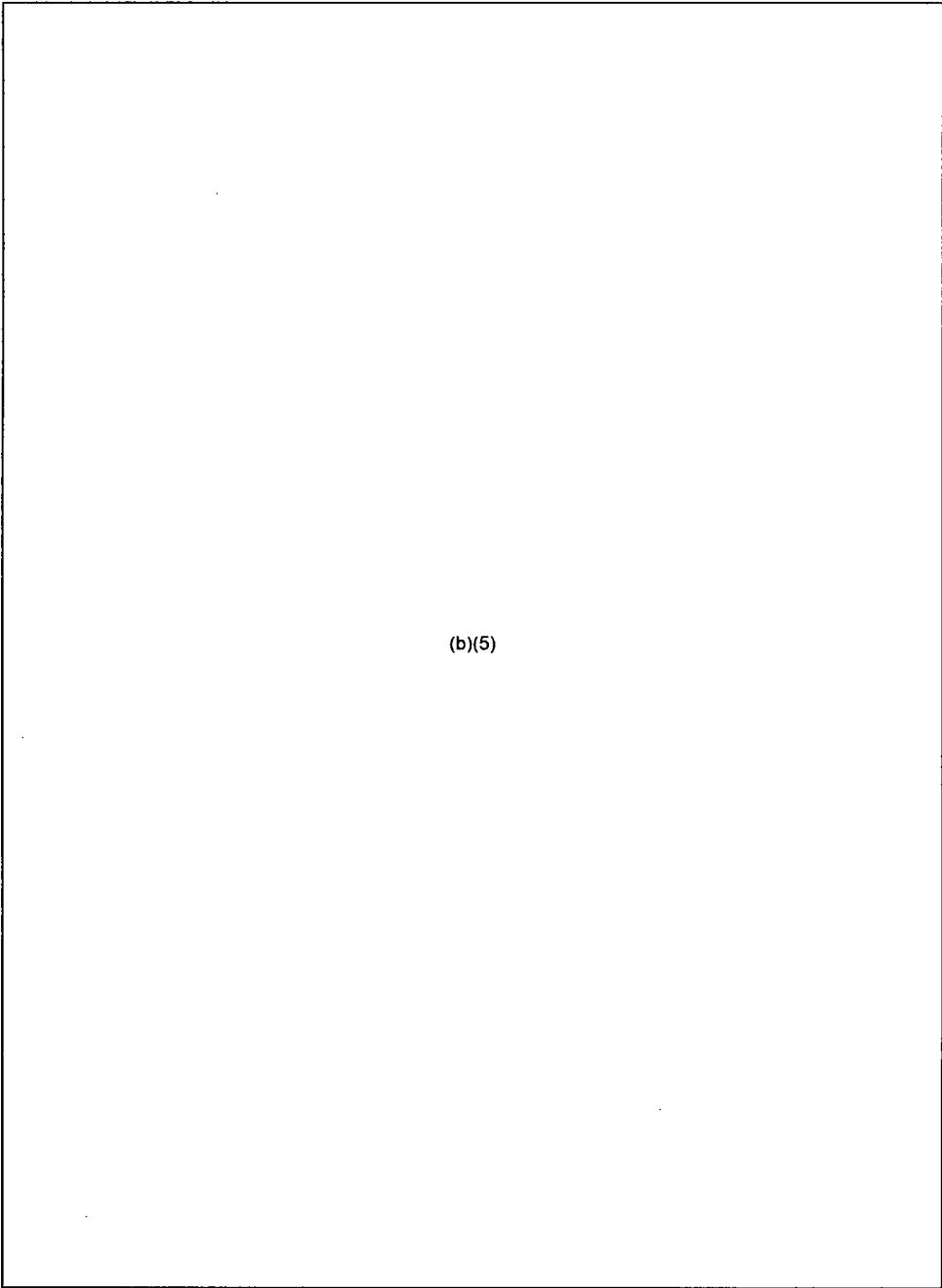
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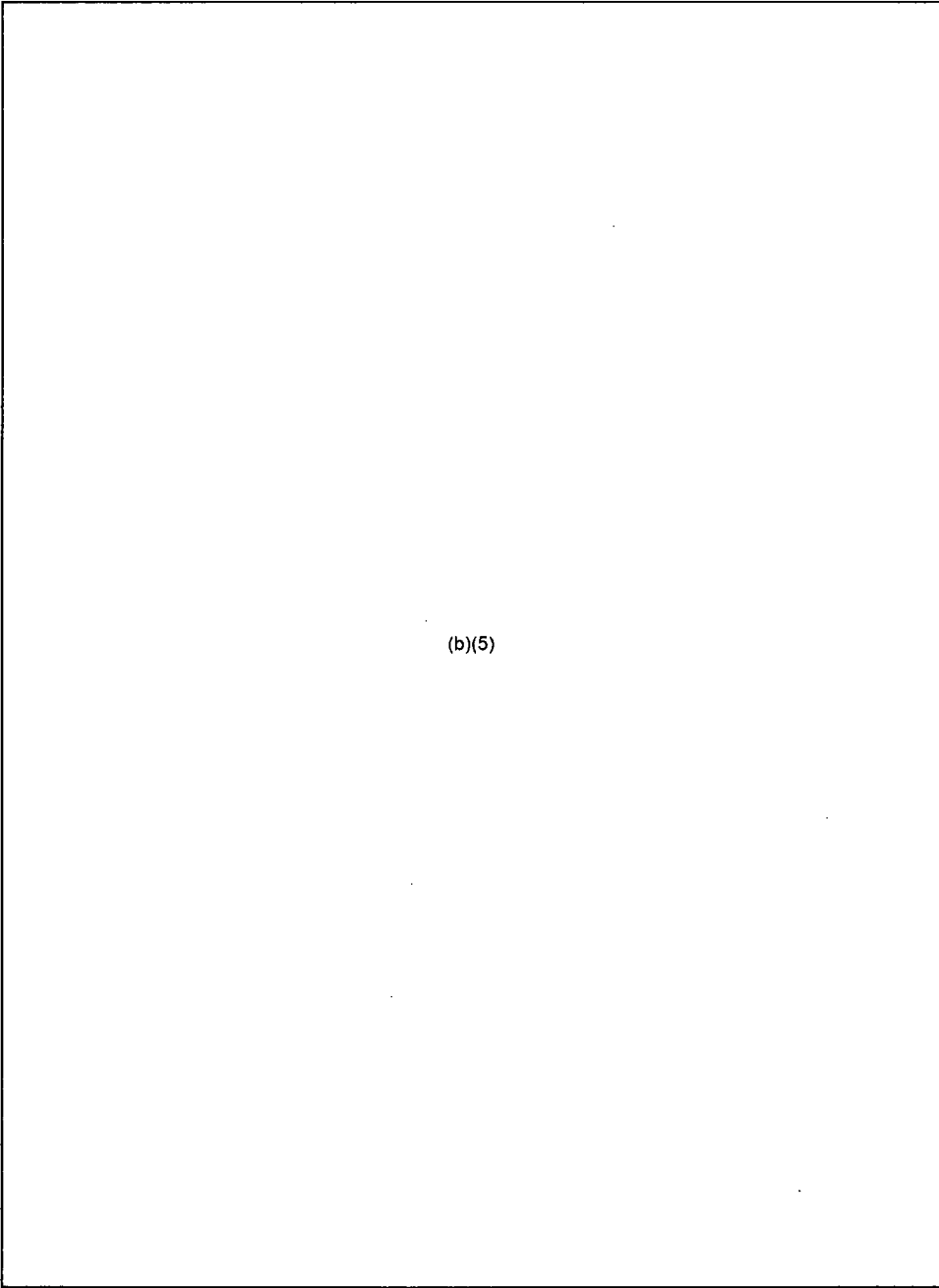
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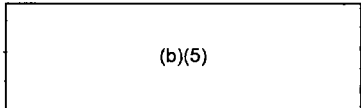


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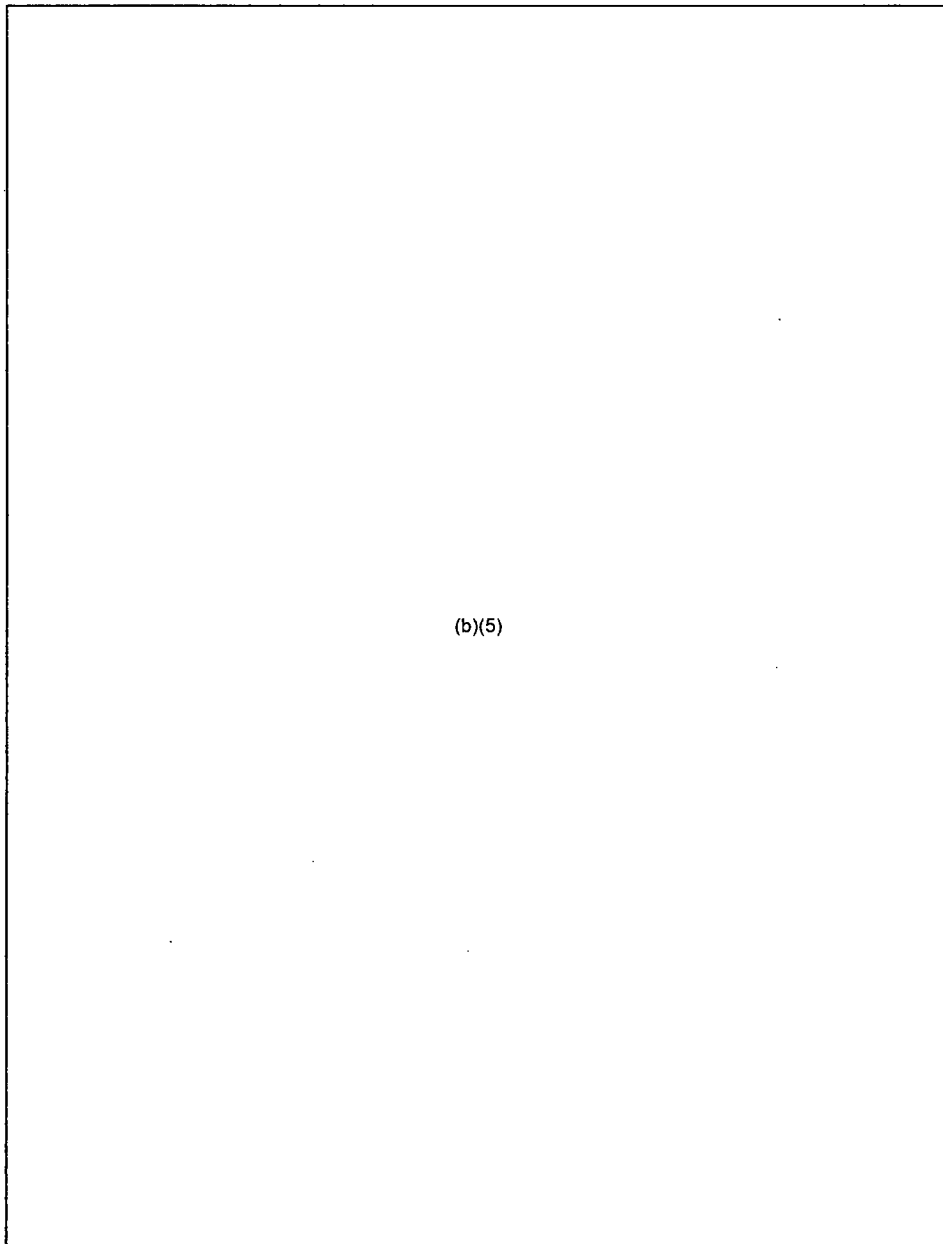
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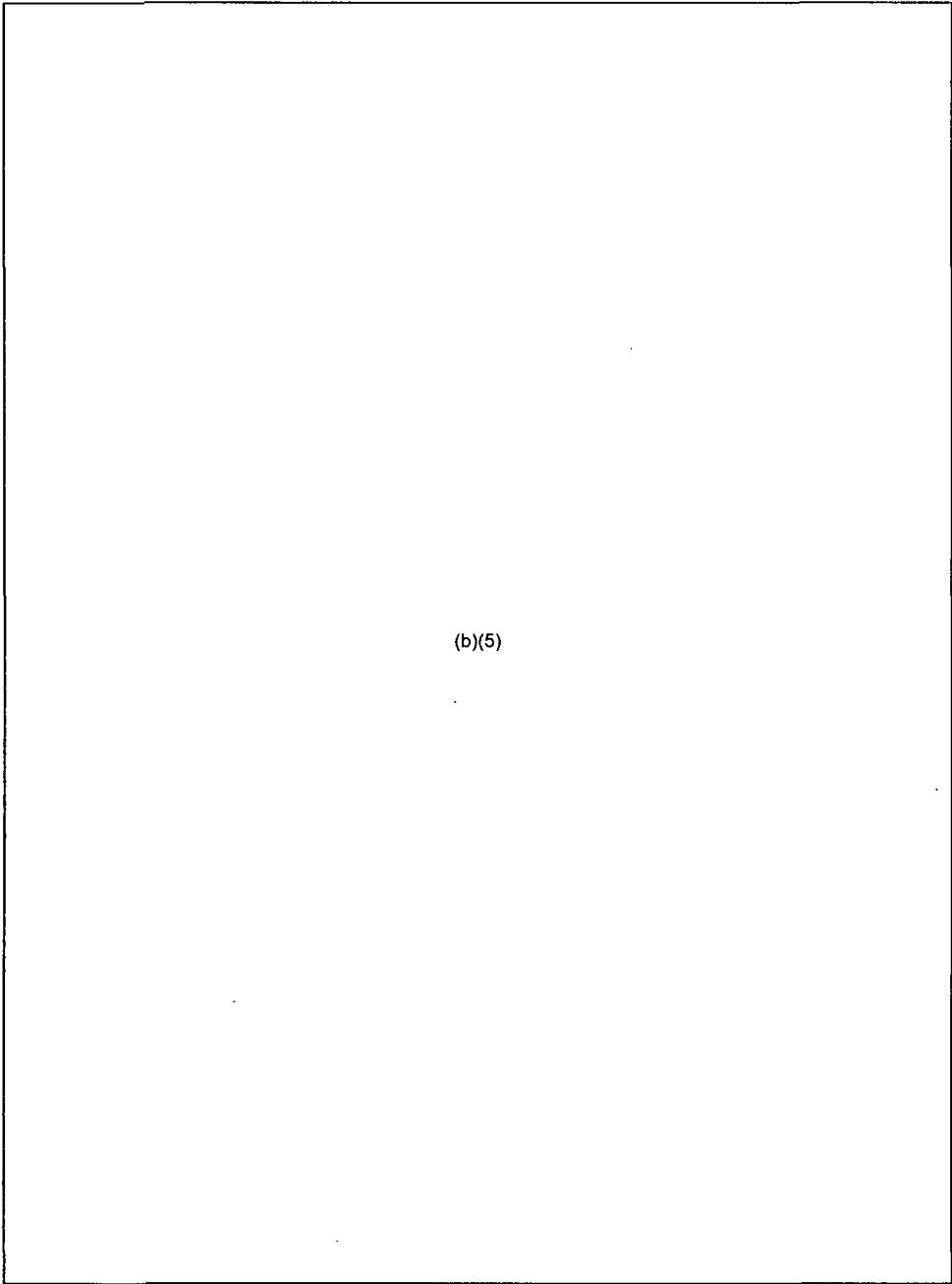
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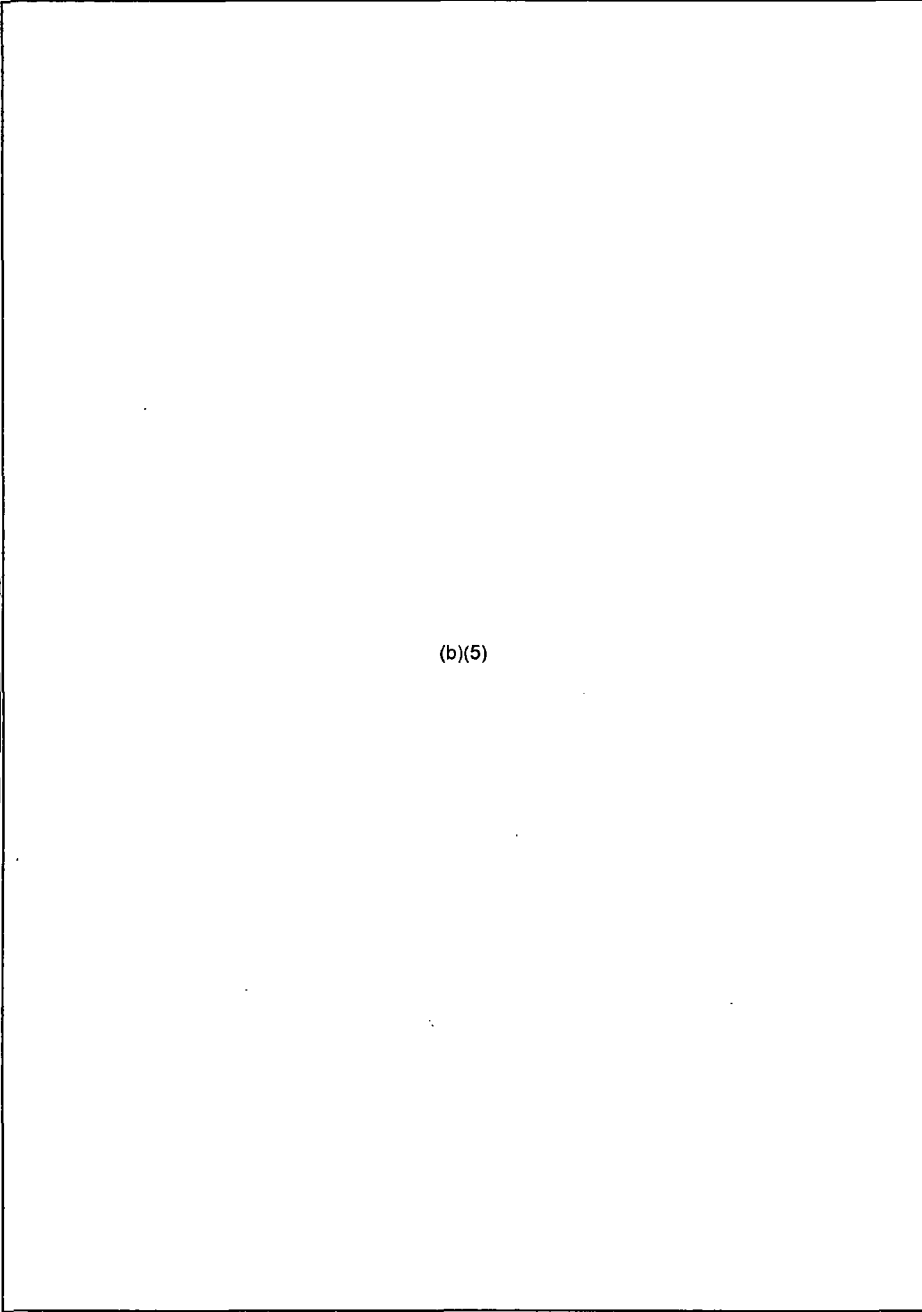
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(b)(5)

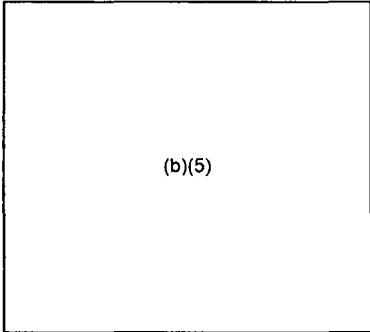


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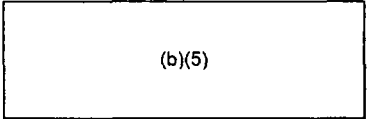
6-153



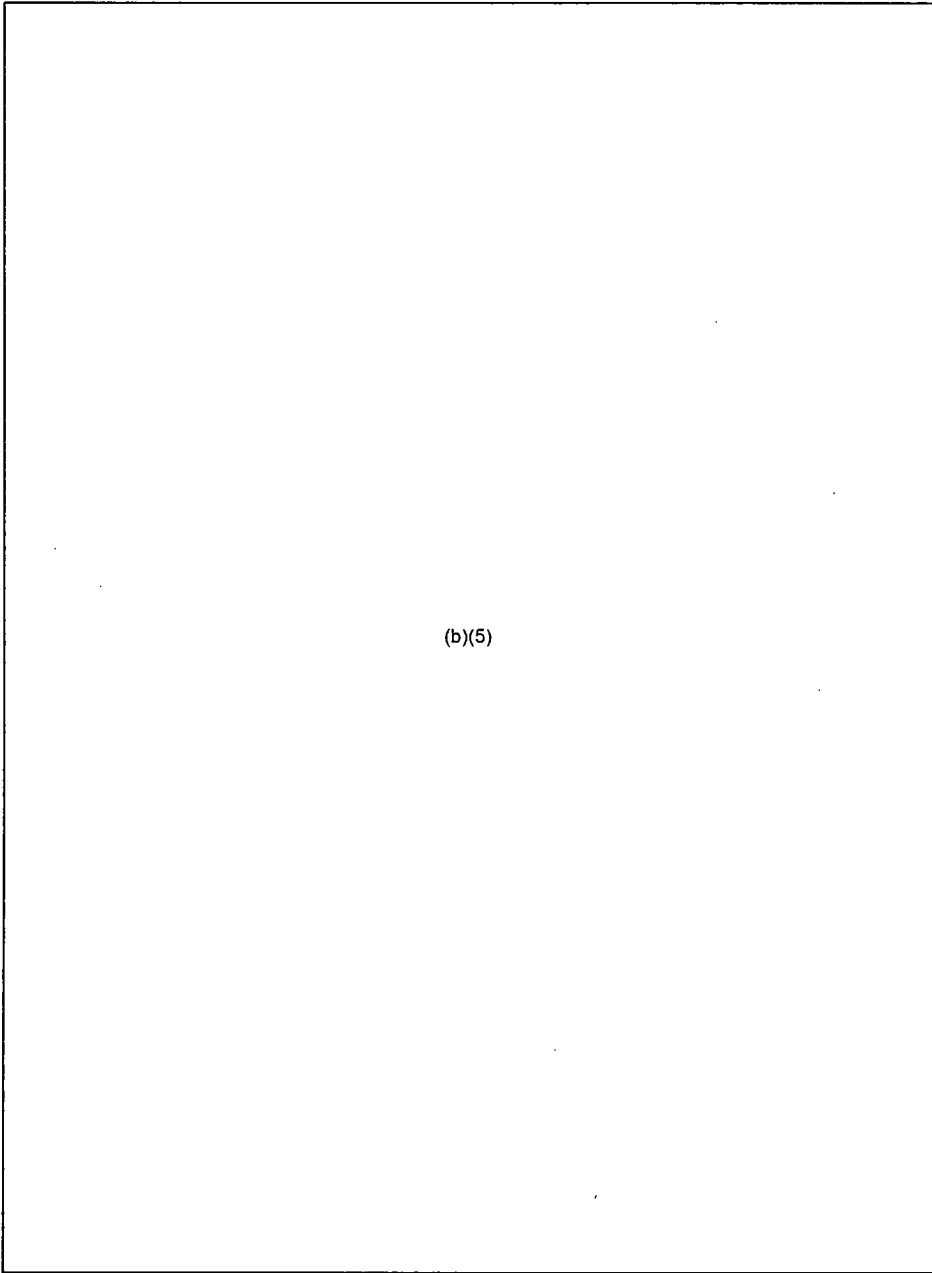
(b)(5)



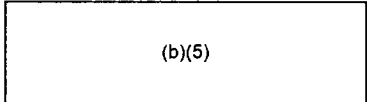
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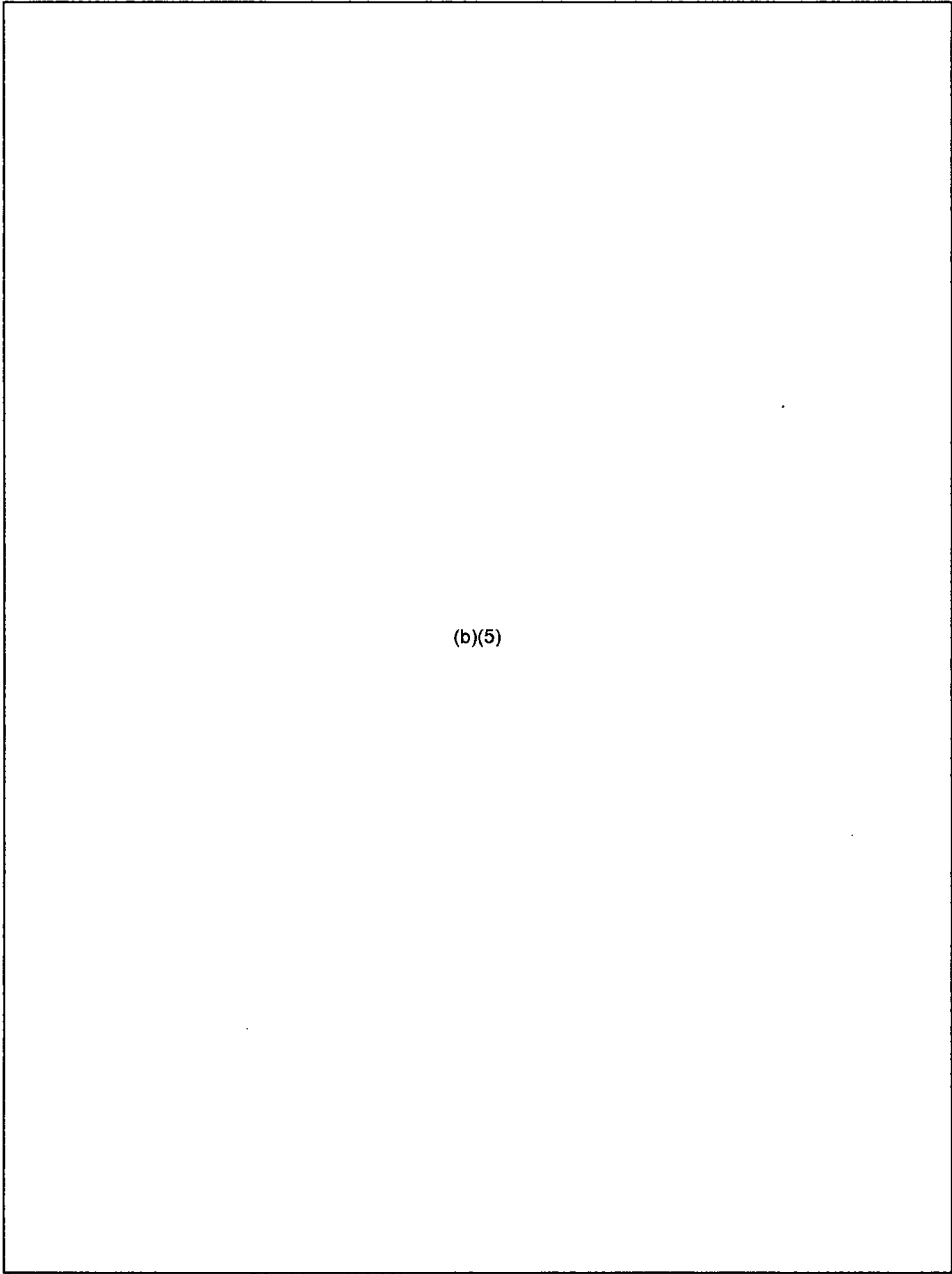
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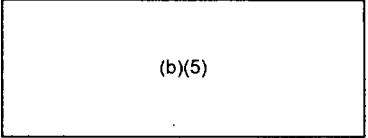
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(b)(5)



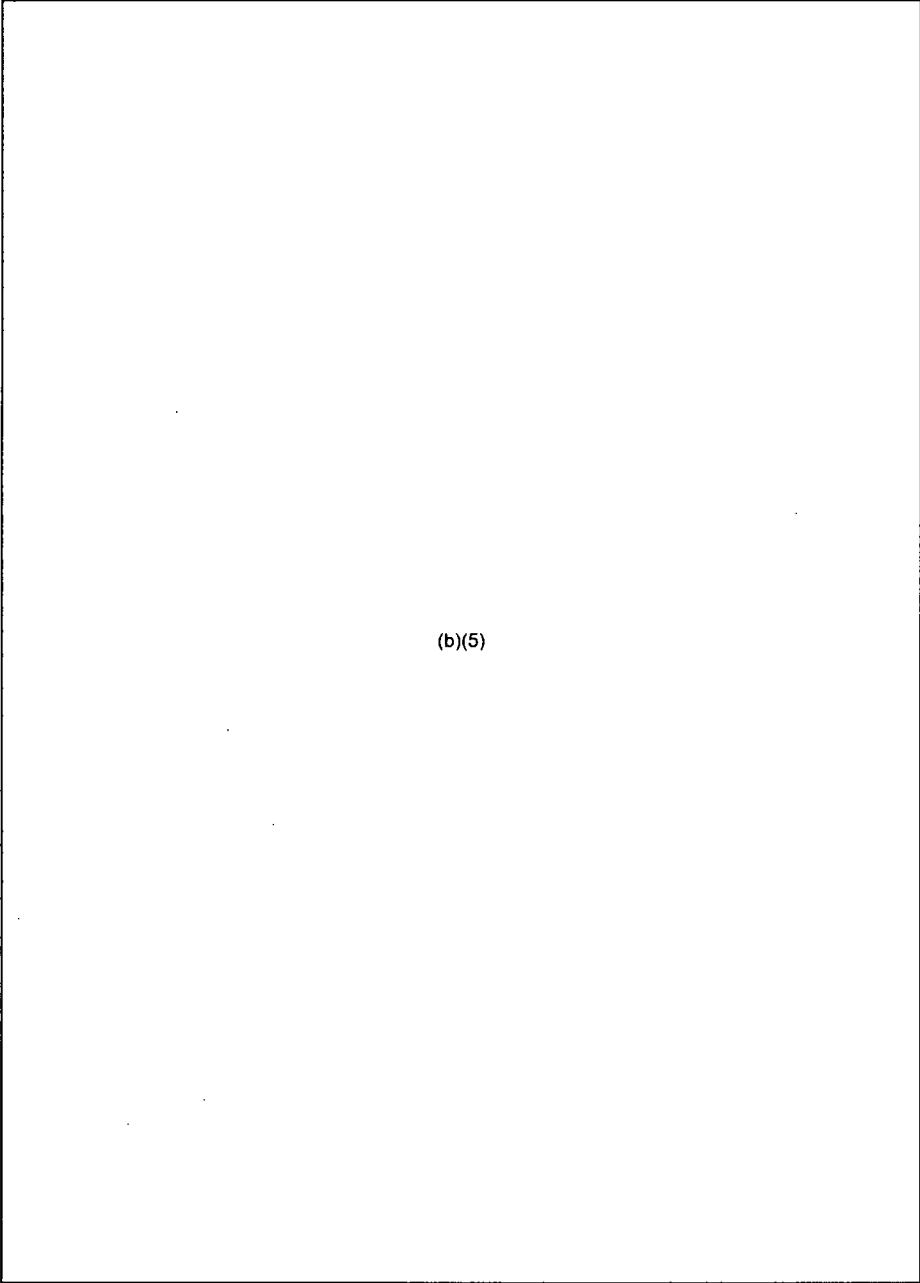
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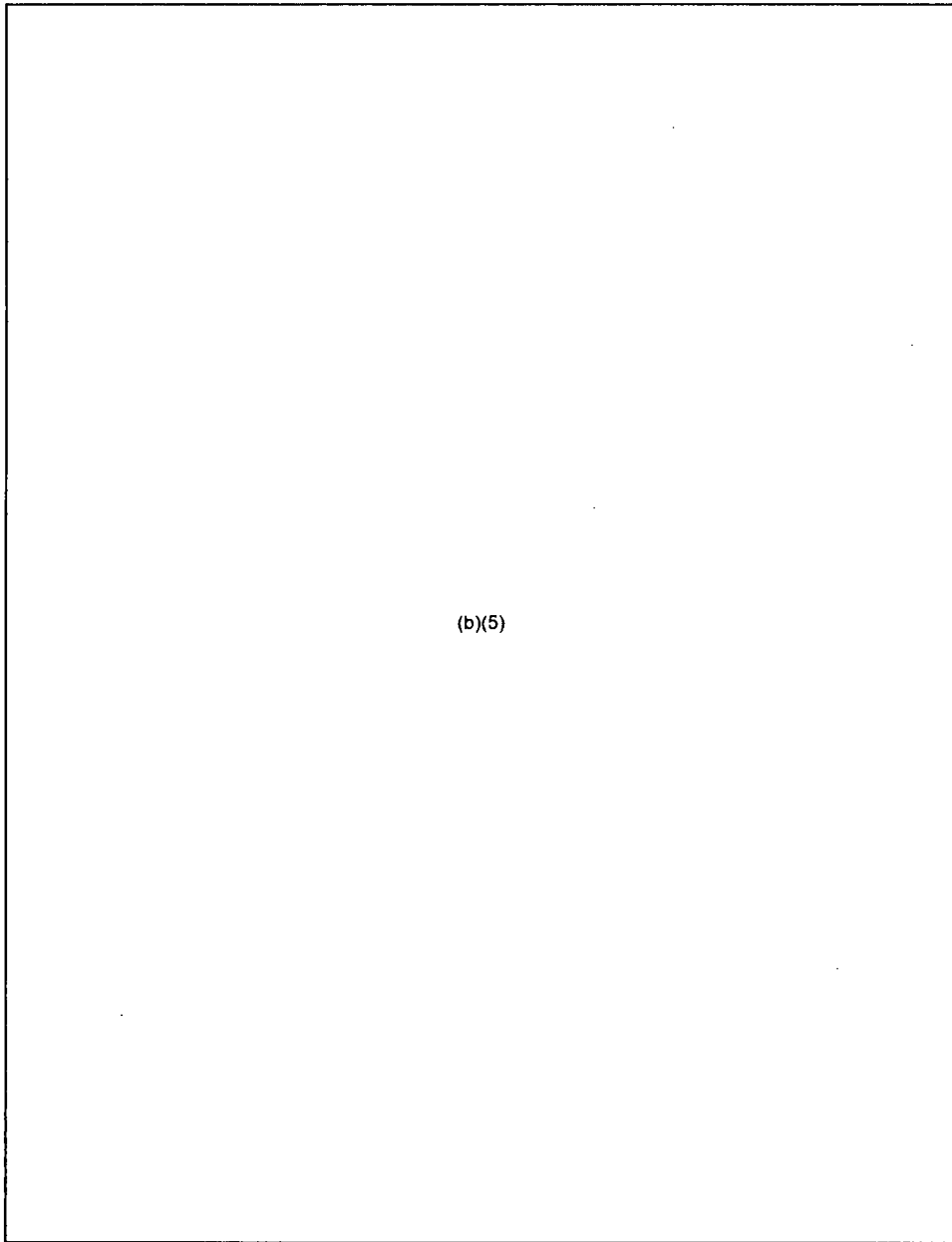
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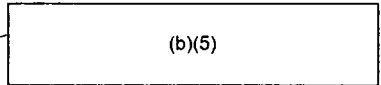
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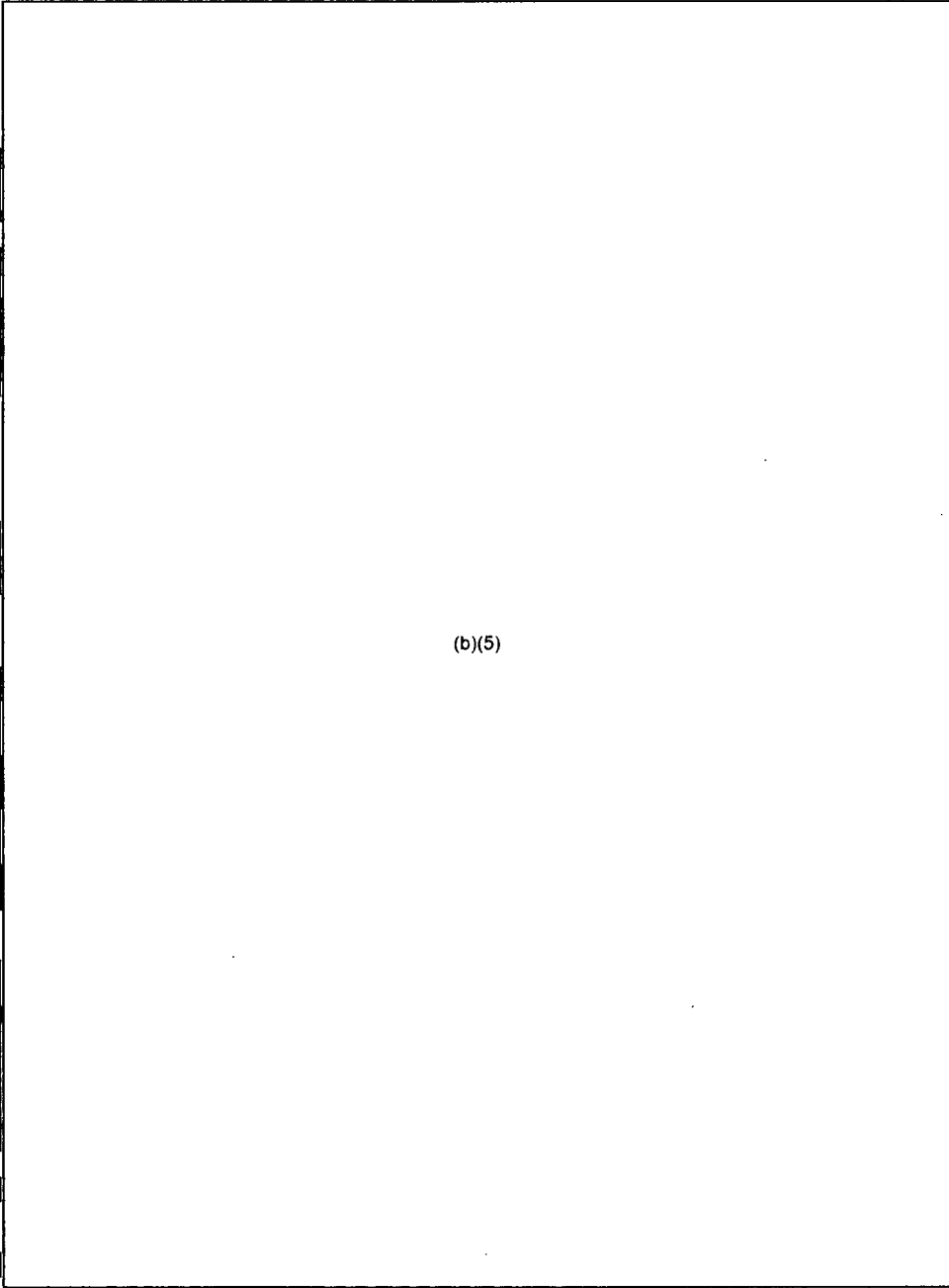
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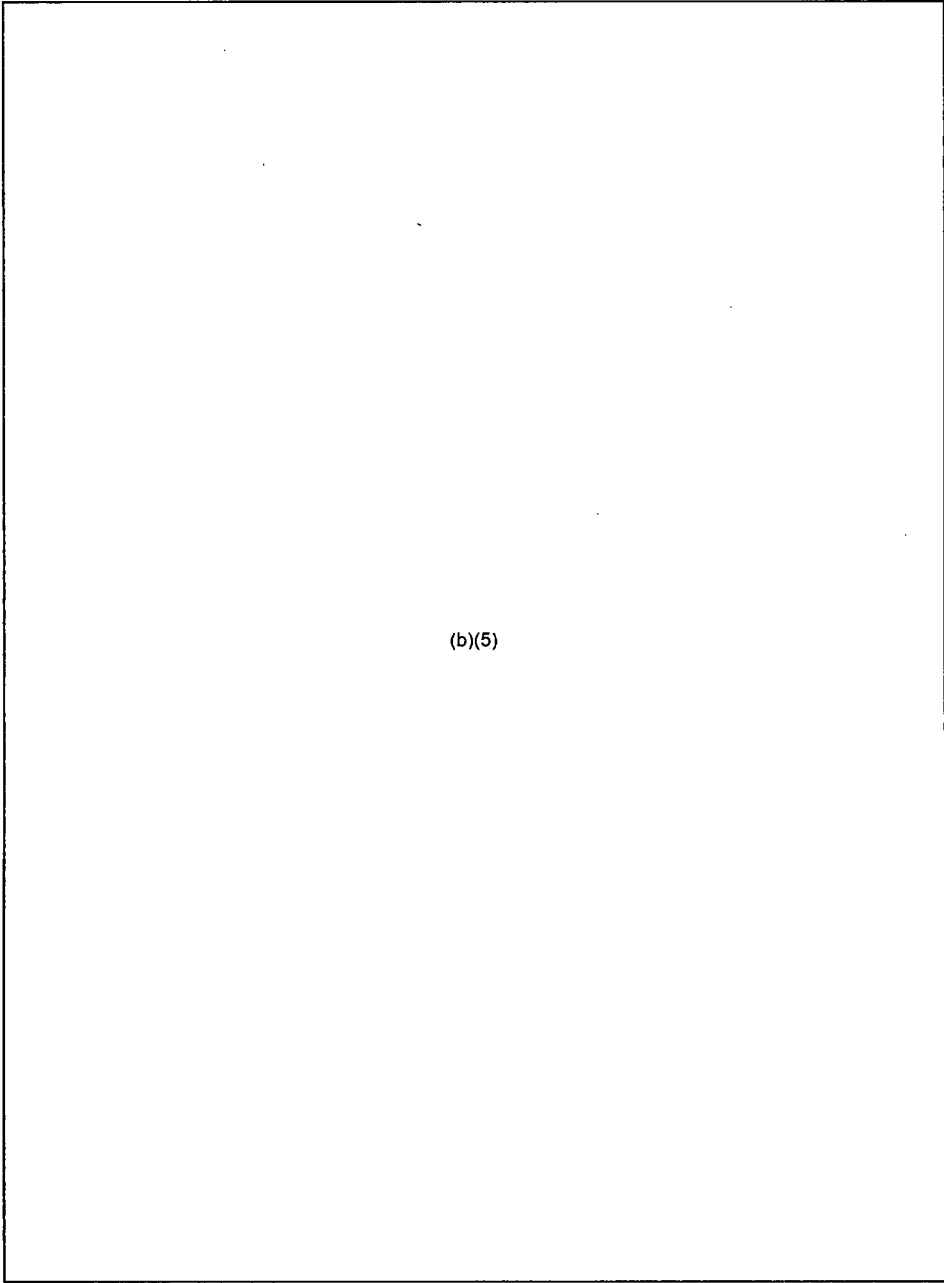
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6-163

(b)(5)

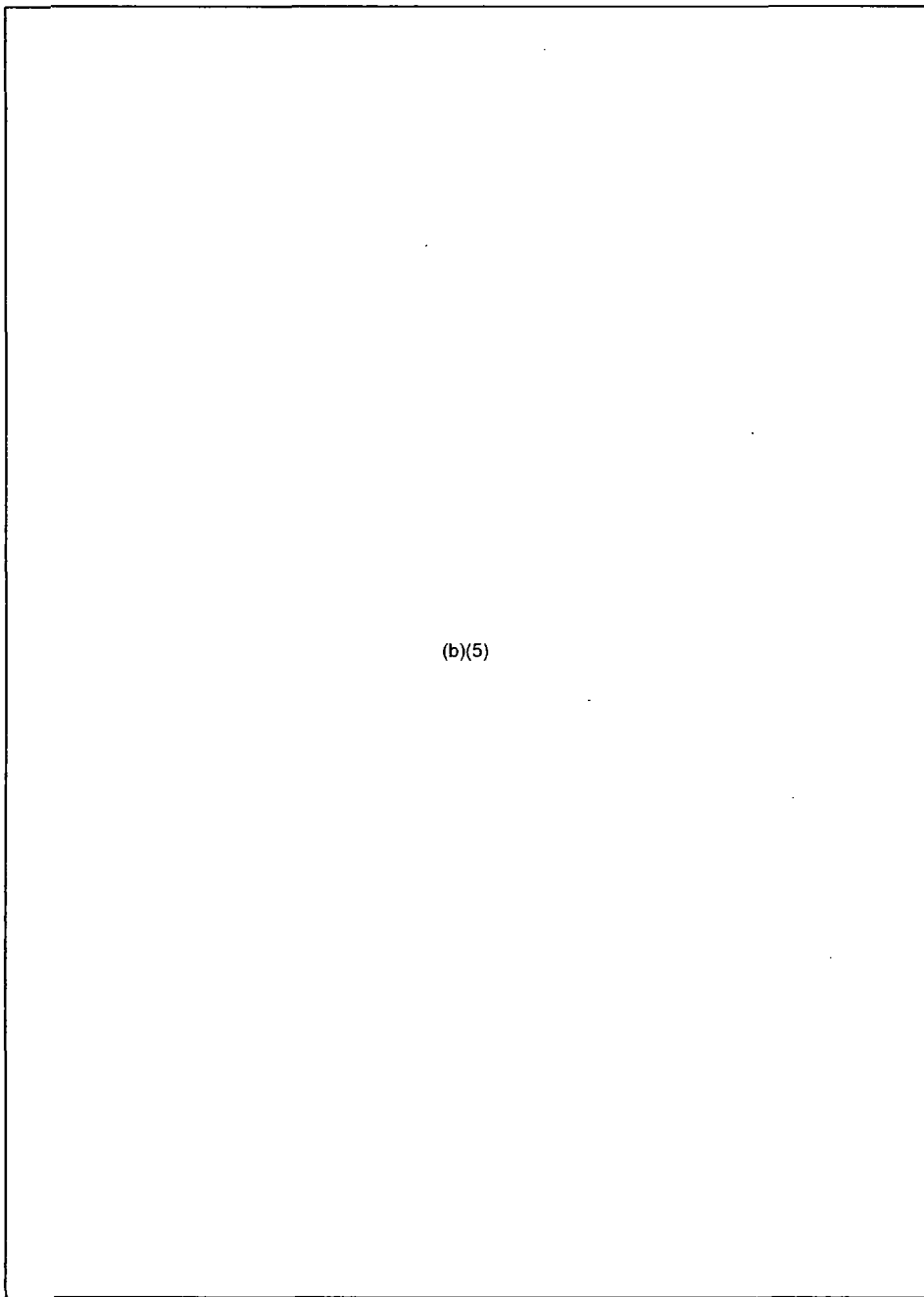
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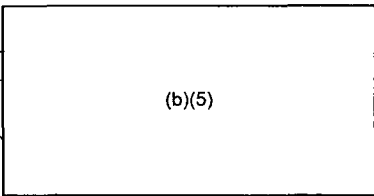


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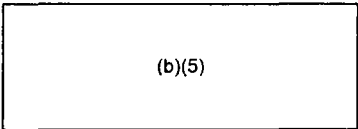
(b)(5)



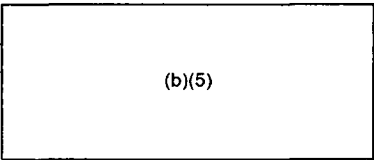
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(b)(5)

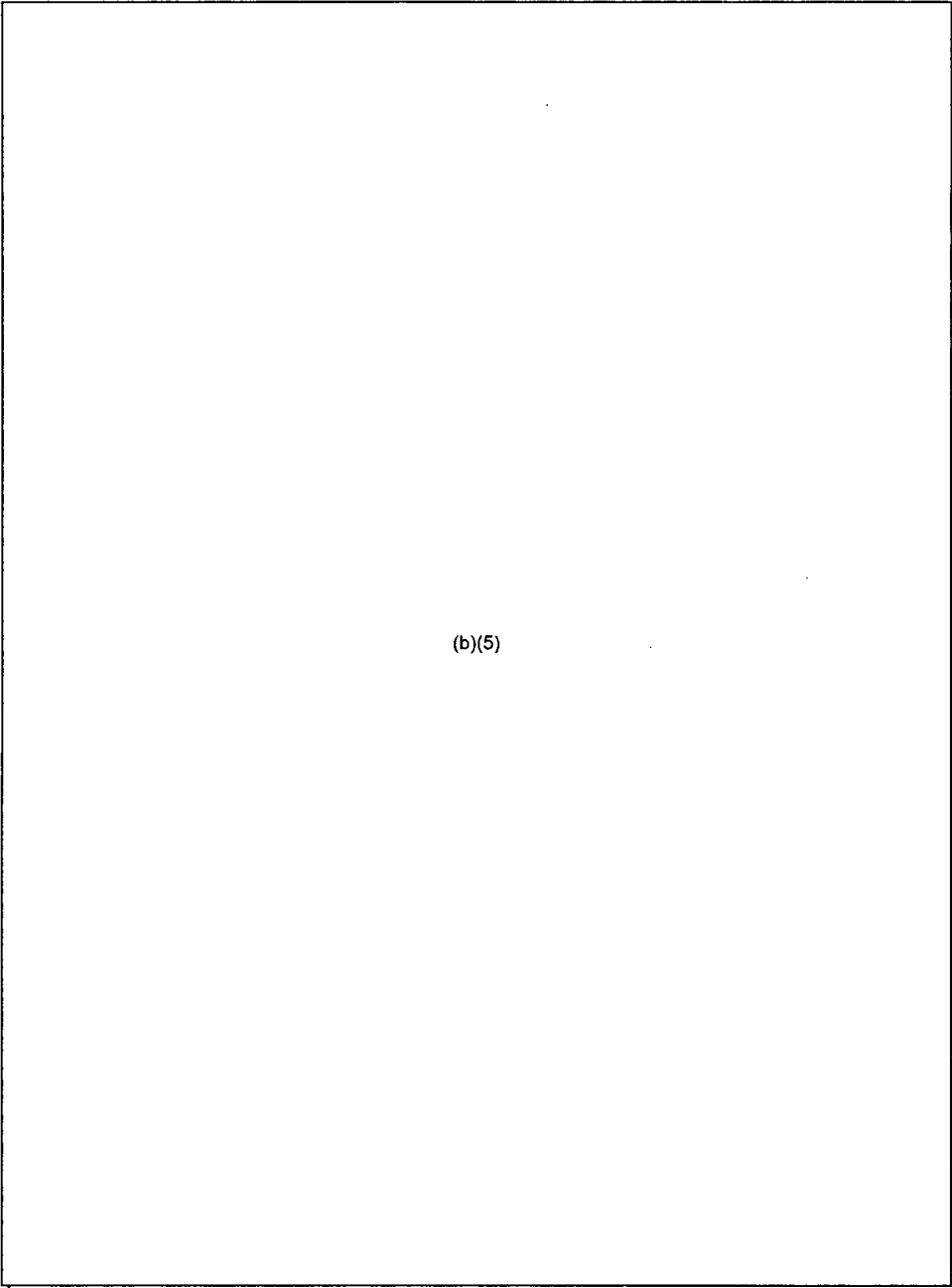


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(b)(5)

6-166

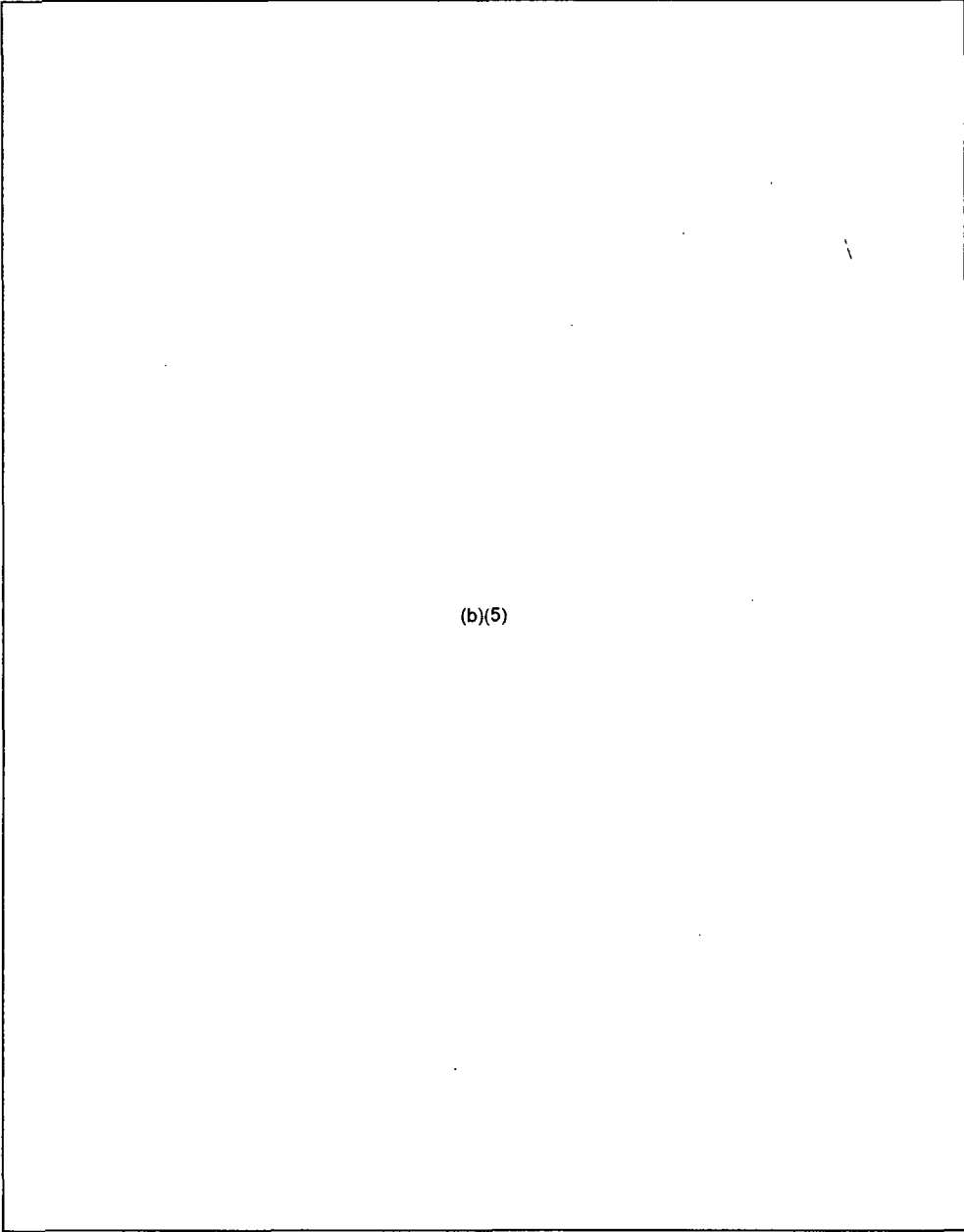


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(b)(5)

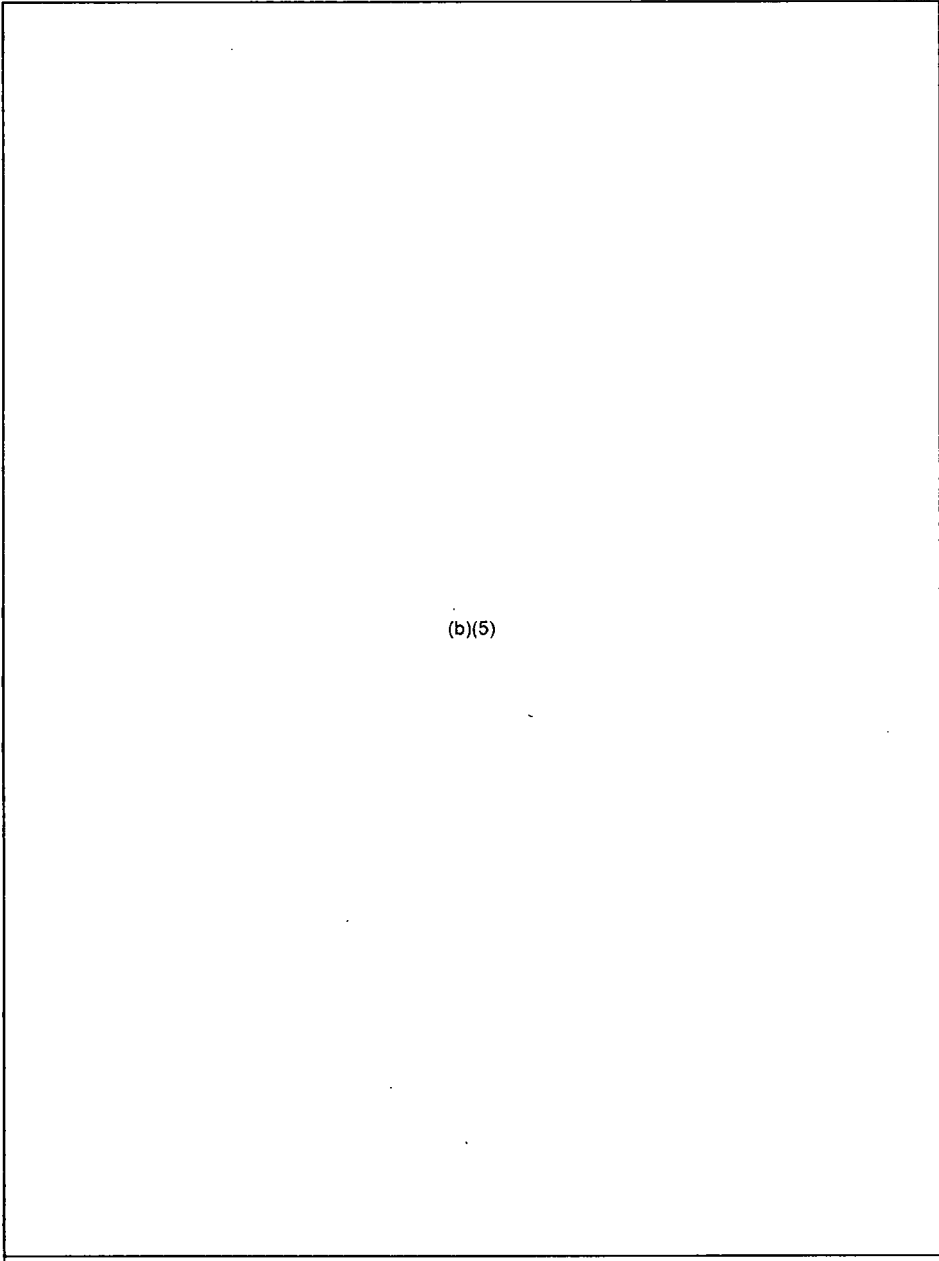
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(b)(5)

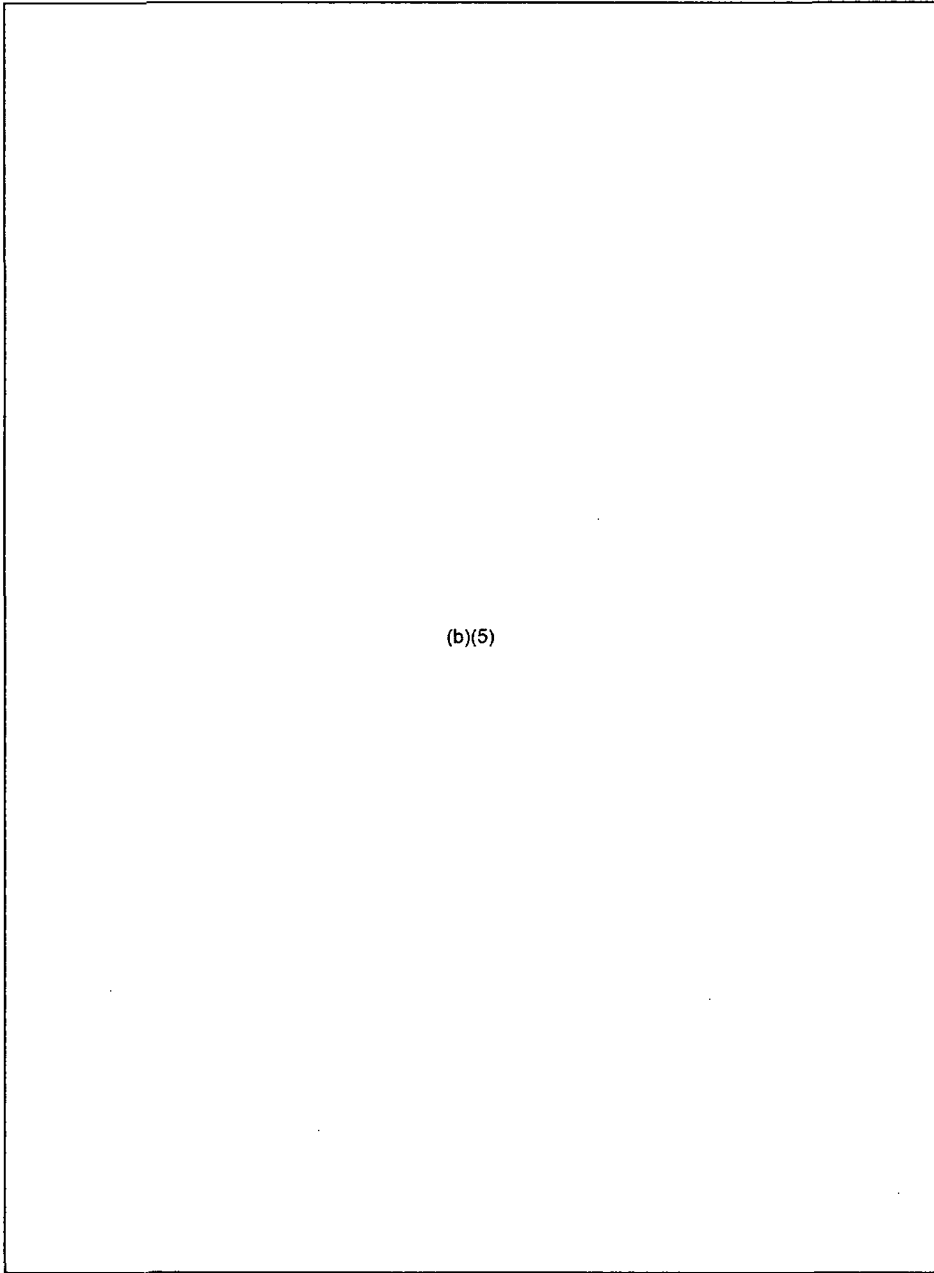
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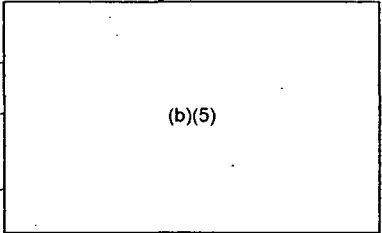
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(b)(5)

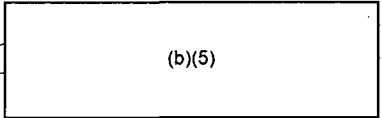
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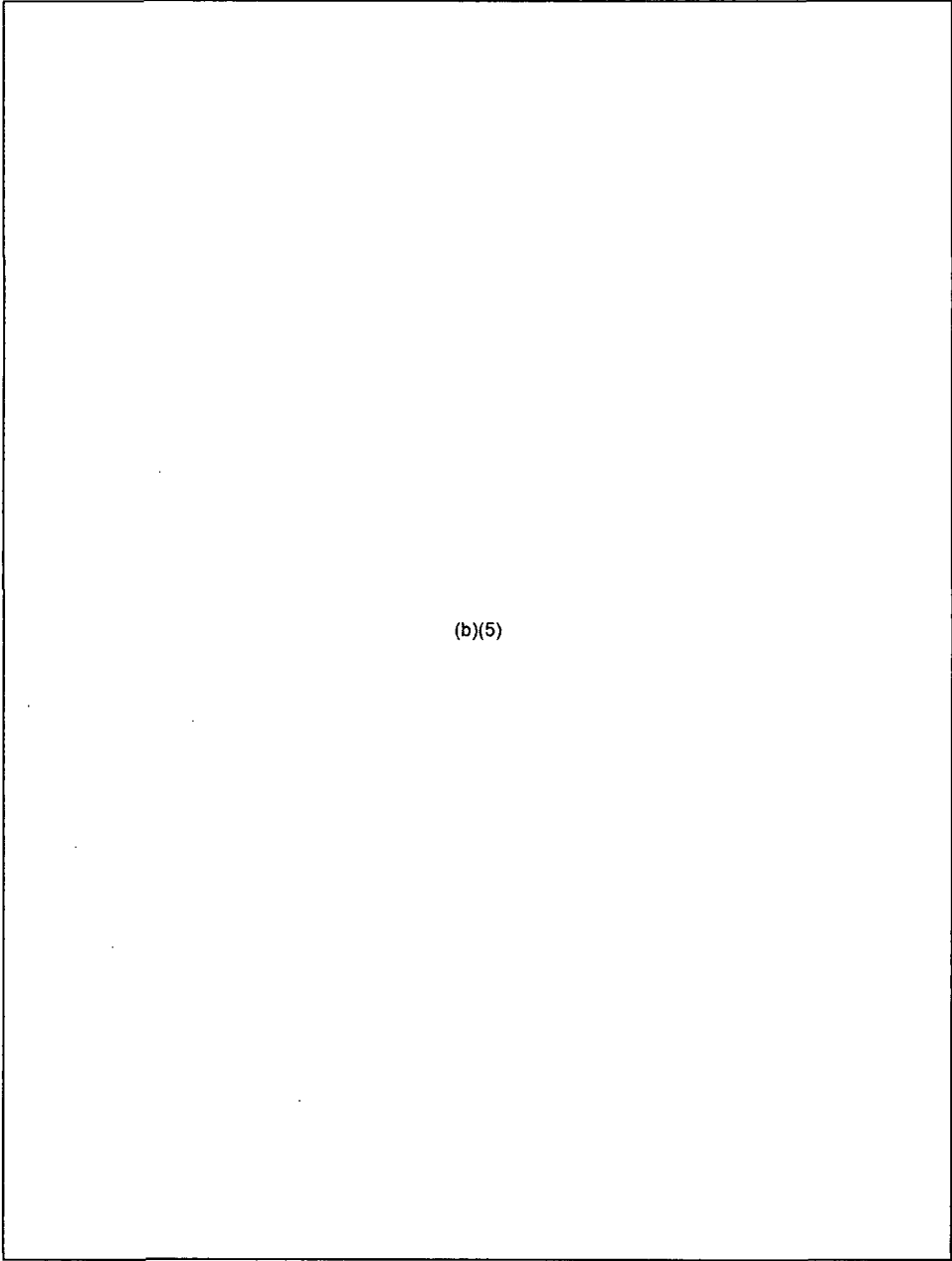
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(b)(5)

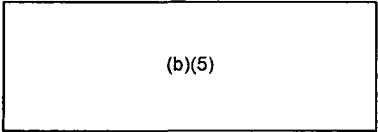
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6-173



(b)(5)



(b)(5)

(b)(5)

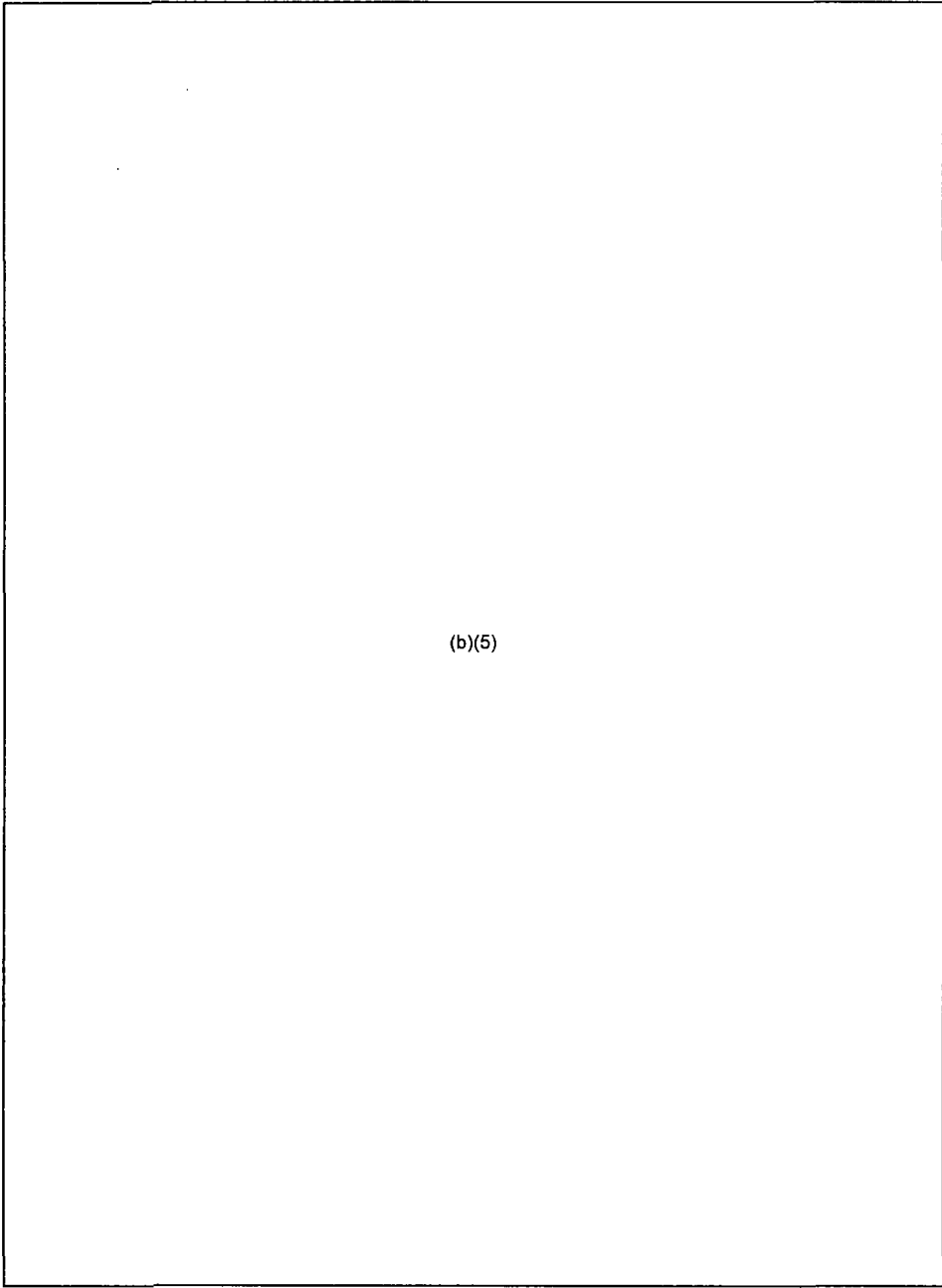
6-175

(b)(5)

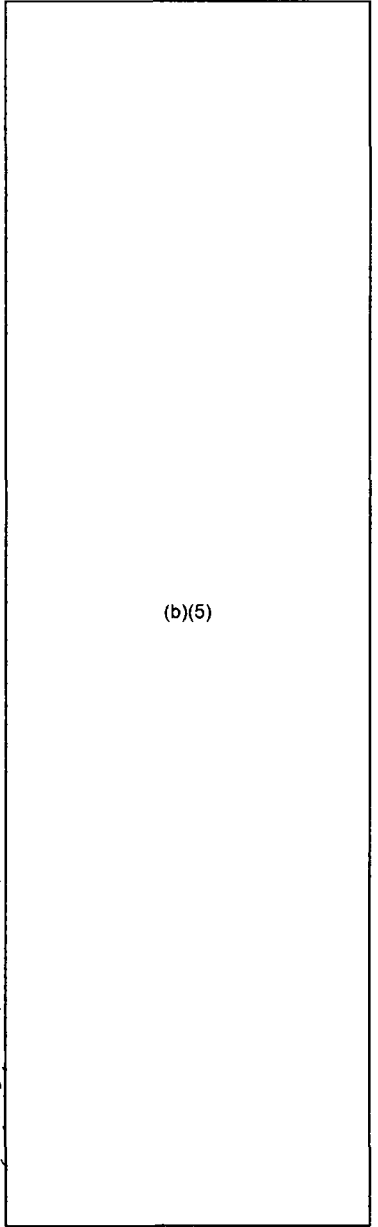
6-176

(b)(5)

6-177

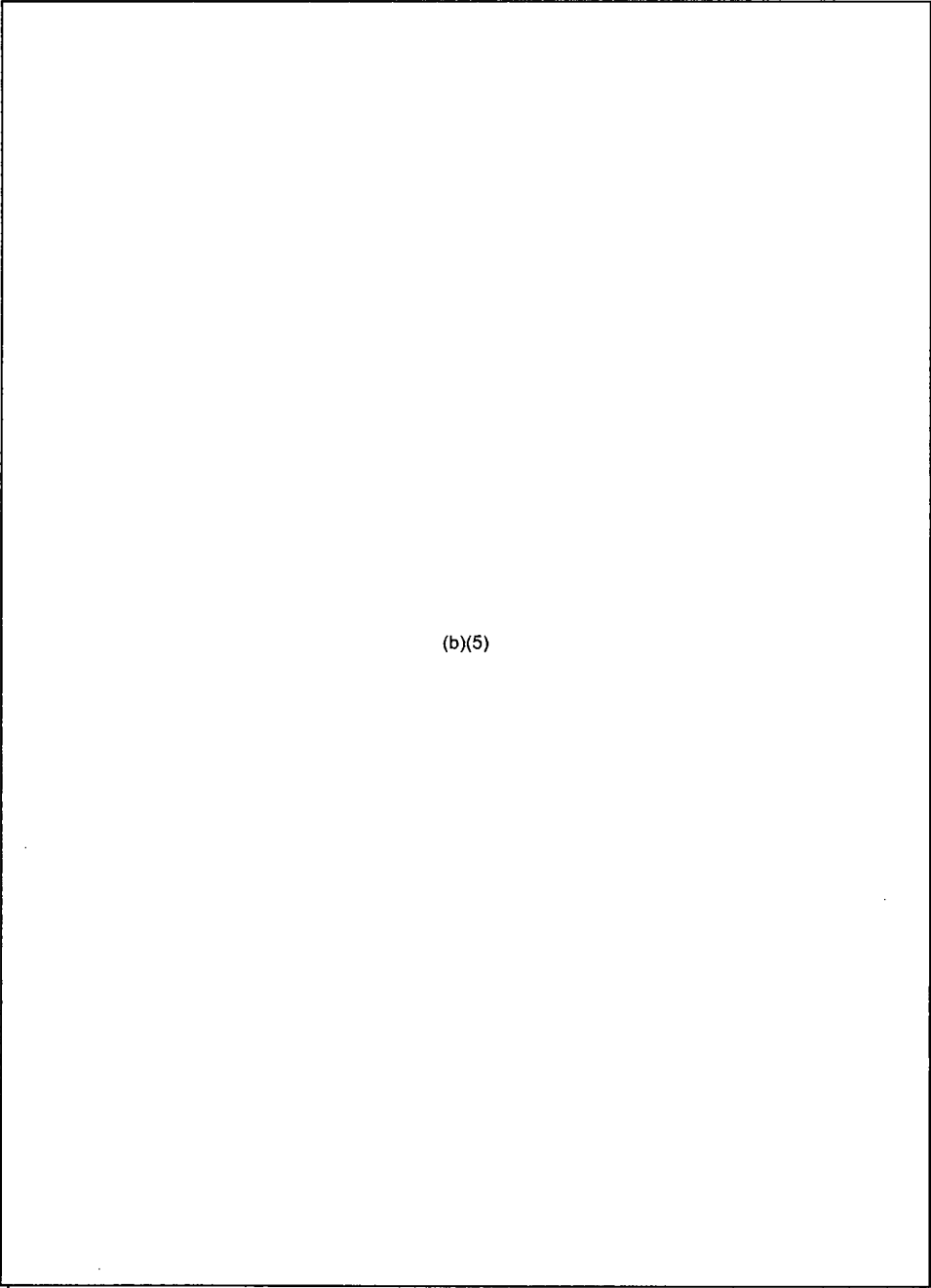


(b)(5)



(b)(5)

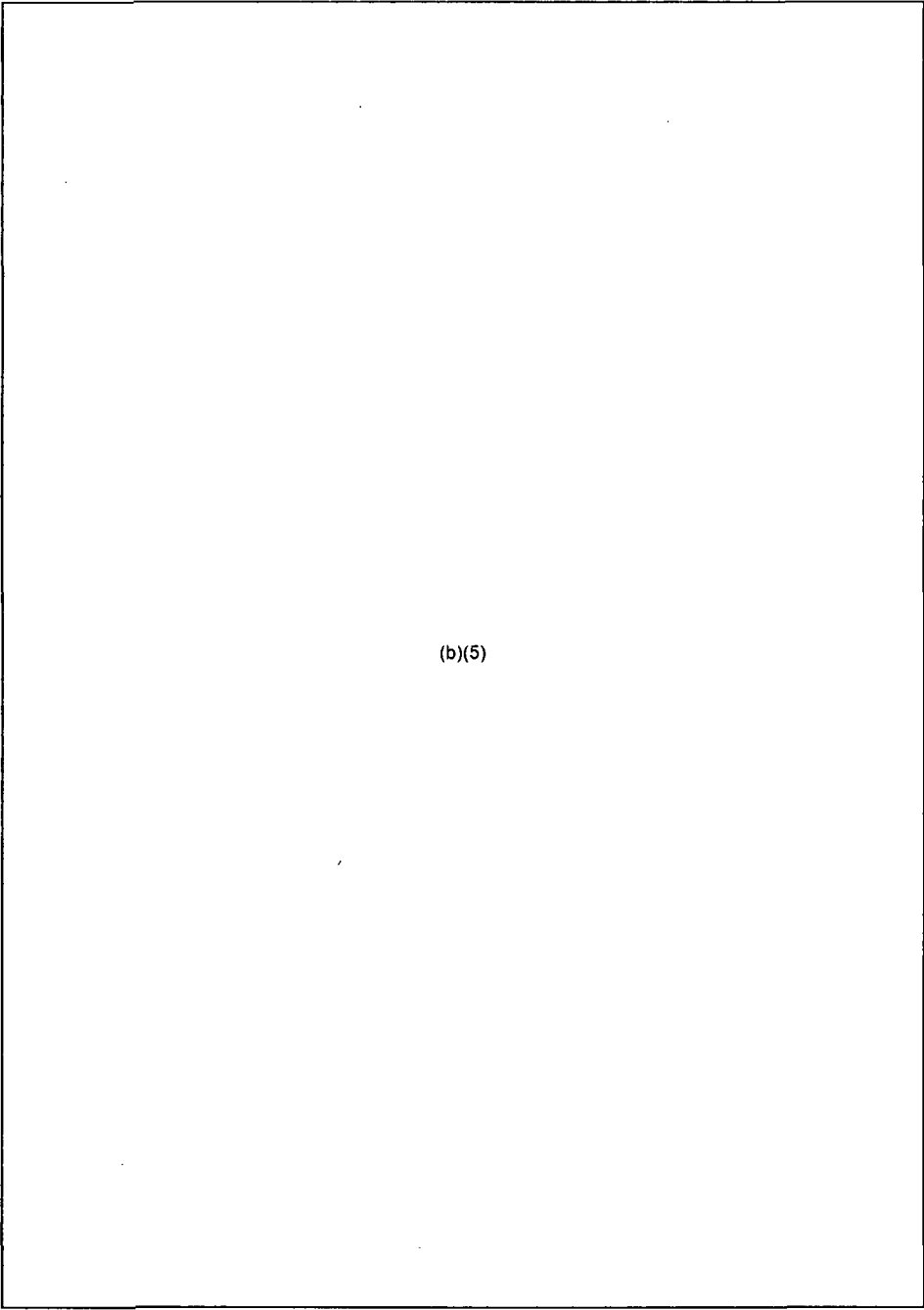
6-178



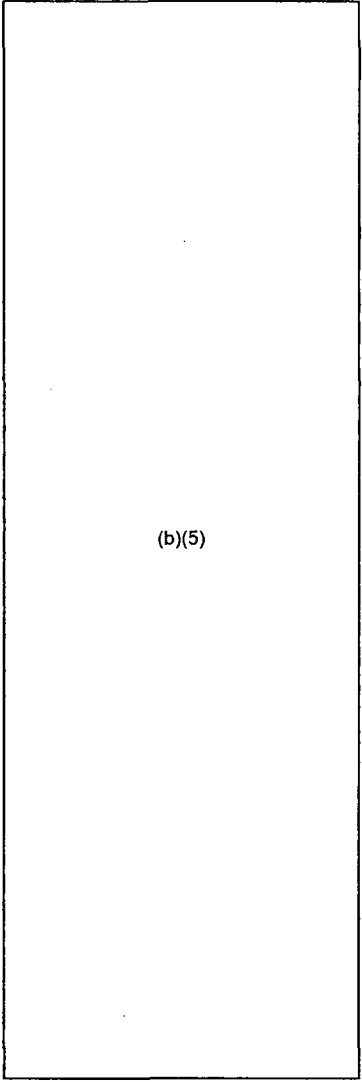
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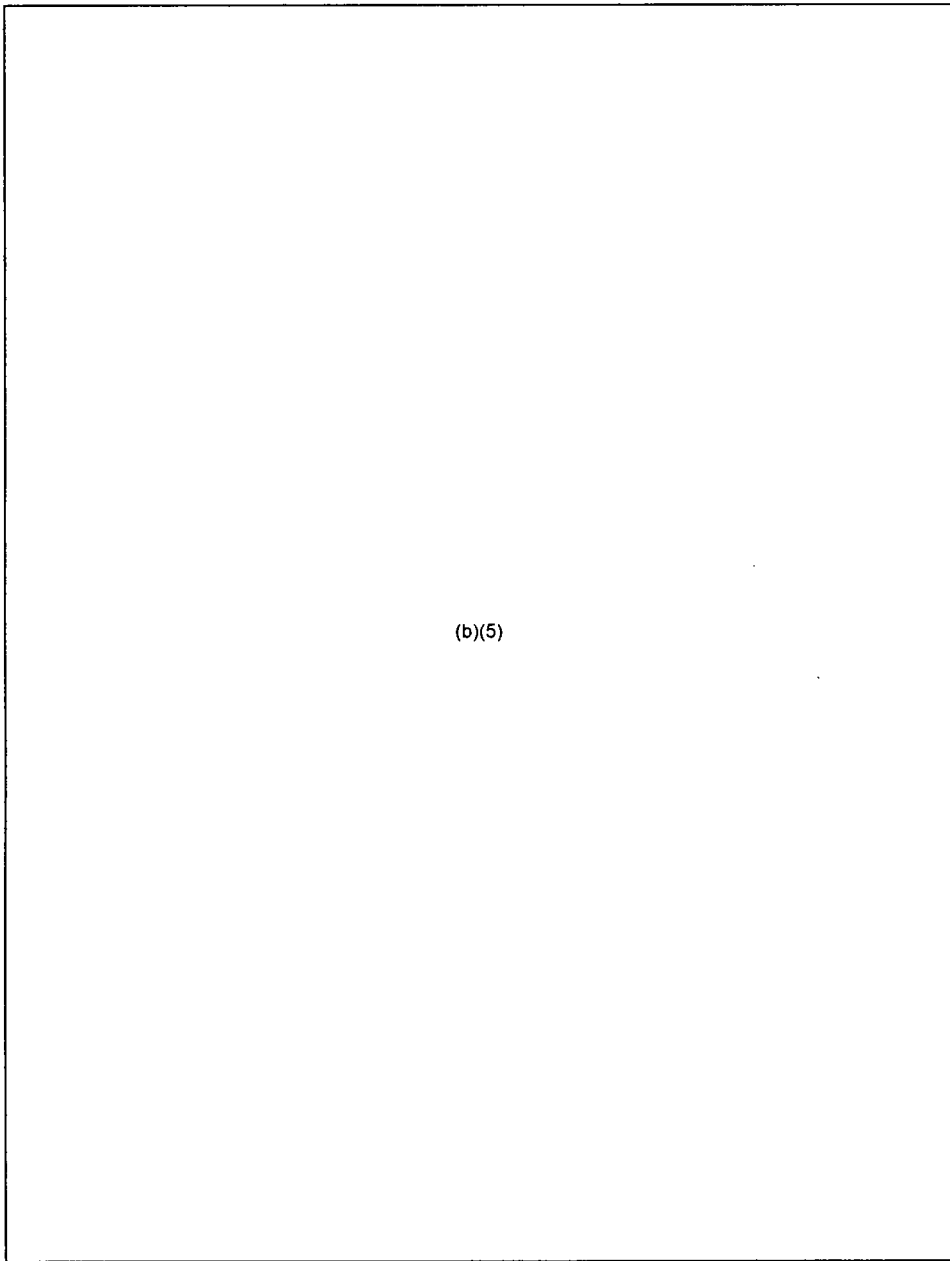
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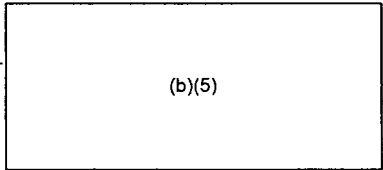
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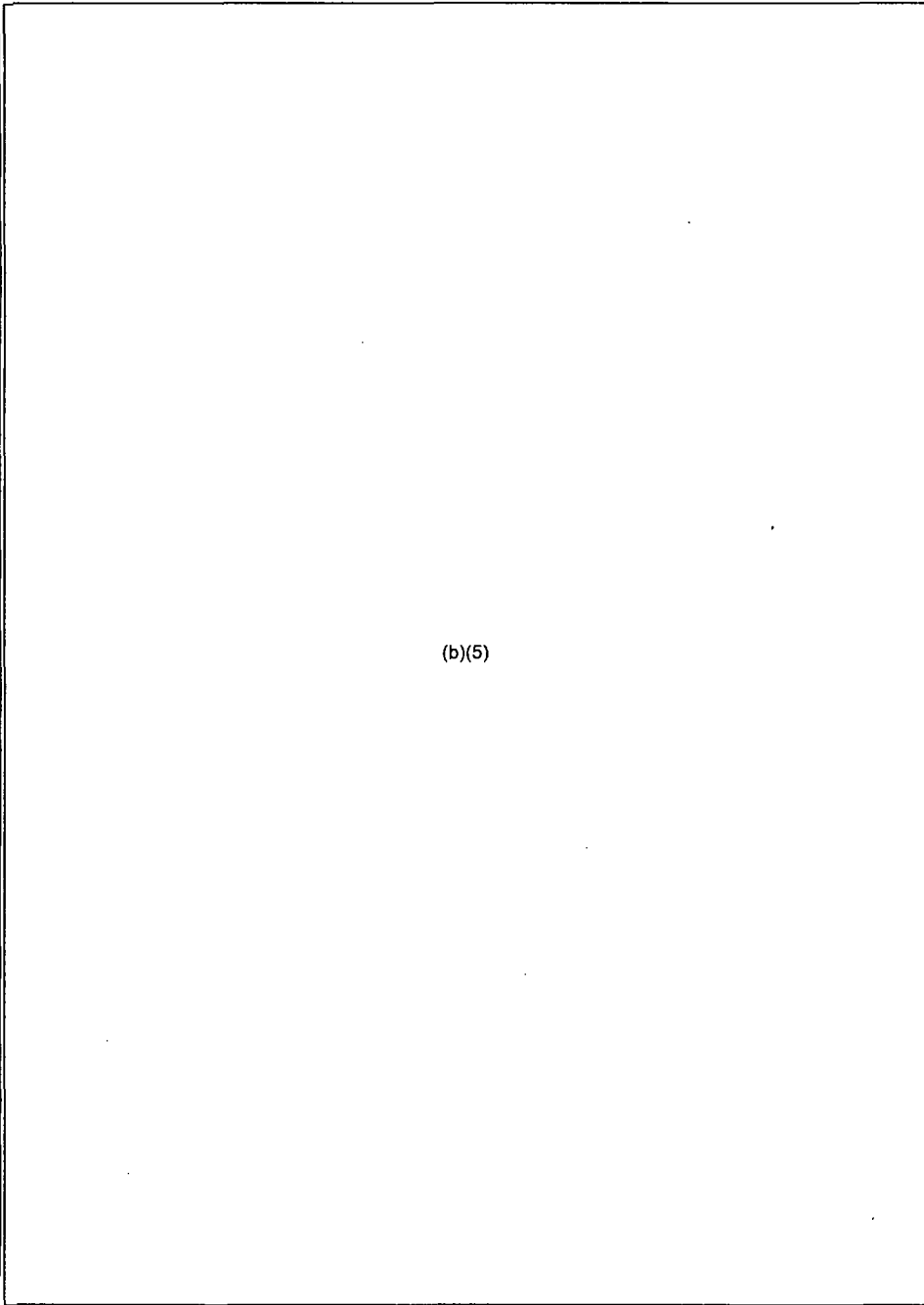
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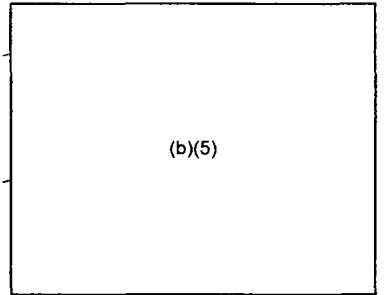
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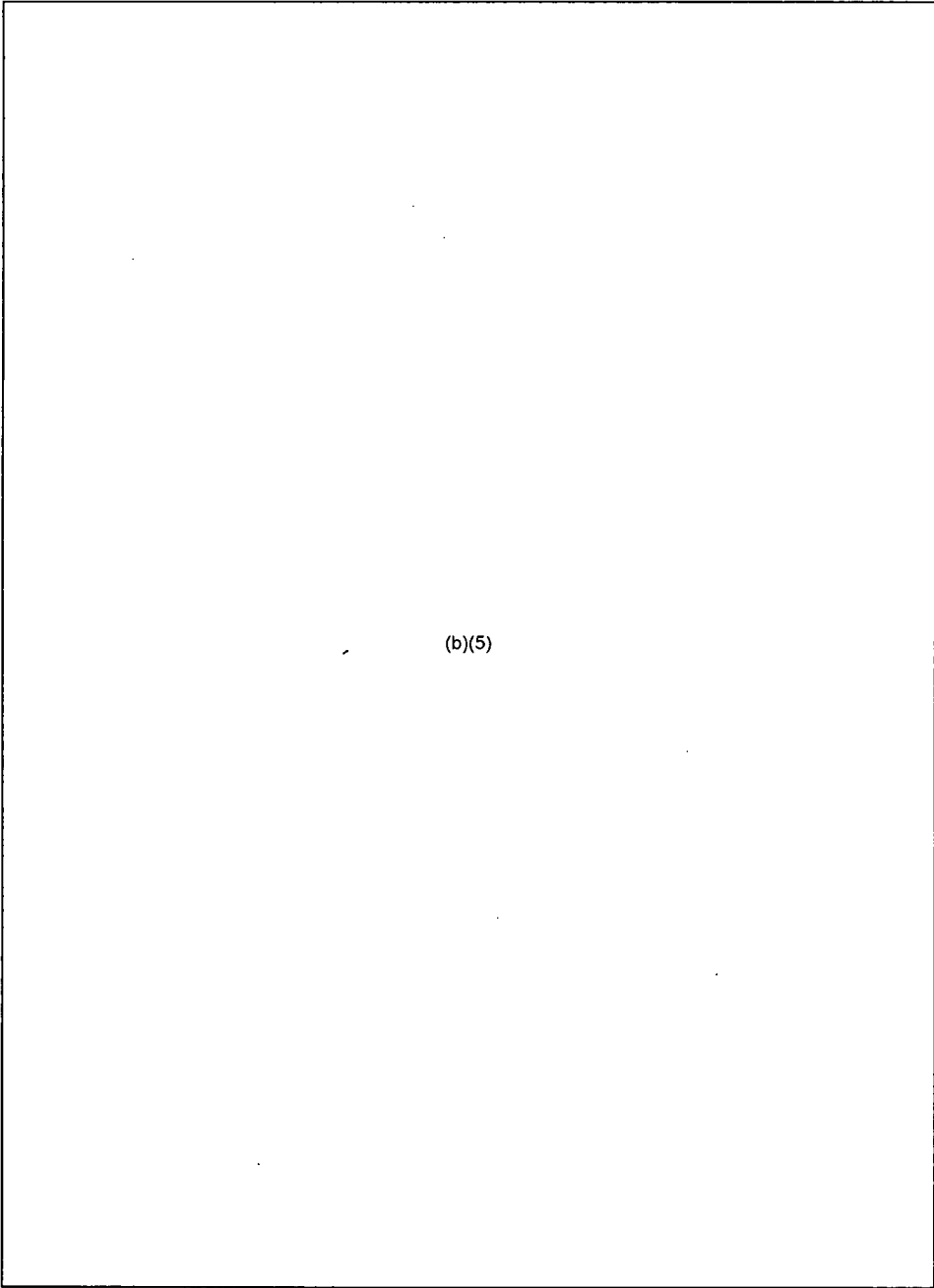
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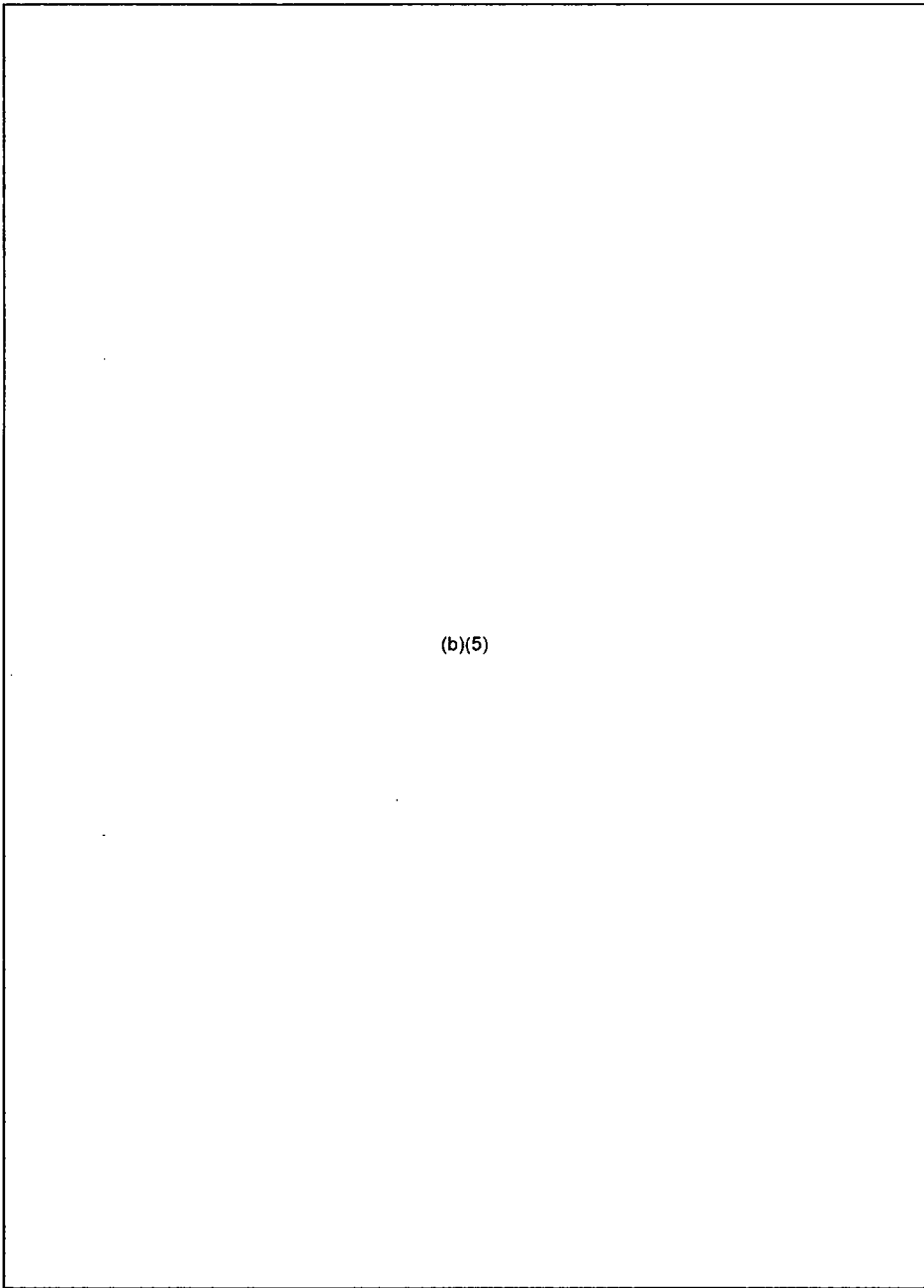
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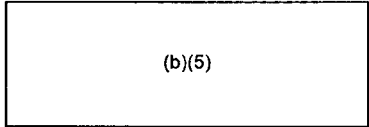
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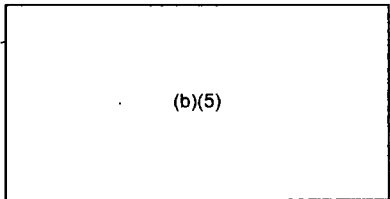
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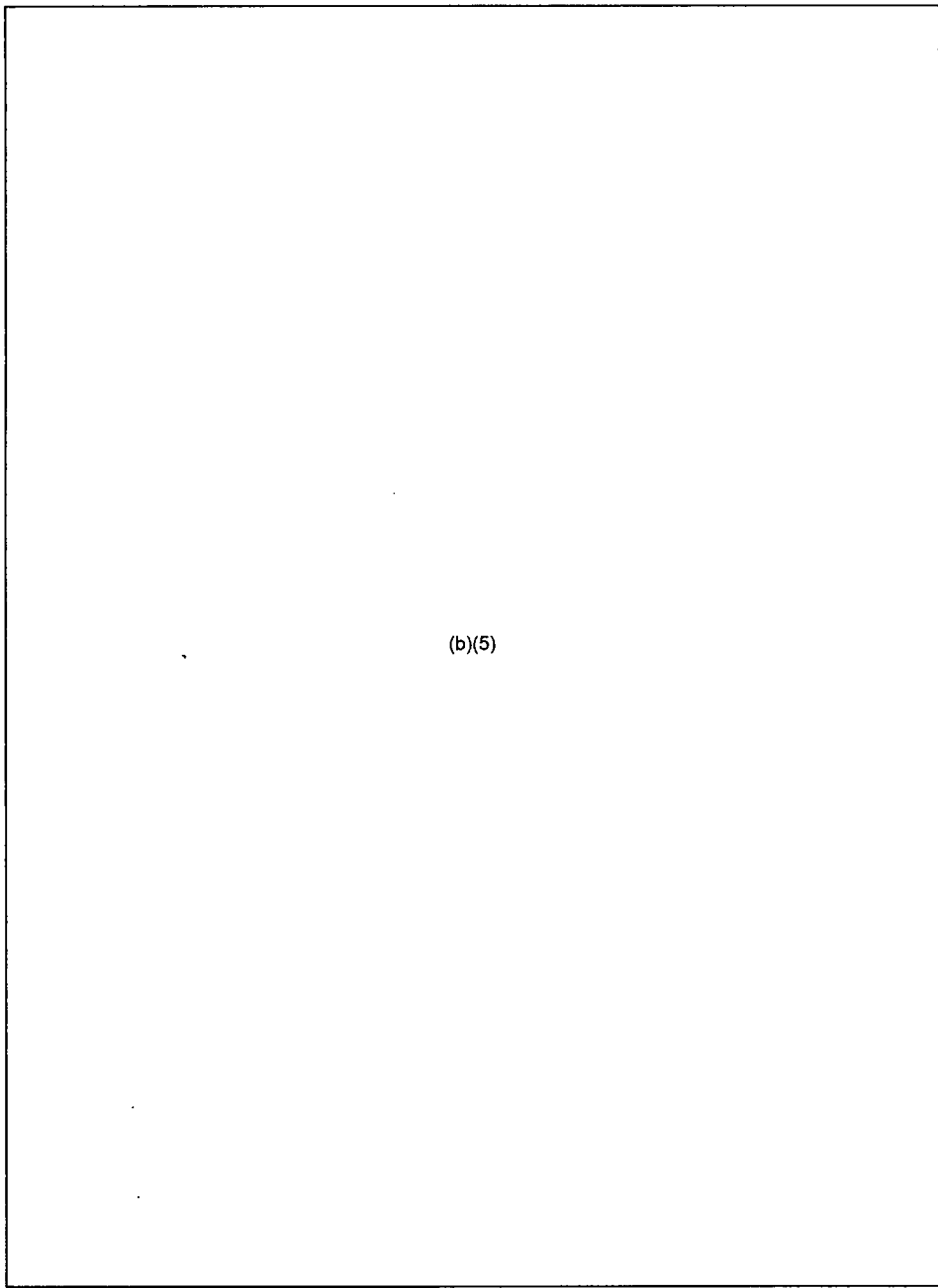
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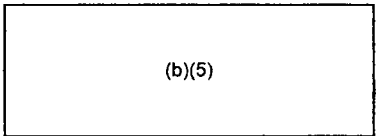
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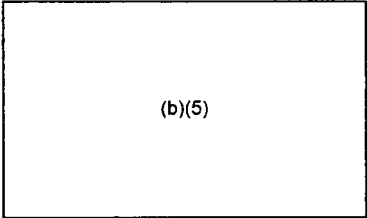
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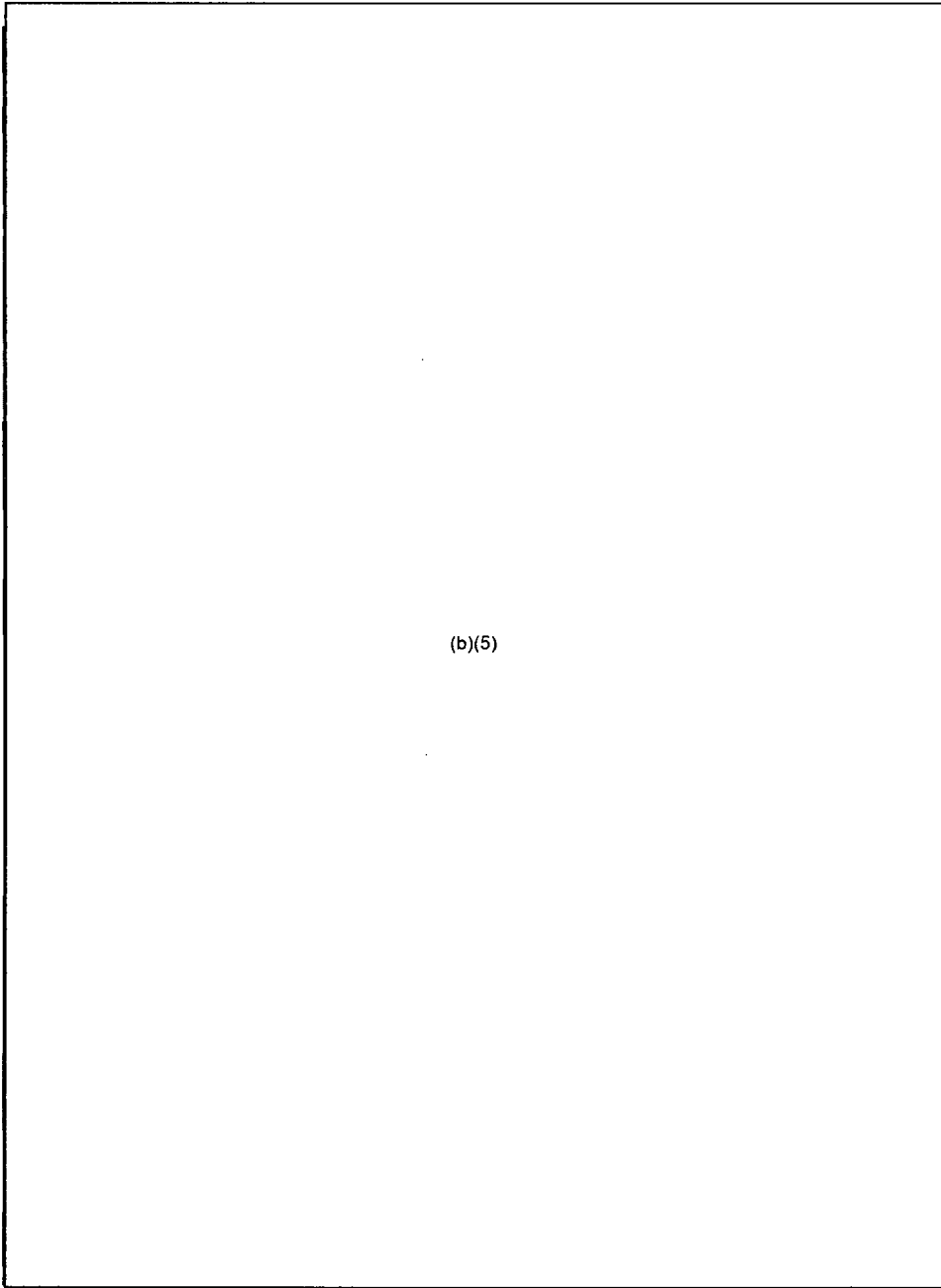
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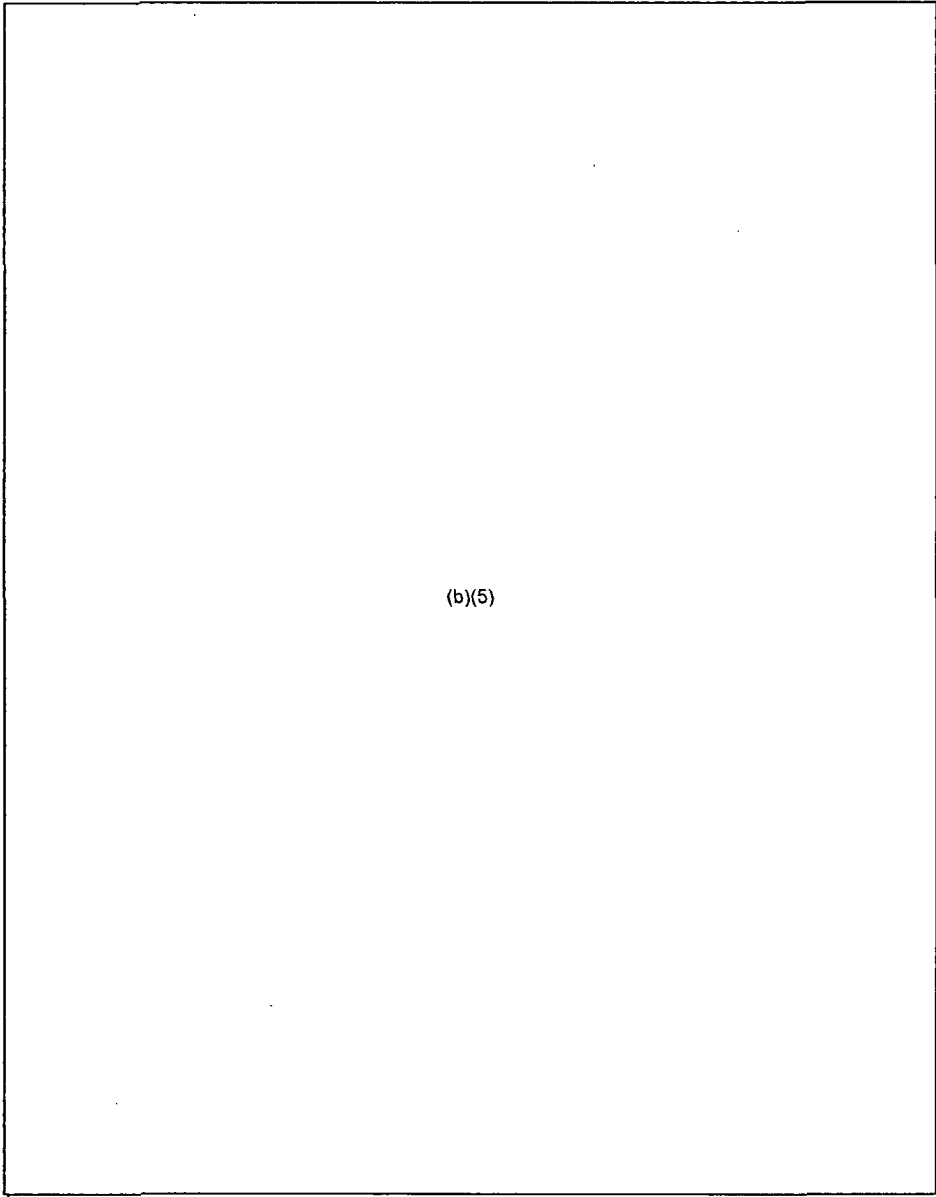
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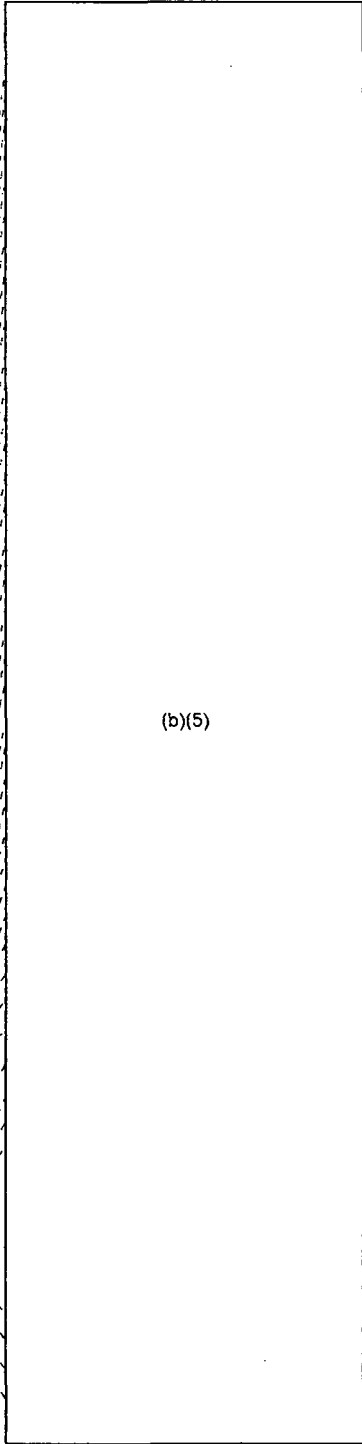
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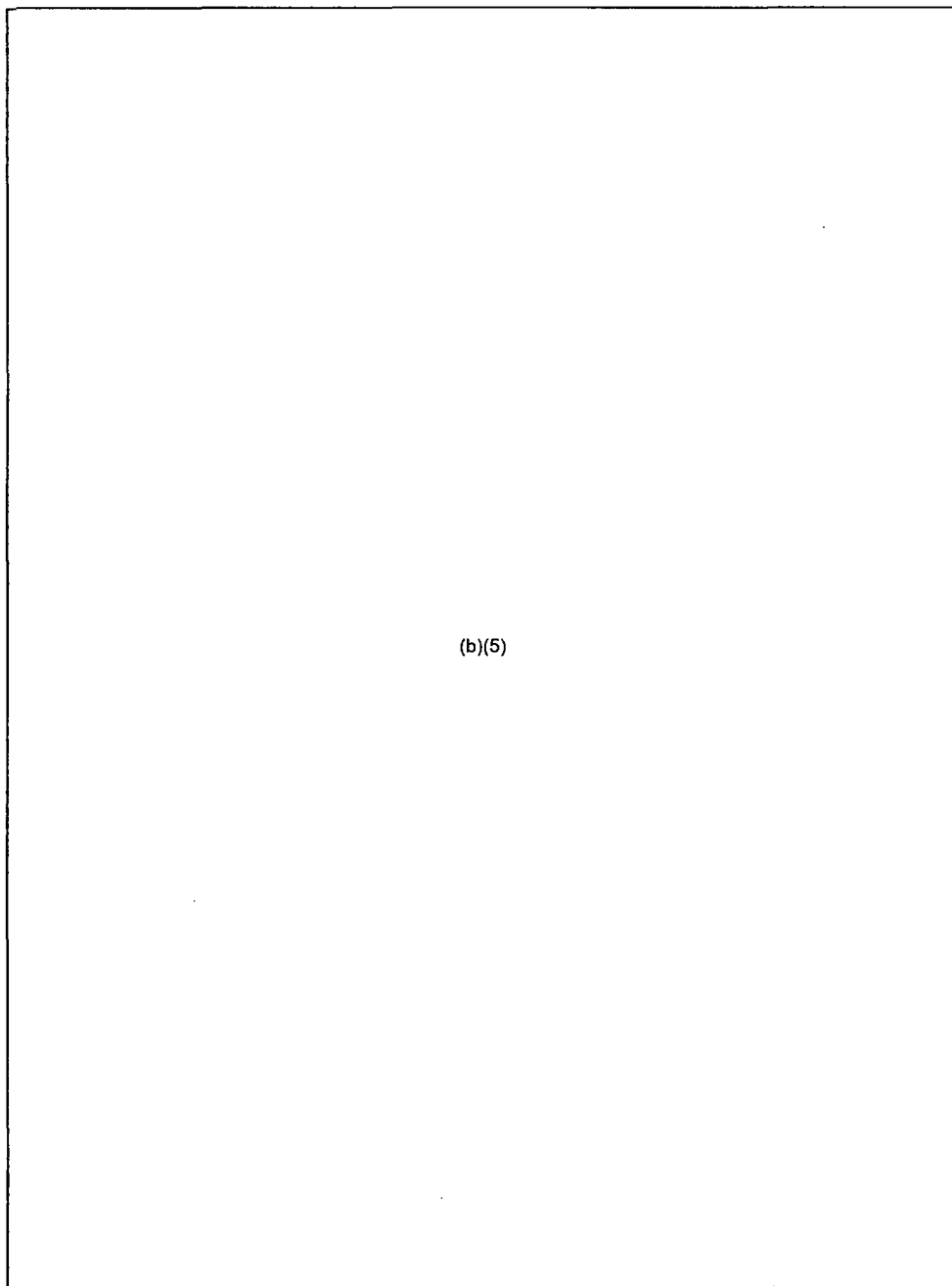
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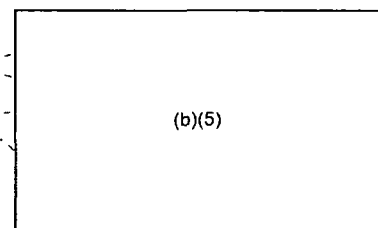
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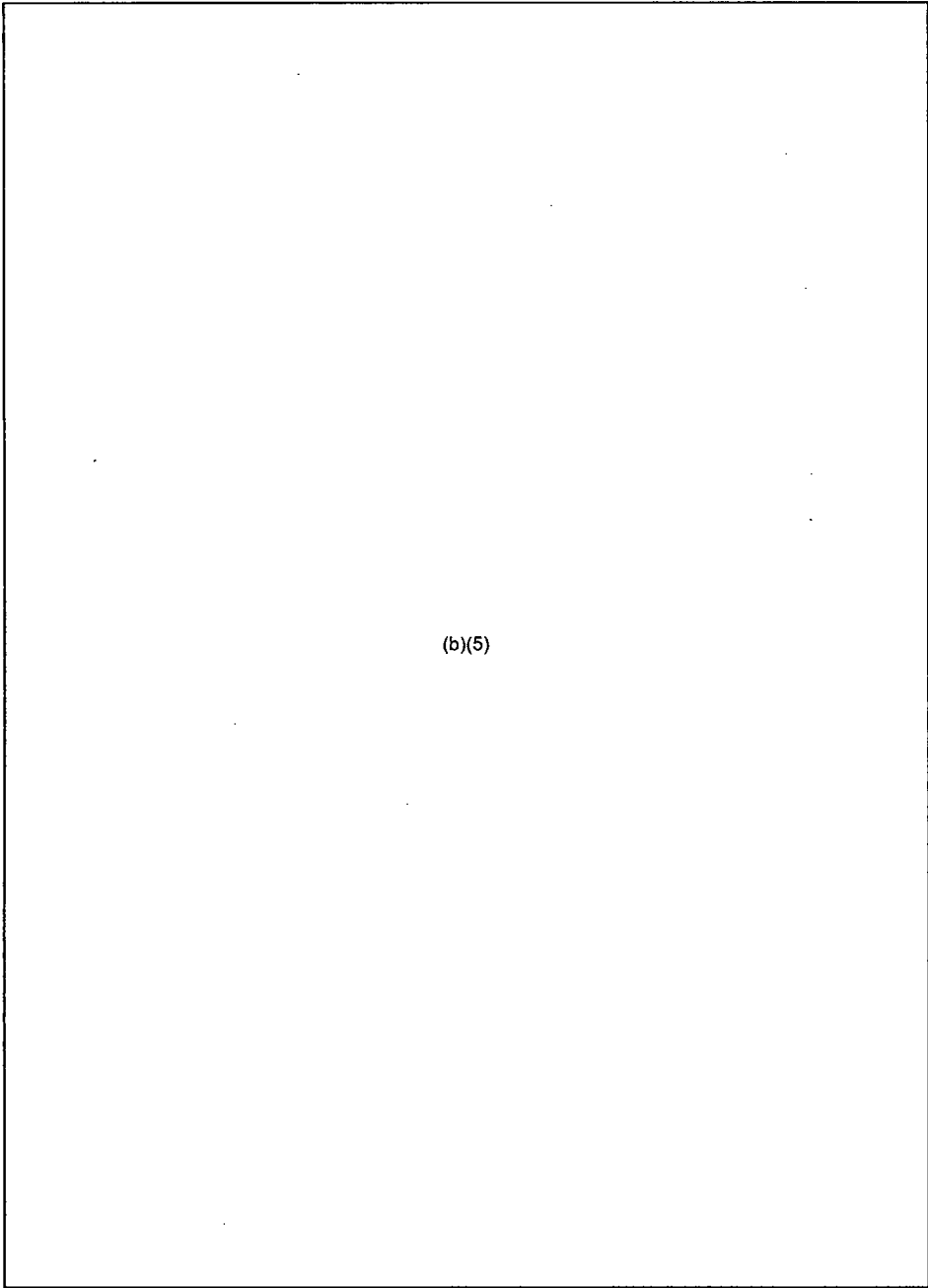
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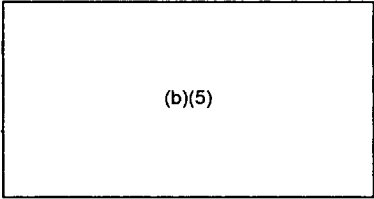
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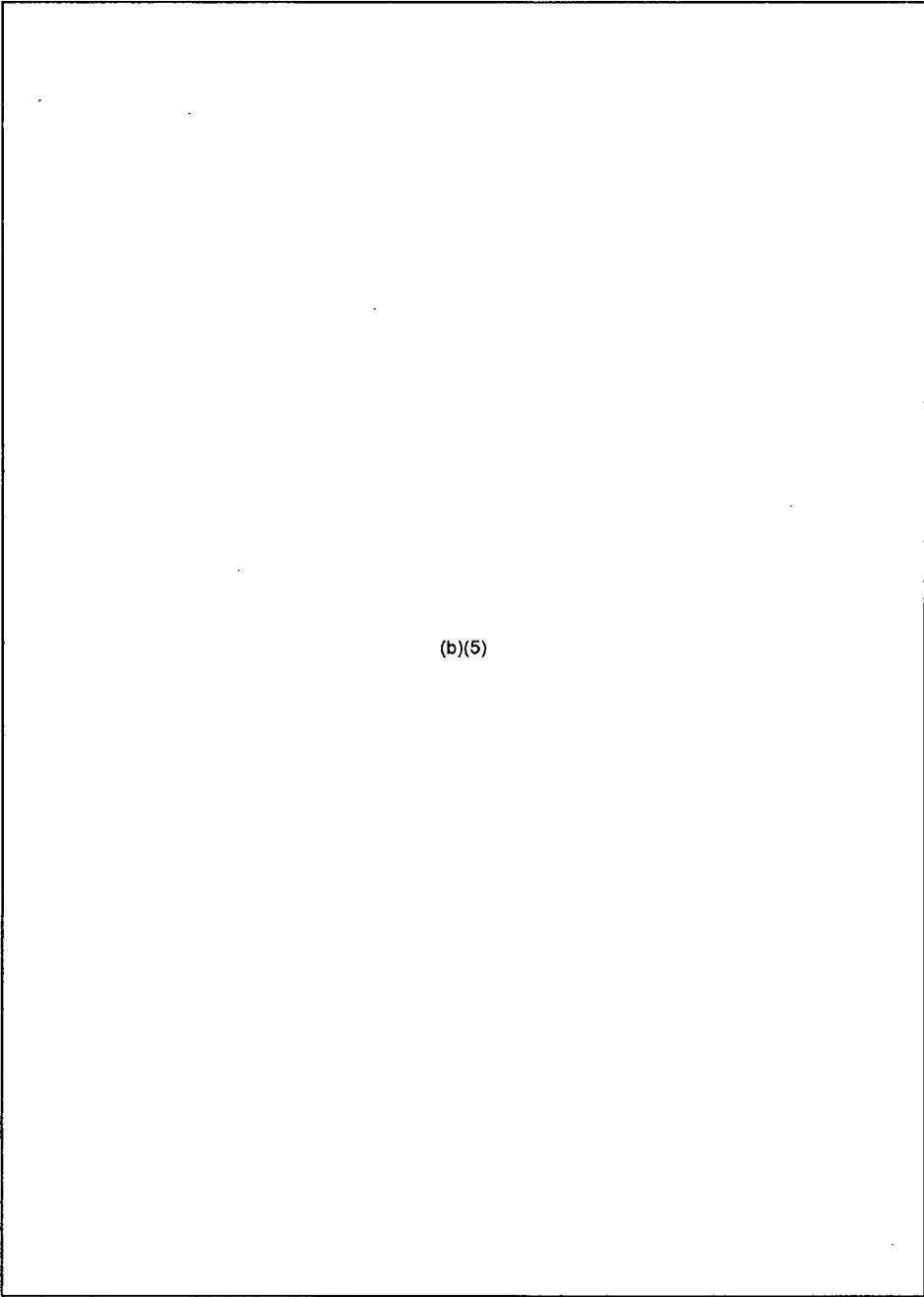
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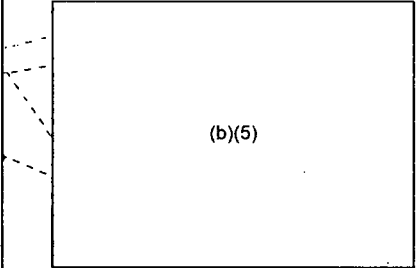
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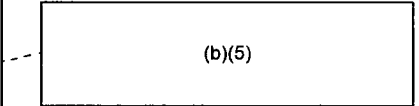
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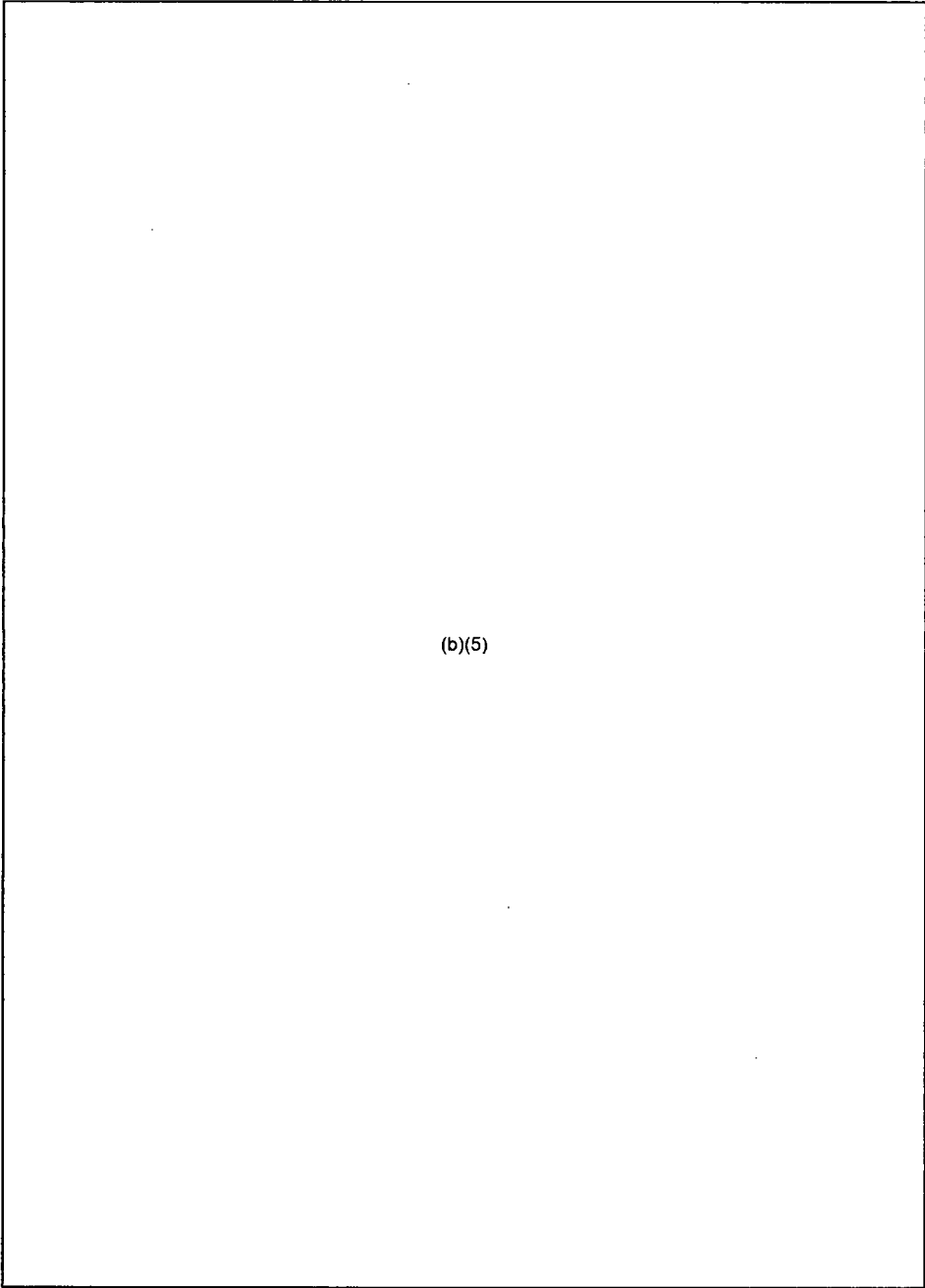
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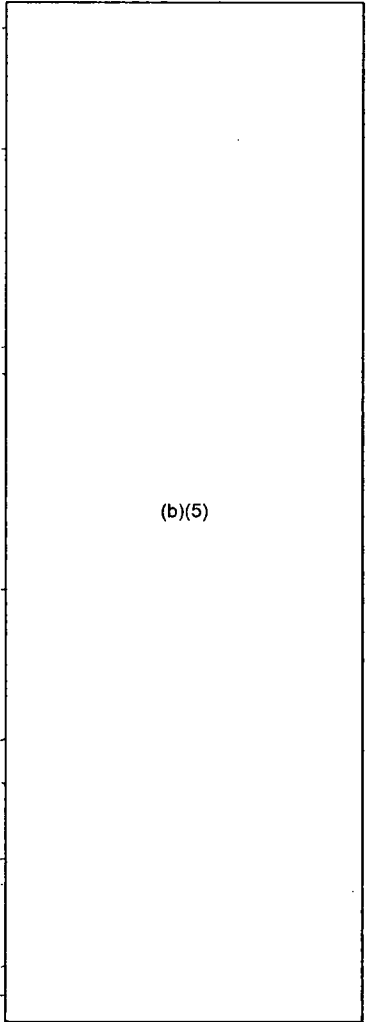
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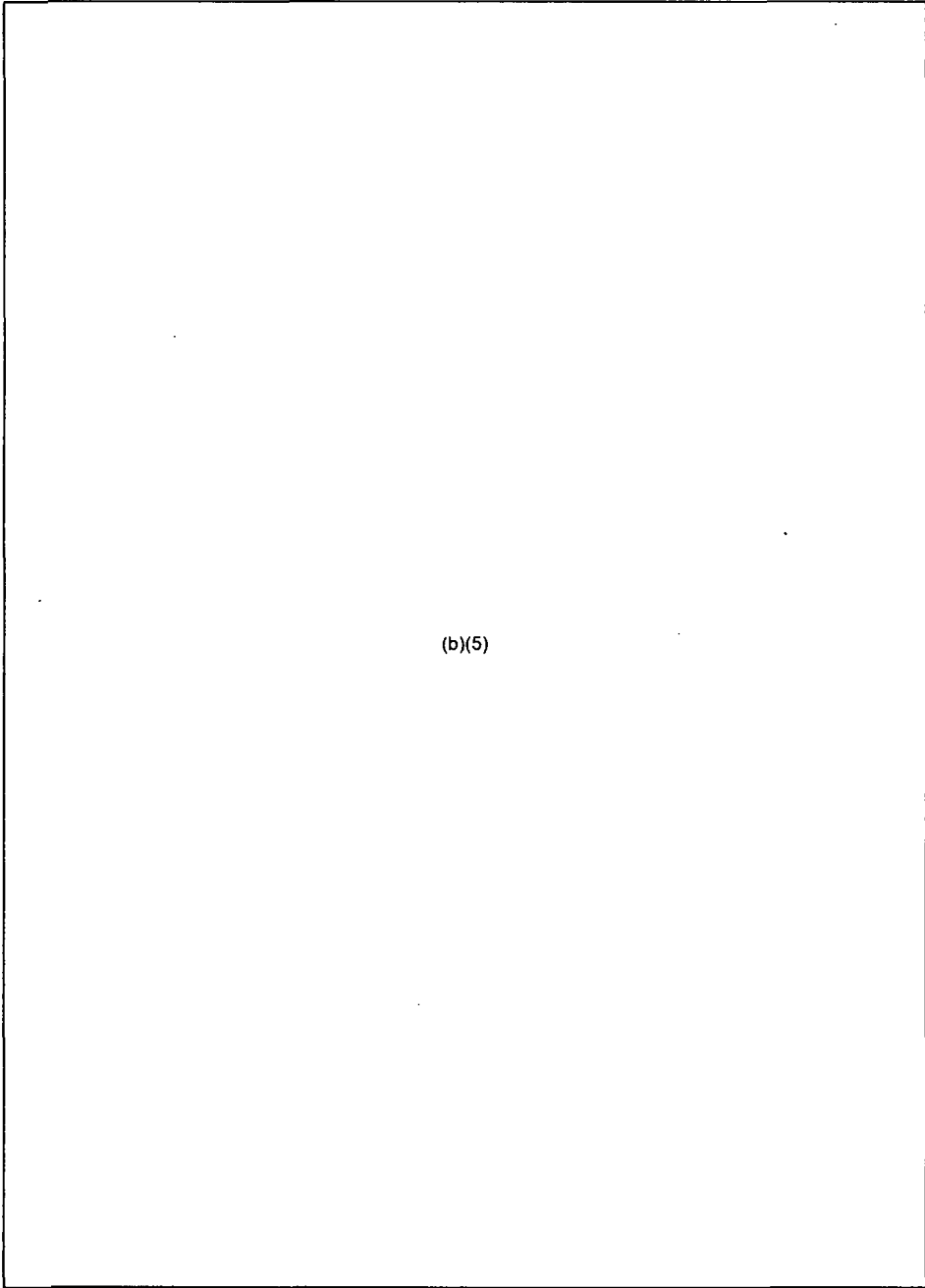
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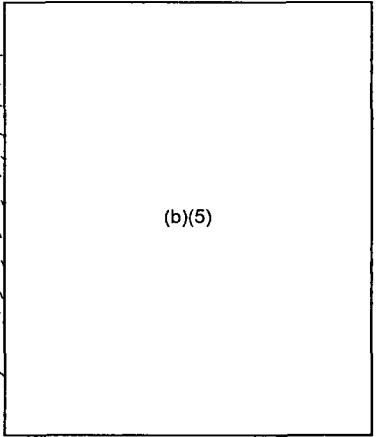
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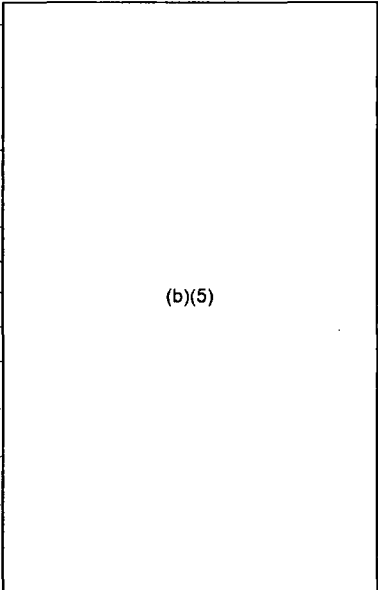
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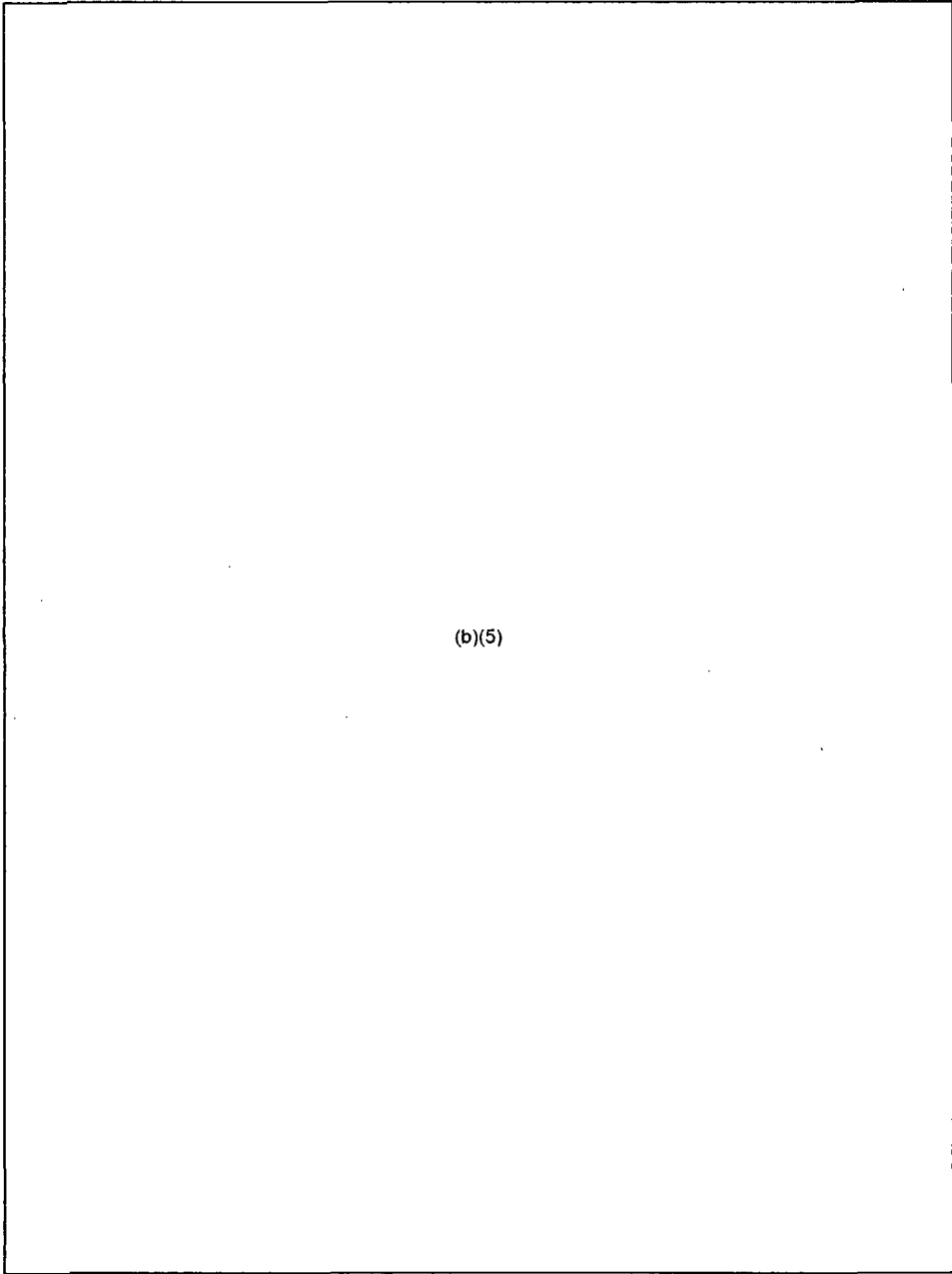
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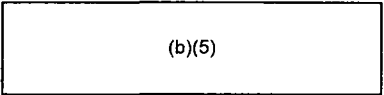
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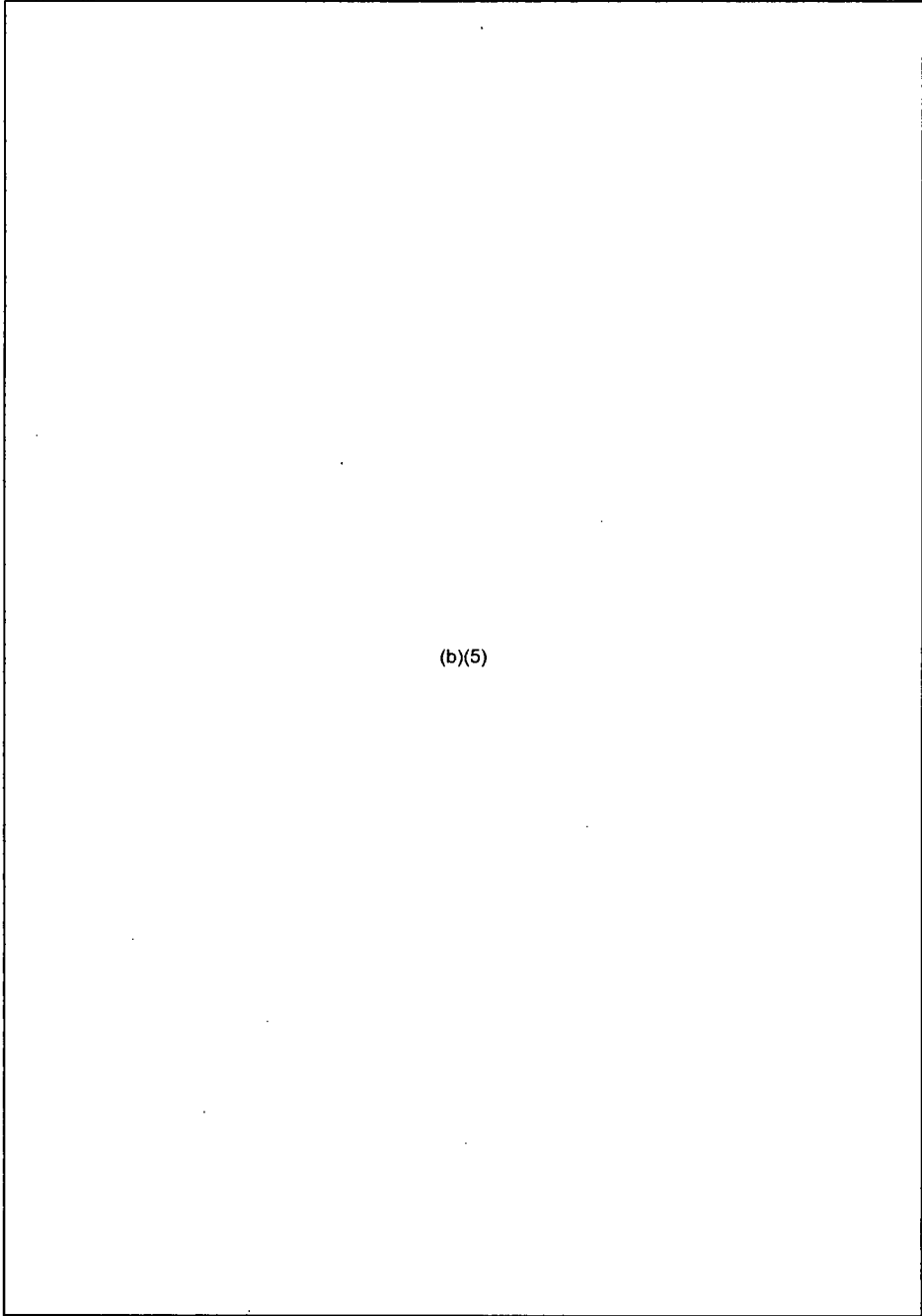
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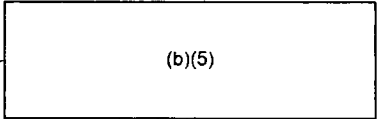
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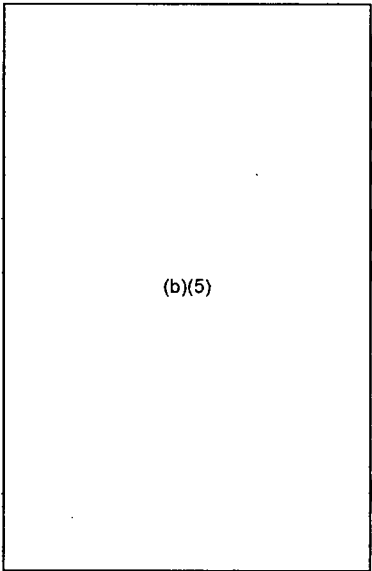
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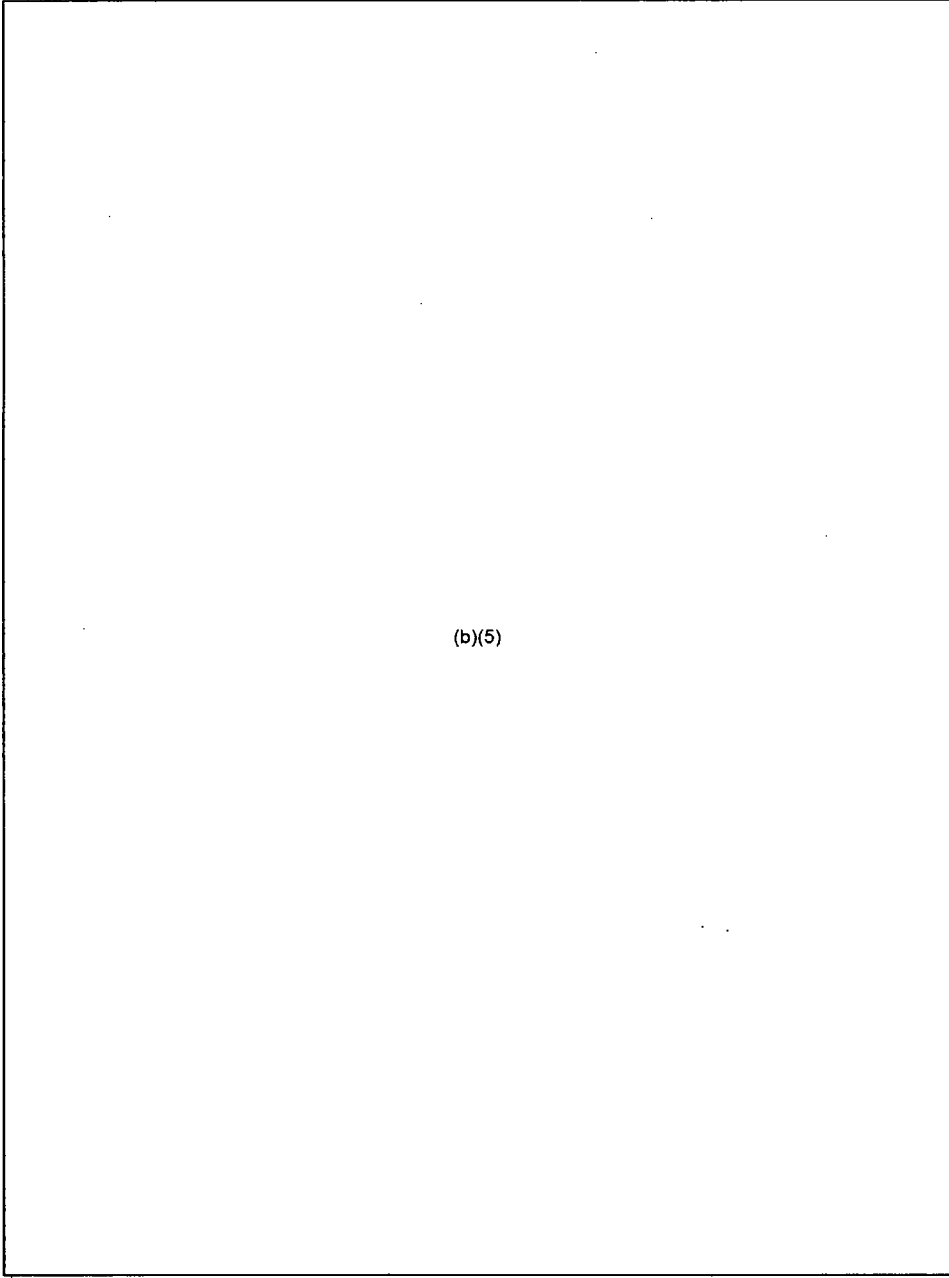
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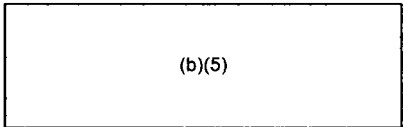
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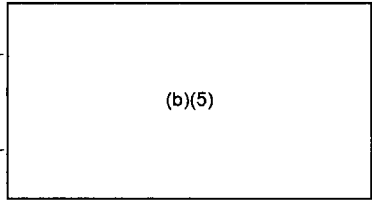
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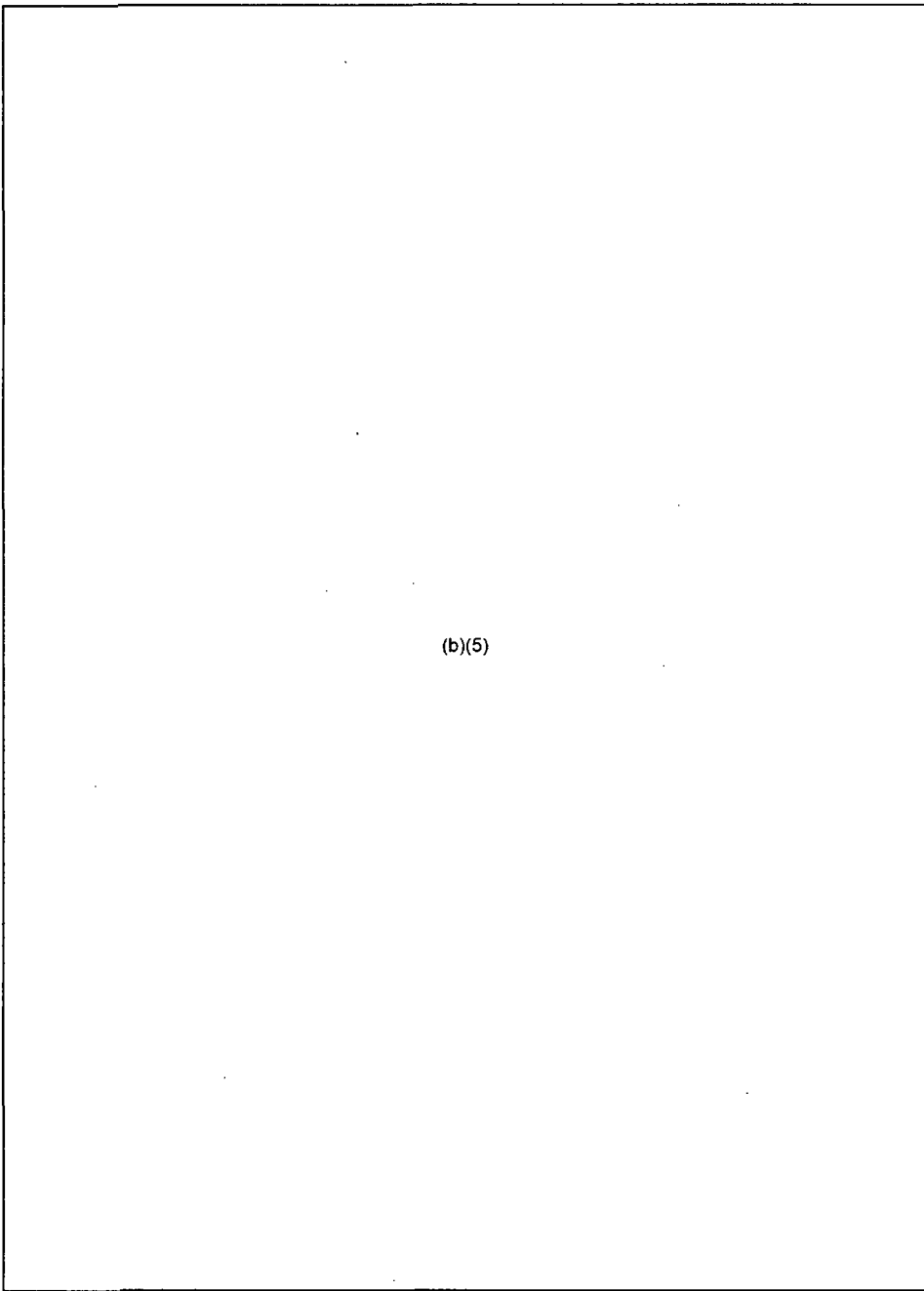


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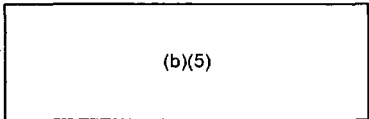
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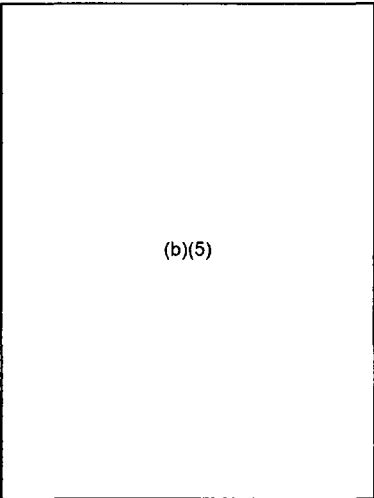
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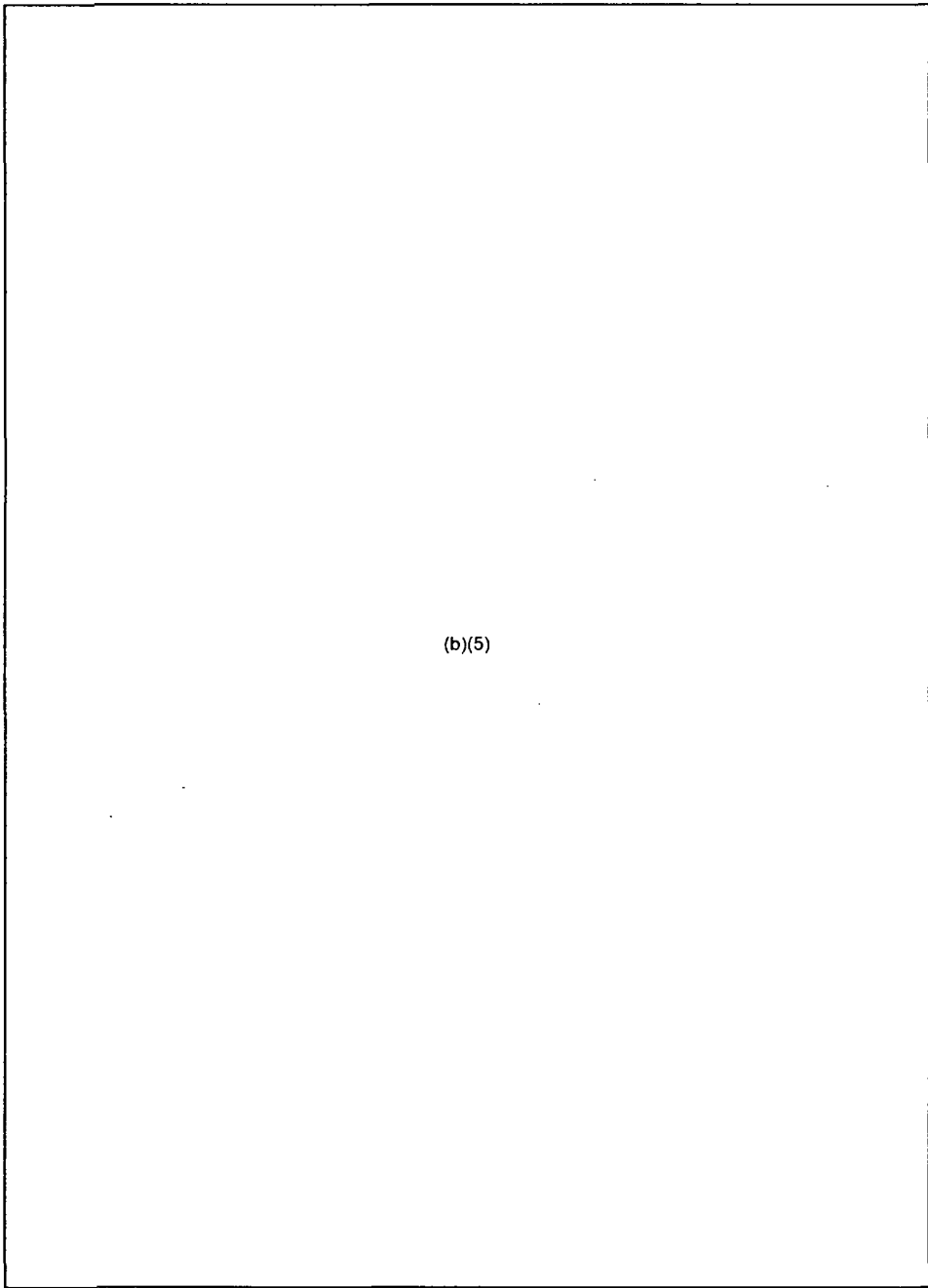
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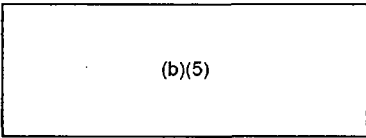
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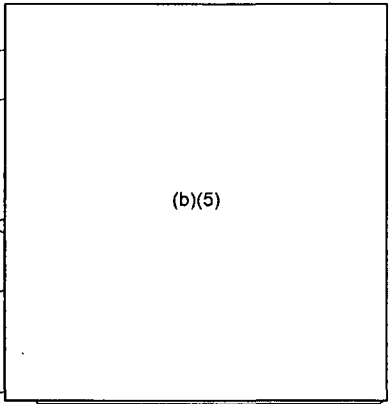
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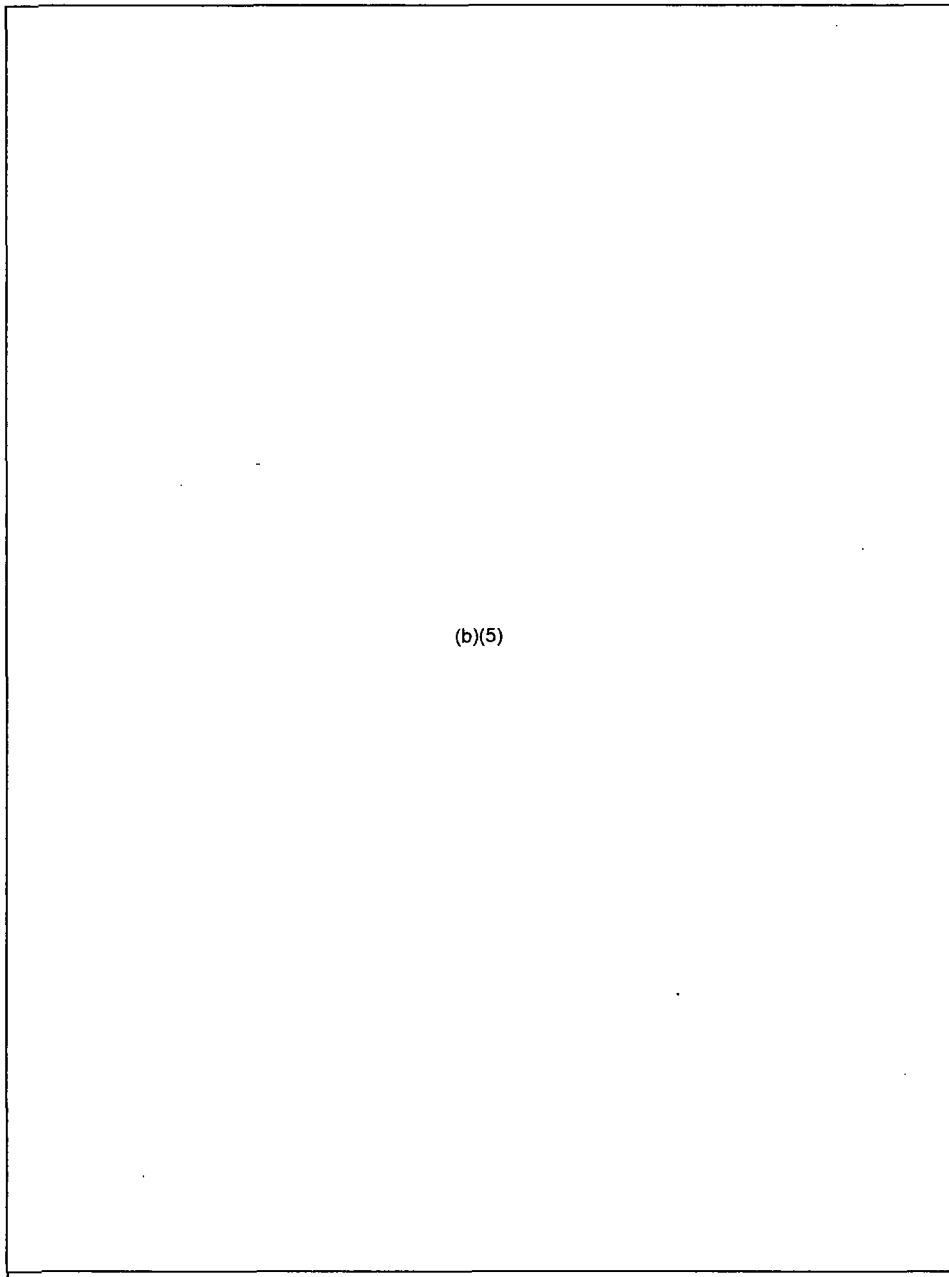


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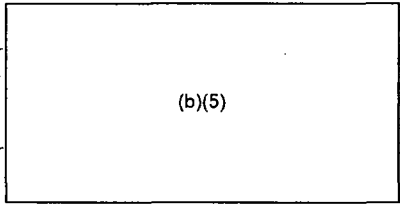


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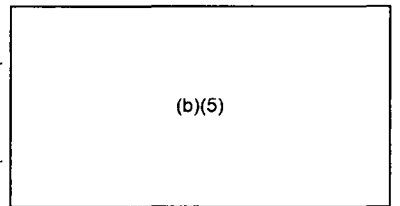
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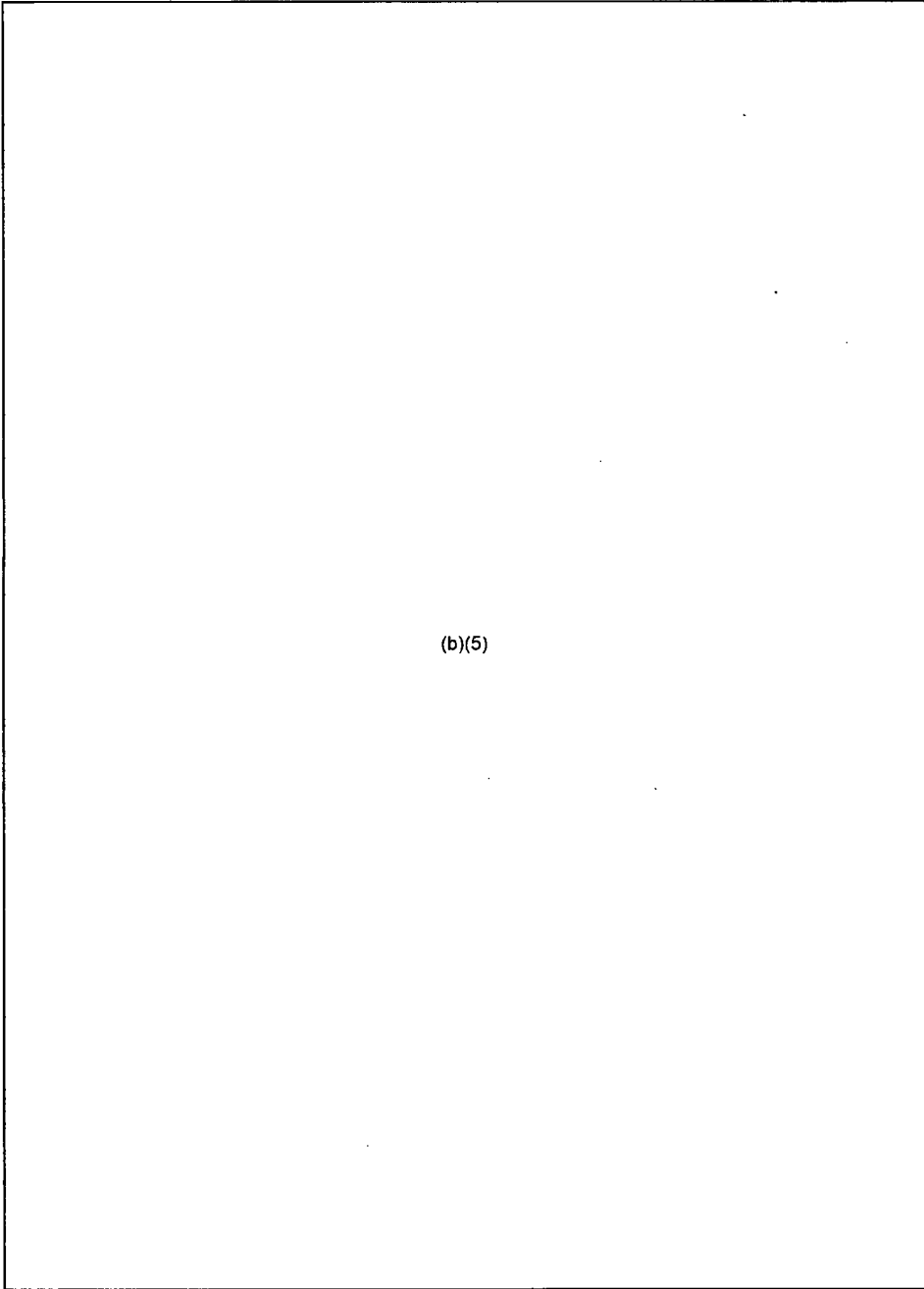
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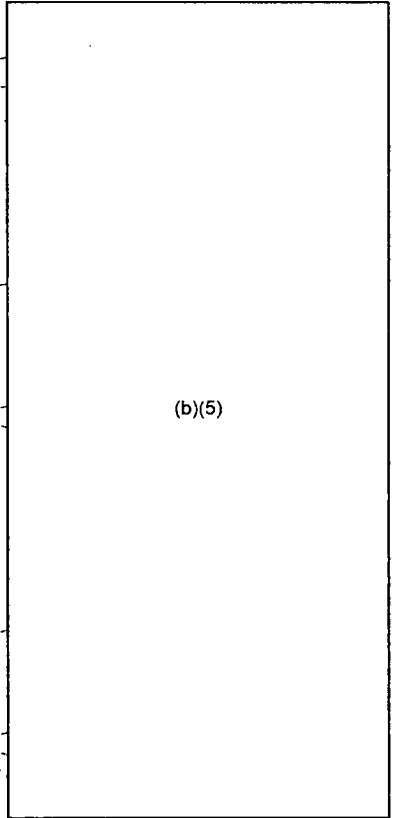
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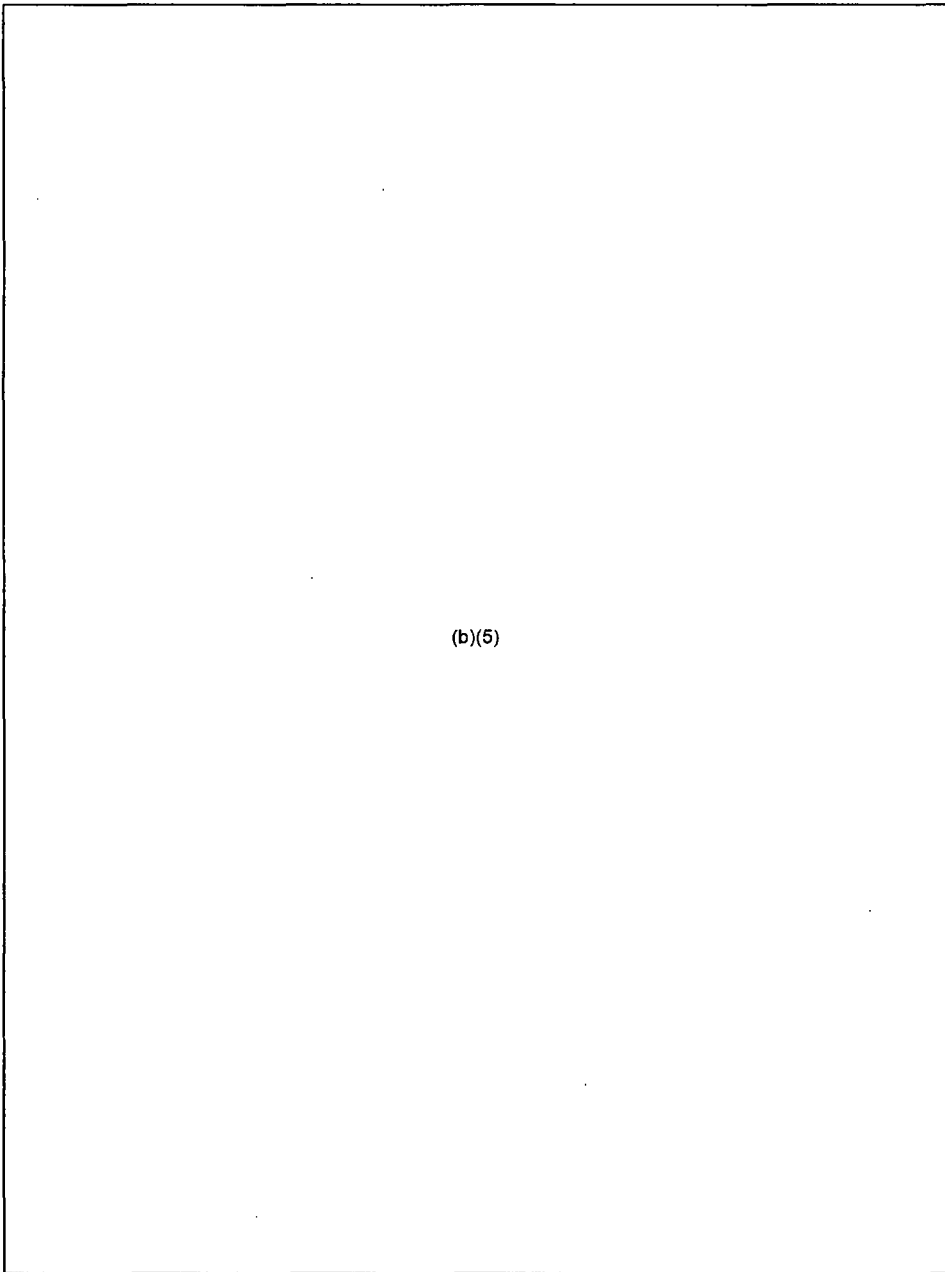
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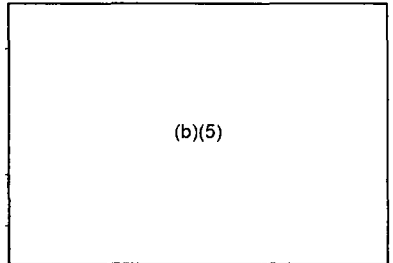
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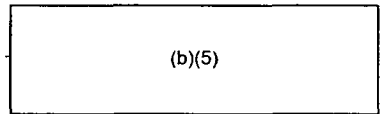
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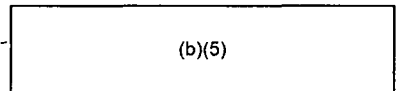
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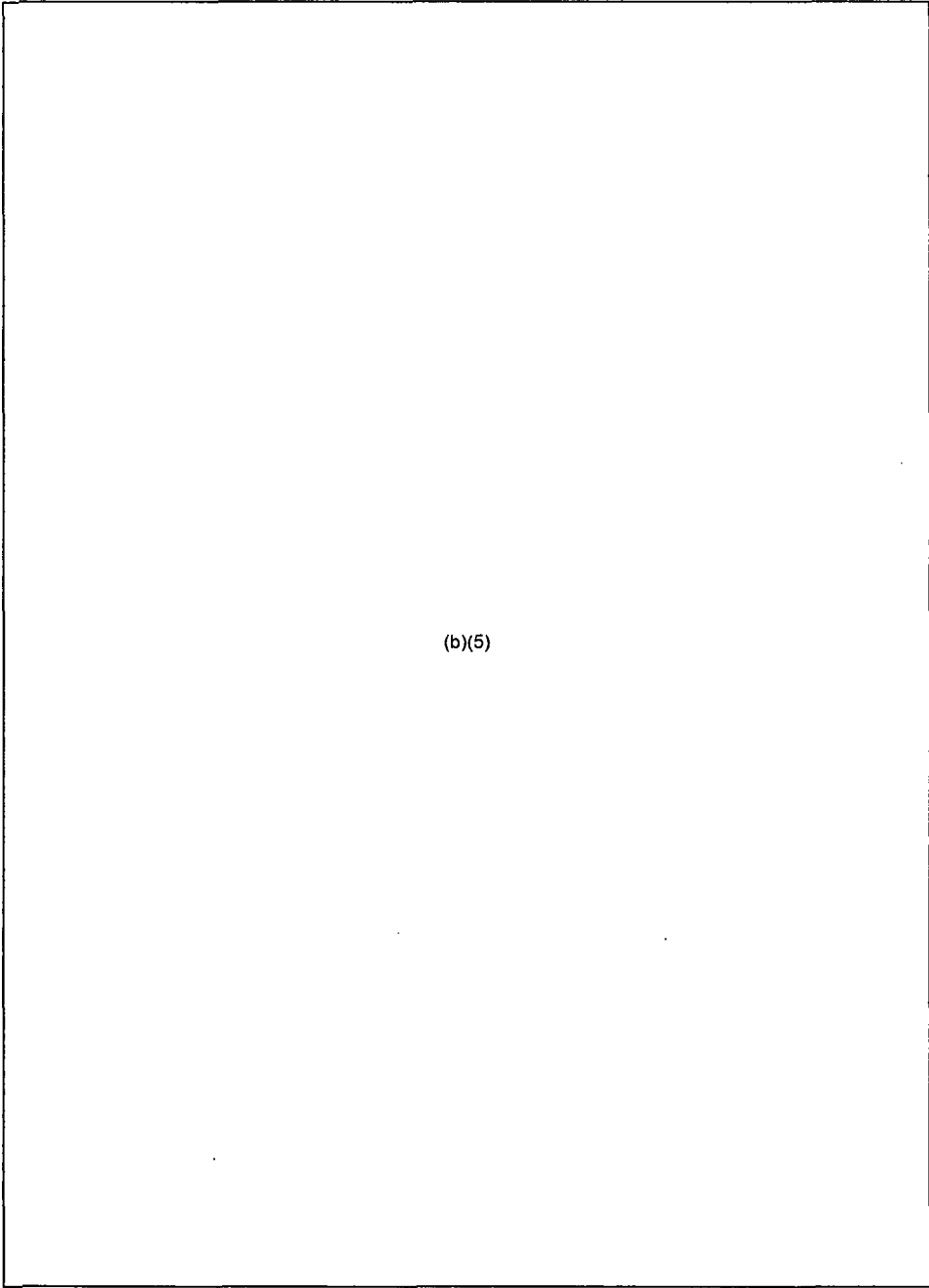
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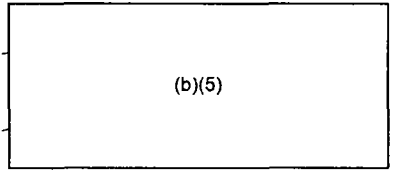
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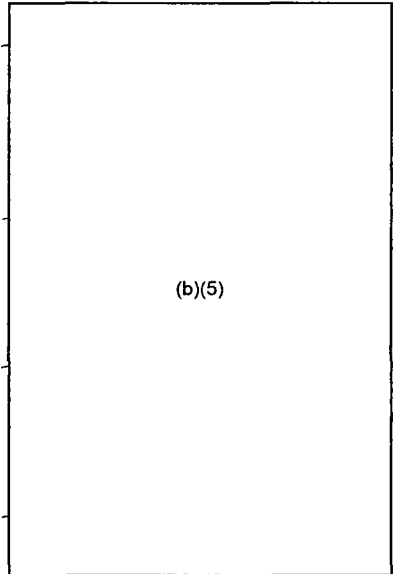
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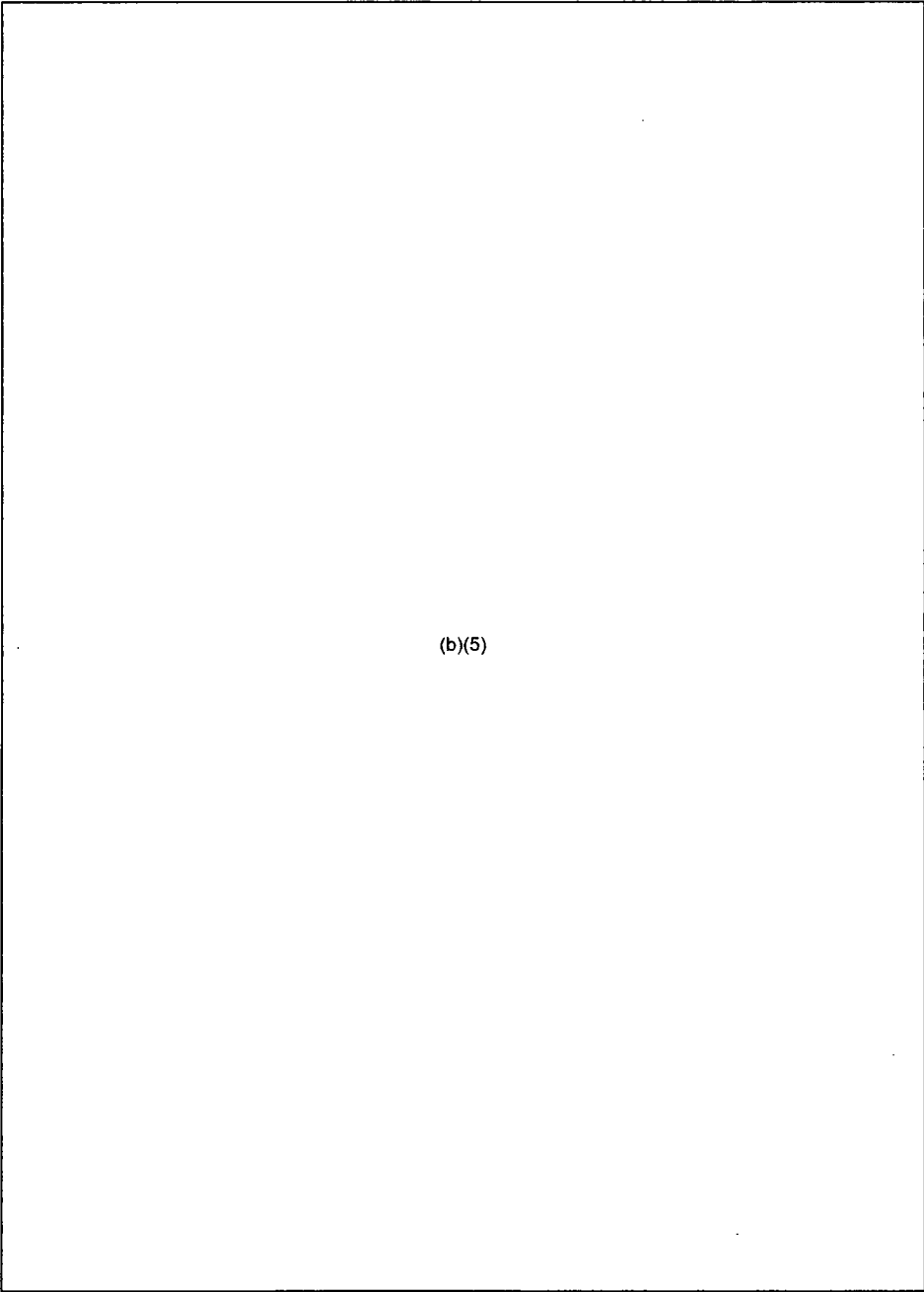
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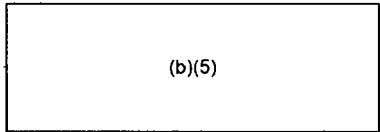
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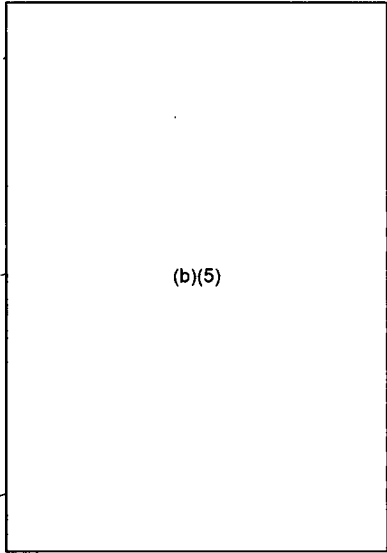
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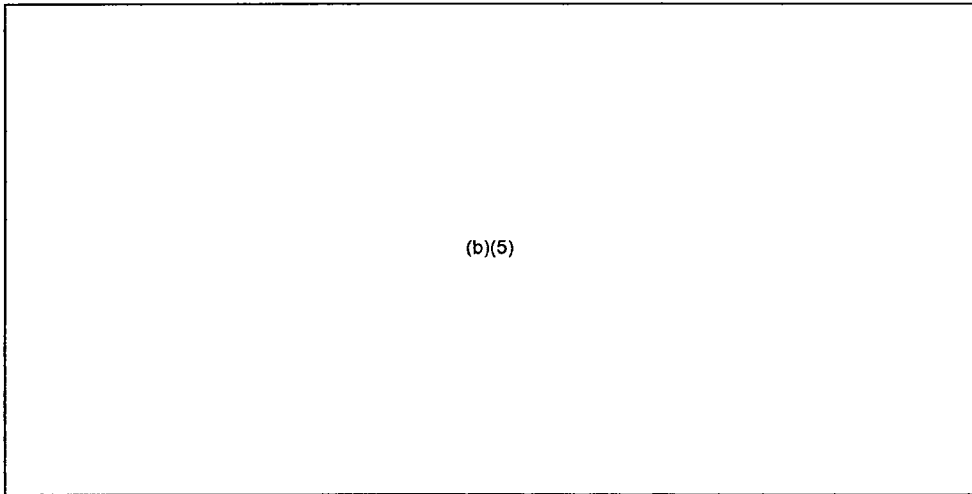
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PM Resolved is usually used. Is resolved appropriate in this instance?

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PM This phrase is used inconsistently. Should water guage be included in the parentheses?

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PM is this correct? Also, define FEMA and REP

Correct.

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PM Unclear what is being stated here. Are these sections part of NUREG-0696 or the FSAR?

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ODriscoll, James

From: ODriscoll, James
Sent: Tuesday, March 22, 2011 3:19 PM
To: Jackson, Christopher; Carneal, Jason; McKirgan, John
Subject: RE: Reference to RG in Section 6.4 - followup action from Chapter Day.

Jason/Chris,
I'm ok with this change.
Jim

From: Jackson, Christopher
Sent: Monday, March 21, 2011 11:49 AM
To: Carneal, Jason; ODriscoll, James; McKirgan, John
Subject: RE: Reference to RG in Section 6.4 - followup action from Chapter Day.

Jason,

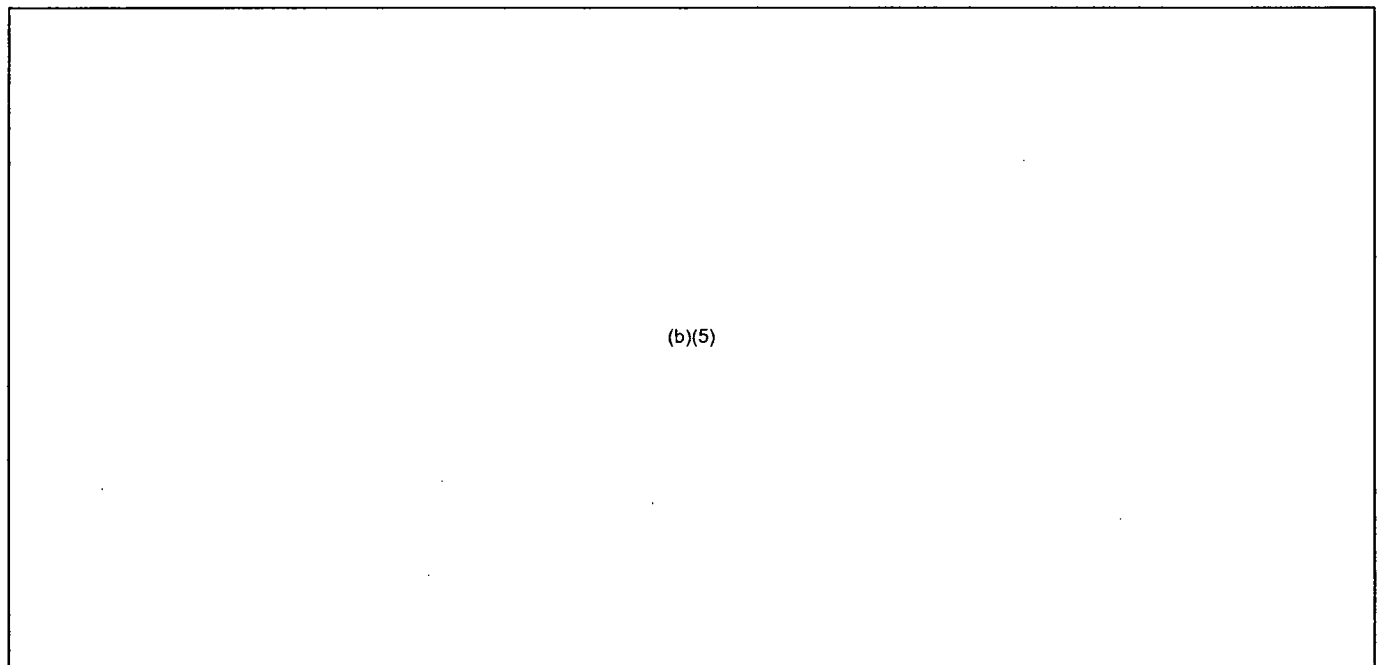
I have reviewed the guidance and I offer the following revision. Can you see if Bob agrees?

CJ

From: Carneal, Jason
Sent: Monday, March 21, 2011 2:33 PM
To: ODriscoll, James; Jackson, Christopher
Subject: Reference to RG in Section 6.4 - followup action from Chapter Day.

Chris and Jim:

The one follow-on for SPCV from Friday's Chapter Day was providing the correct RG to reference in the following paragraph:



ODriscoll, James

From: King, Mark
Sent: Tuesday, March 22, 2011 2:18 PM
Subject: IOEB Clearinghouse Screening Summary for Tuesday, March 22, 2011

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
*****MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*****
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR

Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Eleven (11)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

(b)(5)

(b)(5)

(b)(5)

(b)(5)

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY

~~*MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION***
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR~~**

Attendees at Screening Meeting:

Mark King
Bob Bernardo
Russ Haskell
Jesse Robles
Mary Wegner – RES (by phone)
Doug Copeland – NRO

ODriscoll, James

From: Jackson, Christopher
Sent: Tuesday, March 22, 2011 9:17 AM
To: Carneal, Jason
Cc: ODriscoll, James
Subject: RE: SPCV follow-up items in Section 6.5.3

I am available.

CJ

-----Original Message-----

From: Carneal, Jason
Sent: Tuesday, March 22, 2011 12:26 PM
To: Jackson, Christopher
Subject: RE: SPCV follow-up items in Section 6.5.3

Chris:

We can cover it today at 10 with Bob if you are available.

Thanks,

Jason

From: Jackson, Christopher
Sent: Tuesday, March 22, 2011 5:09 AM
To: Carneal, Jason
Cc: ODriscoll, James; McKirgan, John
Subject: RE: SPCV follow-up items in Section 6.5.3

Jason,

Here is a proposed edit to item number 2 and possibly number 3.

When can we discuss item 1 with Bob? It appears he is only looking for clarification.

CJ

(b)(5)

I hope this helps,
CJ

From: Carneal, Jason
Sent: Monday, March 21, 2011 9:27 PM
To: Jackson, Christopher
Cc: ODriscoll, James
Subject: FW: SPCV follow-up items in Section 6.5.3

Chris:

These are the last two items for SPCV that I could find. Can we provide input on the comments below from Bob?

I think email will suffice, but if we need to arrange a final call with Bob, let me know and I will set it up.

Thanks for all the help,

Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813

From: Carneal, Jason
Sent: Wednesday, March 16, 2011 9:40 AM
To: ODriscoll, James
Cc: Jackson, Christopher; Hart, Michelle
Subject: SPCV follow-up items in Section 6.5.3

Jim:

We came across a couple of items during the Section 6.5.3 review that were containment branch items. I have attached a highlighted copy of the OGC comments on which that Michelle said we would need to confer with SPCV.

(b)(5)

Thanks,

Jason

Jason Carneal
Project Manager
U.S. Nuclear Regulatory Commission
NRO/DNRL/NARP (T-6J4)
301-415-3813

(b)(5)

(b)(5)

6-131

(b)(5)

ODriscoll, James

From: King, Mark
Sent: Wednesday, March 23, 2011 2:10 PM
Subject: IOEB Clearinghouse Screening Summary for Wednesday, March 23, 2011

NOTE: THIS SUMMARY IS OFFICIAL USE ONLY
*****MAY CONTAIN SENSITIVE/ PROPRIETARY OR NRC INTERNAL USE ONLY INFORMATION*****
DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR

Issues for Resolution (IFR): None

OpE Forum Postings (COMMS): None

Management Requests: None

Follow-up/Other Tasks: Ten (10)

[Note - The information in this part of the Summary is often preliminary in nature and is provided to help IOEB staff communicate and track noteworthy items being followed up by either the Regions or HQ staff.]

(b)(5)

(b)(5)

(b)(5)

**(i.e., Screened /reviewed against LIC-401 criteria for initiating an "Issue for Resolution" (IFR), which is IOEB's process for conducting further evaluation of an issue to determine what, if any, additional actions should be taken to communicate and organizationally learn from OpE.)*

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DO NOT FORWARD ANY PORTIONS OUTSIDE OF NRC WITHOUT FIRST OBTAINING PERMISSION
FROM ORIGINATOR**

Attendees at Screening Meeting:

Mark King
Bob Bernardo
Russ Haskell
Jesse Robles
Dave Garmon
Mary Wegner – RES (by phone)
May Cheng – NSIR
Bruce Jones – NSIR
Tom Alexion- PGCB
Doug Copeland – NRO

ODriscoll, James

From: Jackson, Christopher
Sent: Wednesday, March 23, 2011 12:45 PM
To: ODriscoll, James; Grady, Anne-Marie
Subject: RE: Proposed RAI on 6.2.4 for US-APWR Other Defined basis for GDC 56 lines from RWSP to suction of SI and CS/RHR

Great issue Jim --

I completely agree with your points. Please put the RAI in the system.

A few minor comments ...

(b)(5)

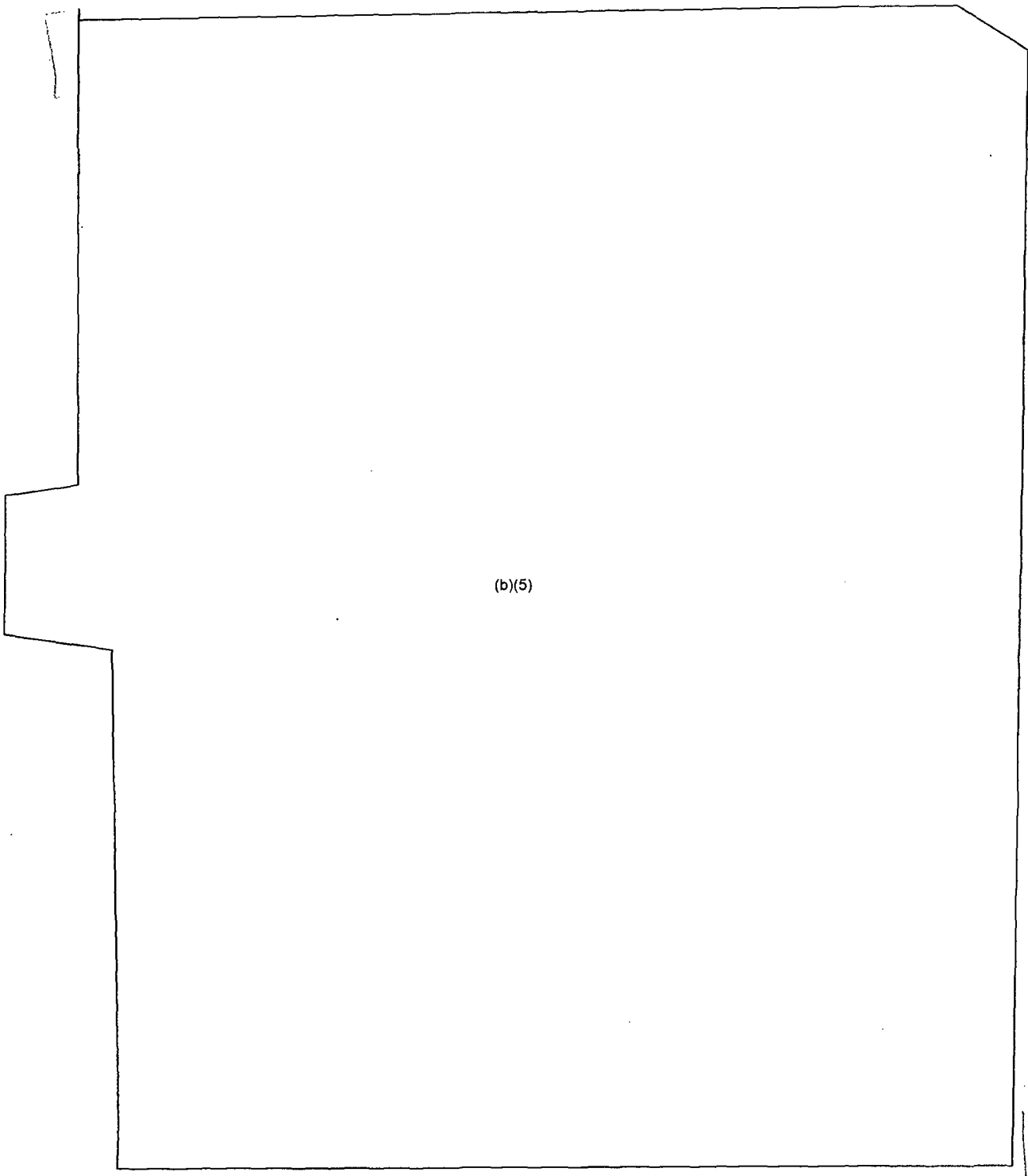
Again, great issue,
CJ

From: ODriscoll, James
Sent: Wednesday, March 16, 2011 11:03 PM
To: Jackson, Christopher; Grady, Anne-Marie
Subject: Proposed RAI on 6.2.4 for US-APWR Other Defined basis for GDC 56 lines from RWSP to suction of SI and CS/RHR

Chris,
Please see the proposed RAI below and comment.

(b)(5)

(b)(5)



(b)(5)

ODriscoll, James

Subject: Discuss credit for EPR secondary containment
Location: HQ-TWFN-10C02-15p

Start: Thu 3/24/2011 9:00 AM
End: Thu 3/24/2011 10:00 AM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: ODriscoll, James
Required Attendees: Hart, Michelle; Jackson, Christopher; Grady, Anne-Marie
Resources: HQ-TWFN-10C02-15p



Meeting to discuss
EPR seconda...

Please see attached. Chris asked me to set this up. Response to outstanding RAIs may affect EPR 6.5.1, 6.2.3 and 6.2.6 sections.

ODriscoll, James

From: ODriscoll, James
Sent: Tuesday, March 15, 2011 3:59 PM
To: Grady, Anne-Marie; Hart, Michelle; Jackson, Christopher
Subject: Meeting to discuss EPR secondary containment
Attachments: Possible revisit issue related to RAI 233 Question 6.5.3-1

Ann-Marie/Michelle,

Chris asked me to schedule a meeting to discuss the issue related to the attached email. I'm in all week except Wed. Please let me know your availability and I'll schedule a time.

Thanks,
Jim

ODriscoll, James

From: ODriscoll, James
Sent: Friday, March 11, 2011 12:18 PM
To: Jackson, Christopher; Hart, Michelle; Grady, Anne-Marie
Subject: Possible revisit issue related to RAI 233 Question 6.5.3-1
Attachments: FW: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1

Michelle/Chris,

The status of what constitutes secondary containment is unclear to me. We may have to re-visit what is credited for secondary containment bypass leakage. Please read below.

(b)(5)

ODriscoll, James

From: ODriscoll, James
Sent: Saturday, September 19, 2009 1:41 PM
To: 'Martin Bowling'; Hayes(NRO), Michelle
Cc: Ted Delgazio; Zoltan Rosztoczy; Karen Hall; Hart, Michelle; Chien, Nan; Jackson, Christopher
Subject: FW: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1
Attachments: RAI 233 Supplement 1 US EPR DC.pdf; image001.gif

Martin

Attached is the remaining portions of RAI 6.5.1-1 and 6.5.3-1. AREVA stated that they will not change the FSAR to include any of this information. As we discussed on 7/13/09, please review the complete response and update the TER. Please advise what if any information should be included in the DCD. Please let me know if you have any questions.

Thanks,



Jim O'Driscoll
Reactor Systems Engineer
US Nuclear Regulatory Commission
NRO/DSRA/SPCV
Room: T-10E41
Mail Stop T-10E50M
Email: James.ODriscoll@nrc.gov
Office: (301) 415-1325
Facsimile: (301) 415-5062

From: WELLS Russell D (AREVA NP INC) [<mailto:Russell.Wells@areva.com>]
Sent: Tuesday, September 01, 2009 10:44 AM
To: Tesfaye, Getachew
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch 6, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided responses to portions of 2 of the 4 questions of RAI No. 233 on July 10, 2009. The attached file, "RAI 233 Supplement 1 Response US EPR DC.pdf" provides technically correct responses to portions of 2 of the remaining 4 questions, as committed.

The following table indicates the respective pages in the response document, "RAI 233 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.05.01-1	2	4
RAI 233 — 06.05.03-1	5	5

The schedule for providing technically correct and complete responses to the remaining 2 questions is unchanged and is provided below:

Question #	Response Date
------------	---------------

RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009

Sincerely,

(Russ Wells on behalf of)

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification

New Plants Deployment

AREVA NP, Inc.

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: (b)(6)

From: Pederson Ronda M (AREVA NP INC)

Sent: Friday, July 10, 2009 9:54 AM

To: 'Tesfaye, Getachew'

Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); GUCWA Len T (EXT)

Subject: Response to U.S. EPR Design Certification Application RAI No. 233, FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 233 Response US EPR DC.pdf" provides responses to portions of 2 of the 4 questions.

The following table indicates the respective pages in the response document, "RAI 233 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 233 — 06.02.02-29	2	2
RAI 233 — 06.02.02-30	3	5
RAI 233 — 06.05.01-1	6	7
RAI 233 — 06.05.03-1	8	8

A complete answer is not provided for the 4 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 233 — 06.02.02-29	December 18, 2009
RAI 233 — 06.02.02-30	December 18, 2009
RAI 233 — 06.05.01-1 (Parts 2, 4, and 5)	September 3, 2009
RAI 233 — 06.05.03-1 (Part d)	September 3, 2009

Sincerely,

Ronda Pederson

ronda.pederson@areva.com

Licensing Manager, U.S. EPR Design Certification

AREVA NP Inc.

An AREVA and Siemens company

3315 Old Forest Road

Lynchburg, VA 24506-0935

Phone: 434-832-3694

Cell: (b)(6)

From: Tesfaye, Getachew [<mailto:Getachew.Tesfaye@nrc.gov>]

Sent: Friday, June 12, 2009 5:18 PM

To: ZZ-DL-A-USEPR-DL

Cc: Ashley, Clinton; ODriscoll, James; Jackson, Christopher; Carneal, Jason; Colaccino, Joseph; ArevaEPRDCPEm Resource

Subject: U.S. EPR Design Certification Application RAI No. 233 (2857, 2872,2873), FSAR Ch. 6

(b)(5)

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

From: [Rivera-Varona, Aida](#)
To: [NRO SES Distribution](#); [Araguas, Christian](#); [Clark, Theresa](#); [Erwin, Kenneth](#); [Holmes, Beverly](#); [Lauron, Carolyn](#); [McGovern, Denise](#); [Snyder, Amy](#); [Tello, Linda](#); [NRQWebServices Resource](#); [Peralta, Juan](#); [Junge, Michael](#); [Kowal, Mark](#); [Frye, Timothy](#); [Rasmussen, Richard](#); [Roach, Edward](#); [Beardslev, James](#)
Cc: [Tappert, John](#); [Shuaibi, Mohammed](#); [Lockhart, Denise](#); [Montgomery, Shandeth](#); [Rivera-Varona, Aida](#)
Subject: DCIP Weekly Update (Week of March 28, 2011)
Date: Friday, March 25, 2011 11:59:10 AM
Attachments: [DCIP Weekly Update March 28 2011.docx](#)

All,

DCIP's weekly update is attached for your information.

Please contact me if you have any questions.

Regards,

Aida

Aida Rivera-Varona

Technical Assistant

Division of Construction Inspection
and Operational Programs

Office of New Reactors

 301-415-4001 |  Aida.Rivera-Varona@nrc.gov

DCIP WEEKLY UPDATE
Week of March 28, 2011

Significant Meetings

- Mar 28: SES pre-retreat meeting
- Mar 29: Periodic with Fred Brown
- Mar 29: DCIP All-Hands Meeting
- Mar 29: Commission Meeting: Briefing on Small Modular Reactors
- Mar 29: Conference call with DCI to discuss MOX Violation Denial w/Victor
- Mar 29: AIA Lessons Learned Meeting
- Mar 30 – 31: SES Retreat
- Mar 30: Safety Culture Steering Committee Meeting
- Mar 30: Public meeting with Luminant on Risk Informed Tech Specs (CTSB)
- Mar 31: CIP Category III Public Workshop

Significant Activities

- Staff supporting OGC on Levy COLA appeal on LLRW contentions: LLRW onsite long-term storage (CHPB)
- Staff working with DNRL to resolve STP Ch 12.2 open item (CHPB)

Prior Week Accomplishments

- Conducted DCIP's Skill Gap Quarterly Meeting
- Conducted Telecon with AREVA to discuss EPR Instrumentation & Electrical System RAI responses (CTSB).
- Public Meeting with MHI to discuss APWR Instrumentation System RAI responses (CTSB)
- Completed Chapter Day for Levy NPP COLA SER Chapter 12, Radiation Protection (CHPB)

From: [Chokshi, Nilesh](#)
To: [Flanders, Scott](#)
Subject: Re:
Date: Friday, March 25, 2011 3:54:30 PM

I agree with you. (b)(5)

Sent from NRC Blackberry
Nilesh

(b)(6)

From: Flanders, Scott
To: Chokshi, Nilesh
Sent: Fri Mar 25 08:44:12 2011
Subject:

(b)(5)

Scott

From: Rosales-Cooper, Cindy
To: Flanders, Scott; McPherson, DeNedra
Subject: Re: OIP SPO Follow-up
Date: Friday, March 25, 2011 2:37:48 PM

Scott,
I agree.

(b)(5)

Cindy

From: Flanders, Scott
To: McPherson, DeNedra
Cc: Rosales-Cooper, Cindy
Sent: Fri Mar 25 14:11:56 2011
Subject: RE: OIP SPO Follow-up

(b)(5)

Cindy, since we have not met with OIP and RES yet the comment may be premature.
Your thoughts?

Scott

From: McPherson, DeNedra
Sent: Friday, March 25, 2011 1:26 PM
To: Flanders, Scott
Cc: Rosales-Cooper, Cindy
Subject: OIP SPO Follow-up
Importance: High

Scott,
Do you still plan to provide input for the OIP SPO assessment?

DeNedra

From: McPherson, DeNedra
Sent: Friday, March 25, 2011 6:26 AM
To: NRO_Division_Directors; NRO_Deputy_Division_Directors
Cc: Johnson, Michael; Holahan, Gary; NRO_TA; Murphy, Jerome; Dehn, Janine; Usilton, William; Bouling, Ramona
Subject: Follow-up - FY-11 Midyear SPO Assessments of Other Offices
Importance: High

As follow-up to yesterday afternoon's discussion regarding NRO's FY-11 midyear SPO assessments of other offices, please provide me with any additional comments by 12:00 p.m. today.

Thanks,

DeNedra

From: McPherson, DeNedra

Sent: Tuesday, March 22, 2011 4:34 PM

To: Johnson, Michael; Holahan, Gary; NRO_Division_Directors; NRO_Deputy_Division_Directors

Cc: NRO_TA; Murphy, Jerome; Usilton, William; Dehn, Janine; Bouling, Ramona; Lee, Samuel

Subject: Draft NRO FY-11 Midyear SPO Assessments of Other Offices

Importance: High

(b)(5)

DeNedra

From: Flanders, Scott
To: Akstulewicz, Frank; Colaccino, Joseph
Subject: FW: Calvert Cliffs Work Description (UNCLASSIFIED)
Date: Friday, March 25, 2011 11:50:00 AM

FYI, [redacted] (b)(5)

Scott

-----Original Message-----

From: Quinn, Laura
Sent: Friday, March 25, 2011 9:05 AM
To: Flanders, Scott; Fetter, Allen
Subject: FW: Calvert Cliffs Work Description (UNCLASSIFIED)

[redacted] (b)(5) See
below.
Laura

From: Anderson, Kathy NAB [redacted] (b)(6)
Sent: Friday, March 25, 2011 7:26 AM
To: Lutchenkov, Dimitri
Cc: Francis, Woody NAB; Quinn, Laura; Burkman, Jim; eghigiarelli@mde.state.md.us; rtabisz@mde.state.md.us; asigillito@mde.state.md.us
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri,

No, that is why I am requesting clean sheets without the handwritten orange notes.

We need one set of plans with the notations incorporated into the plans (text box or something) so that the basis for our decision is fully understood. It will be confusing to the public if MDE and the Corps made decisions on two different sets of plans.

A text box explaining MDE dimensions and Corps dimensions would be helpful. Please look at Figure 3C. See channelward extent 95 feet - encircled. The note states "was 115 feet on USACE 3B". Does this mean the channelward extent was reduced; further defined; or measured from two different reference points? The Corps plans can change. We do not have a problem with breaking down plans from page 3 to pages 3A, 3B, 3C, 3D. Any plans that were added to the MDE package must be incorporated into the Corps package; they should be the same plans for the proposed tidal and nontidal impacts.

If you need further clarification, please let me know as soon as possible.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District
Operations Division, Regulatory Branch
(410) 962-5690

(410) 962-6001(fax)

(b)(6)

<http://www.nab.usace.army.mil/Regulatory/index.html>
<http://www.facebook.com/USACEBaltimore>

-----Original Message-----

From: Lutchenkov, Dimitri [mailto:dimitri.lutchenkov@unistarnuclear.com]
Sent: Thursday, March 24, 2011 3:09 PM
To: Anderson, Kathy NAB; Francis, Woody NAB
Cc: 'Burkman, Jim'
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)

(b)(5)

Regards,
Dimitri Lutchenkov
UniStar Nuclear Energy
410-470-5524 | (m) (b)(6)

-----Original Message-----

From: Anderson, Kathy NAB [mailto:(b)(6)]
Sent: Thursday, March 24, 2011 12:59 PM
To: Lutchenkov, Dimitri; Burkman, Jim
Cc: Francis, Woody NAB; Laura.Quinn@nrc.gov
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri and Jim,

We are going through the plan pages included in the information Dimitri handed to me yesterday. Instead of us spending hours trying to figure out all of the notations and substitutions, can you please e-mail to us (and NRC) and/or hand deliver a CD with one clean set of final plans that we would use in our permit decision review.

Also, please see attached draft for the final review work description. Confirm the changes, address the comments and add a notation for the plan sheets that cover the work described for each project element.

In the meantime, we are working on the other tasks.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District Operations Division,
Regulatory Branch
(410) 962-5690
(410) 962-6001(fax)
(b)(6)

<http://www.nab.usace.army.mil/Regulatory/index.html>
<http://www.facebook.com/USACEBaltimore>

-----Original Message-----

From: Anderson, Kathy NAB
Sent: Thursday, March 24, 2011 11:56 AM
To: 'Lutchenkov, Dimitri'; 'Burkman, Jim'
Cc: Francis, Woody NAB
Subject: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri and Jim,

In reviewing the documents you provided and the modified work description, please confirm that dredging for the fish return is now 100 cubic yards, not the 500 cubic yards that was stated in the Corps PN.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District Operations Division,
Regulatory Branch
(410) 962-5690
(410) 962-6001(fax)

(b)(6)

<http://www.nab.usace.army.mil/Regulatory/index.html>
<http://www.facebook.com/USACEBaltimore>

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

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Classification: UNCLASSIFIED
Caveats: NONE

From: Fetter, Allen
To: Quinn, Laura; Flanders, Scott
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)
Date: Friday, March 25, 2011 9:32:19 AM

Thanks for the update Laura. I suppose that the earliest might be sometime next week.

-----Original Message-----

From: Quinn, Laura
Sent: Friday, March 25, 2011 9:05 AM
To: Flanders, Scott; Fetter, Allen
Subject: FW: Calvert Cliffs Work Description (UNCLASSIFIED)

[REDACTED] (b)(5) See
below.
Laura

From: Anderson, Kathy NAB [REDACTED] (b)(6)
Sent: Friday, March 25, 2011 7:26 AM
To: Lutchenkov, Dimitri
Cc: Francis, Woody NAB; Quinn, Laura; Burkman, Jim; eghigiarelli@mde.state.md.us; rtabisz@mde.state.md.us; asigillito@mde.state.md.us
Subject: RE: Calvert Cliffs Work Description (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Dimitri,

No, that is why I am requesting clean sheets without the handwritten orange notes.

We need one set of plans with the notations incorporated into the plans (text box or something) so that the basis for our decision is fully understood. It will be confusing to the public if MDE and the Corps made decisions on two different sets of plans.

A text box explaining MDE dimensions and Corps dimensions would be helpful. Please look at Figure 3C. See channelward extent 95 feet - encircled. The note states "was 115 feet on USACE 3B". Does this mean the channelward extent was reduced; further defined; or measured from two different reference points? The Corps plans can change. We do not have a problem with breaking down plans from page 3 to pages 3A, 3B, 3C, 3D. Any plans that were added to the MDE package must be incorporated into the Corps package; they should be the same plans for the proposed tidal and nontidal impacts.

If you need further clarification, please let me know as soon as possible.

Thank you,
Kathy B. Anderson
Chief, Maryland Section Southern
U.S. Army Corps of Engineers, Baltimore District
Operations Division, Regulatory Branch
(410) 962-5690
(410) 962-6001(fax)

[REDACTED] (b)(6)

From: [Flanders, Scott](#)
To: [Lauron, Carolyn](#)
Subject: Acting for Gary
Date: Friday, March 25, 2011 10:52:00 AM

Carolyn, FYI I will be acting for Gary for 3 months, effective Monday. Brent will act for me next week and of course Nilesch for the remainder of the time. Nilesch and I will decide which BC to rotate in.

Scott

From: [Ellis, Twana](#)
To: [NRO SES Distribution](#); [NRO DE Distribution](#)
Cc: [Rivera-Varona, Aida](#); [Lockhart, Denise](#)
Subject: FW: DE Work Plan of the Week - 03/28
Date: Friday, March 25, 2011 11:01:29 AM
Attachments: [DE Work Plan 3 28 11.pdf](#)

The plan is also located:

<http://nroweb1.nrc.gov/NRO/nrooffice/dehome/docs/plan-of-the-week.pdf>

*Twana Ellis
Management Analyst
U.S. Nuclear Regulatory Commission
Office of New Reactors
Division of Engineering
Office: T-10E3
Ph: 301-415-1107
Fax: 301-415-5074
twana.ellis@nrc.gov*

DE Work Plan — Week of March 28, 2011

SIGNIFICANT ACTIVITIES

03/28 Briefing - Request: 10 CFR 50.55a Regulatory Basis
03/28 Front Office Briefing on Licensing of I&C
03/28 SES Retreat pre-meeting
03/28 AIA Lessons Learned Briefing Slide Review
03/28 STP Chapter 10 ACRS dry-run
03/29 ACRS Cyber Security Discussion
03/29 Commission Meeting: Briefing on Small Modular Reactors
03/29 Weekly ARP/DSRA/DE Interface Meeting
03/29 Public Meeting with MHI on status of GSI-191 closure for US-APWR
03/30 Monthly Civil Engineering Counterpart Call with DSER and Reg I
03/30 Design Centered Project Performance Meeting
03/30 SES Retreat
03/30 mPower I&C Set Point Methodology - Public Meeting with B&W
03/30 NRR/NRO I&C Technical Consistency Meeting
03/30 NRC Conference Call with STP on Ch 6/LTC ACRS Action Items Resolution
03/31 Public meeting with MHI on US-APWR Sections 3.7 and 3.8 to discuss path forward for the seismic analysis
03/31 Weekly Conference Call with MHI on I&C
03/31 BWR Supervisors Meeting
03/31 Meeting on the Applicability of ASME Section III for iPWRs

ACTIONS THAT MUST BE COMPLETED THIS WEEK

- Provide comments on Draft NUREG/CR-XXX, "Ultrasonic Testing of Cast Austenitic Stainless Steel Pressurizer Surge Line Piping Welds" – due to DE FO 4/1/11.
- Review and concur on FSER for AP1000 DCA Chapter 9

PRIOR WEEK ACCOMPLISHMENTS

- Completed and concurred on a closure memo for YT-2011-0032 on review of draft NUREG/CR-XXXX, "Investigation of Stress-Corrosion Cracking in Nickel-Based Alloys."
- Conducted in Technology Neutral Framework for Performance-Based and Risk-Informed Approaches for Structural and Seismic Safety Reviews.
- Reviewed and concurred on FSER for AP1000 DCA Chapter 23.
- Reviewed and commented on ANSI and NIST draft final report for recommendations for future developments in Concrete Codes and Standards for NPP.
- Reviewed and closed remaining confirmatory items for TR 85 and Section 3.8 for AP1000 DCA review.
- Worked collaboratively with WEC to develop AP1000 DCD parameters for the seismic joint filler between the nuclear island and adjacent structures. Issue is resolved.
- Staff supported Operations Center and engineering analysis activities in response to events in Japan.
- Completed coordination of cyber security activities between NRO, NRR, and NSIR.
- Completed STP Briefing to NRO Office Director and Deputy Director on Status of Section 3.7 and 3.8.
- Participated in the ARP Review Approach Working Group Meeting.
- Participated in the ITAAC Strategy Documents coordination meeting.
- Participated in the telecom with MHI on staff review of the MHI reports on USAPWR piping and components environmental fatigue analysis.
- Participated in mPower meeting on Control Rod Drive Mechanism Design and Development.
- Held weekly RES/NRO Advanced Reactor Meeting/Conference Call.
- Held Public telecon with AREVA NP on Sections 7.2 and 7.3 and Protection System Technical Report.
- Held DE All Hands meeting.
- Held weekly conference call with MHI on I&C and structural/seismic review issues.

From: Chokshi, Nilesh
To: Bauchi, Goutam; Flanders, Scott
Subject: (b)(6)
Date: Friday, March 25, 2011 7:44:41 AM

Sent from NRC Blackberry
Nilesh

(b)(6)

From: Mayfield, Michael
To: Chokshi, Nilesh; Murphy, Andrew
Sent: Thu Mar 24 17:07:34 2011
Subject: (b)(6)

(b)(6)

From: Mayfield, Michael
Sent: Thursday, March 24, 2011 5:05 PM
To: Cohen, Miriam; Tracy, Glenn
Cc: Leeds, Eric; Doane, Margaret
Subject: (b)(6)

(b)(5)

Please let me know if there is anything I can do to help on this.

Mike

From: Snyder, Amy
To: Matthews, David; Bergman, Thomas; Madden, Patrick; Johnson, Michael; Holahan, Gary; Tracy, Glenn; Tappert, John; Flanders, Scott; Chokshi, Nilesh; Santos, Cavetano; Mayfield, Michael; Dudes, Laura; Gusack, Barbara; Ader, Charles; Akstulewicz, Frank; Reckley, William; McKenna, Eileen; Colaccino, Joseph; Zabler, Marian; Williams, Donna; Cruz, Jeffrey; Barss, Dan; Burnell, Scott; Shams, Mohamed; Tardiff, Al; Shropshire, Alan; Roundtree, Amy; Schnetzler, Bonnie; Vaughn, James; Lee, Peter; Prescott, Peter; Williams, Vince; Smith, Will; Fretz, Robert; Snyder, Amy; NRO TA; Burton, William; Jasinski, Robert; Hamzehee, Hossein; Williams, Kevin; Hawkins, Kimberly; Bloom, Steven; Tonacci, Mark; Magruder, Stewart; Erwin, Kenneth; Hodgdon, Ann; "DAVID MATTHEWS"; Sanfilippo, Nathan; McCoppin, Michael; Bowling, Ramona; Lombard, Mark; Dias, Antonio; Montgomery, Shandeth; Huyck, Doug; Greene, LaTosha; Henderson, Mable; Lockhart, Denise
Cc: Flanders, Rhea; Zaki, Tarek; Basu, Sudhamay
Subject: NRO/DNRLSig Meetings/Actions/Items of Interest for the Wk of Mar 28, 2011 - Internal Use Only
Date: Friday, March 25, 2011 9:23:07 AM
Attachments: 3-28-11.docx
Importance: High

Hi Everyone,

Please see attached information regarding NRO/DNRL significant meetings, actions that DNRL must accomplish, and items of interest for the week of Mar 28, 2011. This information is for internal use only.

If you have any questions or if you have changes, please contact me (415-6822).

Best²,

Amy

~~— FOR INTERNAL USE ONLY —~~

DNRL Significant Meetings and Items of Interest for the Week of March 28, 2011

Significant Meetings Scheduled for the Week of March 28, 2011:

- Mar 28: NRO SES Status Meeting
- Mar 28: DNRL SES Weekly Planning Session
- Mar 28: Infrastructure & Policy BC Weekly Meeting
- Mar 28: AP1000 Status Meeting (Gary's Office)
- Mar 28: Status of the Draft of Vogtle and Summer COLA
- Mar 28: Westinghouse call - status update
- Mar 28: SES Retreat pre-meeting- EEB 01B13
- Mar 29: MHI Drop In
- Mar 29: Operational Effectiveness Team (OET) Meeting
- Mar 29: TAC Management Meeting
- Mar 29: USAPWR Projects Contract Funds Review
- Mar 29: DNRL Staff Meeting
- Mar 29: Program Meeting: Follow-up Pre-retreat Discussion for Session 2: Organizational Structure-SES only
- Mar 29: AIA Lessons Learned
- Mar 30: OGC/NRO Interactions w/Marian Zobler
- Mar 30: No Design Center Project Performance Meeting – SES Retreat
- Mar 30: No Call in Meeting w/Westinghouse- SES Retreat
- Mar 30: No Forum on Communication and Coordination- SES Retreat
- Mar 31: No NRO SES Status Meeting- SES Retreat
- Mar 31: No Program Performance Advisory Committee Meeting (PPAC)- SES Retreat
- Mar 31: No Westinghouse call – status- SES Retreat
- Mar 31: No Human Capital Forum- SES Retreat

Items That Must Be Completed This Week are identified below in red:

- Mar 28: Complete Environmental Scan presentation for SES Retreat
- Mar 29: WITS Item 200900151, Updating of Exhibit 300 Information (Konzman)
- Mar 30: YT-2011-0042 - Review and Comments on Management Directive and Handbook 3.7, "NUREG-SERIES PUBLICATIONS"
- Mar 30: SECY-2011-0092- STAFF REQUIREMENTS SECY-10-0117 PROPOSED RULE: REQUIREMENTS FOR MAINTENANCE OF INSPECTIONS, TESTS, ANALYSES, AND ACCEPTANCE CRITERIA (RIN 3150-AI77) [Burton]
- Mar 30: FY 2013 New Reactors Business Line Target Output Measures- FY12 fact of life and FY13 Output Measures Updates- due to PMDA [Erwin/Snyder]
- Mar 30: Review and Comment. OEDO Procedure 510- comments due to NRO FO [Snyder/Erwin]
- Mar 31: Pre-trip Report- Nice, France [Akstulewicz]
- Mar 31: RIC Thank you letter to DNRL FO [Snyder]
- Mar 31: RIC Q&As to DNRL FO [Snyder]
- Mar 31: Provide Schedule information to ACRS as requested on ACRS letter date needs
- Apr 01: Monthly Report to Commission [Snyder]
Mar 28: due to NRO FO
- April 01: Update Status reports for licensing reviews on NRO internal Web site [Snyder]
- April 01: Pre-Trip Report Paris, France- 1 NWE2 Staff member [McKenna]

~~— FOR INTERNAL USE ONLY —~~

Items That Must Be Completed- Look Ahead

- Apr 01-29: Supervisors meet with GG employees to conduct mid-year review discussions
- Apr 02: Liverpool, England- 2 NWE1 staff members[McKenna]
- Apr 02: France, NARP [Colaccino]
- Apr 03: Provide answers to unanswered RIC Q&As from technical session IOUs for posting on NRC web [Snyder/Matthews]
- Apr 08: WITS 201100114/EDATS: SECY-2011-0135 - 03/08/11 SRM re SECY-11-0006 - Proposed Rule - Economic Simplified Boiling-Water Reactor Design Certification (ML110670047) [Tonacci/Cubbage]
April 5: Due to DNRL FO
- Apr 08: SES Mid-year Performance Input to Donna [Snyder/Erwin]
- Apr 14: G20110201/LTR-11-0135/EDATS: SECY-2011-0159 – Water Management and Environmental Reviews Submitted on North Anna 3 Project (DSER lead/DNRL support) [H.Hamzehee]
Apr 08: Due to NRO Front Office
Apr 05: Due to DNRL Front Office
- Apr 17: Review of Selected Chapters of the US EPR DCD and Calvert Cliffs RCOL SER with Open items STP COLA - ACRS review of SER with no open items and long-term core cooling approach: Documents due to ACRS [Colaccino]
- Apr 22: YT-2011-0048 All Divisions -- FW: Inventory Certification Guidelines
- Apr 29: WITS 200700359 / EDATS: OEDO-2007-0625 - Quarterly Report on New Reactors Procurement Activity [Fretz]
- May 02: Green Ticket for NRR - G20110180- Briefing Package for Meeting with Progress Energy on May 9, 2011 (NRO maybe asked to provide input to NRR)
- May 05: BCs notify DNRL Front Office of completion of their midyear reviews
- May 09: DNRL Front Office sends email to PMDA/HCMC certifying completion of midyear reviews for GG employees
- May 31: Federal Acquisition Certification and Training Program-active PMs must complete the updated training requirements [DNRL BCs]
- Jun 06: WITS 201100042: Submit an updated Annual Security Control Test (ASCT) for the Enterprise Project Management System to the Chief Information Security Office (CISO) - memo due to NRO FO

Items of Interest:

- Mar 30-31: SES Retreat- Baltimore
- Apr 01: Submit budget summaries to OCFO/OEDO (include Scenario A, as appropriate)
- Mar 28: The staff will conduct a Category 1 meeting to discuss responses to RAIs for Fermi 3 Project environmental review. NRC Headquarters. 2:00 p.m. – 3:00 p.m. (Contact: Bruce Olson).
- Mar 29 and 31: The staff will hold a Category 1 meeting to discuss resolution of issues to support the safety review of Southern Nuclear Operating Company's application for Vogtle Units 3 and 4. NRC Headquarters. 9:00 a.m. – 10:00 a.m., 3/29; 2:00 p.m. – 3:00 p.m., 3/31. (Contact: Ravindra Joshi).
- Mar 29: The staff will hold a Category 1 meeting to discuss remaining issues associated with the U.S. – APWR containment sump strainer design. Room: T-2-B1. 8:00 a.m. – 4:00 p.m. (Contact: Ruth Reyes).
- Mar 30: The staff will conduct a Category 1 meeting to discuss proposal to use risk managed technical specifications as part of the Comanche Peak Nuclear Power Plant COL application. Room: T-2-B3. 8:00 a.m. – 12:00 noon. (Contact: Tarun Roy).
- Mar 30: The staff will conduct a Category 1 meeting to discuss resolution of open items and outstanding RAI responses to support the safety review of Nuclear Innovation North America, LLC application. NRC Headquarters. 9:00 a.m. – 10:30 a.m. (Contact: Michael Eudy).
- Mar 30: The staff will hold a Category 1 meeting to discuss questions related to the Babcock and Wilcox Instrument Set Point Methodology Topical Report. Room: T-10-C2. 1:00 p.m. – 4:00 p.m. (Contact: Jan Mazza).
- Mar 31: The staff will conduct a Category 1 meeting to discuss proposal to seismic analysis and containment design, Design Control Document, Section 3.7 and Section 3.8, as part of the U.S. – APWR Nuclear Power Plant COL application. Room: T-2-B3. 8:30 a.m. – 5:00 p.m. OGC staff also will participate. (Contact: Dennis Galvin).
- Mar 31: The staff will hold a Category 3 meeting to discuss the Construction Inspection Program. TWFN Auditorium. 8:30 a.m. – 3:15 p.m. The staffs of NRR, NSIR, and all four regional offices also will participate. (Calvin Cheung).

<http://nroweb1.nrc.gov/DEVELOPMENT/DNRL/hot-topics.pdf>

From: Araguas, Christian
To: Araguas, Christian; Dorman, Dan; Hanev, Catherine; NMSS TA; Holahan, Gary; Johnson, Michael; NRO Deputy Division Directors; NRO Division Directors; NRO TA; Boger, Bruce; Grobe, Jack; Leeds, Eric; Wertz, Trent; Correia, Richard; Diec, David; Dudek, Michael; Layton, Michael; McDermott, Brian; Miller, Chris; Shropshire, Alan; Wiggins, Jim; Burns, Stephen; Jones, Bradley; Zabler, Marian; Armstrong, Kenneth; Coe, Doug; Gibson, Kathy; Hudson, Daniel; Lui, Christiana; Santiago, Patricia; Sheron, Brian; Uhle, Jennifer; Sanfilippo, Nathan; Zaki, Tarek; Basu, Sudhamay; Scott, Michael; Montgomery, Shandeth; Raione, Richard; Tiruneh, Nebiyu; Vrahoretis, Susan; Kirkwood, Sara; Roach, Edward; NRO DSRA Branch Chiefs; Schmidt, Jeffrey; Caruso, Mark; Landry, Ralph; Dube, Donald; Rasmussen, Richard; Peralta, Juan; Kowal, Mark; Beardsley, James; Junge, Michael; Coffin, Stephanie; Giacinto, Joseph; Cozens, Ian; Ray, Neil; Weber, Carl; Norato, Michael; Wright, Lisa (Gibney); Lockhart, Denise
Cc: Magruder, Stewart; Reckley, William; Mayfield, Michael; NRO ARP ARB2 Distribution; NRO ARP ARB1 Distribution
Subject: Advanced Reactor Program (ARP) Weekly Update- Week of March 28, 2011.
Date: Friday, March 25, 2011 5:27:07 PM
Attachments: ARP Internal Stakeholder Weekly Update.docx

All,

Attached is the list of upcoming internal / external meetings related to advanced reactors. In an effort to keep our internal stakeholders informed of upcoming advanced reactor activities, this document will be sent weekly. Please let me know if you would like to be removed from the list or if I should be including anyone else. Thanks.

For those that are interested, this document will be located on the Advanced Reactor Sharepoint site at the link provided below,
<http://epm.nrc.gov/Licensing/Advanced%20Reactor%20Program/default.aspx>. You should see the file under the links section on the right hand column.

Christian Araguas
Technical Assistant
Advanced Reactor Program
Office of New Reactors

ARP WEEKLY UPDATE
Week of March 28, 2011

Significant Meetings in CY 2011

Internal Meetings:

- ARP All Hands Meeting March 28, 2011
- Commission Meeting on SMRs March 29, 2011
- ACRS Full Committee Meeting on Emergency Planning for SMRs April 7, 2011

Periodic Meetings:

- NRC/NEI SMR Periodic Workshop April 20, 2011
- NRC/NEI SMR Periodic Workshop May 25, 2011
- NRC/NEI SMR Periodic Workshop July 13, 2011

iPWR Meetings:

- mPower Meetings
 - IST Facility and Test Plan / Design Basis LOCA PIRT Insights/Results April 19, 2011
 - ECCS Design / Fuel Assembly Mechanical Design June 21, 2011
- NuScale Meetings

NGNP Meetings:

LMR Meetings:

Conferences:

- Building the Value Chain for Commercializing SMRs (Infocast/Washington DC) March 30-31, 2011
- International Framework for Nuclear Cooperation April 19-21, 2011
- 1st Annual SMR Conference – Organized by Nuclear Energy Insider April 19-20, 2011
- ICAPP Meeting (ANS/Nice, France) May 2-5, 2011
- Platts SMR Conference May 23-24, 2011

Significant Activities

From: HSToday Magazine
To: Flanders, Scott
Subject: Homeland Security Today Annual Renewal
Date: Friday, March 25, 2011 10:26:19 AM

Dear SCOTT,

This is a reminder that we need you to renew your subscription to continue receiving **HSToday** magazine free of charge for another year.

It only takes a few minutes to reconfirm your information as required annually by our audit bureau.

Renew now and you will also receive 5 issues of our newest publication **National Guard Today!** **National Guard Today** provides a new and insightful look at the roles, missions and capabilities of the US National Guard, including its relations with Congress, the Department of Defense and the states.

Don't miss an issue of **HSToday** or **National Guard Today**.

To proceed:

1) Click on or copy and paste the link below to your internet browser to display the name and address we have on file for you.

[https://sfsdata.com/wsfs/HSSubscribe.aspx?
RKEY=QR02&CUSTID=10652369&HEADER=ON](https://sfsdata.com/wsfs/HSSubscribe.aspx?RKEY=QR02&CUSTID=10652369&HEADER=ON)

2) Make any changes as appropriate and complete the short questionnaire.

3) Hit submit

It's that easy! This is the last time we will ask you to do this until next year if you respond now. Thank you for your continued interest in **HSToday** magazine.

Kimberley "Kim" S. Hanson-Brown
Publisher

From: Sanfilippo, Nathan
To: Leeds, Eric; Johnson, Michael; Wiggins, Jim; Moore, Scott; Haney, Catherine; Sheron, Brian; Burns, Stephen; Dean, Bill; McCree, Victor; Satorius, Mark; Collins, Elmo; Zimmerman, Roy
Cc: Grobe, Jack; Holahan, Gary; Miller, Charles; Virgilio, Martin
Subject: Monday's telecon to discuss the draft task force charter
Date: Friday, March 25, 2011 4:16:11 PM
Importance: High

All,

I just wanted to give you a little background for the scheduler you received for a Monday 4 PM teleconference.

The senior level agency task force to evaluate the need for agency actions following the events in Japan has been formed. It will be led by Charlie Miller, and includes Gary Holahan, Jack Grobe, and myself. The task force is writing its charter and will have a draft ready around lunchtime on Monday. We intend to send you that draft so it can be discussed at the 4 PM teleconference, at which time feedback is welcome. We realize this is a short turnaround, but we wanted to involve you as we finalize the charter, get it approved, and get to work – as the clock is ticking.

Thanks for your support on Monday – and feel free to have someone else sit in on the call if you are not available.

Thanks,
Nathan

Nathan Sanfilippo

Executive Technical Assistant
Office of the Executive Director for Operations
U.S. Nuclear Regulatory Commission
301.415.3951
nathan.sanfilippo@nrc.gov

From: Ader, Charles
To: Johnson, Michael; Holahan, Garv
Cc: Schum, Constance; Segala, John; Lombard, Mark
Subject: NUCLEAR REGULATORY COMMISSION GRADUATE FELLOWSHIP PROGRAM SELECTIONS
Date: Friday, March 25, 2011 1:54:48 PM

I am sure you saw this, but two of the selections are NRO's very own, both from DSRA. Andy Bielen is in Joe Donoghue's branch and will be going for a PhD. We will lose him to RES. Suzanne Schroer is in Lynn's branch and will be completing a MS.

<http://www.internal.nrc.gov/announcements/yellow/2011/2011-036.html>

From: Sprogeris, Patricia on behalf of Johnson, Michael
To: Flanders, Scott; Kugler, Andrew; Whited, Ryan; Otto, Ngola; Hamzehee, Hossein; Robinson, Rasmey;
Konzman, Carl; Perez-Ortiz, Aracelis; Jenkins, Ronaldo; Bergman, Thomas
Subject: Length of Service/ Qual / Employee of the Month

When: Monday, March 28, 2011 9:30 AM-10:00 AM (GMT-05:00) Eastern Time (US & Canada).
Where: T-6A01

Note: The GMT offset above does not reflect daylight saving time adjustments.

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Length of Service:
Scott Flanders
Ronaldo Jenkins
Andrew Kugler

Qual:
Ngola Otto
Rasmey Robinson

Employee of the Month:
Aracelis Periz-Ortiz

Scheduled by Psprogeris 3/10/2011

From: Dent, Kimberly on behalf of DSERCAL Resource
To: NRO DSER Distribution
Cc: Bagchi, Goutam; Wang, Weijun; Chaput, Peter; Haque, Mohammad; Mussatti, Daniel; Fringer, John; Stieve, Alice; Brown, Maria; Tammara, Seshagiri; Palmrose, Donald; Candelario, LUISSETTE; Bieganousky, Wayne; Schaaf, Robert; Graizer, Vladimir; Quinn, Laura; Kuntzleman, Nancy; Ahn, Hosung; Hatchett, Gregory; McBride, Mark; Fetter, Allen; Sisk, David; Olson, Bruce; Whited, Ryan; Mazaika, Michael; Stirewalt, Gerry; Hart, Michelle; Doub, Peyton; Braden, Michael; Vokoun, Patricia; Jones, Henry; Xi, Zuhan; Clayton, Brent; Devlin, Stephanie; Brown, David; Hawkins, Gwendolyn; Emch, Richard; Terry, Tomeka; Karas, Rebecca; Nash, Harriet; Sutton, Mallecia
Subject: DSER All-Hands Meeting
Attachments: DSER All Hands Meeting Agenda 032011.doc

When: Monday, April 11, 2011 9:30 AM-11:30 AM (GMT-05:00) Eastern Time (US & Canada).
Where: Commissioner's Hearing Room

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

*Please note new day and time

Bridge Line: 800-857-9687
Passcode:

DSER All-Hands Meeting

Agenda

April 11, 2011

Time 9:30 - 11:30 a.m.

Location: Commissioner's Hearing Room

Staff Activity Code: ZG0000, "General Administration"

Managers, Supervisors, and Secretaries should continue to report time to ZM0000/ZS0000, respectively.

Time	Agenda Item
9:30 - 10:00	Introduction to New Employees Awards
10:00 - 10:15	Safety Culture
10:15 - 11:30	DSER Issues, Questions, and Concerns

From: [EATS Resource](#)
To: [Bergman, Thomas](#); [Ader, Charles](#); [Flanders, Scott](#); [Gusack, Barbara](#); [Matthews, David](#); [Mayfield, Michael](#); [Tracy, Glenn](#); [Lappin, Bob](#)
Cc: [Dudes, Laura](#); [Dixon-Herrity, Jennifer](#)
Subject: Weekly Lappin/NRO Division Directors Meeting, Incident# 508109

When: Wednesday, April 20, 2011 1:00 PM-2:30 PM (GMT-05:00) Eastern Time (US & Canada).
Where: TBD

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

New Incident # 508109 (April) required for metric reporting purposes for each month.

Weekly meeting between Bob Lappin and NRO Division Directors every Wednesday from 1 to 2:30 pm

From: Schofer, Fred
To: Ader, Charles; Bergman, Thomas; Correia, Richard; Dudes, Laura; Flanders, Scott; Matthews, David
Cc: Akstulewicz, Frank; Burton, William; Chokshi, Niles; Clark, Theresa; Hsia, Anthony; Layton, Michael; Madden, Patrick; McKirgan, John; Miller, Chris; Shuaibi, Mohammed; Tappert, John
Subject: New Plant Working Group (NPWG) Meeting (placeholder)

When: Wednesday, April 27, 2011 2:00 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: NEI Office at 1776 Eye St NW, Washington DC

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*

When: Wednesday, April 27, 2:00 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: NEI Office, 1776 I Street NW, Washington DC (near Farragut North Metro Stop - Red Line)

NRC discussion topics NPWG Category 3 public meeting / teleconference
4/27/2011, 2 PM - 4 PM
Meeting location: NEI Offices, Washington DC

Planning for meeting underway. Agenda will be finalized by 4/20/2011

Li, Yong

From: FSAFEDS@shps.com
Sent: Thursday, March 17, 2011 3:45 PM
To: Li, Yong; (b)(6)
Subject: Your FSAFEDS Claim Activity

(b)(6)

Claims Activity

Account Type	Service Type	Date(s) of Service	Amount Requested	Denied Amount	Denial Code	Pending Amount	Reimbursement Amount
(b)(6)							

Message Summary

Message Code	Description
(b)(6)	

Payment Summary

Total Reimbursement	Payment Number
(b)(6)	

For more information, go to www.FSAFEDS.com and click on My Account Summary near the top center of the page – log in and click on the "My Claims" button near the top left of the page to view additional details on the claim(s) that we processed. My Account Summary is always open and safeguards your personal information.

Have a question? Call an FSAFEDS Benefits Counselor at 1-877-FSAFEDS (372-3337), TTY: 1-800-952-0450, Monday through Friday, 9:00 a.m. until 9:00 p.m., Eastern Time, or contact us via email at FSAFEDS@shps.com.

REMINDER! FSAFEDS Claims Deadline is April 30, 2011 for the 2010 Benefit Period. Eligible expenses **MUST** have been incurred from 1/1/2010 through 3/15/2011. Expenses incurred after March 15, 2011 **CANNOT** be reimbursed from your 2010 account(s).

3/18/2011

National Laboratory monthly report on projects EX. 4

Harmful statement: if it was released to public, it can potentially expose the national laboratory accounting program information

Li, Yong

From: Williams, Wendy [wwilliams@bnl.gov]
Sent: Friday, March 18, 2011 4:27 PM
To: Daly, Jill; Chapman, Karen; Contracts POT; Fitz, Lynda; Gunther, William E; Hennigan, James; Higgins, James C; Hofmayer, Charles H; Julian, Maryann; Li, Yong; Mazza, Jan; Nguyen, John-Chau; NRO_MLSR Resource; Samanta, Pranab K; Tjader, Theodore; Vega, Frankie; Zalcmn, Barry
Subject: NRC Monthly Report for February 2011 - JCN Q-4017
Attachments: Chapman - JCN Q-4017.pdf

Wendy Williams
Brookhaven National Laboratory
Global and Regional Solutions Directorate
Business Operations
Building 179A
Upton, New York 11973
Phone: (631) 344-3924
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Upton, NY 11973-5000
Phone 631 344-3377
FAX 631 344-3021
loffredo@bnl.gov

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for the U.S. Department of Energy

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March 18, 2011

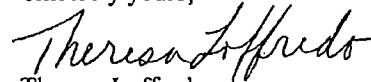
Mrs. Karen Chapman
Office of New Reactors
Division of New Reactor Licensing
Mail Stop T 9F29
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mrs. Chapman:

Attached is the electronic February monthly letter status report for JCN Q-4017 sponsored by your Division. Also included is the computerized budget summary for the program. Please review this information and notify the principal investigator if there are any discrepancies.

I hope this meets with your approval. If there are any questions regarding format, distribution, or budget reporting, please contact me at (631) 344-3377.

Sincerely yours,



Theresa Loffredo
Budget Administrator

TL/waw
Enclosures

c: L. Fitz, BNL
W. Gunther, BNL
J. Higgins, BNL
J. Hennigan, NRC
C. Hofmayer, BNL
M. Julian, BNL
Y. Li, NRC
J. Mazza, NRC

J.C. Nguyen, NRC
P. Samantha, BNL
T. R. Tjader, NRC
F. Vega, NRC
B. Zalcman, NRC
ContractsPOT.Resource@nrc.gov
NRO_MLSR@nrc.gov

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 1: BNL Technical Assistance in Project Management to Assist the Office of New Reactors

Project Number: 15409

Activity Number: 10768

Page 1 of 2

NRC Technical Assistance Project Manager: Karen Chapman (301-415-3653)
NRC Project Manager: John-Chau Nguyen (301-415-1177)
BNL Principal Investigator: James Higgins (631-344-2432)
Period of Performance: September 24, 2007 – July 31, 2012

Objective

The objective of this task is for the Brookhaven National Laboratory (BNL) Project Managers to provide the managerial and technical expertise necessary to assist NRC's Office of New Reactors (NRO) in analyzing, coordinating and staffing for the new reactor licensing work.

Progress During Reporting Period

BNL participated in the weekly phone conferences with NRC and the 4-lab consortium to discuss various issues related to new reactor licensing support. BNL also performed the following activities:

- Ensured the proper processing of new task orders and changes to task orders under JCN Q-4005 (NRC-07-01) and the five subsidiary JCNs that are covered under Q-4005.
- Coordinated various NRO activities with 4-lab consortium members.
- Kept BNL staff informed of new reactor licensing status and issues.
- Coordinated with the other three labs on joint NRO projects.
- Updated the electronic spending plan (ESP) spreadsheet for NRO for tracking all of the BNL NRO projects. Updated the revised spending plans for tasks, as necessary, and included them in the ESP and into the monthly reports.
- Updated the Phase Status spreadsheet with the latest information available and provided to NRC with the ESP.
- Discussed the task orders that need funds for FY 11 and provided NRO with estimates of funding needs through May 2011.
- Provided recommendations to NRO on shifting funds between tasks to ensure those needing funds have a sufficient amount.

Travel

None.

Anticipated and Encountered Problem Areas

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 1: BNL Technical Assistance in Project Management to Assist the Office of New Reactors

Project Number: 15409

Activity Number: 10768

Page 2 of 2

Plans for the Next Reporting Period

Continue to provide the managerial and technical expertise necessary to assist NRC/NRO in analyzing, coordinating and staffing for the new reactor licensing work.

Variance

None.

Financial Status

On April 16, 2010, received an additional \$50K in incremental funding for this TO.

Spending Plan Update

The spending plan for the next six months follows:

\$9,000 \$9,000 \$9,000 \$8,000 \$6,000 \$6,000

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 2: BNL Technical Assistance in Conducting Orientation for Prospective Review Team Members

Project Number 15409

Activity Number 10766

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	Jan Mazza	(301-415-0498)
BNL Principal Investigator:	James Higgins	(631-344-2432)
Period of Performance:	September 24, 2007 – September 30, 2011	

Objective

The objective of this task is for the Brookhaven National Laboratory (BNL) Project Managers to provide the managerial and technical expertise necessary to assist NRC's Office of New Reactors (NRO) in analyzing, coordinating and staffing for the new reactor licensing work.

Progress During Reporting Period

BNL produced a 4-disc set of DVDs based on the filming of the orientation session held at BNL in January 2008. Several copies were made of the DVDs and sent to NRC and the other three laboratories in the consortium. BNL established and is maintaining a tracking system for personnel who did not attend the orientation session given by NRC to read the viewgraphs and view the DVDs.

As needed, BNL personnel that will be doing NRO work in the new task orders being initiated at BNL, but did not attend the NRC orientation session, will complete their orientation with the viewgraphs and the DVDs. During the meetings of the four-lab consortium at NRO on April 30, 2009, this task was discussed with the NRC TM. Subsequently, on June 5, 2009, Steve Koenick sent to BNL an updated version of the orientation material. BNL forwarded this to the other labs and held discussions to determine the best way to implement the revisions. NRO concurred on June 11, 2009 and BNL implemented as specified.

During January, 2011, BNL hired a new staff member that will be working partially on NRO programs. BNL provided him with the orientation viewgraphs and videos and he reviewed them. No work was done in February 2011.

Travel

None.

Anticipated and Encountered Problem Areas

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 2: BNL Technical Assistance in Conducting Orientation for Prospective Review Team Members
Project Number 15409
Activity Number 10766

Page 2 of 2

Plans for the Next Reporting Period

If new BNL personnel are assigned to work on NRO projects, they will need to review the slide presentations and watch the DVDs of the orientation sessions given at BNL by NRC.

Variance

None.

Financial Status

Funds are adequate for level of work.

Spending Plan Update

The spending plan for the next six months follows:

\$1,500	\$1,500	\$0	\$0	\$0	\$0
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DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)
JCN Q-4017

Task 4: Orientation Activities – Environmental Focus

Project Number 15409

Activity Number 10911

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	B. Zalcmán	(301-415-2419)
BNL Principal Investigator:	William Gunther	(631-344-7961)
Period of Performance:	4/21/08 to 3/31/2012	

Objective

The objective of this task order is to obtain expert technical assistance to assist the staff in orienting prospective contractor team members to ensure that they have the regulatory insights to assist the NRC in licensing review activities.

Progress During Reporting Period

BNL continued to monitor application activities and remain ready to support application reviews as needed.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

BNL will continue to monitor application activities and remain ready to support application reviews as needed.

Variance

None.

Financial Status

Funding will be needed in FY 11 for technical support activities.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 4: Orientation Activities – Environmental Focus

Project Number 15409

Activity Number 10911

Page 2 of 2

Spending Plan Update

The spending plan for the next six months follows:

\$250 \$250 \$250 \$500 \$500 \$3,000

DOE Laboratory Acquired Equipment

None.

END

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4017

Task 5: Guideline for Seismic Input to Soil Structure Interaction Analysis Models for Various Site Conditions

Project Number 15409

Activity Number 10937

Page 1 of 2

NRC Technical Assistance Project Manager:	Karen Chapman	(301) 415-3653
NRC Project Manager:	John-Chau Nguyen	(301) 415-1177
NRC Technical Monitors:	Frankie Vega	(301) 415-1617
	Yong Li (Alternate)	(301) 415-4141
BNL Principal Investigators:	Carl Costantino	(631) 344-2186
	Charles Hofmayer	(631) 344-2317
Period of Performance:	September 8, 2008 – July 31, 2011	

Objective

The objective of this task order is to obtain technical expertise from Brookhaven National Laboratory (BNL) to assist the NRC staff in developing recommendations for guidance related to seismic ground motion input for soil structure interaction (SSI) analysis for various site conditions.

Progress During Reporting Period

None.

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

If requested by the NRC staff, provide additional input for inclusion in the revision to ISG-004.

Variance

NRC Form 173, dated October 11, 2008, changed the NRC Technical Monitor from Bhagwat Jain to Mahmoud Jardaneh. An email from the NRC TAPM on July 15, 2009 changed the NRC TM from Mahmoud Jardaneh to Frankie Vega.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews - Q-4005 (NRC 07-01)

JCN Q-4017

Task 5: Guideline for Seismic Input to Soil Structure Interaction Analysis Models for Various Site Conditions

Project Number 15409
Activity Number 10937

Page 2 of 2

Variance (cont'd)

In response to NRC's request to modify the statement of work, BNL submitted a proposal to the NRC TAPM on October 23, 2009 to provide technical expertise to assist the NRC staff in developing a revised "necessary excavation" definition for inclusion in a revision to ISG-004. The proposal for Task Order 5, Mod 1 was accepted per NRC Form 173, dated November 18, 2009, and the authorized cost ceiling was increased from \$80,100 to \$91,600.

NRC Form 173, dated January 19, 2010, extended the period of performance to May 1, 2010. NRC Form 173, dated April 14, 2010, extended the period of performance to October 31, 2010. NRC Form 173, dated October 25, 2010, extended the period of performance to July 31, 2011.

Financial Status

The authorized cost ceiling for Task Order 5 is \$91,600. NRC Form 173, dated September 5, 2008 provided incremental funding of \$25,000 to initiate work on this project. NRC Form 173, dated December 20, 2008 provided incremental funding of \$20,000 to continue work on this project. NRC Form 173, dated August 18, 2009 provided additional incremental funding of \$10,000. NRC Form 173, dated April 14, 2010 provided additional incremental funding of \$30,000.

NRC Form 173 dated January 19, 2011, redirected \$30,000 of FY10 funding from Task 5 to Task 6. NRC Form 173 also dated January 19, 2011, redirected \$8,053.89 of FY09 funding from Task 5 to Task 6. The total funds obligated to date for Task Order 5 are \$46,946.11.

Additional funds will need to be obligated to Task Order 5, if additional work is to be performed on this task.

Spending Plan Update

The spending plan for the next six months is as follows:

\$0 \$0 \$5,000 \$5,000 \$5,000 \$0

DOE Laboratory Acquired Equipment

None.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 6: Provide Technical Assistance to Develop Standard TS (STS); Develop STS Writer's Guide; Create Database for STS Proposed Changes [TS Task Force (TSTF) Travelers]; and Support Development of Risk-informed TS Changes

Project Number 15409

Activity Number 10957

Page 1 of 3

NRC Technical Assistance Project Manager:	Karen Chapman	(301-415-3653)
NRC Project Manager:	John-Chau Nguyen	(301-415-1177)
NRC Technical Monitor:	T. R. Tjader	(301-415-1187)
BNL Principal Investigator:	Pranab Samanta	(631-344-4948)
Period of Performance:	6/17/09 to 6/22/12	

Objective

The objective of this task is to develop Standard Technical Specifications (STSs) for different reactor designs. It includes creation of a writer's guide to provide consistency among the various STS, creation of an STS for each certified design developed from the design certification generic TS (GTS), preparing the final safety evaluation report (FSER) for the Chapter 16 GTS, reviewing NRC-approved technical specification task force (TSTF) TS change travelers, revising the appropriate existing STS NUREG, and incorporating the approved risk-informed TS changes.

Progress during Reporting Period

BNL continued work on the preparation of GTSTs for Section 3.10 of ABWR STS. Eight GTSTs are nearing completion addressing sections 3.10.1 to 3.10.8. Five additional GTSTs are also planned to be developed. In addition to preparing the GTSTs, a matrix addressing the Rev.0 changes, the affected sections, and an analysis of the changes was being completed at the request of the NRC Technical Monitor. This matrix is an update of the previously issued matrix. The development of the matrix was coordinated with the 4LC participants and the completed matrix was submitted to the NRC Technical Monitor. This matrix is being used to assure that the applicable Rev.0 changes have been included in the GTST being prepared for a section and can also be used by the reviewers.

Work on the STS Database focused on correcting the alignment of CONDITION, REQUIRED ACTION, and COMPLETION TIME within the LCO ACTIONS Table. Alignment of the associated Required Action and the Completion Time was not always correct in the previous version during data entry which increased the possibility of errors. A revised version of the Database is being worked on addressing this issue.

BNL is serving as the lead lab for the four-lab consortium (4LC) effort on this Task. As part of the project management effort, a weekly conference call is being held among the 4LC participants. The conference call is used to discuss issues related to the project and to coordinate efforts among the labs.

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)

JCN Q-4017

Task 6: Provide Technical Assistance to Develop Standard TS (STS); Develop STS Writer's Guide; Create Database for STS Proposed Changes [TS Task Force (TSTF) Travelers]; and Support Development of Risk-informed TS Changes

Project Number 15409

Activity Number 10957

Page 2 of 3

Travel

None.

Anticipated and Encountered Problem Areas

None.

Plans for the Next Reporting Period

Work will continue on the Database addressing the alignment issue and revising the completed GTSTs to be compatible with the revised version of the Database.

Work will continue on developing GTSTs for ABWR. Work will continue on GTSTs for Section 3.10.

Variance

None.

Financial Status

BNL has received an additional \$141,553 for this task order on January 20, 2011. This funding is adequate for continuation of this project/activity until March 31, 2011.

Resources needed for STS Database development are expected to be higher than that estimated in the SOW. Resources for STS Database development has been submitted to the NRC Technical Monitor, as part of the Project Plan. BNL has submitted a revised resource estimate and is discussing the remaining project tasks with the NRC Project Manager.

Spending Plan Update

The spending plan for the next six months follows:

\$50,000 \$40,000 \$40,000 \$40,000 \$50,000 \$50,000

MONTHLY LETTER STATUS REPORT FOR FEBRUARY 2011

(Reporting Period: January 21, 2011 – February 20, 2011)

Technical Assistance for COL Reviews – JCN Q-4005 (NRC 07-01)
JCN Q-4017

Task 6: Provide Technical Assistance to Develop Standard TS (STS); Develop STS Writer's Guide; Create Database for STS Proposed Changes [TS Task Force (TSTF) Travelers]; and Support Development of Risk-informed TS Changes

Project Number 15409
Activity Number 10957

Page 3 of 3

DOE Laboratory Acquired Equipment

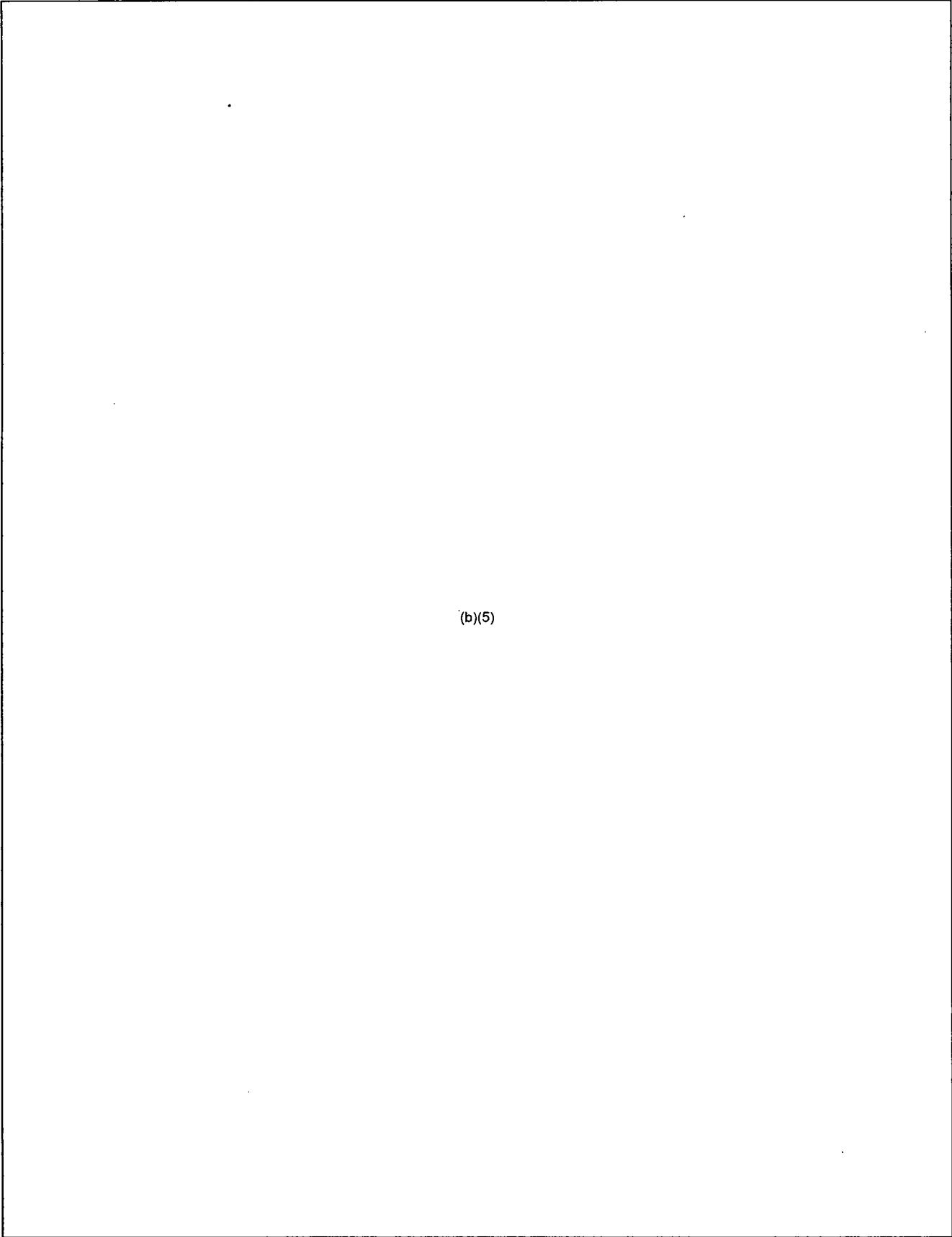
The following software is being purchased as part of the development of the STS database:

1. Two copies of "Total Access Memo": \$299 each.
2. Three copies of "SAP Crystal Reports, full product": a total of approximately \$1200.

The purchase of the software has been discussed with and approved by the NRC Project Manager.

(b)(5)

(b)(5)



(b)(5)

(b)(5)

(b)(5)

(b)(5)

Li, Yong

From: E2GOVHELPDESK@carlson.com
Sent: Monday, March 21, 2011 1:52 PM
To: Li, Yong
Subject: Booking Confirmation Yong Li -- Memphis, Apr 12

Thank you for making your reservation through our site.

This is a no reply mail box. If you need assistance please contact your CWTSatoTravel customer support site.

This is a copy of your itinerary only. Please review for accuracy. When your reservation is ticketed, your invoice will be sent in a separate message. The invoice will show your trip details, ticket number, and ticket cost. Please be prepared to present your invoice (not this itinerary copy) upon airport check-in as proof your ticket has been issued.

CONFIRMATION NUMBERS
SABRE Record Locator #: IEHMWM
Airline Record Locator #1 DL-GDWICF (Delta Airlines)

Name(s) of people Traveling
Name: Yong Li
Meal: standard

Fare Details: WAS DL MEM350.70KCADCA DL WAS350.70KCADCA USD701.40END ZPDCA MEM XFDCA4.5

Penalty: VALIDATING CARRIER - DL

ITINERARY

AIR:
Flight/Equip.: Delta Airlines 1431 Airbus A319
Depart: Washington(DCA) Tuesday, Apr 12 12:05
Arrive: Memphis(MEM) Tuesday, Apr 12 13:26
Stops: non-stop; Miles: 761
Class: Coach
Status: Confirmed
Seats Requested: 10B

AIR:
Flight/Equip.: Delta Airlines 3164
Operated By: Mesaba Dba Delta Connection
Depart: Memphis(MEM) Saturday, Apr 16 14:25
Arrive: Washington(DCA) Saturday, Apr 16 17:32
Stops: non-stop; Miles: 761
Class: Coach
Status: Confirmed

Seats Requested:

Base Airfare (per person) 701.40 USD

Total Taxes and/or Applicable fees (per person) 69.50 USD Total Flight (per person) 770.90 USD Flight segments must be ticketed by close of business on Tuesday, Apr 12, 2011

Penalty: VALIDATING CARRIER - DL

AGENCY INFORMATION

Agency: Carlson Wagonlit Government Travel Inc.
San Antonio, TX, US

DELIVERY INFORMATION

Deliver To:

Name: Yong Li

Address: 11545 Rockville Pike

Rockville, MD, 20852

Phone: 301-415-4141

Email: Yong.Li@nrc.gov

Shipment: E-Tkt

PAYMENT INFORMATION

Visa Card Number: 0000

SPECIAL REQUESTS

General Requests or Special Needs:

HAVE A GREAT TRIP

Li, Yong

From: NotificationIII [notification3@cwtsatotravel.com]
Sent: Monday, March 21, 2011 1:53 PM
To: Li, Yong
Subject: G1M3-Itinerary Only For LI YONG 04/12/11
Attachments: IEHMWM.pdf

<<IEHMWM.pdf>>

This is an automated email notification. Please do not respond to this email address.

****Did you know we can also book your hotels and rental cars? ****



For: YONG LI

To: ATTN-YONG LI 301-415-4141
11545 ROCKVILLE PIKE
ROCKVILLE, MD 20852

Sales Person: ZH
Locator: IEHMWM
Customer Number: M403PPE

*TICKET PURCHASED WITH VI.....1299
THIS DOCUMENT BECOMES AN INVOICE WHEN THE PASSENGER
*NAME/INVOICE AND TICKET NUMBERS APPEAR
*IN THE PRICING BOX.

Tuesday April 12, 2011



Delta Airlines Flight Number: 1431
Class of Service: Coach Class K
Depart: WASHINGTON/NATL,DC 12:05 Pm April 12, 2011
Arrive: MEMPHIS, TN 1:26 Pm April 12, 2011
Total Flight Time: 2 Hours 21 Minutes Non-Stop
Equipment: 319
Meal Service: Available For Purchase
Status: Confirmed Confirmation Number: GDWICF
Reserved Seat: LI/YONG 10B
Frequent Flyer Number: DL2396129609 LI/YONG
DEP-TERMINAL B

Saturday April 16, 2011



Delta Airlines Flight Number: 3164
Class of Service: Coach Class K
Depart: MEMPHIS, TN 2:25 Pm April 16, 2011
Arrive: WASHINGTON/NATL,DC 5:32 Pm April 16, 2011
Total Flight Time: 2 Hours 7 Minutes Non-Stop
Equipment: CR9
Meal Service: Available For Purchase
Status: Confirmed Confirmation Number: GDWICF
Frequent Flyer Number: DL2396129609 LI/YONG
ARR-TERMINAL B
*MEM-DCA OPERATED BY MESABA DBA DELTA CONNECTION

Thursday October 13, 2011

Other Service
Oct 13, 2011 - Oct 13, 2011
Departure City: MEMPHIS, TN
THANK YOU FOR USING CWT SATOTRAVEL

Name	Invoice / Ticket / Date	Base	Tax1	Tax2	Tax3	Total
		701.40USD	52.60US	7.40ZP	9.50XT	770.90

Total Amount: 770.90

RESERVED SEATS SUBJECT TO CANCEL 30 MIN PRIOR TO FLIGHT

THANK YOU FOR BOOKING WITH CWT SATOTRAVEL
PLEASE NOTE OUR PHONE NUMBERS FOR YOUR ACCOUNT
CWTSATOTRAVEL PHONE RESERVATION 866-250-2160
CWTSATOTRAVEL AFTER HOURS EMERGENCY 866-250-2160
CWTSATOTRAVEL FAX TO SEND TRAVEL ORDERS IS 866-845-9031
OR EMAIL YOUR ORDERS TO NRC AT CWTSATOTRAVEL.COM

.....
FOR INFORMATION ON TSA SECURE FLIGHT PROGRAM VIST
WWW.TSA.GOV
.....

Li, Yong

From: Li, Yong
Sent: Monday, March 21, 2011 10:23 AM
To: 'Li, Yun'
Subject: RE: Name

(b)(6)

6/8

From: Li, Yun [<mailto:Yun.Li@dm.usda.gov>]

Sent: Monday, March 21, 2011 10:18 AM

To: Li, Yong

Subject: Name

(b)(6)

Yun Li

GIS Specialist

Emergency Operation Center

Office of Homeland Security & Emergency Coordination

yun.li@usda.gov

(202) 720 - 0323 (O)

Li, Yong

From: etravel@carlson.com
Sent: Tuesday, March 22, 2011 3:36 PM
To: Li, Yong
Subject: Authorization 2849211 has been returned by your Approver. Please alter and re-submit

Dear YONG LI,

Your travel authorization has been returned to you for revisions by approver: CHRISTOPHER COOK. Please make the necessary changes and re-submit the authorization.

Please see the approver's instructions below.

Approver's Remarks/Instructions: (None)

Trip ID : 2849211
Traveler : LI, YONG
Destination: MEMPHIS, TN
TDY Type : CONFERENCE ATTENDANCE
Purpose : present at SSA meeting
Trip Dates : 2011-04-12 To 2011-04-16
Status : Revised Authorization

Thank you for using E2 Solutions. Help and support is available online by selecting the 'Find Answers' link.
Please note: Replies to this mailbox are not monitored.

[Click here to log back into the System.](#)

Li, Yong

From: Bauer, Laurel
Sent: Tuesday, March 22, 2011 4:19 PM
To: Li, Yong
Subject: FW: Courtyard Memphis Downtown Reservation Confirmation #88863954

Yong,
The phone number for the Marriott is below. 901-522-2200. The Fed. Gov't rate should be \$96..

Laurel
(301) 415-3210



Courtyard Memphis Downtown 75 Jefferson Avenue,
Memphis, Tennessee 38103 USA Phone: 1-901-522-2200 Fax: 1-901-522-2210



Reservation for LAUREL BAUER

- **Confirmation Number:** 88863954
- **Check-in:** Tuesday, April 12, 2011 (03:00 PM)
- **Check-out:** Saturday, April 16, 2011 (12:00 PM)

[View hotel website](#)
[Modify or Cancel reservation](#)

[Driving Directions](#)
[Maps & Transportation](#)

Reservation Confirmation

Li, Yong

From: Cook, Christopher
Sent: Tuesday, March 22, 2011 3:37 PM
To: Li, Yong
Subject: SSA travel: need to add hotel charges

I had to return your travel as only your M&IE charges were there. Hotel was showing up as \$0.

3/22/2011 National Laboratory monthly report on projects EX. 4
Harmful statement: if it was released to public, it can potentially expose the
national laboratory accounting program information

Li, Yong

From: Bruce Bevard [bevardbb@ornl.gov]
Sent: Tuesday, March 22, 2011 11:32 AM
To: Glaros, Rachel
Cc: Simpson, Julie J.; Jy-An Wang; Aloisi, Lindsey D.; Willingham, Michael; Chuang, Tze-Jer; Caverly, Jill; Jain, Bhagwat; Kugler, Andrew; Holmes, Beverly; zimmermangp@ornl.gov; Hennigan, James; Li, Yong; Rodriguez, Ricardo; Tiruneh, Nebiyu; beaversje@ornl.gov; jbeavers@jebconsultants.com; Nguyen, John-Chau; Ray, Neil; Ahn, Hosung; Lee, Jay; ContractsPOT Resource; Hatchett, Gregory; Thomas, Vaughn; Valentin, Milton; Tammara, Seshagiri; Joseph III, Robert Anthony; Ng, Ronnie
Subject: Submittal of February 2011 Monthly Report for JCN Q4006
Attachments: Q4006 MLSR February FY11.pdf; 1102 NSIR ESP ORNL.xlsx

Dear Ms Glaros:

Attached please find the **February** 2011 monthly letter status report for work under Q4006. I have also attached the electronic spend plan for Q4006 to this email.

If you have any questions, I can be contacted at (865) 574-0279 or at bevardbb@ornl.gov.

Sincerely

Bruce Bevard
ORNL Project Manager

Bruce B. Bevard	email: bevardbb@ornl.gov
Oak Ridge National Laboratory	voice: 865-574-0279
Bldg. 5700, Rm H-205, MS-6165	fax: 865-241-1044
Oak Ridge, TN 37831-6165	

Visit our Web sites to learn more about:
Oak Ridge National Laboratory, <http://www.ornl.gov>

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TO	Phase	%	TO Amount	Obligated / Remain	FY	Obligated	Remain	Expenses		Total	
								Monthly	Actual		
								Cumulative	Actual		
1		0%	(b)(5)	(b)(5)	2008	\$ -	\$ -	Orig. Plan	(b)(5)		
					2009		\$ -				Rev. Plan
					2010	(b)(5)					Actual
					2011	(b)(5)					Comment
OPERATING REACTOR PHYSICAL SECURITY PLAN REVIEWS (CFR 50.54P)											
2				\$ -	2008	\$ -	\$ -	Orig. Plan	\$ -		
					2009	\$ -	\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		
					2011		\$ -	Comment			
				\$ -	2008	\$ -	\$ -	Orig. Plan	\$ -		
					2009	\$ -	\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		
					2011		\$ -	Comment			
				\$ -	2008	\$ -	\$ -	Orig. Plan	\$ -		
					2009	\$ -	\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		
					2011		\$ -	Comment			
				\$ -	2008	\$ -	\$ -	Orig. Plan	\$ -		
					2009	\$ -	\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		
					2011		\$ -	Comment			
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					2009		\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		
					2011		\$ -	Comment			
				\$ -	2008		\$ -	Orig. Plan	\$ -		
					2009		\$ -	Rev. Plan	\$ -		
					2010		\$ -	Actual	\$ -		

					2011		\$ -	Comment	
				\$ -	2008		\$ -	Orig. Plan	\$ -
				\$ -	2009		\$ -	Rev. Plan	\$ -
					2010		\$ -	Actual	\$ -
					2011		\$ -	Comment	
				\$ -	2008		\$ -	Orig. Plan	\$ -
				\$ -	2009		\$ -	Rev. Plan	\$ -
					2010		\$ -	Actual	\$ -
					2011		\$ -	Comment	

2011

Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10
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Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10
(b)(5)							

Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11
(b)(5)							

Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12
(b)(5)							

Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
(b)(5)							

Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
(b)(5)							

OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

P.O. Box 2008
Oak Ridge, TN 37831-6165
Phone: (865) 574-0279
Fax: (865) 241-1044
Email: bevardbb@ornl.gov

March 18, 2011

Ms. Rachel Glaros
Division of New Reactor Licensing
Office of New Reactors
U.S. Nuclear Regulatory Commission
Mail Stop T-9 F29
Washington, D.C. 20555-0001

Dear Ms. Glaros:

Monthly Letter Status Report for Q4006

The subject MLSR is attached for **February 2011** (January 24, 2011 – February 20, 2011). Since task 10 has not yet started it is not included with this MLSR. Also, the following tasks have been cancelled, put on hold, or are complete, and therefore are not included in the report: 1, 2, 4, 7, 8, 10, 11, 12, 14, and 15. The report has been prepared in accordance with MD 11.7 and its associated handbook.

I look forward to any comments you may have on this report.

Sincerely,



Bruce B. Bevard
Project Manager

c: H. Ahn, NRO/DSER/RHEB
J. E. Beavers, ORNL
J. S. Caverly, NRO/DSER/RHEB
T. Chuang, NRO/DE/SEB1
T. L. Dickson, ORNL
I. C. Gauld, ORNL
A. Kugler, NRO/DSER/RAP2
Y. Li, NRO/DSER/RGS2
M. A. Mayes, ORNL
M. S. McBride, NRO/DSER/RHEB
N. K. Ray, NRO/DE/CIB2
R. E. Rodriguez, NRO/DSER/RGS1
J. J. Simpson, ORNL
S. R. Tammara, NRO/DSER/RSAC
V. V. Thomas, NRO/DE/SEB1
N. D. Tiruneh, NRO/DSER/RHEB
M. O. Valentin, NRO/DE/SEB1
W. Wang, NRO/DSER/RGS2
M. H. Willingham, FSME/DILR/RB-A
G. P. Zimmerman, ORNL
File – RC

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**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No:	Q4006
Project Title:	Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications
Project Period of Performance:	9/14/2007 through 7/01/2012
NRC Project Manager:	Rachel Glaros, (301) 415-3672
Performing Organization:	Oak Ridge National Laboratory
Task Order Number:	1
Task Order Title:	Technical Assistance in Review of the Bellefonte Application for Combined Operating License in the Areas Relating to Geotechnical Engineering
Task Order Period of Performance:	3/13/2008 - 3/12/2011
NRC Technical Monitor:	Yong Li, (301) 415-4141
ORNL Project Manager:	B. B. Bevard, (865) 574-0279 bevardbb@ornl.gov
Address:	P. O. Box 2008 Oak Ridge, TN 37831-6165
Principal Investigator:	Jy-An Wang, (865) 574-2274 Wangja@ornl.gov
Period of Report:	1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is to provide expert technical assistance to assist the NRC staff in determining the adequacy of the geotechnical site characterizations of the COL application sections 2.5.4 and 2.5.5.

2. PROGRESS DURING REPORTING PERIOD:

Become familiar with SRP Sections 2.5.4 and 2.5.5 (Task 1)

This task has been completed.

Participate in an orientation/kick-off meeting with the NRC staff (Task 2)

This task has been completed.

Using the criteria found in 10 CFR Part 52 to evaluate the sections and subsections of 2.5.4 and 2.5.5. Prepare RAIs. Prepare a technical letter report. (Task 3)

A final revised version of the RAI package was sent to the NRC TM on June 20. This package contained a total of 21 RAIs. The NRC TM prepared a draft of the technical report (SER) during this reporting period. This task has been completed.

Prepare for and travel to the applicant's site and participate in an NRC review team audit. Prepare a trip report to include the final RAIs. Update the letter report developed in task 3. (Task 4)

The Bellefonte NPP site visit was started on the 27th of October and ended on the 28th of October. On the 27th of October the traveler attended the presentations by TVA and the WLA subcontract personnel regarding the Bellefonte Unit 3 & Unit 4 site layout, including site orientation, geology, and project organization. The traveler also participated in an afternoon RAI discussion regarding NRC questions. A small trip to the top of the Turbine building provided a better birds-eye view of the Bellefonte NPP site and its surroundings. The travel report was submitted to NRC on October 30th.

Perform a detailed review of the application; review the applicant's RAI responses. Prepare a technical letter report. (Task 5)

On October 20, received the Bellefonte RAI responses from NRC, and during the week the detailed review on the response was carried out. This task has been completed.

Review and evaluate additional information provided by the applicant to assist in closing out open items. (Task 6)

More discussions on the grouting and rock integrity of the BLN site characteristics were performed during the report period. The review on the last open item RAI 2.5.4-18 was completed and all the open items were closed.

Additional review on the open items for the final SER was performed; a teleconference among the vendor, NRC and subcontractor was held to resolve the open items during the report period in June.

As needed and requested by the staff, provide technical support to the staff during related ACRS meetings and hearing proceedings. (Task 7)

Task not yet started.

Prepare for and attend the ASLB hearing to assist NRC staff. (Task 8)

Task not yet started.

3. TASK/MILESTONE STATUS:

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
1. Familiarization with report	April 3, 2008		March 2008
2. Kickoff meeting	April 3, 2008		April 3, 2008
3. Review TR. Issue RAIs	May 28, 2008		June, 20, 2008
4. Support Staff on on-site Review	June 8, 2008	October, 27, 2008	October 28, 2008
5. Perform detailed review of the application	January 29, 2009		January 23, 2009
6. Review Open Items. Issue final TER	June 2009		June 5, 2009
7. Support ACRS presentations	October 6-7, 2009		
8. Attend ASLB hearing			

* dependent on the receipt of RAI responses from Bellefonte nuclear plant.

4. TRAVEL:

None.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

None.

8. PLANS FOR THE NEXT REPORTING PERIOD:

Start the technical review.

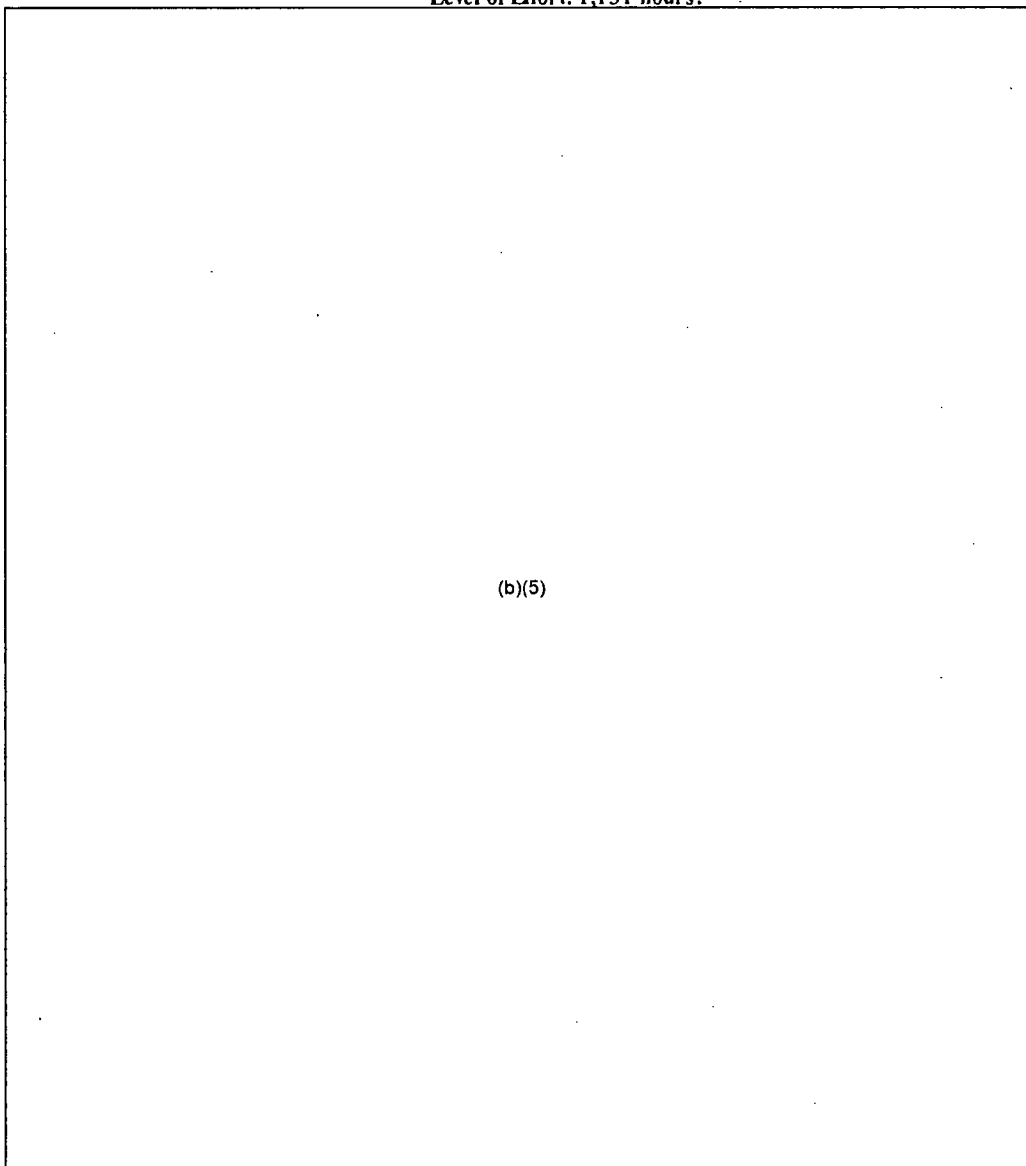
9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

Detailed financial information is provided on the following pages. On March 13, 2008 the NRC provided \$190,000 of the \$244,500 approved for this task.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

MLSR FINANCIAL STATUS REPORT -February 2011
(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 1
Task Order Title: Technical Assistance in Review of the Bellefonte Application for
Combined Operating License in the Areas Relating to
Geotechnical Engineering
Task Order Period of Performance: 3/13/08-3/12/11
Level of Effort: 1,131 hours.



**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications

Project Period of Performance: 9/14/2007 through 7/01/2012
NRC Project Manager: Rachel Glaros, (301) 415-3672
Performing Organization: Oak Ridge National Laboratory
Task Order Number: 3
Task Order Title: Technical Support for the Luminant Power/Comanche Peak COL Environmental Review

Task Order Period of Performance: 9/23/2008 through 9/22/2011
NRC Technical Monitor: Michael Willingham, (301) 415-3924
ORNL Project Manager: B. B. Bevard, (865) 574-0279
bevardbb@ornl.gov
Address: P. O. Box 2008
Oak Ridge, TN 37831-6165
Principal Investigator: Greg Zimmerman, (865) 574-5815
zimmermangp@ornl.gov
Period of Report: 1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is to provide expert technical assistance to the NRC staff in review of environmental protection requirements associated with the Luminant application for new power reactor units at the Comanche Peak nuclear plant in Texas. The specific objective is to provide multi-disciplinary managerial and technical expertise necessary to assist NRC in developing the environmental regulatory documents to provide the bases for the licensing decisions and to support the adjudicatory hearing on whether licenses should be granted for the proposed two units.

2. PROGRESS DURING REPORTING PERIOD:

The number of labor hours expended by ORNL staff on the activities described in this report is shown on the attached financial status sheet. The ORNL staff's expenditure of effort corresponding to those labor hours is described in the following paragraphs.

GENERAL ACTIVITIES

In early-February, additional funding in the amount of \$125K was provided by NRC for the continuation of the work under this task order.

PHASE 3, Task 10 (Disposition of Draft EIS Comments)

The public comment period on the Draft EIS closed on October 27. The ORNL staff has developed responses to each set of public comments (i.e., e-mail or letter) that were received on the Draft EIS. On February 2, the comments and their proposed responses were packaged and delivered to NRC in the format of Appendix E for the Final EIS. The responses were reviewed with the NRC staff during a writing session at ORNL on February 15 to 17. This activity completed Task 10. At the end of the

reporting period, Appendix E was being revised and updated for inclusion in the camera-ready deliverable for the Final EIS.

PHASE 4, Task 11 (Prepare Working Draft FEIS)

On January 24, the NRC EPM provided the ORNL PI with a *Publication Plan* for finalizing the Comanche Peak EIS. In concert with that *Plan* – and on February 2 – ORNL delivered to NRC a preliminary version of the Final EIS (i.e., the pFEIS) for review and comment. On February 14 to 17, the NRC staff visited ORNL to conduct a writing meeting with the ORNL SMEs to finalize the text for the document. The Aquatic Ecology SME, who is under contract directly to NRC thru the NRC’s ISL contract, was not in attendance at the writing meetings at ORNL, and those portions of the EIS were consequently not revised or updated.

At the close of the writing meeting, the ORNL team began its efforts to prepare and deliver a camera-ready version of the Final EIS. This document is to be completed and delivered to NRC by March 17.

Some review comments from the NRC resource experts were forwarded to the ORNL SMEs prior to the February 14 writing meeting, and those comments were addressed and incorporated during the writing meeting. However, the comments of NRC’s Office of General Counsel (OGC) were not received until February 18, one day after the writing meeting had closed. The ORNL team will attempt to address these comments in conjunction with the preparation and delivery of the camera-ready version of the FEIS.

ALL OTHER PHASES AND TASKS

No activity during the reporting period. See Section 3 for a list of those tasks that have been completed.

3. TASK/MILESTONE STATUS:

A detailed schedule was provided to ORNL by NRC on January 30, 2009, and a revised version was provided to ORNL by NRC on December 18, 2009. In addition, a “Draft EIS Publication Plan” was provided to ORNL by the NRC TM on June 3, 2010, and a “Final EIS Publication Plan” was provided on January 24, 2011. The following table summarizes the subtasks, milestones, and deliverables for the schedule of activities under this Task Order.

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
PHASE 1, Task 1: Familiarization	Jan 21, 2009		Jan 21, 2009
PHASE 2, Task 2: Scoping Meeting	Jan 6, 2009		Jan 6, 2009
PHASE 2, Task 5: Disposition Scoping Comments	Mar 16, 2009		Mar 19, 2009
PHASE 2, Task 6: Scoping Summary Report	May 12, 2009		May 12, 2009
PHASE 3, Task 3: Site Audit and Alternate Sites Visit	Feb 23-27, 2009		Feb 23-27, 2009
PHASE 3, Task 4: Prepare RAIs	Feb 2-6, 2009 Mar 20, 2009		Feb 2-6, 2009 Mar 23, 2009
PHASE 3, Task 7: Discuss RAIs with Applicant	Jun 12, 2009	Jul 30, 2009	Aug 11-20, 2009 and Jan 27, 2010

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
PHASE 3, Task 8: Prepare Working Draft DEIS	<i>Initial Version:</i> Sep 1, 2009 <i>Supp Version:</i> N/A	<i>Initial Version:</i> Sep 4, 2009 <i>Supp Version:</i> Apr 19, 2010 <i>Camera-Ready:</i> Jun 8-11, 2010	<i>Initial Version:</i> Sep 4, 2009 <i>Supp Version:</i> Apr 21, 2010 <i>Camera-Ready:</i> Jun 15, 2010
PHASE 3, Task 9: Support Public Meeting on DEIS	Feb 26, 2010	Sept 21, 2010	Sept 21, 2010
PHASE 3, Task 10: Disposition of DEIS Comments	May 10, 2010	Nov 30, 2010	Dec 16, 2010
PHASE 4, Task 11: Prepare Working Draft FEIS	<i>Initial Version:</i> Aug 6, 2010	<i>Initial Version:</i> Feb 2, 2011 <i>Camera-Ready:</i> Mar 17, 2011	<i>Initial Version:</i> Feb 2, 2011
PHASE 4, Task 12: Address FEIS Comments	TBD	TBD	
PHASE 5, Task 13: Prepare for ASLB Hearings	TBD	TBD	
Other: Prepare monthly reports	Monthly	Monthly	

4. TRAVEL:

None during the reporting period.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None during the reporting period.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

ORNL received comments from NRC's OGC one day after the writing meeting at ORNL had been completed. Additional, unplanned effort will be required by the ORNL SMEs to respond to these comments and prepare their final write-ups for the camera-ready version of the EIS.

ORNL's projected effort for the next reporting period is estimated to consume all of the remaining funds for this project. The actual workload cannot be accurately predicted, due to the number of review comments (including the comments from OGC) that still require resolution. If a funding shortfall is anticipated, the ORNL PI will communicate with the NRC EPM to obtain guidance on what portions of the Final EIS should be given priority for finalization with the remaining funds.

During the writing meeting at ORNL, Chapter 8 of the Final EIS ("Need for Power") was extensively revised and updated. At the end of the reporting period, this chapter was still under development and had been submitted to review by NRC. ORNL will attempt to include the latest version of Chapter 8 with the camera-ready deliverable.

The Aquatic Ecology SME was not able to participate in the writing meeting that was intended to provide the final text for the EIS. The sections of the document that need to be revised by the Aquatic Ecology SME are still under development and, hence, may affect ORNL's ability to complete the camera-ready version on schedule.

8. PLANS FOR THE NEXT REPORTING PERIOD (2/21/2011 through 3/27/2011):

Under Task 11, the ORNL staff will prepare and deliver to NRC the camera-ready version of the Final EIS, which will incorporate all of the mark-up and revisions that were discussed with NRC staff during the writing session at ORNL. The date scheduled for the camera-ready deliverable is March 17, 2011.

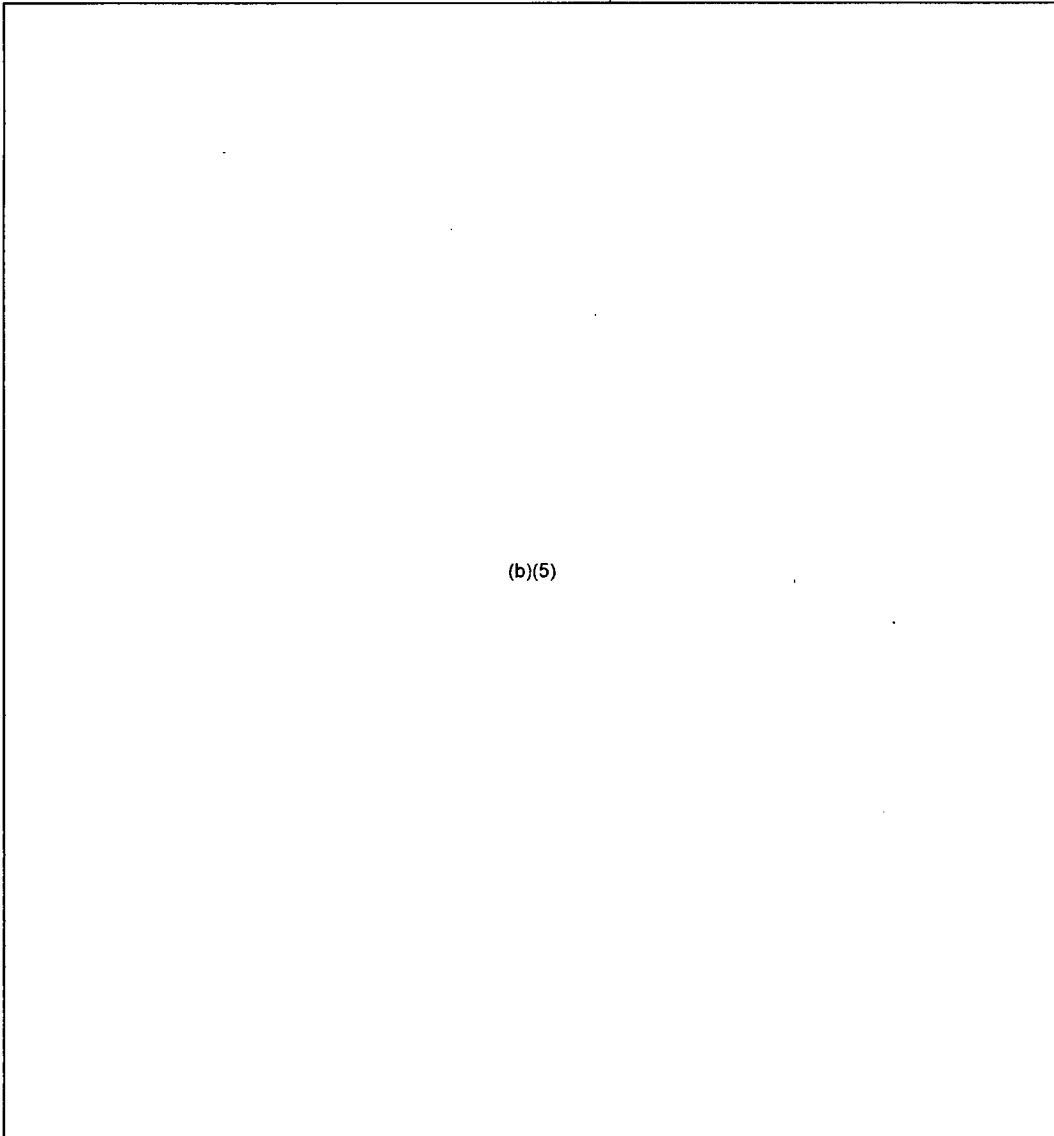
9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

Detailed financial information is provided on the following page. The actual expenditures for the reporting period were higher than the amount projected in the electronic spending plan for this Task Order due to a larger number of labor-hour charges than had been previously budgeted for those ORNL SMEs who were involved in the writing sessions.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
(b)(5)					

MLSR FINANCIAL STATUS REPORT -February 2011
(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 3
Task Order Title: Technical Support for the Luminant Power/Comanche Peak
COL Environmental Review
Task Order Period of Performance: 9/23/08-9/22/11
Level of Effort: 11,770 hours.



(b)(5)

**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No:	Q4006
Project Title:	Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications
Project Period of Performance:	9/14/2007 through 7/01/2012
NRC Project Manager:	Rachel Glaros, (301) 415-3672
Performing Organization:	Oak Ridge National Laboratory
Task Order Number:	5
Task Order Title:	Review of Reference Combined Operating License (R-COL) Application Section 3.3.1, 3.3.2, 3.4.2, and 3.5.3 (design of Category I Structures)
Task Order Period of Performance:	9/23/2008 – 9/22/2011
NRC Technical Monitor(s):	Tze-Jer Chuang (Jerry), (301) 415-8586
ORNL Project Manager:	Bruce Bevard, (865) 574-0279 bevardbb@ornl.gov
Address:	P. O. Box 2008 Oak Ridge, TN 37831-6165
Principal Investigator:	Jy-An Wang, (865) 574-2274 wangja@ornl.gov
Period of Report:	1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is to obtain technical expertise from ORNL to assist the NRC staff in determining whether or not the subject COL application meets appropriate regulatory requirements relating to the analysis and design of category I structures.

2. PROGRESS DURING REPORTING PERIOD:

Become familiar with pertinent SRP sections (Task 1)

The task was completed during the report period.

Project Kickoff (Task 2)

This task was completed with a teleconference on December 10, 2008. Meeting discussions focused primarily on the information contained in the Comanche Peak Nuclear Power Plant Units 3 and 4 Reference COL Application, Part 2, Final Safety Analysis Report (FSAR), Revision 0 and the US-APWR DCD.

A significant part of the meeting involved discussions about the scope of the review because preliminary review of the FSAR, Chapter 3 suggests that technical information required to evaluate Sections 3.3.1, 3.3.2, 3.4.2, 3.5.3 is either limit or excluded. The following examples reinforce this concern.

- The COL applicant selected a site-specific basic wind speed of 90 mph, or higher for design of Seismic Category I structures. The basis for this particular wind speed value was not reported.
- The COL applicant stated that certain site-specific buildings are designed as vented structures for tornado atmospheric differential pressure loading, but the approach used to establish the size and configuration of the vent openings is not reported.

It was also noted during the call that a significant number of Requests for Additional Information (RAIs) may need to be developed if the level of technical information in the FSAR is not reported in sufficient detail for a meaningful and complete evaluation. Task was completed.

Evaluate pertinent SRP sections and prepare letter report (Task 3)

The draft TERs and RAIs for 3.3.1 and 3.3.2, and 3.4.2 and 3.5.3 were completed and submitted to NRC for review and comments during the report period. Task was completed.

Detailed review of application; RAIs and report (Task 4)

The revised draft TERs, RAIs, and Tracking table for 3.3.1, 3.3.2, and draft TERs, RAIs, and Tracking table for 3.4.2 and 3.5.3 were completed and submitted to NRC for review and comments.

The updated TER based on new NRC template were completed for 3.3.1, 3.3.2, and 3.4.2, were completed on September 2010 and submitted to NRC.

Trip to site and trip report (Task 5)

Not yet started.

Review open items (Task 6)

The revised draft TER and Tracking Table for 3.3.1 and 3.3.2 that cover the review of open items were completed and submitted to NRC on November 9, 2009.

Attend/Support ACRS Subcommittee Meeting (Task 7)

Not yet started.

3. TASK/MILESTONE STATUS:

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
Task 1 SRP Familiarization	12/11/2008		12/16/2008
Task 2 Project Kickoff	12/10/2008		12/10/2008
Task 3 Prepare letter report	2/27/2009		2/10/2008
Task 4 Review of application, RAIs, Report	3/27/2009		9/20/2010
Task 5 Site visit and trip report	TBD		
Task 6 Review open items, report	11/30/2009		
Task 7 Attend/support ACRS meeting	TBD		

4. TRAVEL:

None this reporting period.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

None this reporting period.

8. PLANS FOR THE NEXT REPORTING PERIOD:

Discuss the start of the task with the NRC TM.

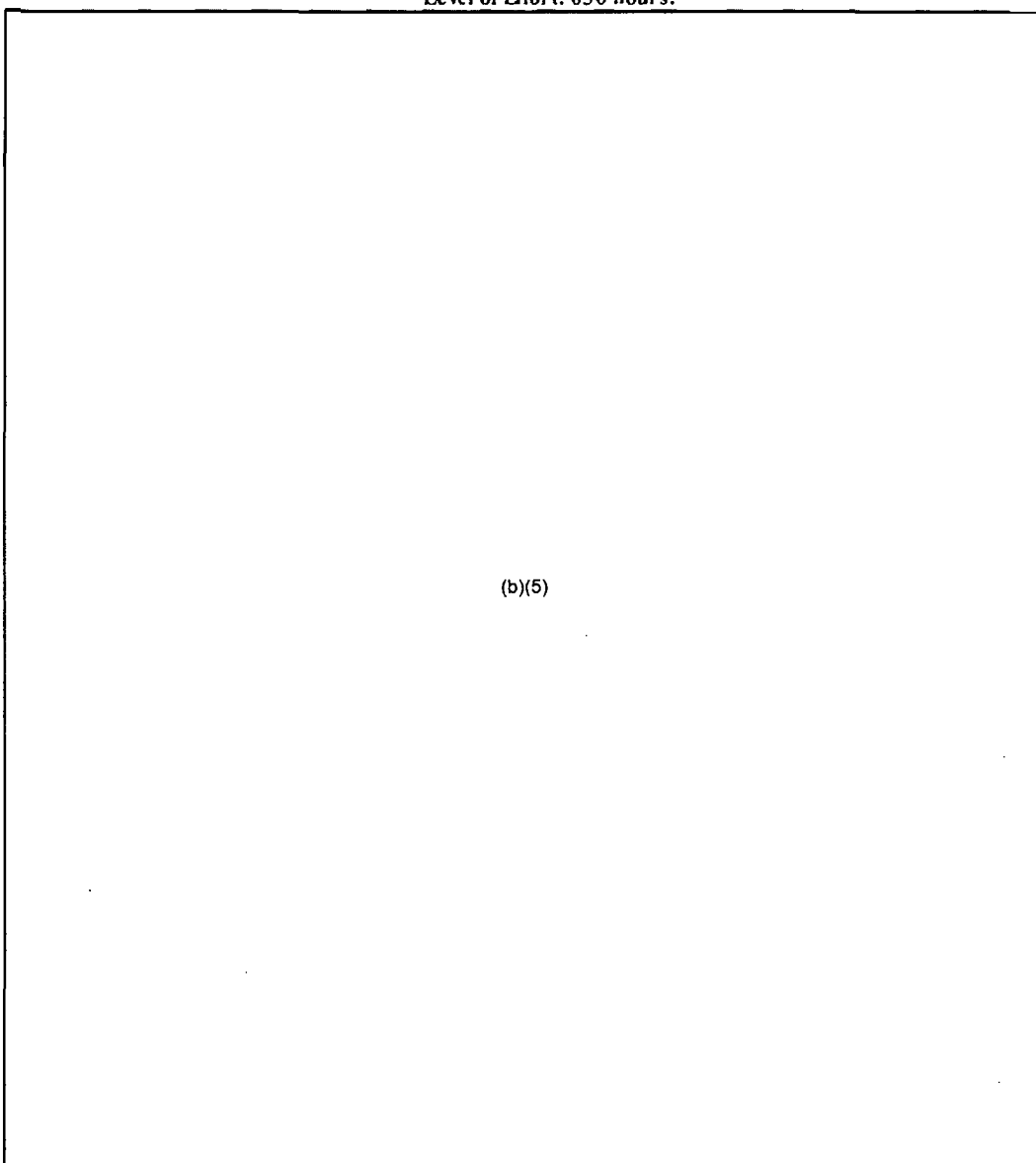
9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

Detailed financial information is provided on the following page.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
(b)(5)					

MLSR FINANCIAL STATUS REPORT -February 2011
(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 5
Task Order Title: Review of Reference Combined Operating License (R-COL)
Application Section 3.3.1, 3.3.2, 3.4.2, and 3.5.3 (Design of
Category 1 Structures)
Task Order Period of Performance: 9/23/08-9/22/11
Level of Effort: 636 hours.



(b)(5)

**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No:	Q4006
Project Title:	Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications
Project Period of Performance:	9/14/2007 through 7/01/2012
NRC Project Manager:	Rachel Glaros, (301) 415-3672
Performing Organization:	Oak Ridge National Laboratory
Task Order Number:	6
Task Order Title:	Technical Assistance in the Review of Combined Operating License Application for Luminant Power's Comanche Peak Units 3 and 4; SRP Section 2.4, Hydrology
Task Order Period of Performance:	9/23/2008 through 9/22/2011
NRC Technical Monitor:	Nebiyu Tiruneh, (301) 415-2080
ORNL Project Manager:	B. B. Bevard, (865) 574-0279 bevardbb@ornl.gov
Address:	P. O. Box 2008 Oak Ridge, TN 37831-6165
Principal Investigator:	Brennan Smith, (865) 241-5160 smithbt@ornl.gov
Period of Report:	1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is to provide expert technical assistance to the NRC staff in determining whether or not the subject COL application meets appropriate regulatory requirements pertaining to the site safety-related surface water hydrology, groundwater hydrology, and hydraulic structures issues and site characterizations as specified in Sections 2.4.1 through 2.4.14 of NRC's Standard Review Plan.

2. PROGRESS DURING REPORTING PERIOD:

The number of labor hours expended by ORNL staff on the activities described in this report is shown on the attached financial status sheet. The ORNL staff's expenditure of effort corresponding to those labor hours is described in the following paragraphs.

GENERAL ACTIVITIES:

During the reporting period, an additional \$10.5K was placed into ORNL accounts for the continuation of work under this task order.

PHASE 2; Tasks 6, 7, and 8

In December, the ORNL staff delivered draft versions of SER Sections 2.4.1 through 2.4.14 for review by the NRC. During the current reporting period, comments were received from NRC on Section 2.4.1, and the ORNL staff completed its review of these comments and incorporated them into a revised version

of the section. At the end of the reporting period, ORNL was awaiting further comments from NRC on draft Sections 2.4.2 through 2.4.14.

ALL OTHER PHASES AND TASKS

No activity during the reporting period. See Section 3 for a list of those tasks that have been completed.

3. TASK/MILESTONE STATUS:

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
PHASE 1, Task 1: Familiarization	Oct. 3, 2008	Oct. 10, 2008	Oct. 10, 2008
PHASE 1, Task 2: Kick-off meeting	Oct. 9, 2008		Oct. 9, 2008
PHASE 1, Task 3: Acceptance review tables	Oct. 17, 2008		Oct. 17, 2008
PHASE 1, Task 4: Site Safety Audit	<i>Info needs table:</i> Mar. 31, 2009 <i>Site Audit:</i> July 6-9, 2009 <i>Trip Report:</i> July 17, 2009	<i>Trip Report:</i> July 24, 2009	<i>Info needs table:</i> Apr. 6, 2009 <i>Site Audit:</i> July 6-9, 2009 <i>Trip Report:</i> August 3, 2009
PHASE 1, Task 5: Draft pTER and RAIs	July 24, 2009	<i>Complete RAIs:</i> July 31, 2009 <i>Draft pTER:</i> August 7, 2009 <i>Final pTER:</i> August 14, 2009	<i>Complete RAIs:</i> August 8, 2009 <i>Draft pTER:</i> August 13, 2009
PHASE 2, Task 6: Modeling of Floods	Oct. 2, 2009		Nov. 24, 2010
PHASE 2, Task 7: Modeling of Groundwater	Oct. 2, 2009		
PHASE 2, Task 8: TER with Open Items (OIs)	Oct. 2, 2009	Sept. 17, 2010	Dec. 6, 2010
PHASE 3, Task 9: ACRS Hearing on TER/OIs	TBD		
PHASE 4, Task 10: Advanced TER w/o OIs	10 weeks after Task 9		
PHASE 5, Task 11: ACRS Hearing on TER	TBD		
PHASE 6, Task 12: Final TER (no OIs)	10 weeks after Task 11		
Task 13: Support ASLB Hearing	TBD		
Other: Prepare monthly reports	Monthly		

4. TRAVEL:

None during the reporting period.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None during the reporting period.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

None during the reporting period.

8. PLANS FOR THE NEXT REPORTING PERIOD (2/21/2011 through 3/27/2011):

The ORNL staff is awaiting NRC's review comments on the SER with Open Items. Under Task 9, the ORNL staff will respond to NRC's review comments on the SER with Open Items and will develop a revised version of the document. The ORNL staff will also begin to prepare for the ACRS hearing in conjunction with the NRC staff.

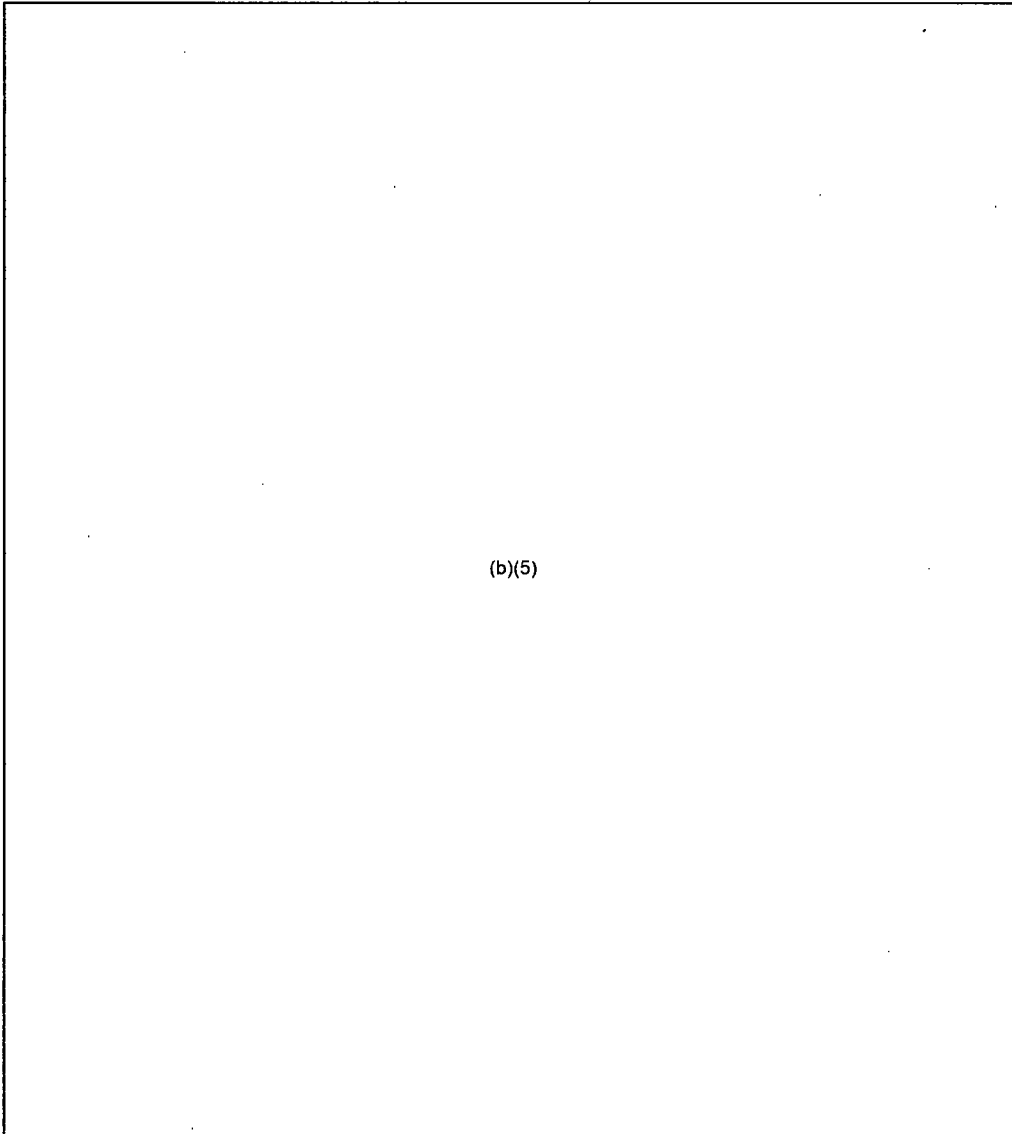
9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

Detailed financial information is provided on the following page. The actual expenditures for the reporting period were far less than the amount projected in the electronic spending plan for this Task Order due to only a limited amount of work being done by the ORNL staff beyond the delivery of the SER with Open Items for NRC's review.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
(b)(5)					

MLSR FINANCIAL STATUS REPORT -February 2011
(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 6
Task Order Title: Technical Assistance in the Reivew of Combined Operating License
Application for Luminant Power's Comanche Peak Units 3 & 4 SRP
Section 2.4, Hydrology
Task Order Period of Performance: 9/23/08-9/22/11
Level of Effort: 1,664 hours.



**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No:	Q4006
Project Title:	Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications
Project Period of Performance:	9/14/2007 through 7/1/2012
NRC Project Manager:	Rachel Glaros, (301) 415-3672
Performing Organization:	Oak Ridge National Laboratory
Task Order Number:	9
Task Order Title:	Review of Reference Combined Operating License (COL) Application for Seismic Design of Structures, Components, Equipment, and Systems
Task Order Period of Performance:	9/23/2008 – 9/30/2011
NRC Technical Monitor(s):	Milton Valentin, (301) 415-4061
ORNL Project Manager:	Bruce Bevard, (865) 574-0279
Address:	bevardbb@ornl.gov P. O. Box 2008 Oak Ridge, TN 37831-6165
Principal Investigator:	Jim Beavers, (865) 241-3038
Period of Report:	beaversje@ornl.gov 1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is for ORNL to assist the NRC staff in determining whether or not the subject DCD application meets appropriate regulatory requirements.

2. PROGRESS DURING REPORTING PERIOD:

Become familiar with pertinent SRP sections (Task 1)

Task 1 has been completed.

Project Kickoff (Task 2)

Task 2 has been completed.

Evaluate pertinent SRP sections and prepare letter report (Task 3)

This task is in progress. Evaluation of pertinent SRP Sections has been completed.

Detailed review of application; RAIs and report (Task 4)

During February, ORNL continued updating the TER/SER based on the NRC review template and specific requirements requested by the TM. A draft sample section of TER/SER consisting of 4 COL Information Items and resolution of one RAI was sent to the TM for review on January 28. ORNL continued work on a draft report for the remainder of Section 3.7.1 of the SER/TER (which was sent to the TM on March 1—March business month). Updates to RAIs in the TER/SER continued and were the subject of several discussions with the TM. ORNL staff also initiated preparation of draft TER/SER Sections 3.7.2 and 3.7.3. ORNL also had several communications with the TM on the high frequency issue and submitted a request

to the TM for NRC staff responsible for Section 2.5 of the COL to contribute to this evaluation. The evaluation of the high frequency issue is still ongoing.

Trip to site and trip report (Task 5)

Task not yet started.

Review open items (Task 6)

Task not yet started.

Attend/Support ACRS Subcommittee Meeting (Task 7)

Task not yet started.

3. TASK/MILESTONE STATUS:

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
Task 1 SRP Familiarization	11/1/08		11/1/08
Task 2 Project Kickoff	12/15/08		12/15/08
Task 3 Prepare letter report	3/31/09		
Task 4 Review of application, RAIs, Report	3/31/09		
Task 5 Site visit and trip report			
Task 6 Review open items, report			
Task 7 Attend/support ACRS meeting			

4. TRAVEL:

None this reporting period.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None this reporting period.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

None

8. PLANS FOR THE NEXT REPORTING PERIOD:

Continue to close out RAIs and preparation of COL-TER.

9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

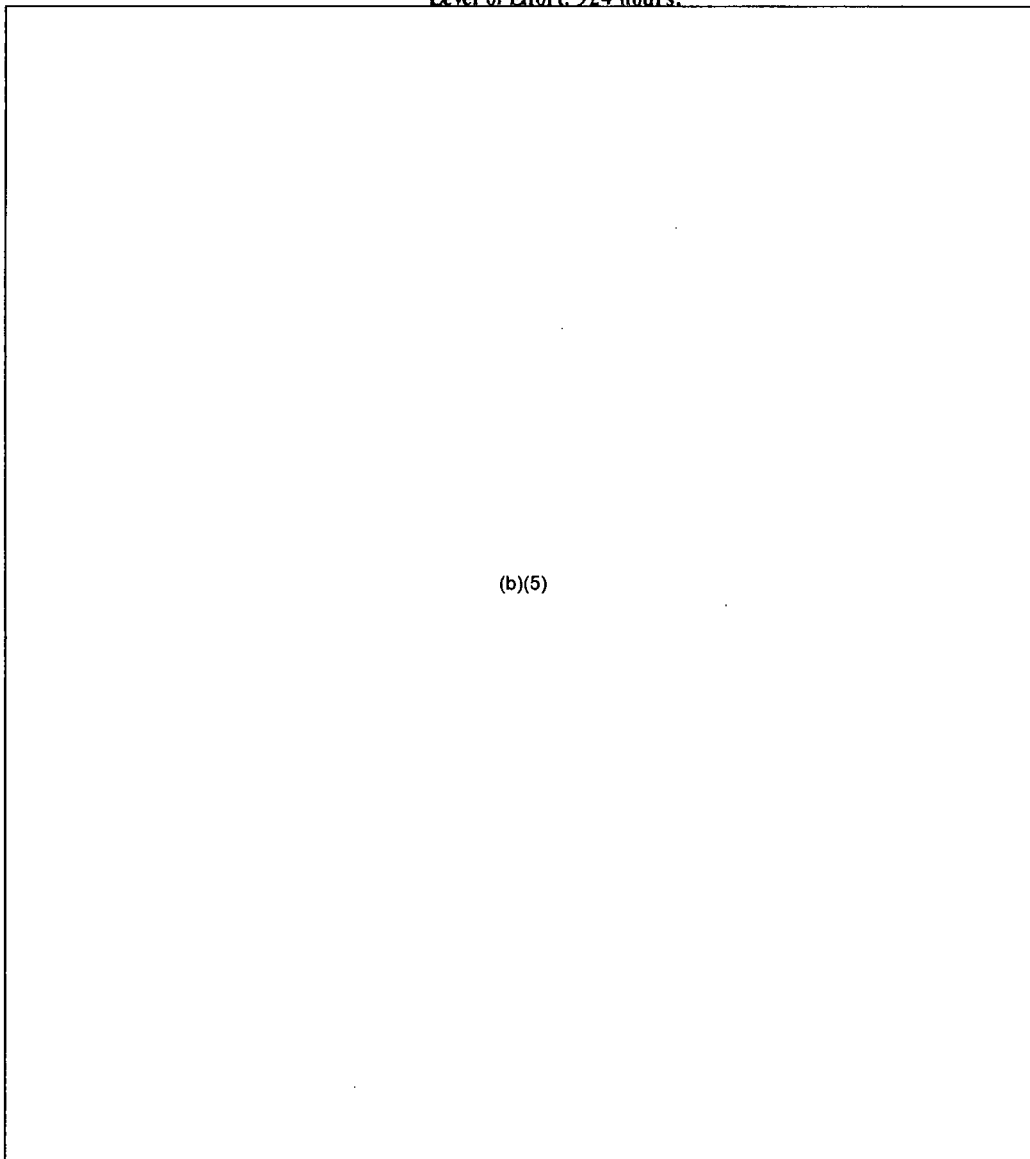
Detailed financial information is provided on the following pages.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
(b)(5)					

MLSR FINANCIAL STATUS REPORT -February 2011

(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 9
Task Order Title: Review of Reference Combined Operating License (COL)
Application for Seismic Design Structures, Components,
Equipment, and Systems
Task Order Period of Performance: 9/23/08-9/30/11
Level of Effort: 924 hours.



(b)(5)

**MONTHLY LETTER STATUS REPORT
FEBRUARY 2011**

Job Code No:	Q4006
Project Title:	Technical Assistance in Support of Design Certification (DC), Early Site Permit (ESP), Combined License (COL), Environmental, Infrastructure and Knowledge Management Tools, and Readiness Assessment Activities Related to New Reactor License Applications
Project Period of Performance:	9/14/2007 through 7/01/2012
NRC Project Manager:	Rachel Glaros, (301) 415-3672
Performing Organization:	Oak Ridge National Laboratory
Task Order Number:	13
Task Order Title:	Hydrology Safety Review (Section 2.4) of Combined License Application for the Turkey Point COL Application
Task Order Period of Performance:	9/01/2009 through 7/01/2012
NRC Technical Monitor:	Hosung Ahn, (301) 415-1398
ORNL Project Manager:	B. B. Bevard, (865) 574-0279 bevardbb@ornl.gov
Address:	P. O. Box 2008 Oak Ridge, TN 37831-6165
Principal Investigator:	Melanie Mayes, (865) 574-7336 mayesma@ornl.gov
Period of Report:	1/24/2011 through 2/20/2011

1. PROJECT OBJECTIVE:

The objective of this task order is to provide expert technical assistance to the NRC staff in determining whether or not the subject COL application meets appropriate regulatory requirements pertaining to the site safety-related surface water hydrology, groundwater hydrology, and hydraulic structures issues and site characterizations as specified in Sections 2.4.1 through 2.4.14 of NRC's Standard Review Plan.

2. PROGRESS DURING REPORTING PERIOD:

The number of labor hours expended by ORNL staff on the activities described below is shown on the attached financial status sheet.

TASK 1b (Develop RAIs)

ORNL groundwater staff await Applicant's response to four outstanding RAIs (Question 19387/ RAI ID 5190) submitted to NRC on December 13, 2010. No estimations of Applicant response have been provided to date. ORNL and NRC ground water staff interfaced regarding three potential Supplementary RAIs, resulting in ORNL ground water staff submitting only two additional Supplementary RAIs during the reporting period.

ORNL surface water staff continues to await applicant responses on the Supplemental RAIs submitted earlier. ORNL surface water staff continued to perform confirmatory analysis.

After discovering that a data package related to RAI question 18179 (RAI 4806) had been placed in the reading room, ORNL surface water staff reviewed that package and determined that the Applicant's analysis did not close the question of whether addition of interpolated cross-sections could lead to water elevations above the critical threshold for safety. The Applicant's addition of one set of interpolated cross-sections did in some cases result in higher water levels, but there is no documentation of followup analysis to determine whether that additional refinements could result in an exceedance of the elevation threshold. Staff expects this finding to lead either to an additional Supplementary RAI or an Open Item.

At this time, ORNL believes all Supplementary RAIs have been submitted, except as noted above. During the course of writing the pTER and reviewing applicant responses to existing RAIs, it is possible that additional RAIs may arise.

TASK 1c (Deliver pTER)

ORNL received detailed NRC comments and suggested revisions on the first draft of the pTER delivered in August 2010.

ALL OTHER PHASES AND TASKS

No activity during the reporting period. See Section 3 for a list of those tasks that have been completed.

3. TASK/MILESTONE STATUS:

The detailed schedule was discussed during the Site Safety Audit in March 2010. On September 7, 2010, the NRC TM and the ORNL PI discussed the deliverable dates for the items in ORNL's Task Order. The following table represents the best available schedule of activities under this Task Order.

Description	Planned Completion Date	Revised Completion Date	Actual Completion Date
Task 0: Orientation/Kick-off meeting	TBD	Feb 1-2, 2010	Feb 1-2, 2010
PHASE 1, Task 1a: Site Safety Audit	Mar 22-26, 2010		Mar 22-26, 2010
PHASE 1, Task 1b: Develop RAIs	May 1-21, 2010		May 2010
PHASE 1, Task 1c: Deliver pTER	Jun 30, 2010	Aug 6, 2010	Aug 6, 2010
PHASE 1, Task 1d: Supplemental RAIs	Nov 30, 2010	TBD	
PHASE 2, Task 2a: Prepare TER with Ols	TBD		
PHASE 3, Task 3a: Support ACRS Hearing	TBD		
PHASE 4, Task 4a: Prepare Advanced TER	June 15, 2011		
PHASE 5, Task 5a: Support ACRS Hearing	Dec 9, 2011		
PHASE 6, Task 6a: Prepare Final TER	Jan 25, 2012		
PHASE 7, Task 7a: Support ASLB Hearings	TBD		
Other: Prepare monthly reports	Monthly		

4. TRAVEL:

None during the reporting period.

5. REPORTS, PAPERS, AND PUBLICATIONS:

None during the reporting period.

6. PROPERTY ACQUIRED:

No property that could be considered sensitive or that had an acquisition cost of \$500 or more was purchased during the reporting period.

7. PROBLEM AREAS:

ORNL groundwater staff await Applicant's response to four outstanding RAIs (Question 19387/ RAI ID 5190) submitted to NRC on December 13, 2010. No estimations of Applicant response have been provided to date. ORNL surface water staff are considering Applicant's response to the outstanding RAIs discussed above. Due to delays in Applicant's response to ground and surface water RAIs, the target delivery date for the Advanced TER was delayed from May 7 to June 15, 2011 during this reporting period.

8. PLANS FOR THE NEXT REPORTING PERIOD (2/21/2011 through 3/27/2011):

ORNL staff will continue confirmatory analysis for surface water. ORNL ground water staff will begin to prepare the second draft of the pTER w/OI.

9. FINANCIAL STATUS AND VARIANCE ANALYSIS:

Detailed financial information is provided on the following page. The actual expenditures for the reporting period were almost identical with the amount projected in the electronic spending plan for this Task Order.

Estimated Spending Plan for the next 6 months					
March	April	May	June	July	August
(b)(5)					

MLSR FINANCIAL STATUS REPORT -February 2011

(ORNL Business Month: January 24, 2011 -February 20, 2011)

Job Code No: Q4006
Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, And Readiness
Assessment Activities Related to New Reactor License Applications
Project Period of Performance: 9/14/07-7/01/12
Task Order Number: 13
Task Order Title: Hydrology Safety Review of the Turkey Point 6 & 7 COL
Task Order Period of Performance: 9/1/09 - 7/1/12
Level of Effort: 2,140 hours

(b)(5)

**MLSR FINANCIAL STATUS REPORT -February 2011
(ORNL Business Month: January 24, 2011 -February 20, 2011)**

Job Code No: Q4006

**Project Title: Technical Assistance in Support of Design Certification (DC),
Early Site Permit (ESP), Combined License (COL), Environmental,
Infrastructure and Knowledge Management Tools, and Readiness
Assessment Activities Related to New Reactor License Applications**

A. Task Order Summary Table

Task Order	Authorized Cost Ceiling	Obligations To Date	Obligations Balance	Total Costs To Date	Uncosted Balance	Fiscal Year Costs to Date	Period Costs		Status
							Fund	FAC*	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
TOTAL									

(b)(5)

Munson, Clifford

From: Cook, Christopher
Sent: Friday, March 11, 2011 2:30 PM
To: Karas, Rebecca; Munson, Clifford
Subject: FW: DRAFT mudmat COLA changes
Attachments: VEGP-VOL-Ch02 mudmat DEP - draft 20110311.pdf

Importance: High

FYI

-----Original Message-----

From: Joshi, Ravindra
Sent: Friday, March 11, 2011 12:21 PM
To: Wang, Weijun; Tegeler, Bret
Cc: Shams, Mohamed; Cook, Christopher; Cruz, Jeffrey
Subject: FW: DRAFT mudmat COLA changes
Importance: High

To All,

(b)(5)

Thanks,

Ravi

-----Original Message-----

From: Aughtman, Amy G. [<mailto:AGAUGHTM@SOUTHERNCO.COM>]
Sent: Friday, March 11, 2011 12:02 PM
To: Joshi, Ravindra
Cc: Eddie Grant; Richard Grumbir; Sparkman, Wesley A.
Subject: DRAFT mudmat COLA changes
Importance: High

Ravi

(b)(5)

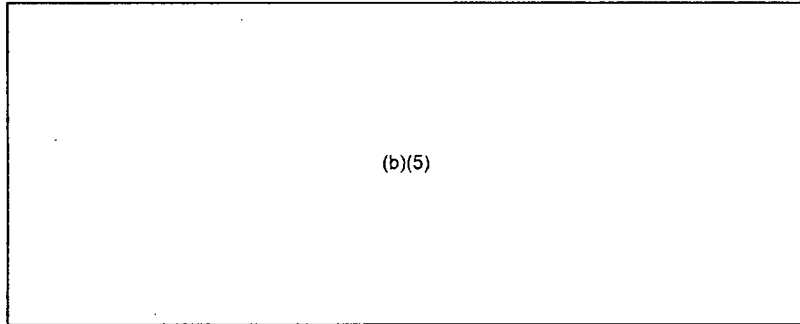
Amy A.

ND-11-####

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, 2011

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DRAFT

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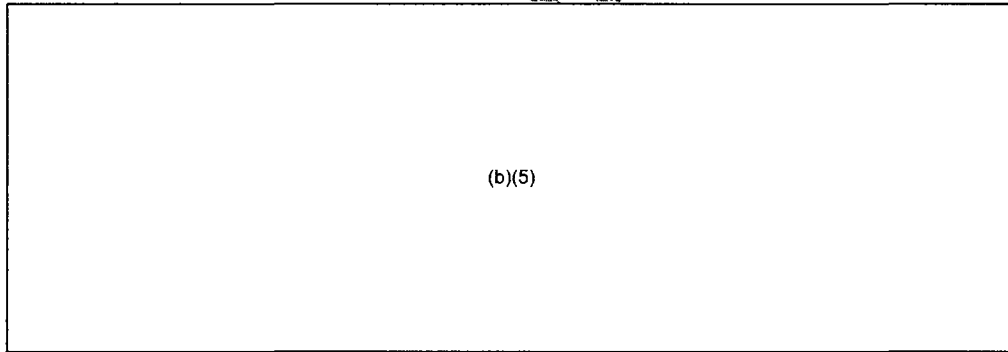
(b)(5)

RAI

Southern Nuclear Operating Company

ND-11-####

Enclosure



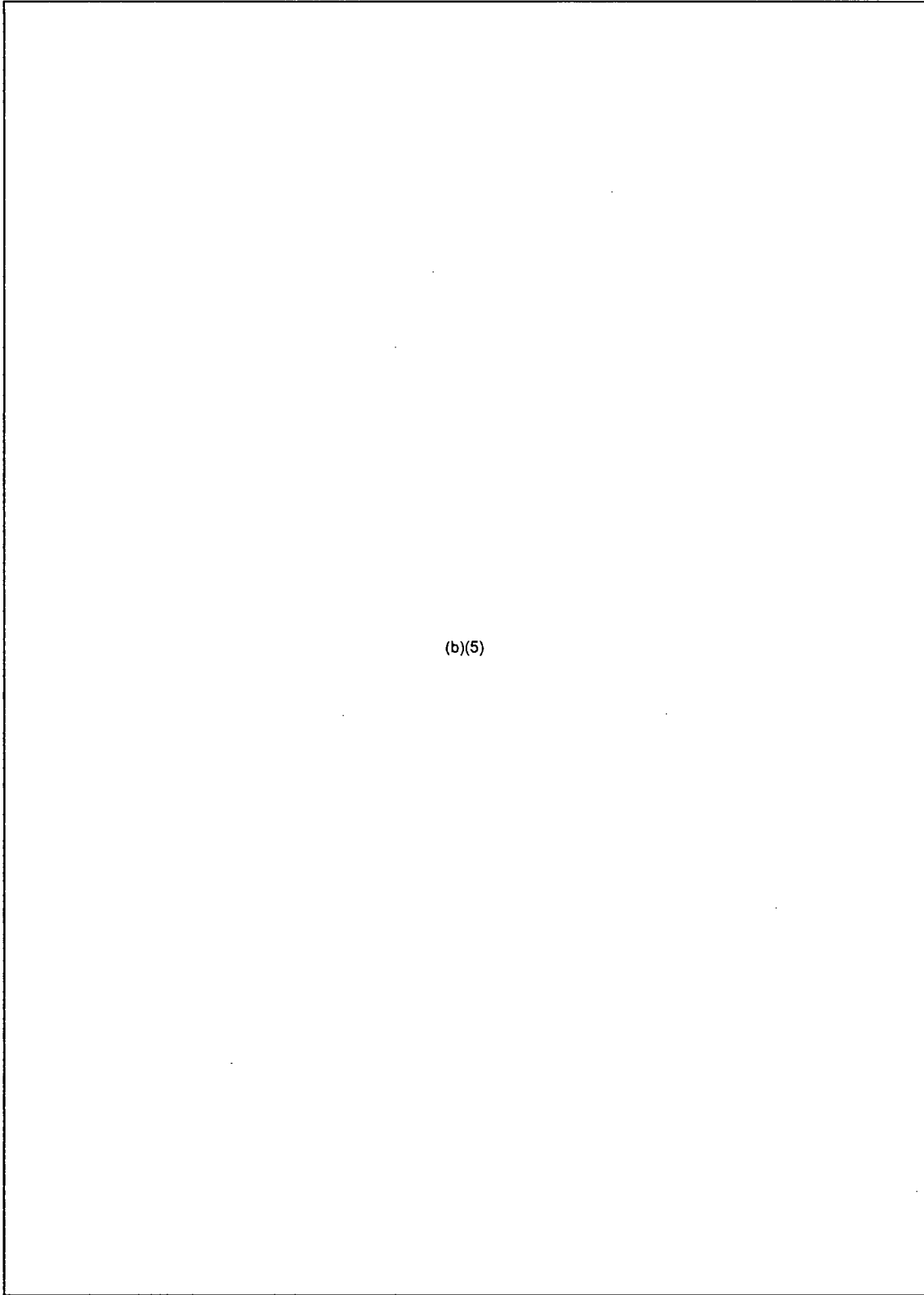
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ND-11-####
Enclosure
Voluntary Revision to FSAR Chapter 2

(b)(5)

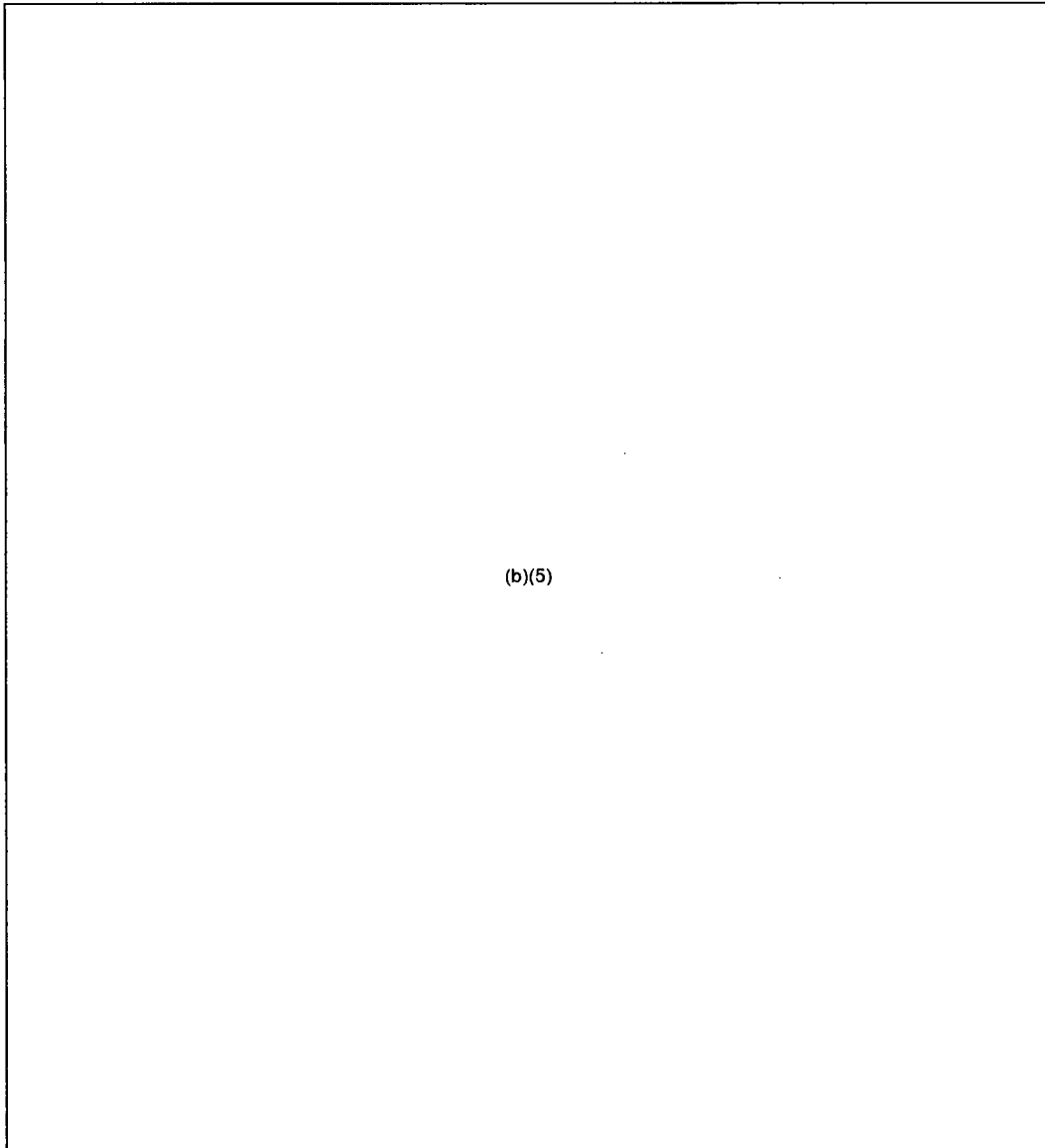
(b)(5)

ND-10-xxxx
Enclosure
Voluntary Revision to FSAR Chapter 2



(b)(5)

ND-10-xxxx
Enclosure
Voluntary Revision to FSAR Chapter 2



(b)(5)

From: [Dube, Donald](#)
To: [Williams, Donna](#)
Cc: [Clark, Theresa](#); [Lombard, Mark](#); [Ader, Charles](#); [Johnson, Michael](#); [Holahan, Gary](#)
Subject: draft slides for NRO all-hands
Date: Friday, March 11, 2011 10:24:20 AM
Attachments: [NRO all-hands 032311_rev 2.optx](#)
Importance: High

(b)(5)

I'll be at the PSA 2011 conference March 13-17, but will be in on the 18th to make any last minute changes, or Theresa might handle any minor editorial kinds of revisions,

Don

(b)(5)





Outline

(b)(5)

(b)(5)



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Protecting People and the Environment

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(b)(5)

From: [Lewis, Robert](#)
To: [Jaczko, Gregory](#)
Cc: [Viroillo, Martin](#); [Weber, Michael](#); [Johnson, Michael](#); [Miller, Charles](#); [Moore, Scott](#); [Cool, Donald](#); [Tappert, John](#); [Borchardt, Bill](#); [Wiggins, Jim](#); [Carpenter, Cynthia](#); [Ordaz, Vonna](#); [Batkin, Joshua](#); [FOIA Response.hoc Resource](#); [Coggins, Angela](#); [Lubinski, John](#); [Zimmerman, Roy](#); [Moore, Scott](#)
Subject: draft approach to considering relaxing protective actions
Date: Tuesday, March 22, 2011 6:33:26 AM
Attachments: [Relaxing protective action criteria EDITS 03-22-2011.doc](#)

Chairman Jaczko

In response to your request, the PMT and ET developed the attached approach to potentially relax the protective action recommendations, particularly the 50 mile evacuation recommendation.

This could become a potential deputies' meeting discussion topic.

- Rob

Q:

(b)(5)

A:

(b)(5)

Explanation

(b)(5)

(b)(5)

CRITERIA

1.	
2.	(b)(5)
3.	

M:\PMT\Relaxing protective action criteria.doc

From: Carneal, Jason
Sent: Monday, March 14, 2011 9:33 PM
To: ODriscoll, James; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jim:

Thanks for the clarification. I agree with the approach of tracking it in Chapter 6 if we decide to ask for it at all.

Once we have input from Chris. I'll schedule a follow-up discussion with Bob to cover this action item. It will probably be Wednesday or Thursday as I am hoping to get Bob's comments on the remainder of Chapter 6 (including 6.4) as soon as possible.

Thanks,

Jason

From: ODriscoll, James
Sent: Monday, March 14, 2011 4:22 PM
To: Carneal, Jason; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jason,

(b)(5)

From: Carneal, Jason
Sent: Monday, March 14, 2011 3:59 PM
To: ODriscoll, James; Jackson, Christopher
Cc: McKirgan, John
Subject: RE: EPR 6.5 chapter day HVAC ITAAC OGC question

Jim:

If we want to ask for an ITAAC, will we evaluate it in 6.5 or 14.3? Just wondering, since if it will be handled in the 14.3 review we can place a pointer in the ITAAC discussion.

I've seen it both ways in the SERs for other Chapters.

Thanks,

Jason

From: ODriscoll, James
Sent: Monday, March 14, 2011 2:57 PM
To: Carneal, Jason; Jackson, Christopher
Cc: McKirgan, John
Subject: EPR 6.5 chapter day HVAC ITAAC OGC question

Chris,
I think the SER paragraph under "summary of Application should be changed as follows to address Bob's comment:

(b)(5)

Please let me know what you think.

Thanks,
Jim

From: Wagage, Harry
Sent: Tuesday, March 15, 2011 8:29 PM
To: McKirgan, John; Jackson, Christopher
Subject: AP1000 PCS SS time delay Audit Report.doc

Chris and John,

Enclosed is the audit summary for your review and comment.

Harry

AP1000 DCD REVISION 18

EMERGENCY CORE COOLING SYSTEMS SUCTION STRAINER REVIEW

AUDIT SUMMARY

1. Background

The staff performed an audit of the Westinghouse AP1000 Design Certification Document change to address modeling update on the delay in establishing Passive Containment Cooling System (PCS) water coverage of the containment shell. The applicant updated its modeling to correct the time for PCS to begin steady state film coverage of the containment vessel shell, which is determined using a scaling factor from AP600 full scale 1/8 sector testing.

The staff performed this audit at the Westinghouse Office in Rockville, MD on February 22 and March 4, 2011. The audit team consisted of the following NRC staff members:

Henry Wagage, NRC Technical Staff
David Jaffe, NRC Licensing

2. Objective

The objective of the audit was for the staff to review a calculation report supporting Westinghouse assessment of the impact of the change in delay in establishing PCS after a design basis accident as documented in APP-GW-GLR-096, "Evaluation of the Effect of the AP1000 Enhanced Shield Building Design on the Containment Response and Safety Analysis," Revision 2.

3. Regulatory Basis

This regulatory audit was based on the following:

- GDC 38, "Containment Heat Removal," as it relates to the ability of the containment heat removal system to rapidly reduce the containment pressure and temperature following a loss-of-coolant accident (LOCA) and to maintain them at acceptably low levels.
- GDC 50, "Containment Design Basis," as it relates to demonstrating sufficient margin in accident analysis.
- 10 CFR 52.47(c)(2) and 10 CFR 50.43(e), as they relates to design certification analysis and testing in support of a passive plant design.

4. Documents Audited

The NRC staff reviewed the following documents during the audit:

Westinghouse Document No. APP-SSAR-GSC-193, "Scaling Calculation for Time to Steady State PCS Film Coverage for AP1000 Containment Pressure and Temperature Response Analysis," Revision 0, dated February 2011 and Revision 2, dated March 2011

5. Audit Activities

On February 22, 2011, the staff audited Revision 0 of APP-SSAR-GSC-193, which supports APP-GW-GLR-096, Revision 2. APP-SSAR-GSC-193 addresses the following issues:

- Issue 1 on steady state PCS water coverage as reported in Westinghouse Corrective Action Process Issue Report 10-340-M025, "Scaling Calculation Incorrect for Determining Time to Achieve Steady State Water Coverage," and
- Issue 2 on containment shell coated with epoxy for a short distance above the operating deck as reported in Westinghouse Corrective Action Process Issue Report 10-350-M060"

APP-SSAR-GSC-193, reports that after changing the containment analysis model to address the above two issues, the peak containment pressure of the bounding design basis accident (DBA) increased to 58.04 psig, which is consistent with APP-GW-GLR-096, Revision 2. APP-SSAR-GSC-193 reports that the impact on the peak containment pressure of the bounding DBA is an increase less than 0.05 psi.

The staff noted that a draft version of APP-GW-GLR-096, Revision 2, which the applicant provided to the staff, discusses only Issue 1 but not Issue 2. Therefore, the staff raised a concern and requested the applicant to provide results showing the impact from Issue 1. In response, in APP-SSAR-GSC-193, Revision 1, the applicant added a sensitivity case to provide the impact from issue 1.

On March 4, 2011, the staff audited APP-SSAR-GSC-193, Revision 1. This document reported that as a result of modeling change to address only Issue 1, the peak containment pressure of the bounding DBA increased to 58.034 psig; the impact from Issue 2 was an increase of pressure by 0.01 psi, which is less than that reported in APP-SSAR-GSC-193, Revision 0. This resolved the staff's concern.

During the audit, the staff determined that APP-SSAR-GSC-193, Revision 1, provides supporting documentation for APP-GW-GLR-096, Revision 2, which addresses the delay in establishing PCS coverage of the containment shell.

7. Action Items

None

From: ODriscoll, James

Sent: Tuesday, March 15, 2011 8:59 PM

To: Grady, Anne-Marie; Hart, Michelle; Jackson, Christopher

Subject: Meeting to discuss EPR secondary containment

Ann-Marie/Michelle,

Chris asked me to schedule a meeting to discuss the issue related to the attached email. I'm in all week except Wed. Please let me know your availability and I'll schedule a time.

Thanks,

Jim

From: Ashley, Clinton

Sent: Wednesday, March 16, 2011 1:09 AM

To: Lu, Shanlai; Budzynski, John; Carneal, Jason

Cc: McKirgan, John; Jackson, Christopher

Subject: FW: DRAFT Response to U.S. EPR Design Certification Application RAI No. 416, FSAR Ch. 6, Question 06.03-15

John B. Shanlai -

(b)(5)

Clint

From: WELLS Russell (AREVA) [mailto:Russell.Wells@areva.com]

Sent: Wednesday, March 09, 2011 5:07 PM

To: Tesfaye, Getachew

Cc: BENNETT Kathy (AREVA); DELANO Karen (AREVA); ROMINE Judy (AREVA); GUCWA Len (EXTERNAL AREVA); RANSOM James (AREVA); BROWNSON Doug (AREVA); BALLARD Bob (AREVA); HALLINGER Pat (EXTERNAL AREVA); RYAN Tom (AREVA); WILLIFORD Dennis (AREVA)

Subject: DRAFT Response to U.S. EPR Design Certification Application RAI No. 416, FSAR Ch. 6, Question 06.03-15

Getachew,

Attached is a draft response for RAI No. 416, Question 06.03-15 in advance of the final response date April 7, 2011 as shown below.

Let me know if the staff has questions or if this can be sent as a final response.

Sincerely,

Russ Wells
U.S. EPR Design Certification Licensing Manager
AREVA NP, Inc.
3315 Old Forest Road, P.O. Box 10935
Mail Stop OF-57
Lynchburg, VA 24506-0935
Phone: 434-832-3884 (work)
(b)(6) cell
Fax: 434-382-3884
Russell.Wells@Areva.com

From: BRYAN Martin (External RS/NB)
Sent: Friday, February 11, 2011 8:06 PM
To: Getachew.Tesfaye@nrc.gov
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 416, FSAR Ch. 6, Supplement 2

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for a technically correct and complete response to RAI 416 on August 25, 2010. Supplement 1 response to RAI 416 was sent on November 5, 2010 and provided a response to 2 of the 3 questions.

The response schedule for Question 06.03-15 is changed as shown below to provide additional opportunity to interact with the NRC staff.

Question #	Response Date
RAI 416 — 06.03-15	April 7, 2011

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
(b)(6) cell
Martin.Bryan.ext@areva.com

From: BRYAN Martin (External RS/NB)
Sent: Friday, November 05, 2010 7:54 AM
To: 'Tesfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 416, FSAR Ch. 6, Supplement 1

Getachew,

AREVA NP Inc. (AREVA NP) provided a schedule for a technically correct and complete response to RAI 416 on August 25, 2010. The attached file, "RAI 416 Supplement 1 Response US EPR DC.pdf" provides technically correct and complete responses to 2 of the 3 remaining questions, as committed. Appended to this

file are affected pages of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which support the response to RAI 416 Question 06.02.01-94.

The following table indicates the respective pages in the response document, "RAI 416 Supplement 1 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 416 — 06.02.01-94	2	31
RAI 416 — 06.02.01-95	32	35

The response schedule for Question 06.03-15 is changed to provide additional opportunity to interact with the NRC staff as shown below.

Question #	Response Date
RAI 416 — 06.03-15	February 24, 2011

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
(b)(6) cell
Martin.Bryan_ext@areva.com

From: BRYAN Martin (External RS/NB)
Sent: Wednesday, August 25, 2010 8:13 PM
To: 'Tsfaye, Getachew'
Cc: DELANO Karen (RS/NB); ROMINE Judy (RS/NB); BENNETT Kathy (RS/NB); GUCWA Len (External RS/NB)
Subject: Response to U.S. EPR Design Certification Application RAI No. 416, FSAR Ch. 6

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 416 Response US EPR DC.pdf" provides a schedule since a technically correct and complete response to the 3 questions cannot be provided at this time.

The following table indicates the respective pages in the response document, "RAI 416 Response US EPR DC.pdf," that contains AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 416 — 06.02.01-94	2	3
RAI 416 — 06.02.01-95	4	4
RAI 416 — 06.03-15	5	6

A complete answer is not provided for 3 of the 3 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 416 — 06.02.01-94	November 6, 2010
RAI 416 — 06.02.01-95	November 6, 2010

Sincerely,

Martin (Marty) C. Bryan
U.S. EPR Design Certification Licensing Manager
AREVA NP Inc.
Tel: (434) 832-3016
(b)(6) cell
Martin.Bryan.ext@areva.com

From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]

Sent: Monday, July 26, 2010 6:52 AM

To: ZZ-DL-A-USEPR-DL

Cc: Peng, Shie-Jeng; Jackson, Christopher; McKirgan, John; Ashley, Clinton; Lu, Shanlai; Donoghue, Joseph; Carneal, Jason; Colaccino, Joseph

Subject: U.S. EPR Design Certification Application RAI No. 416(4767,4749),FSAR Ch. 6

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on June 6, and discussed with your staff on June 30, 2010. No change is made to the draft RAI as a result of that discussion. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Response to

Request for Additional Information No. 416(4767, 4749), Revision 1

7/26/2010

U.S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 06.02.01 - Containment Functional Design

SRP Section: 06.03 - Emergency Core Cooling System

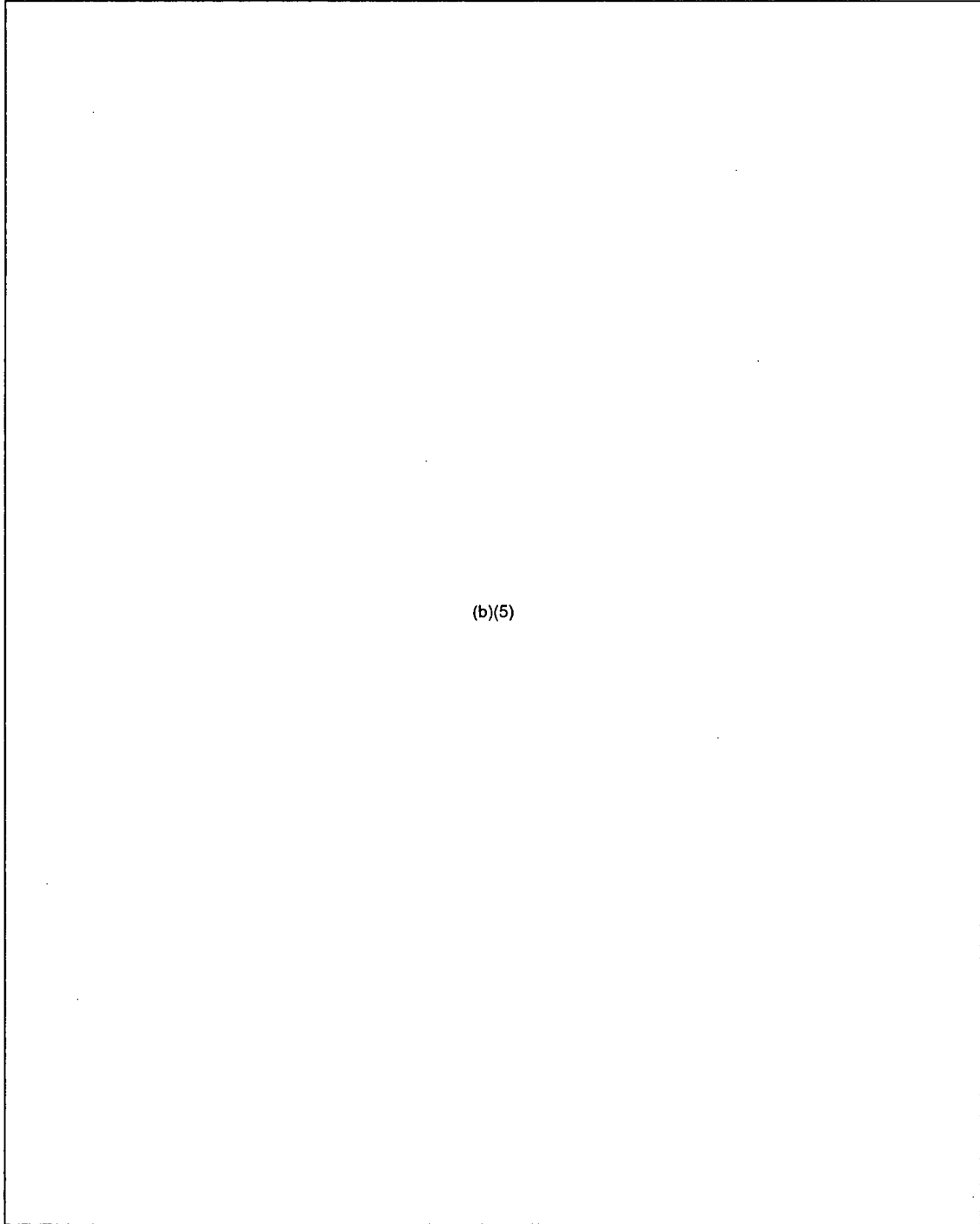
Application Section: FSAR Chapter 6

**QUESTIONS for Containment and Ventilation Branch 1 (AP1000/EPR Projects)
(SPCV)**

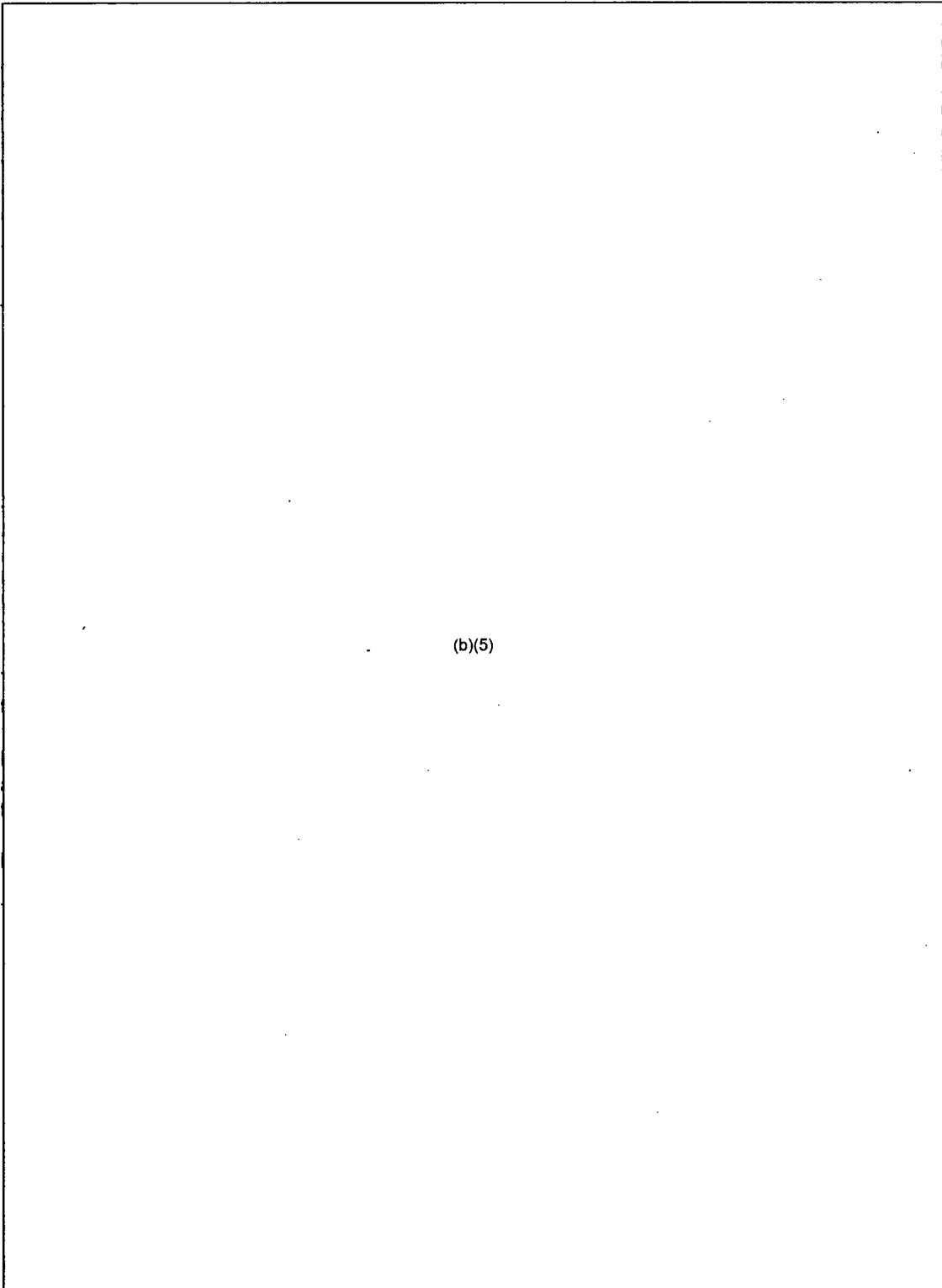
QUESTIONS for Reactor System, Nuclear Performance and Code Review (SRSB)

Question 06.03-15:

Follow-up to RAI 212, Question 6.03-6



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AREVA NP Inc.

Response to Request for Additional Information No. 416, Draft
U.S. EPR Design Certification Application

Page 5 of 5

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From: Carneal, Jason

Sent: Wednesday, March 16, 2011 2:40 PM

To: ODriscoll, James

Cc: Jackson, Christopher; Hart, Michelle

Subject: SPCV follow-up items in Section 6.5.3

Jim:

We came across a couple of items during the Section 6.5.3 review that were containment branch items. I have attached a highlighted copy of the OGC comments on which that Michelle said we would need to confer with SPCV.

- 1.
- 2.
- 3.

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I am expecting to get comments from OGC today on Section 6.4. Could we cover the attached, highlighted items, when we discuss Section 6.4 with OGC?

Joe Colaccino and Getachew are pushing for Friday issuance for Chapter 6. Would a Chapter Day on Friday be possible if I get the comments on Section 6.4 to you today?

Thanks,

Jason

JASON CARNEAL
PROJECT MANAGER
U.S. NUCLEAR REGULATORY COMMISSION
NRO/DNRL/NARP (T-6J4)
301-415-3813

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6.5.3.1 Introduction

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6.5.3.2 (b)(5) Summary of Application

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FSAR Tier 1:

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FSAR Tier 2:

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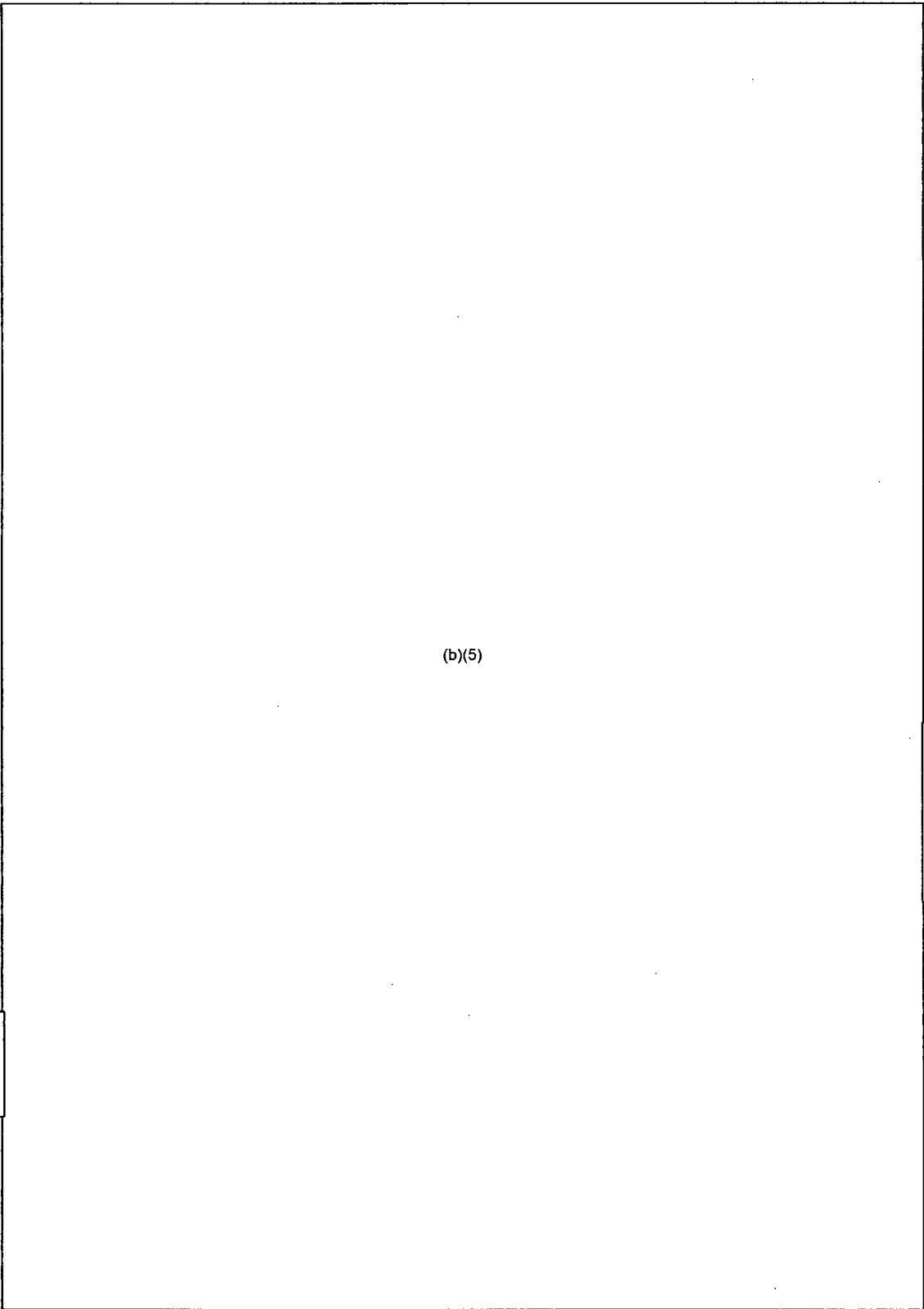
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-----Original Appointment-----

From: Miller, Eric

Sent: Thursday, March 17, 2011 3:27 PM

To: Miller, Eric; Ashley, Clinton; Jensen, Walton; Drozd, Andrzej; Peng, Shie-Jeng; McKirgan, John

Cc: Jackson, Christopher

Subject: Update on Code Methodology recommendations regarding NPSH

When: Wednesday, March 23, 2011 1:00 PM-2:00 PM (GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna.

Where: John's Office (T-10F34)

When: Wednesday, March 23, 2011 8:00 AM-9:00 AM (GMT-05:00) Eastern Time (US & Canada).

Where: John's Office (T-10F34)

Note: The GMT offset above does not reflect daylight saving time adjustments.

~~*~*~*~*~*~*~*~*



Containment ML09110052

eling for NPSI 10.pdf

NPSH Methodology Assumptions used in approved NRC Staff Safety Evaluation

Model Options

Heat Transfer

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Revaporization Fraction

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Fog and Mist Modeling

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Jet and Drop Breakup Model

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Drop-Liquid Phase Conversion

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Structural Heat Sinks

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Containment Spray

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Heat Exchangers

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Fan Coolers

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Interfacial Area

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Break Flow Flashing

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Mass and Energy Calculations

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Single Failure

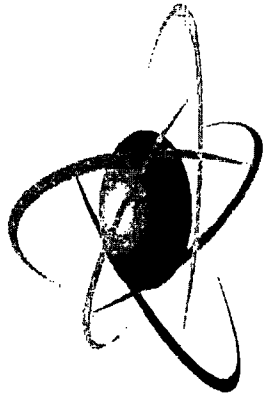
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NPSH for non-design basis events assumptions

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From: Jensen, Walton
Sent: Thursday, March 17, 2011 4:15 PM
To: McKirgan, John
Cc: Jackson, Christopher; Peng, Shie-Jeng
Subject:

John,
Here are the draft ACRS slides on the multi-node model, LOCA M&E, MSLB M%E and min. containment pressure. I borrowed some from Chris and put in lots of pictures since that seems to be what ACRS likes.
Walt



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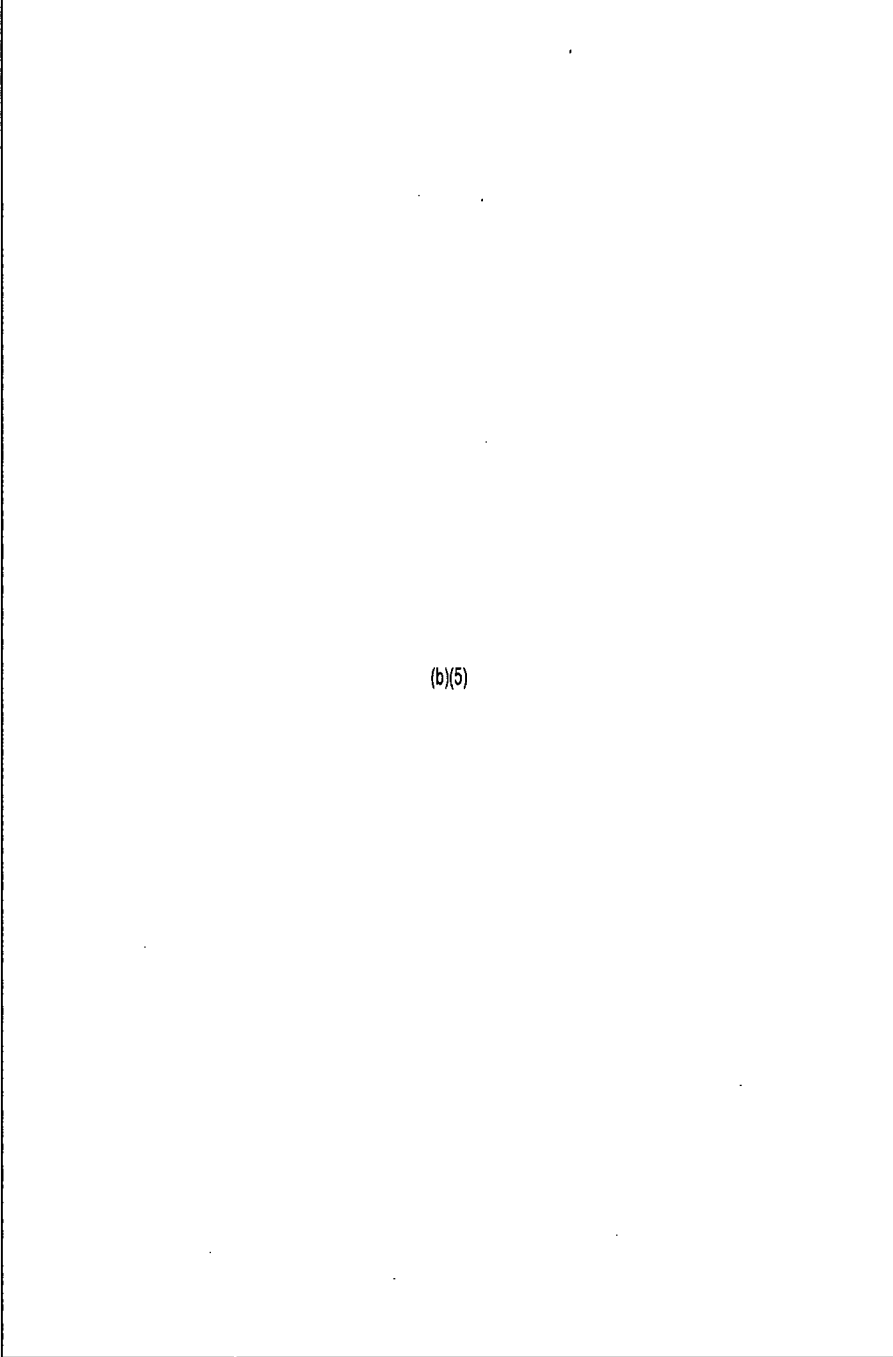
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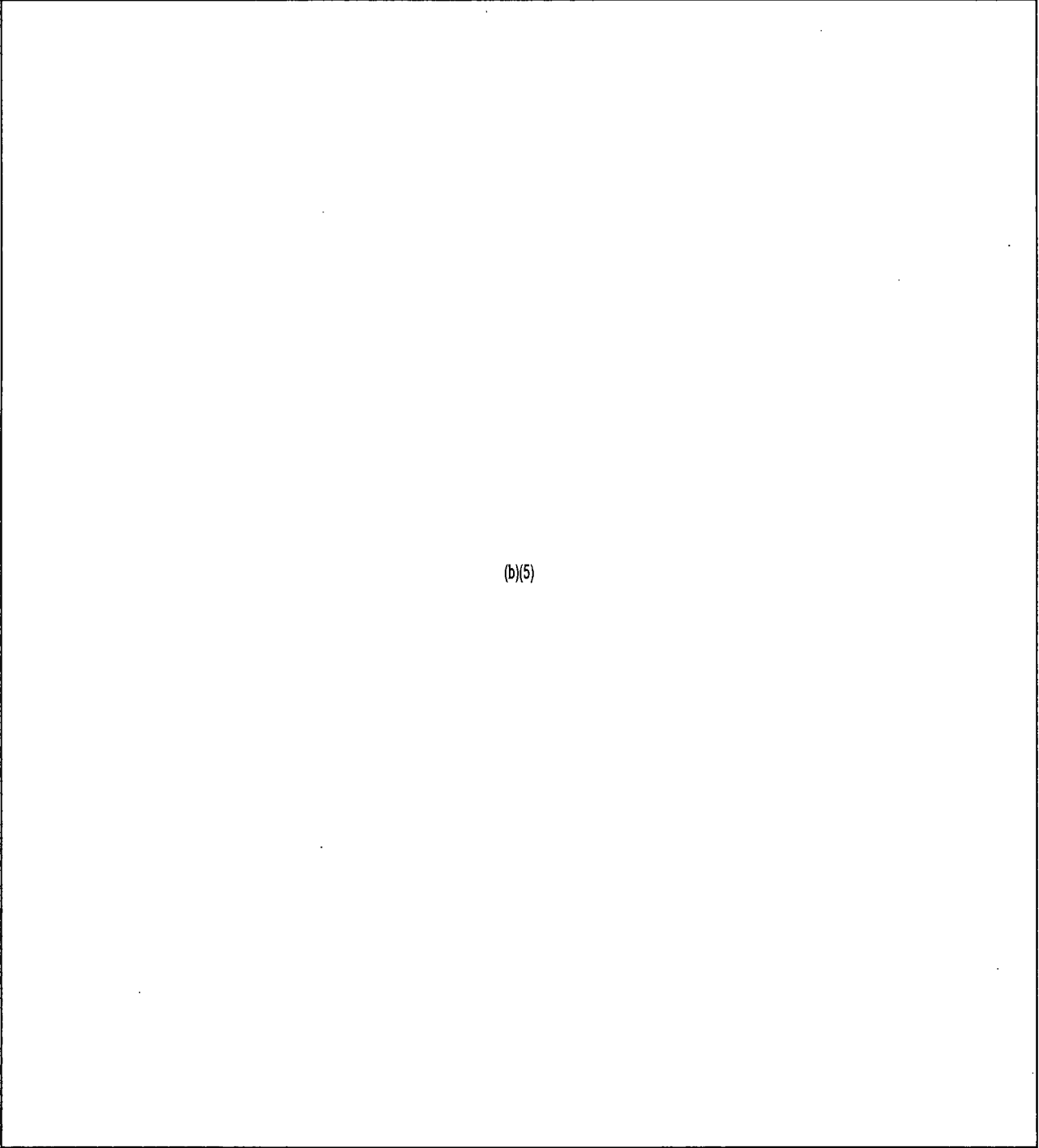


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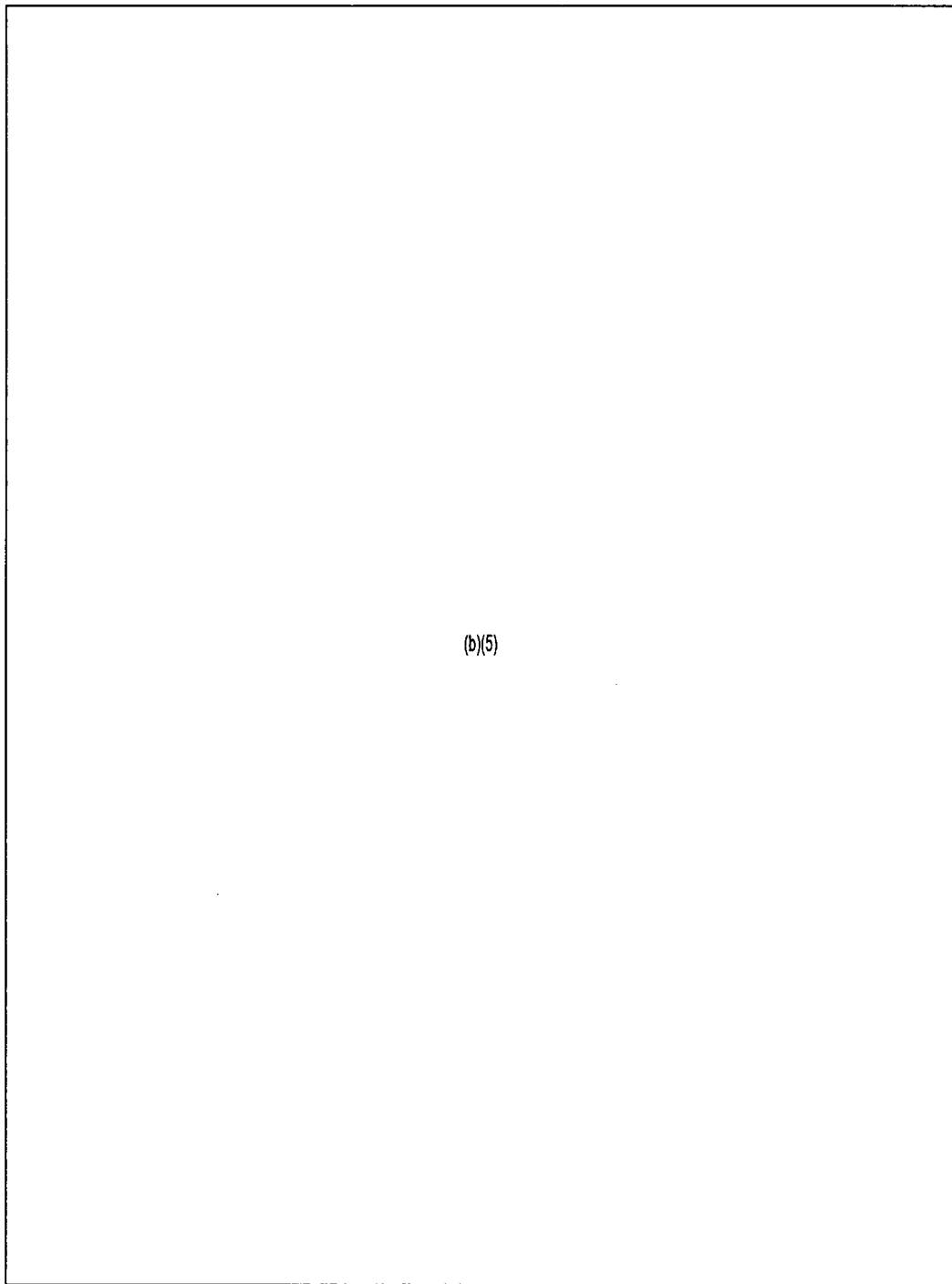
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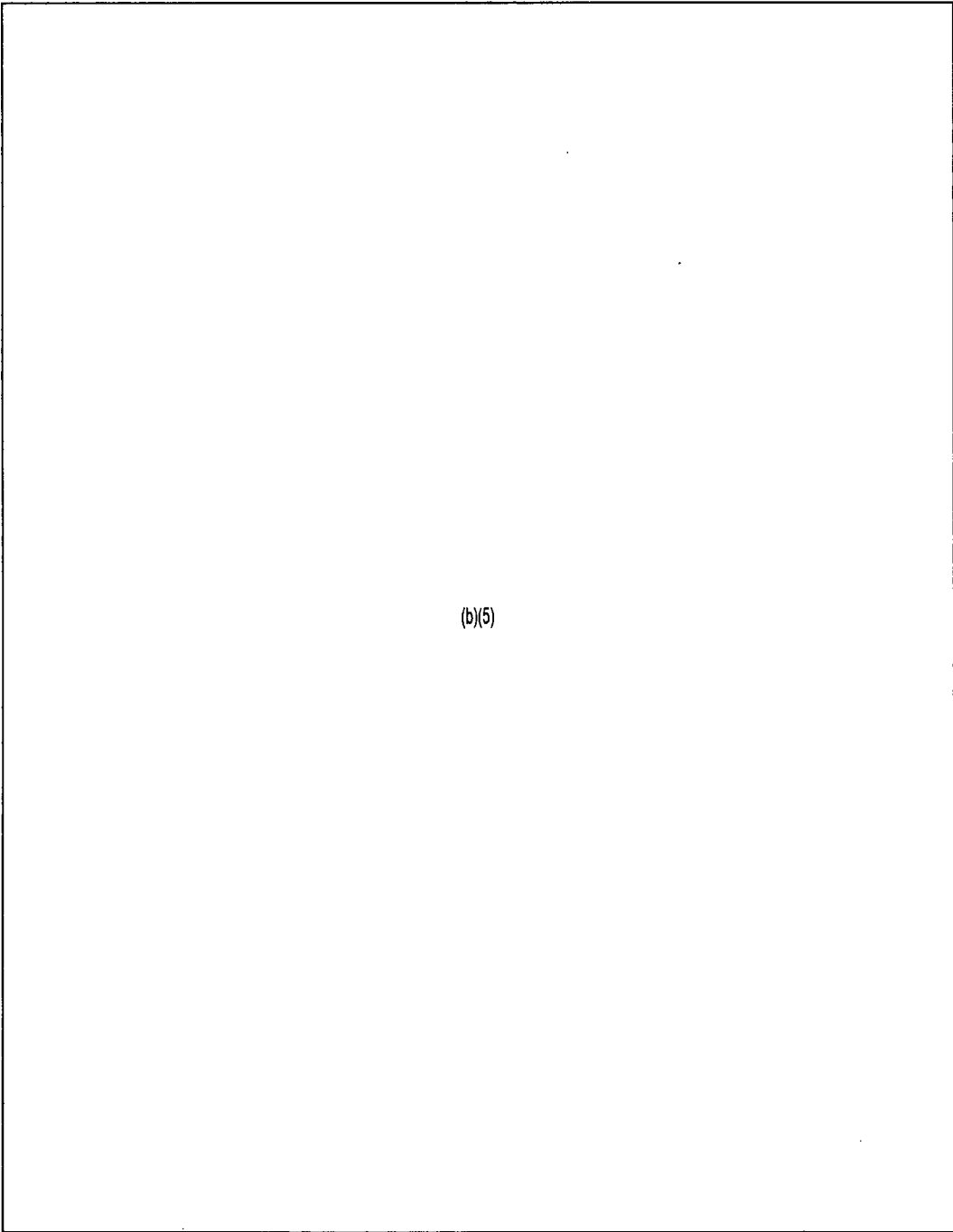
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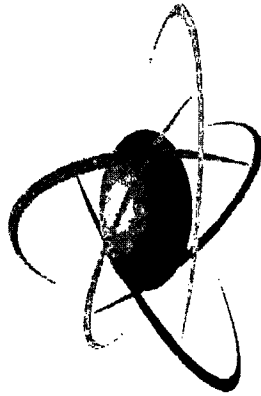
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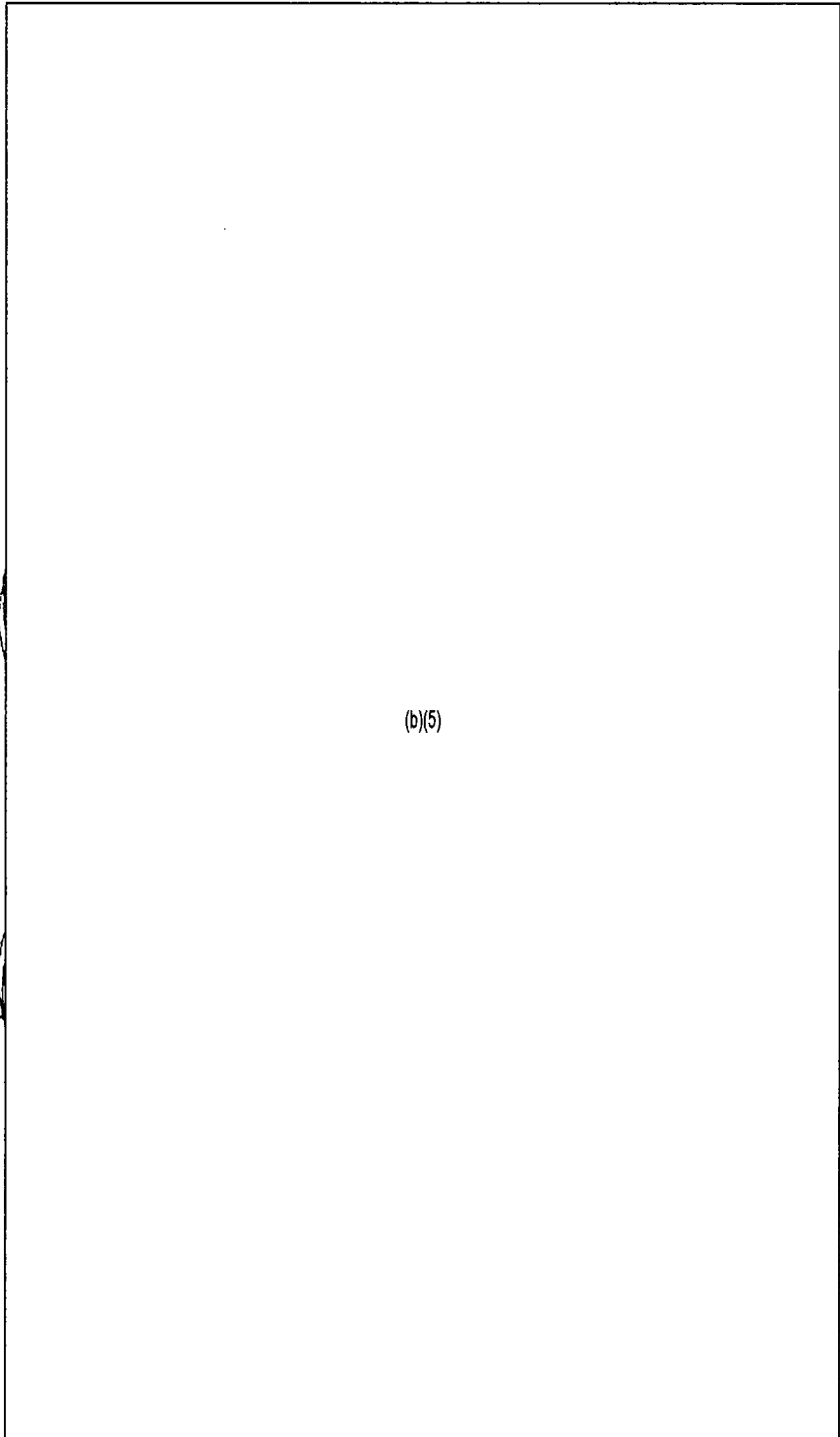
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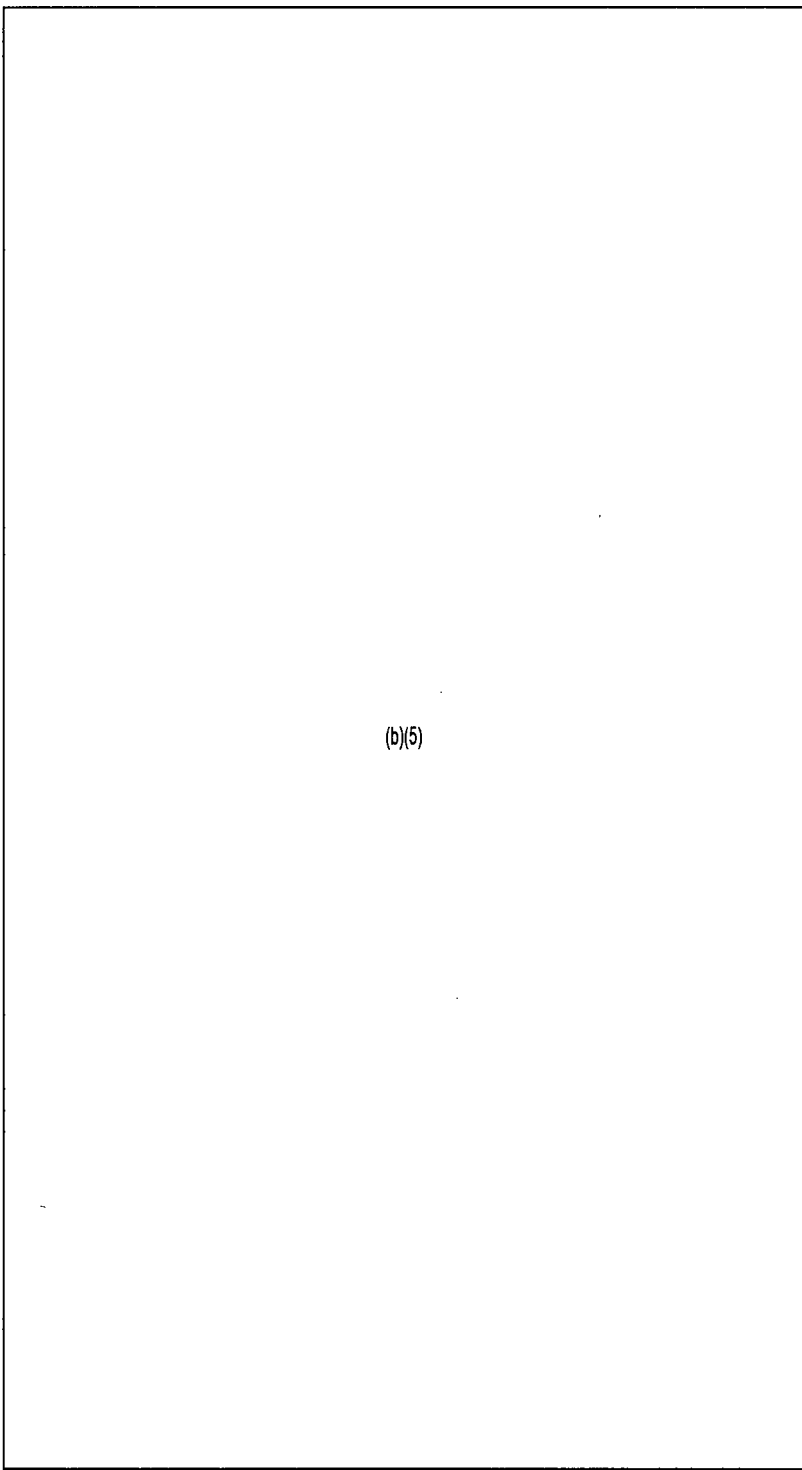
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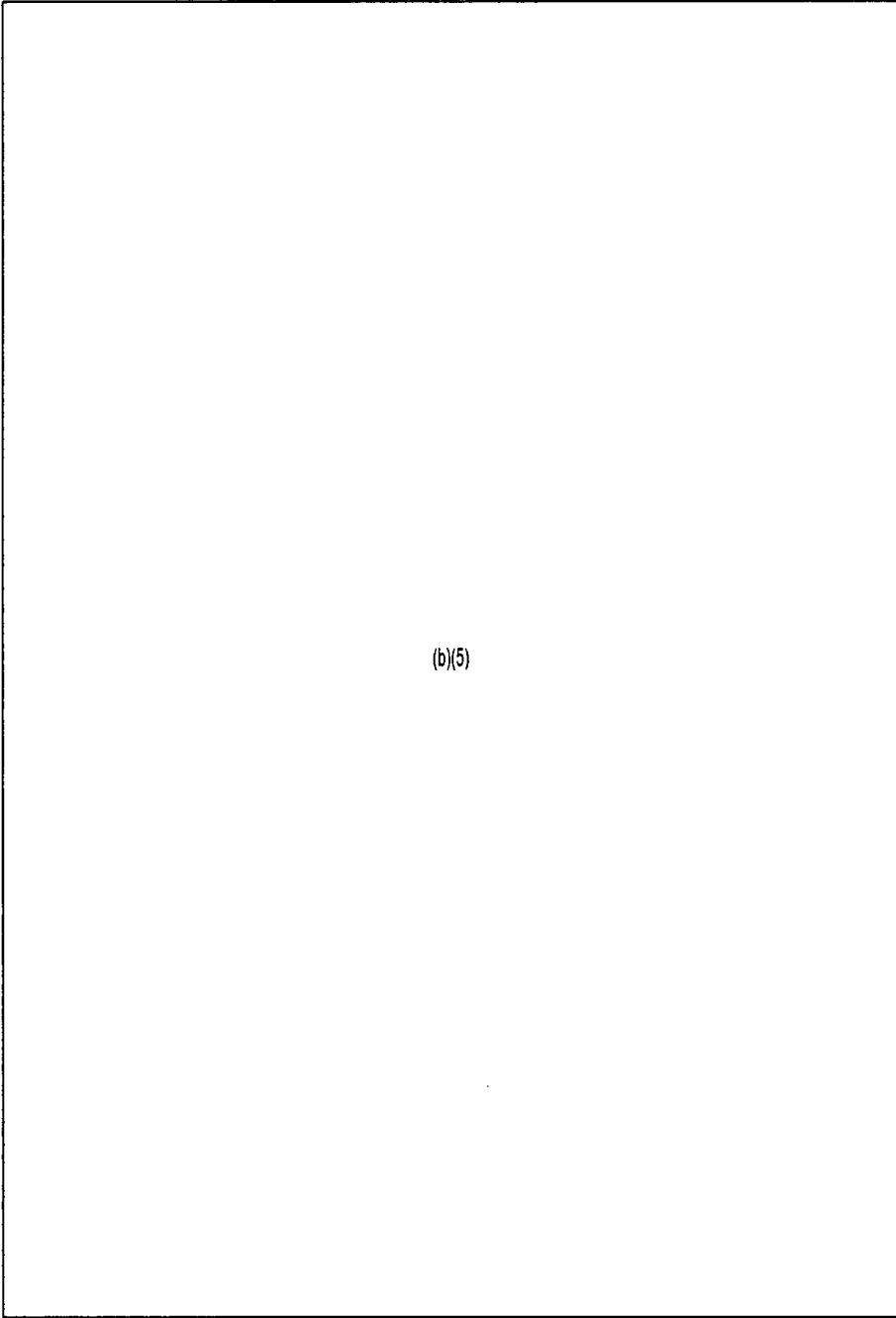
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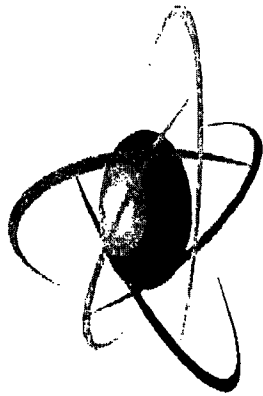
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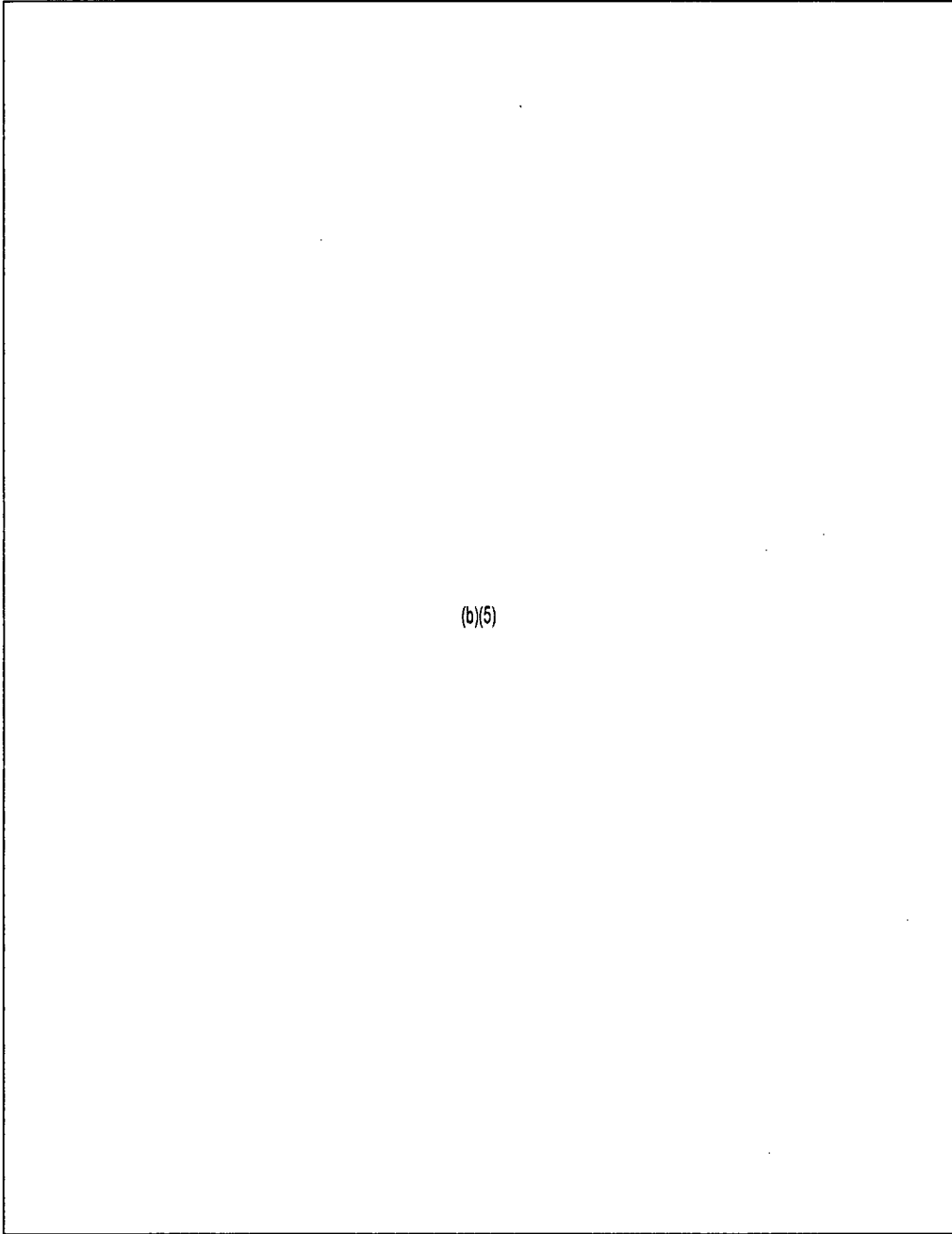
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From: Carneal, Jason
Sent: Thursday, March 17, 2011 5:05 PM
To: Jackson, Christopher
Subject: FW: US EPR DCD ch 6.2.4 AGrady changes to OGC comments for chapter day 17 Mar

Chris:

Attached are the changes Anne-Marie sent me. We will work from this file today, and I'll incorporate any updates into the master ADAMS file after the meeting.

Thanks,

Jason

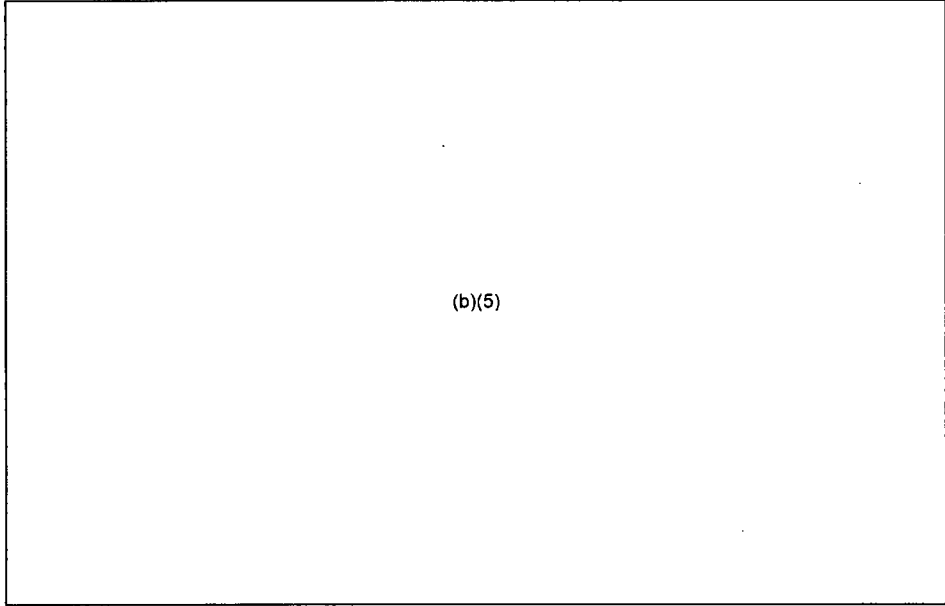
From: Grady, Anne-Marie
Sent: Thursday, March 17, 2011 11:39 AM
To: Carneal, Jason
Subject: US EPR DCD ch 6.2.4 AGrady changes to OGC comments for chapter day 17 Mar

Jason,

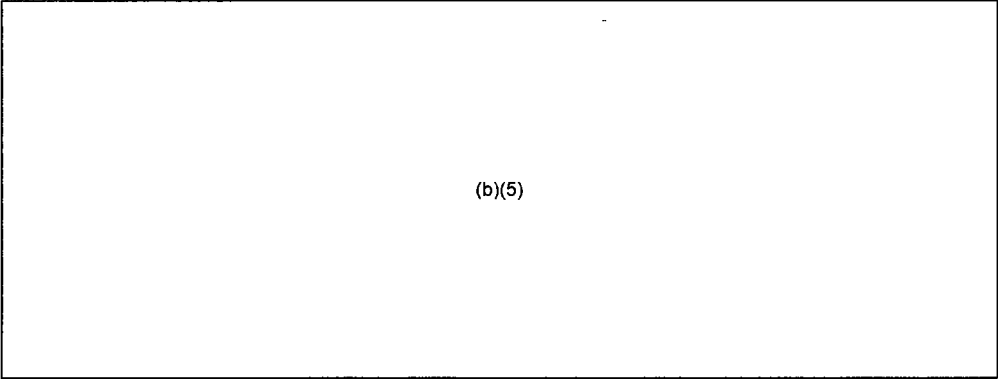
Attached is the Word document including ch 6.2.4. I have addressed OGC comments by revising the text using track changes, as you requested.

Anne-Marie

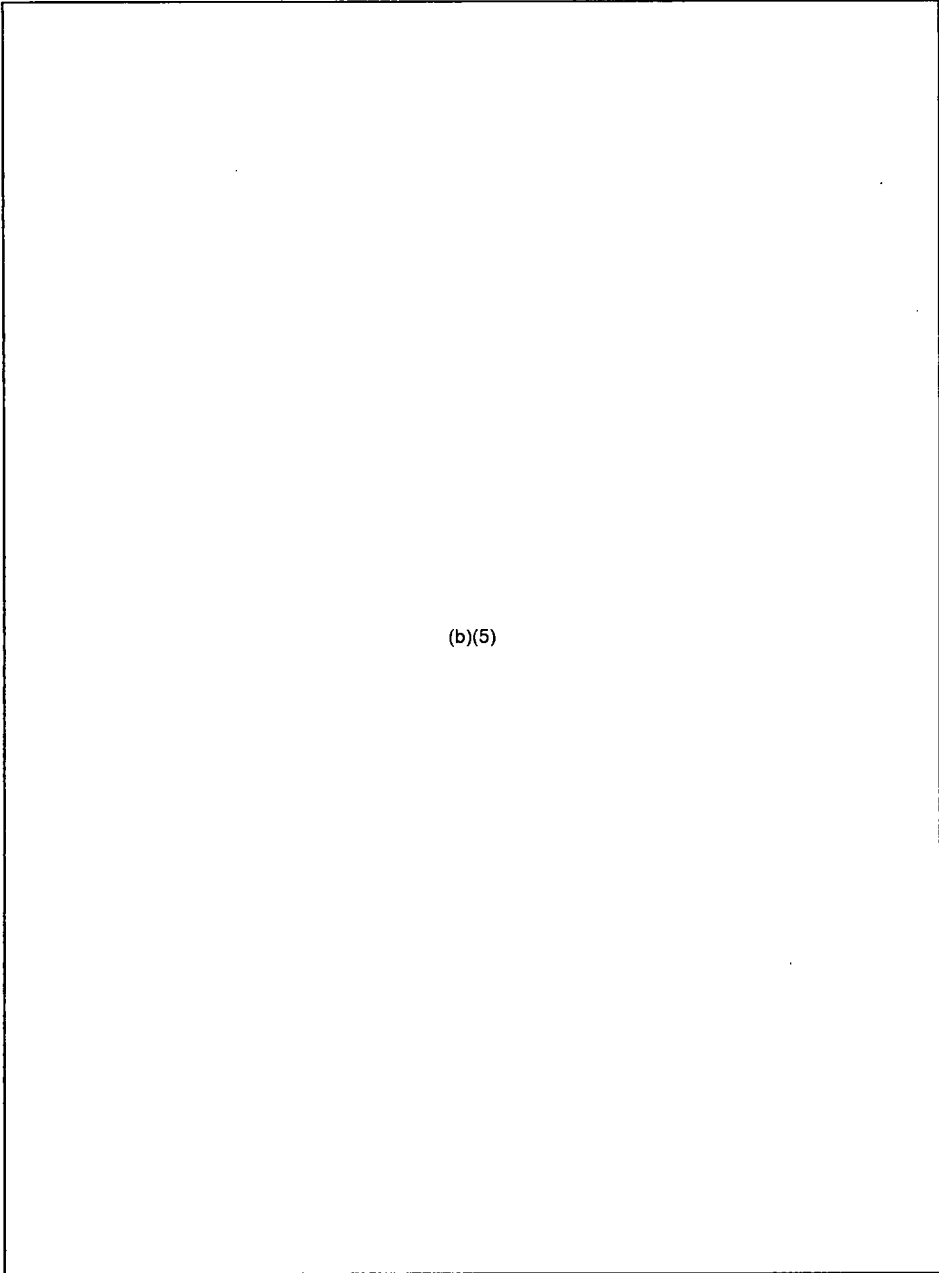
Anne-Marie Grady, PE
Reactor Systems Engineer
US Nuclear Regulatory Commission
NRO/DSRA/SPCV
301-415-7645
Anne-Marie.Grady@nrc.gov



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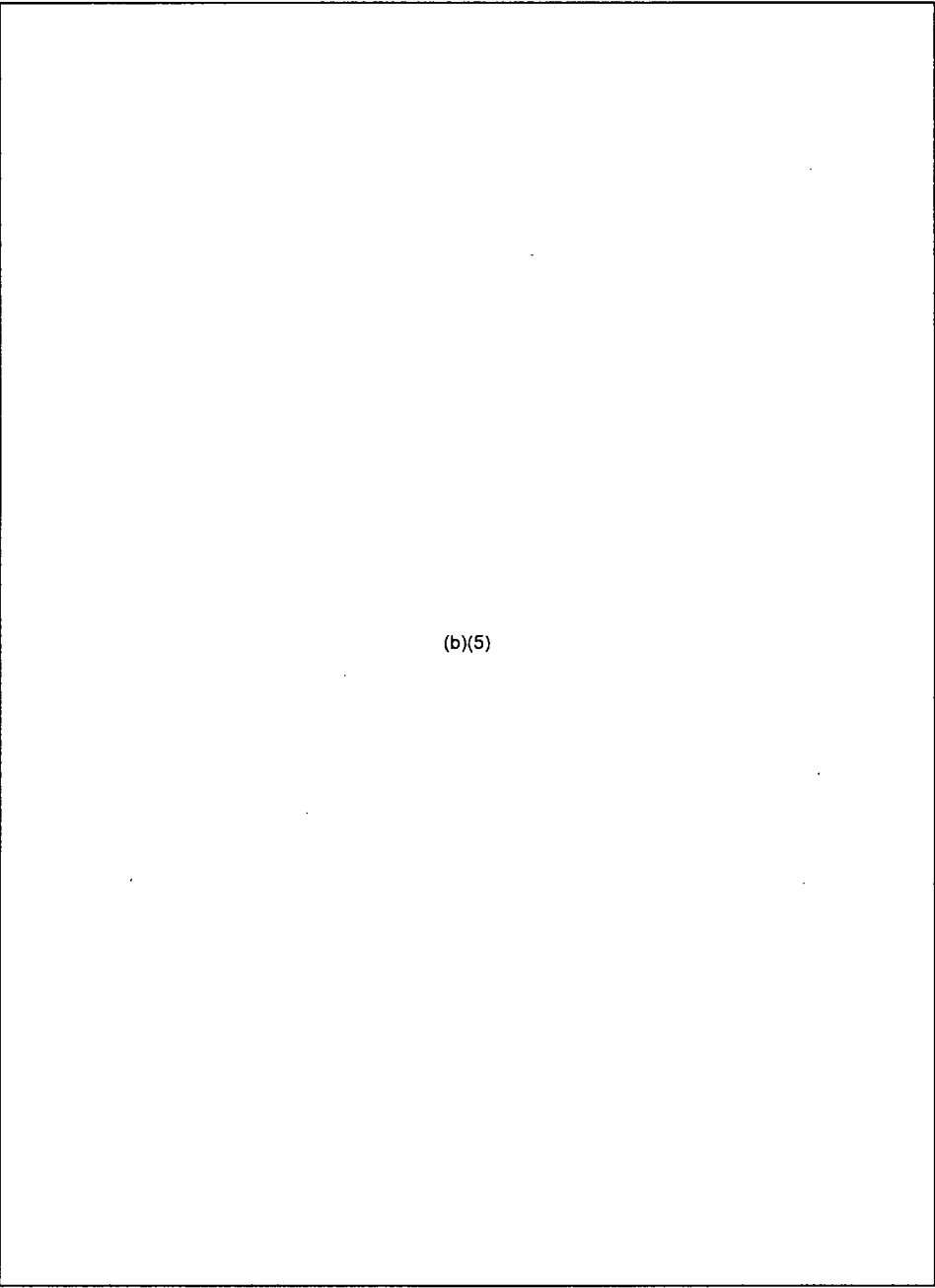


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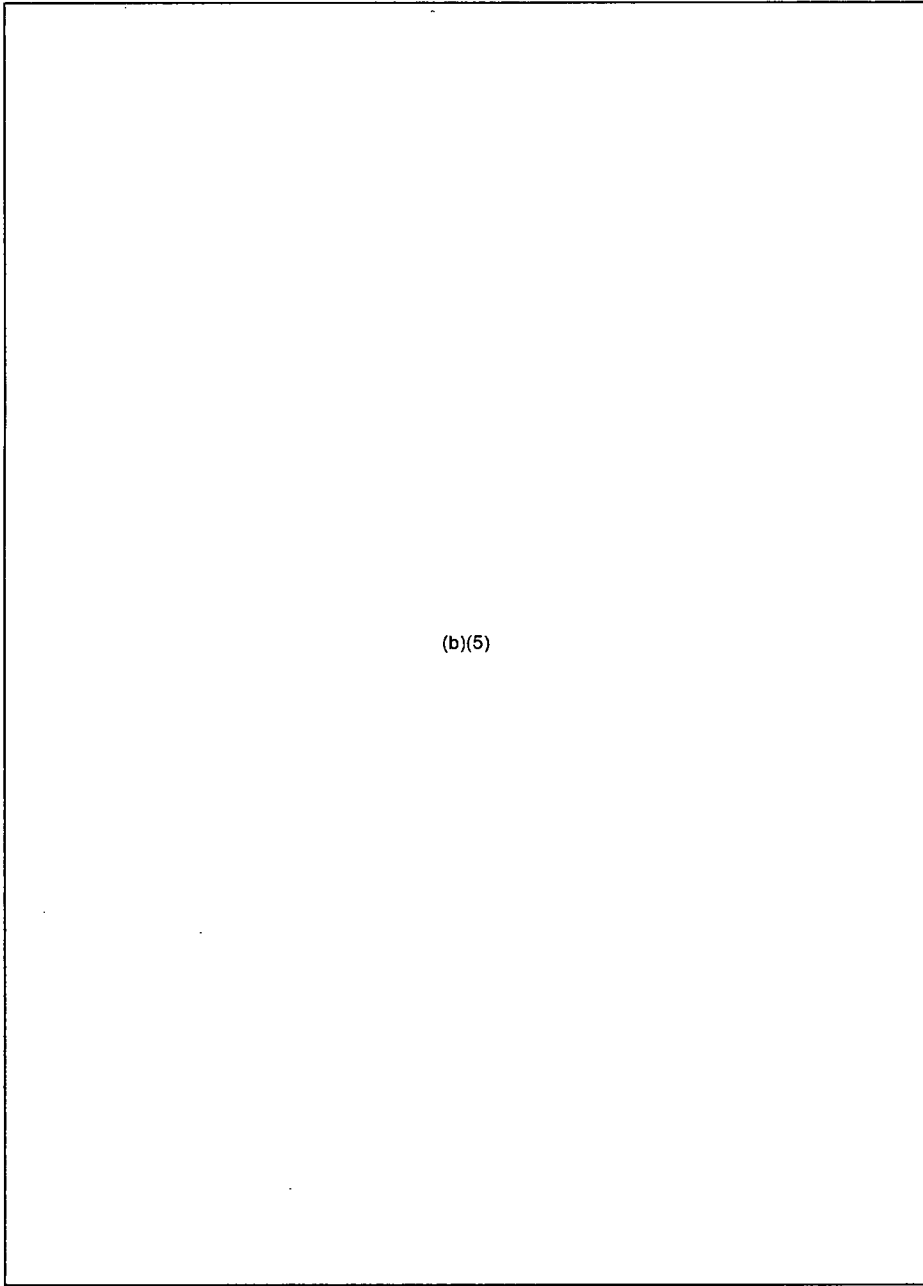


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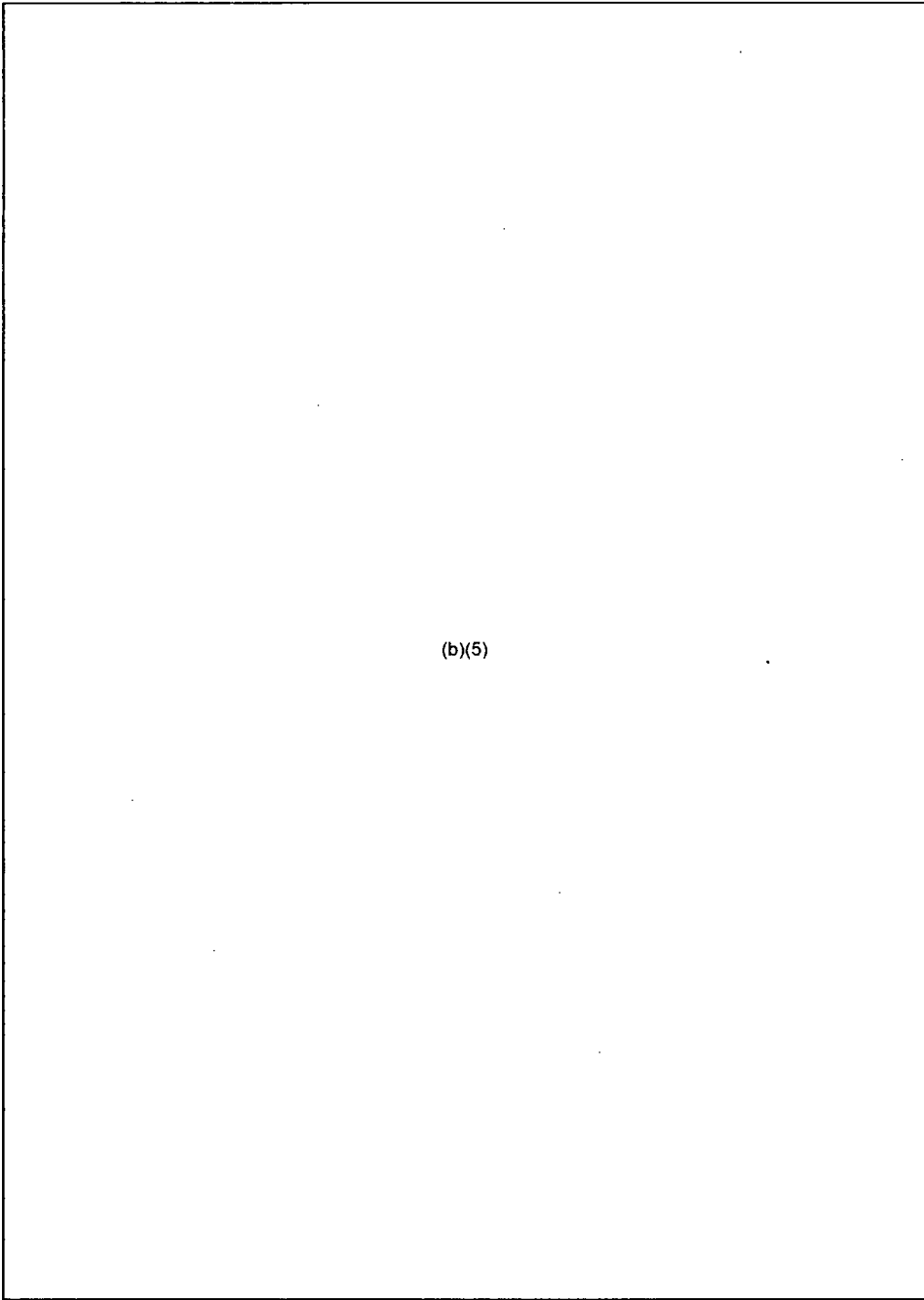
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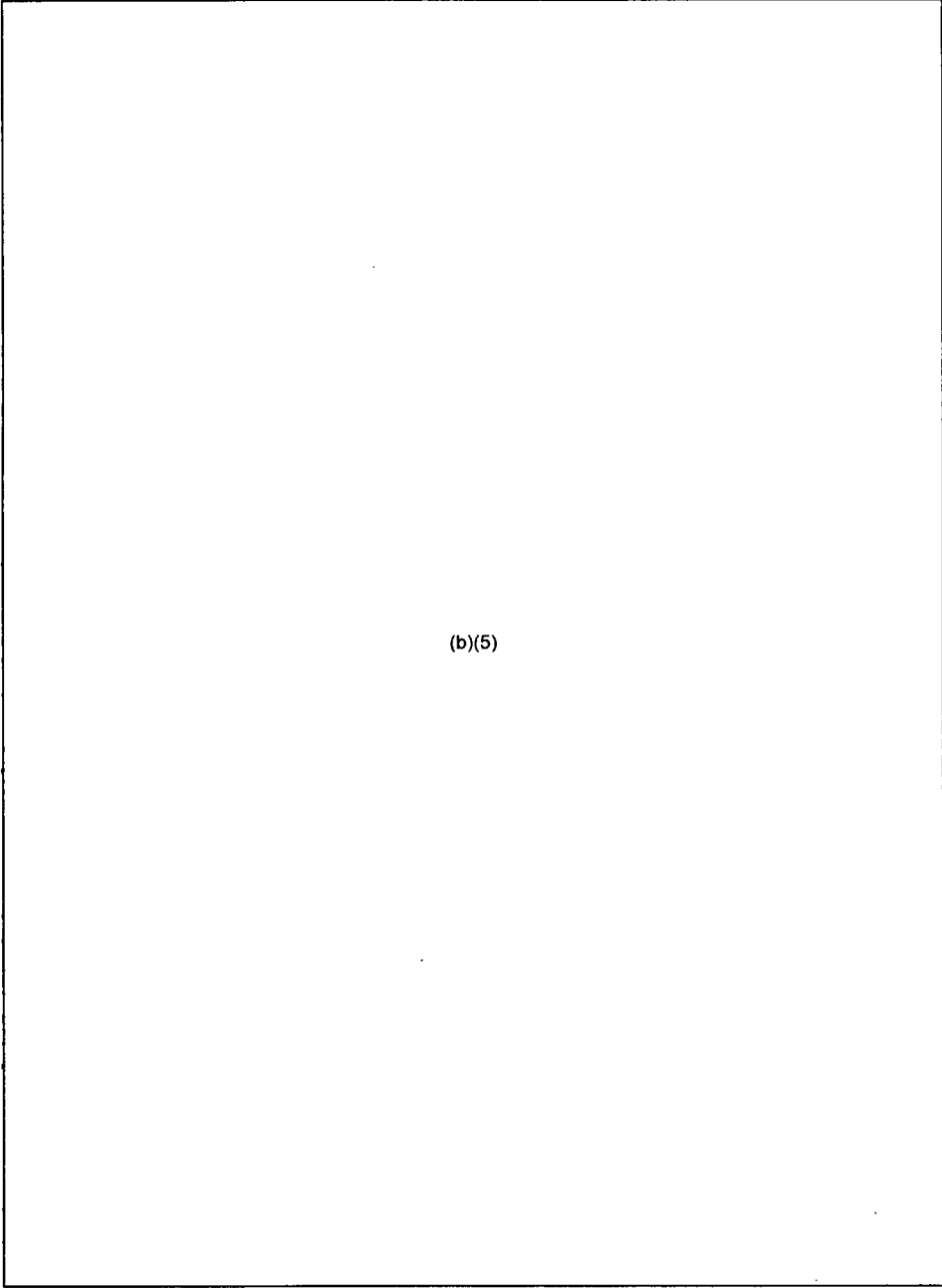


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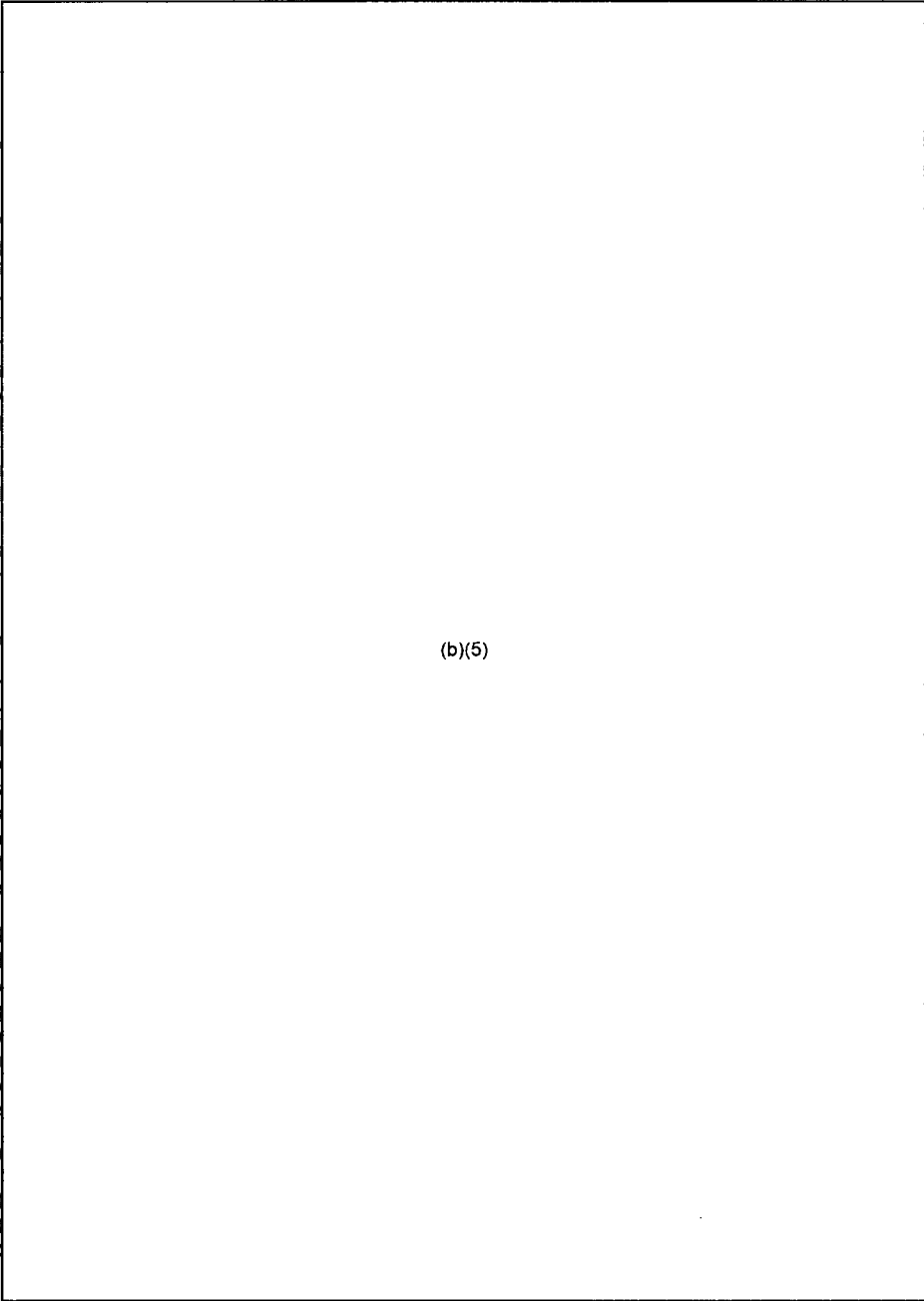
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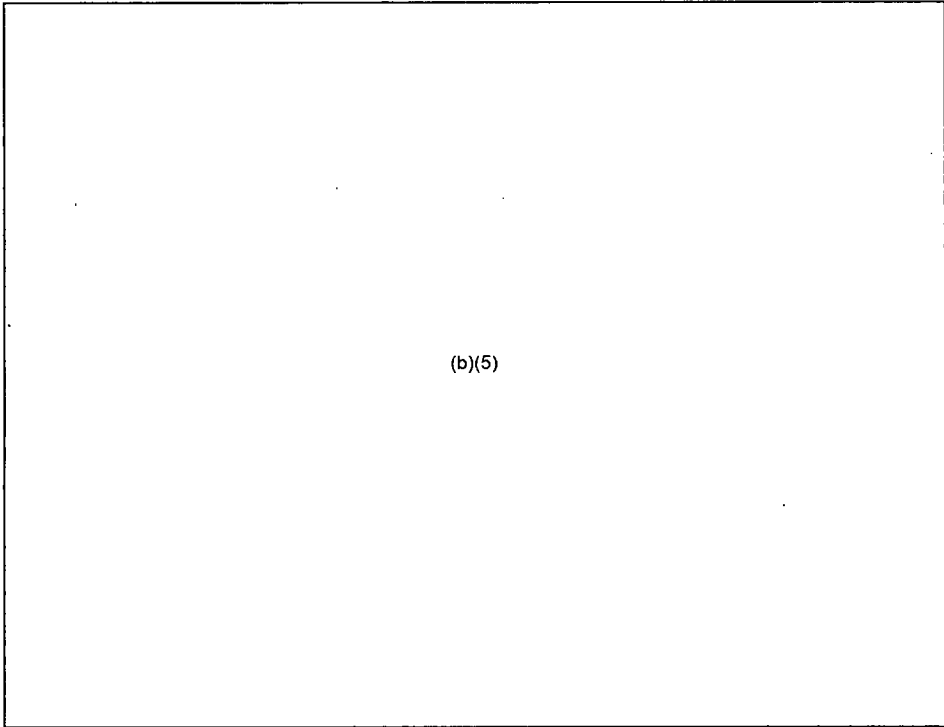
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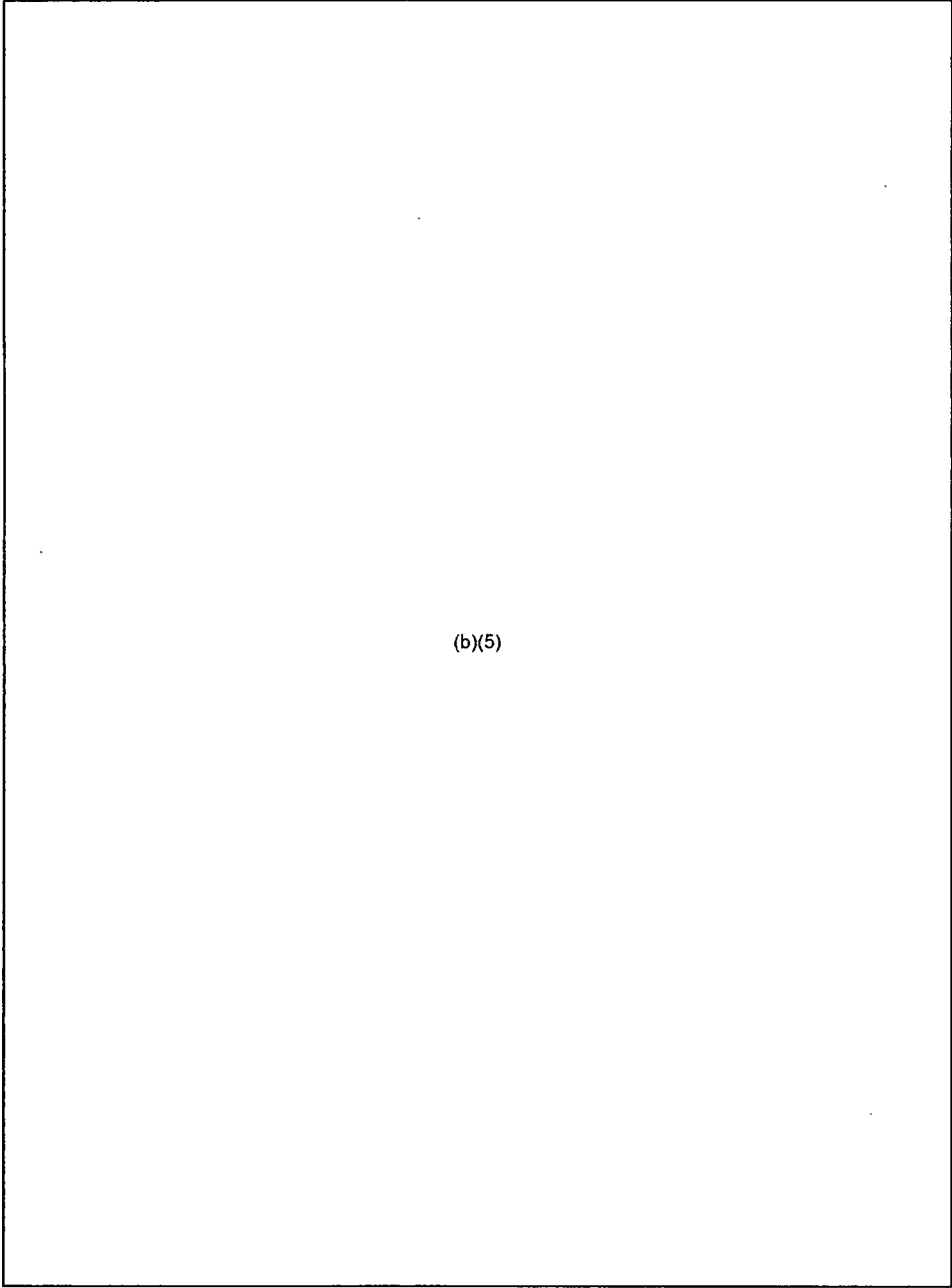


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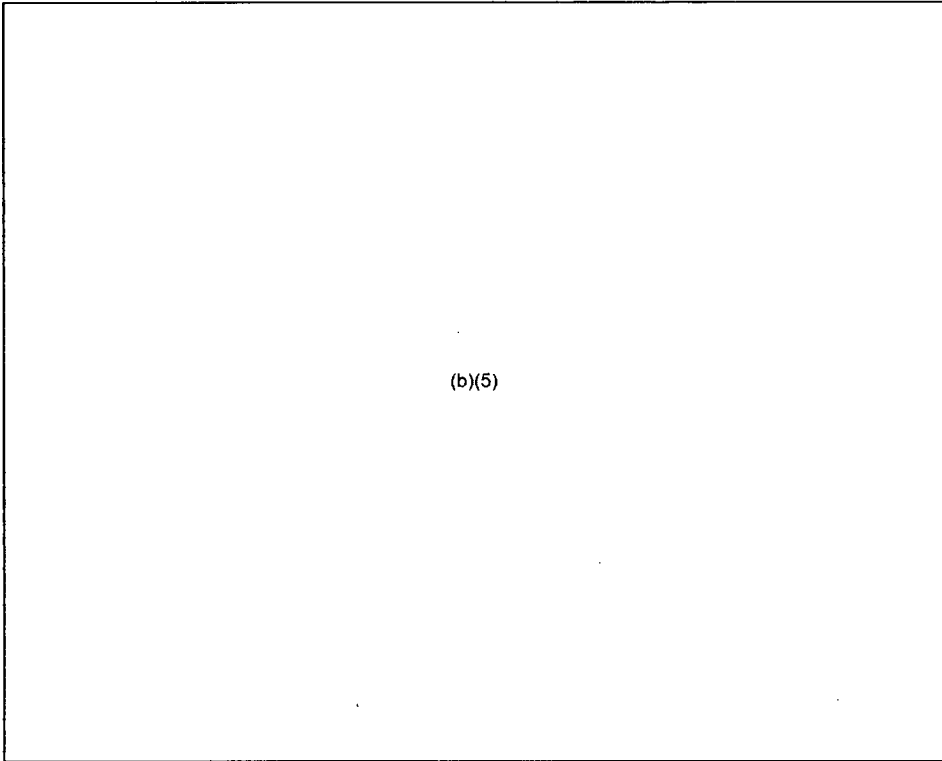
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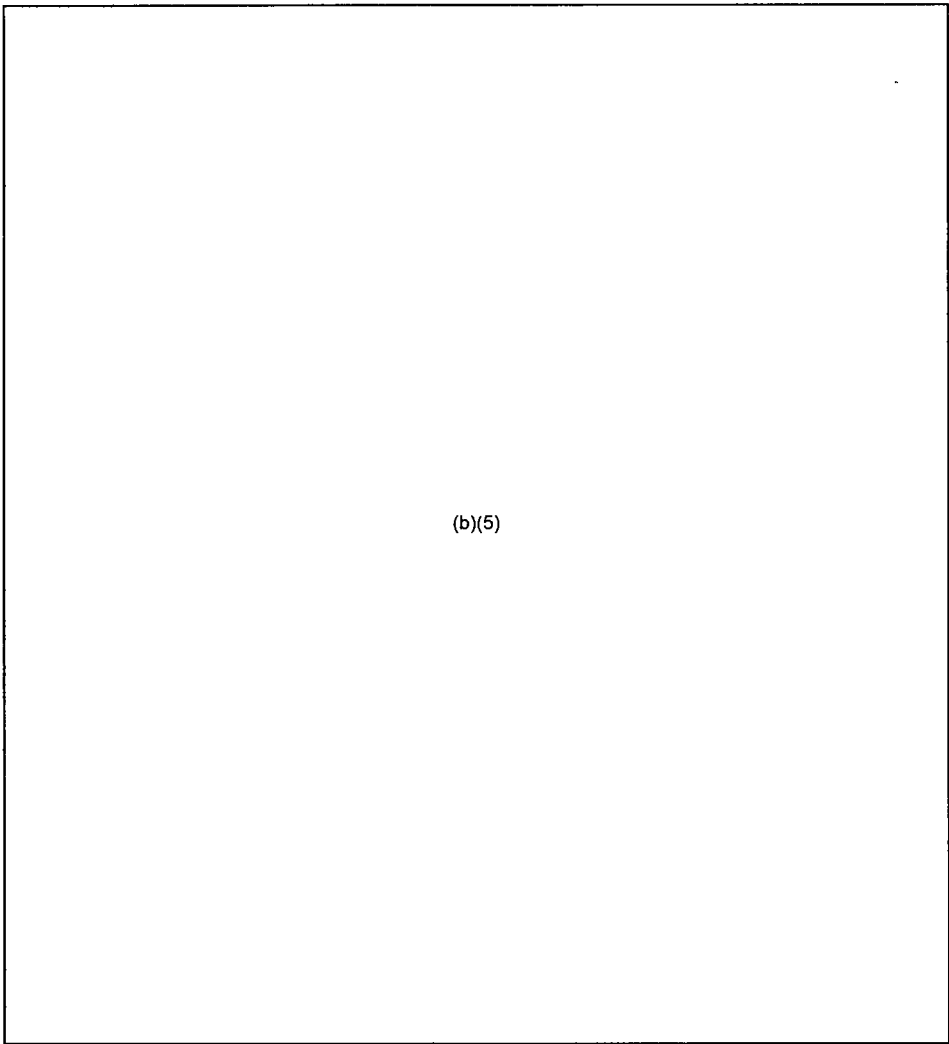
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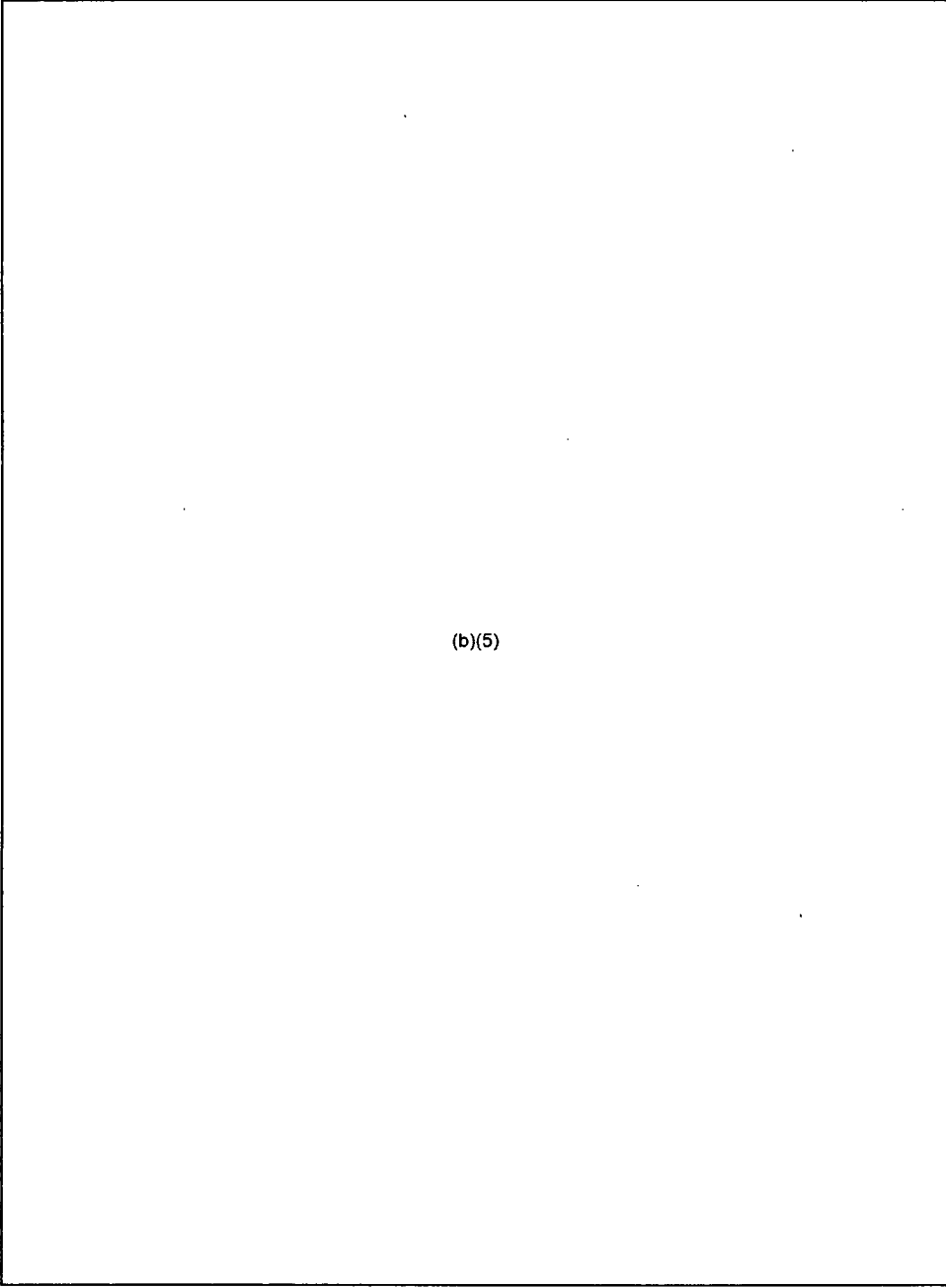
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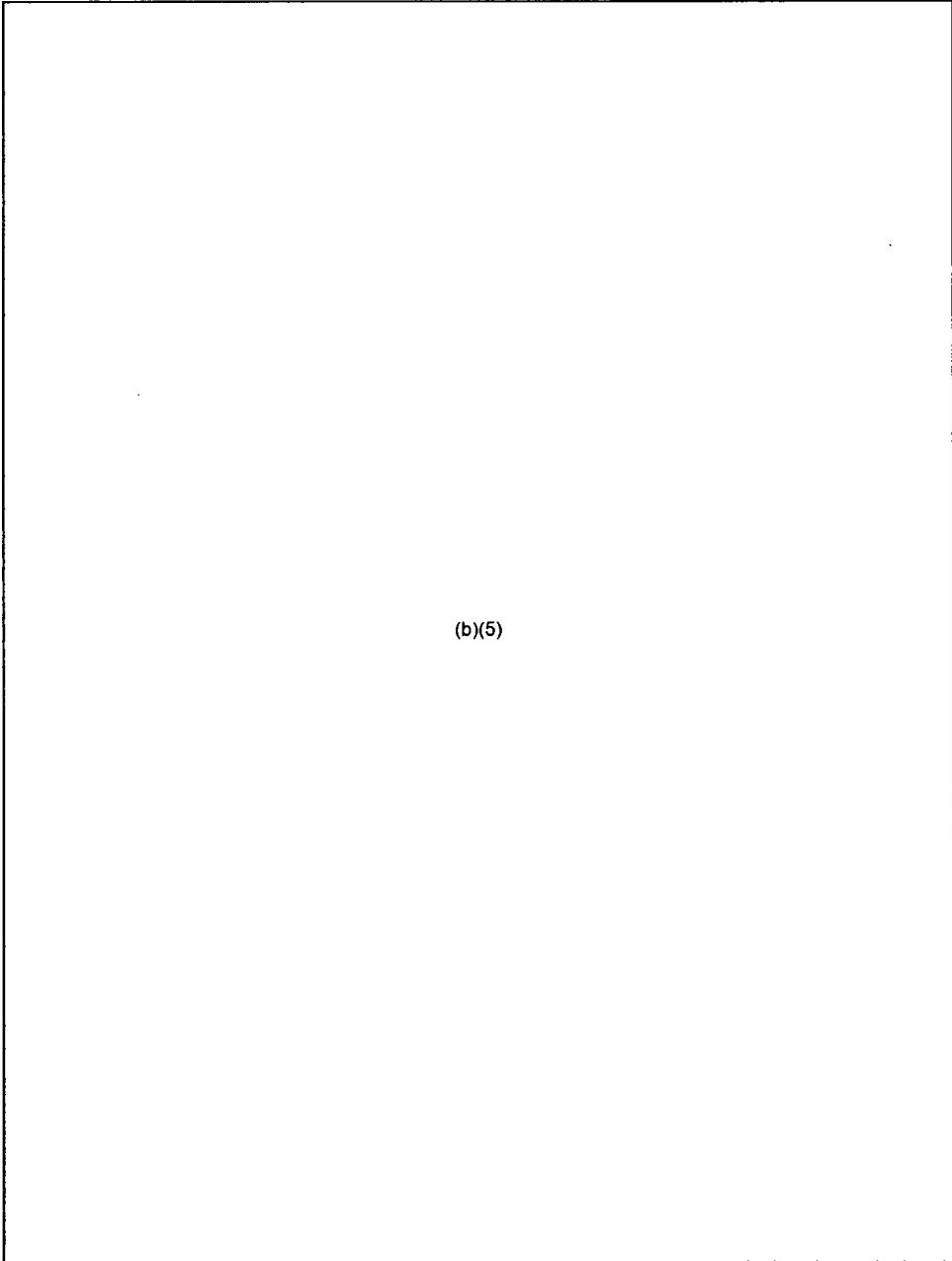
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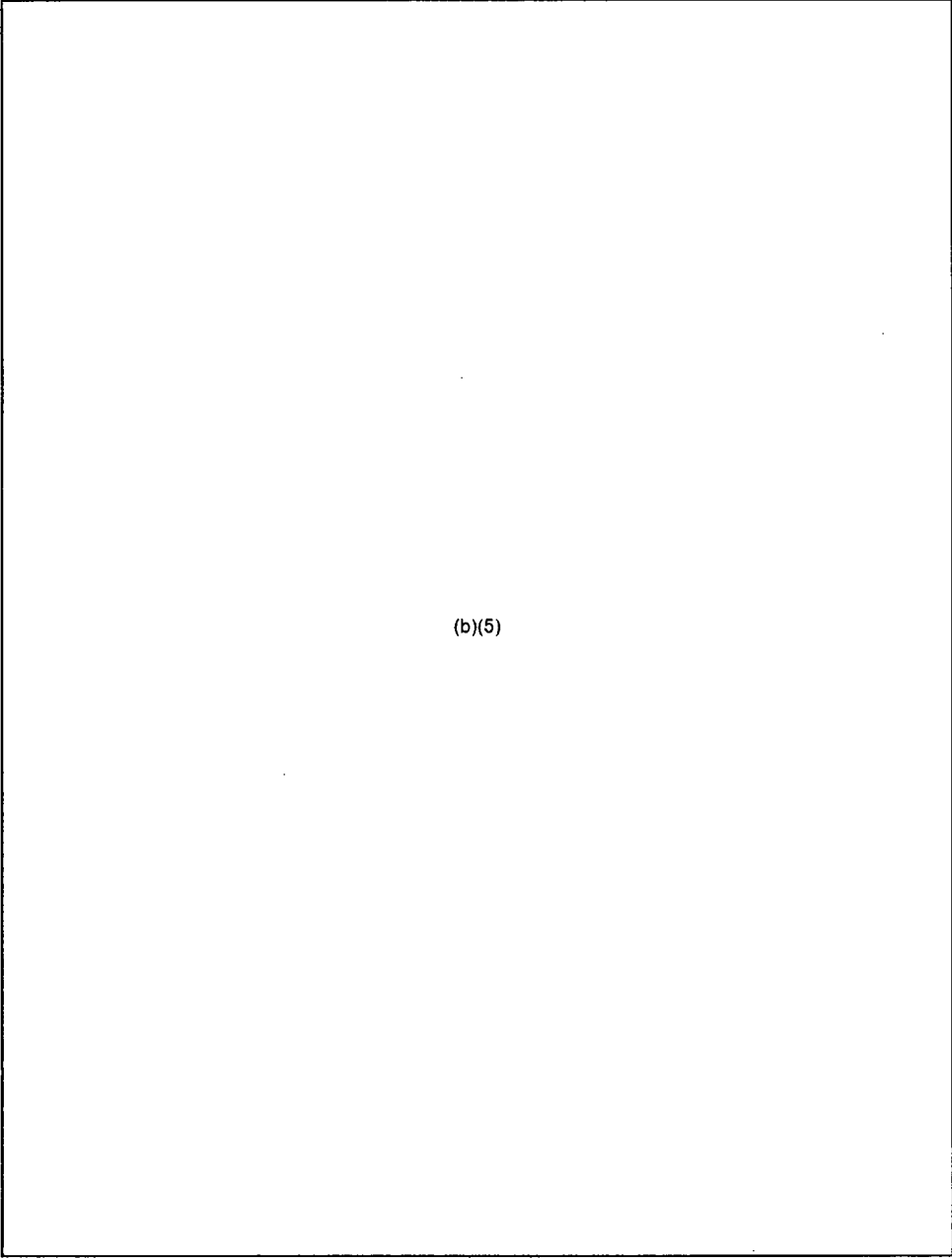
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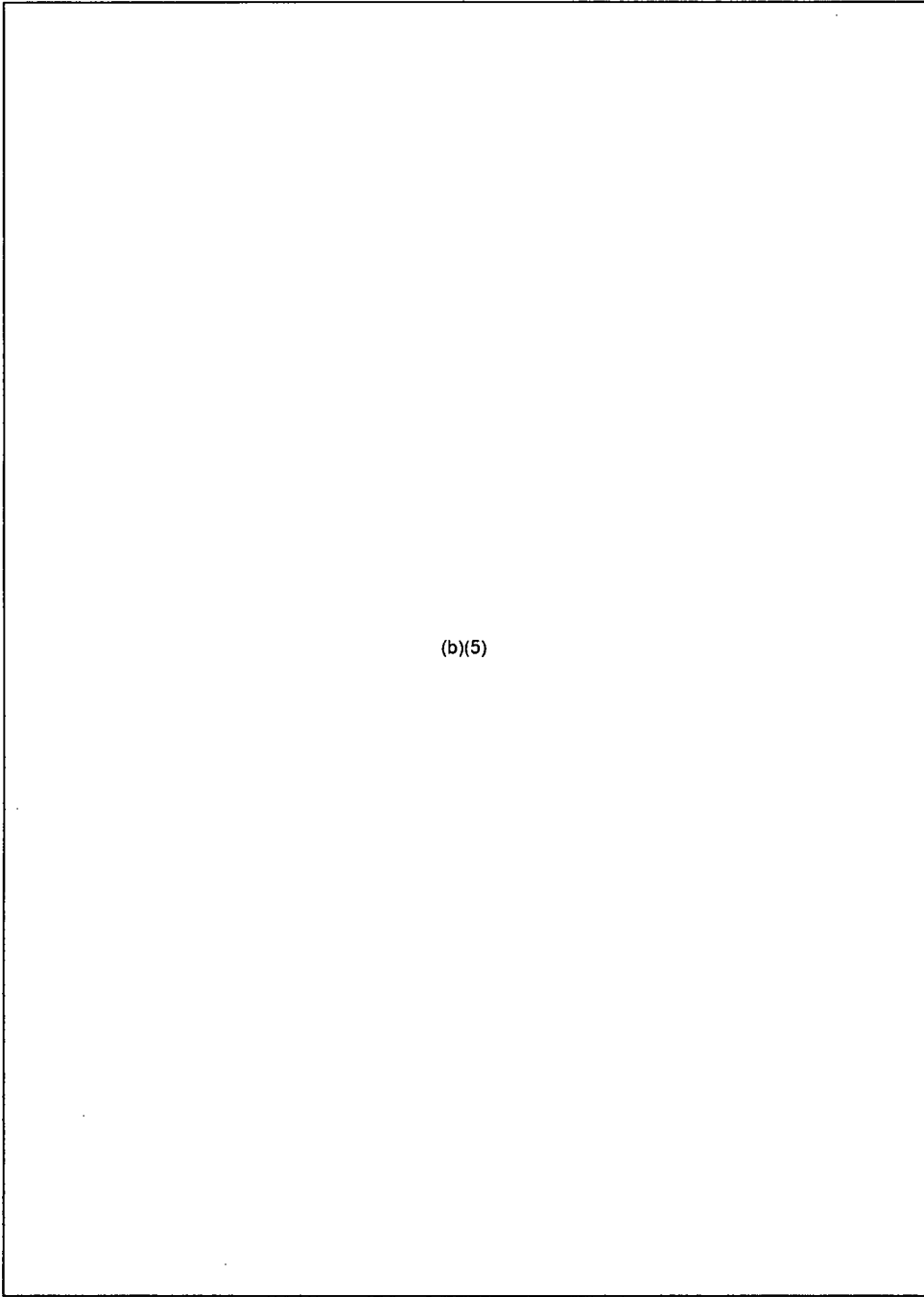
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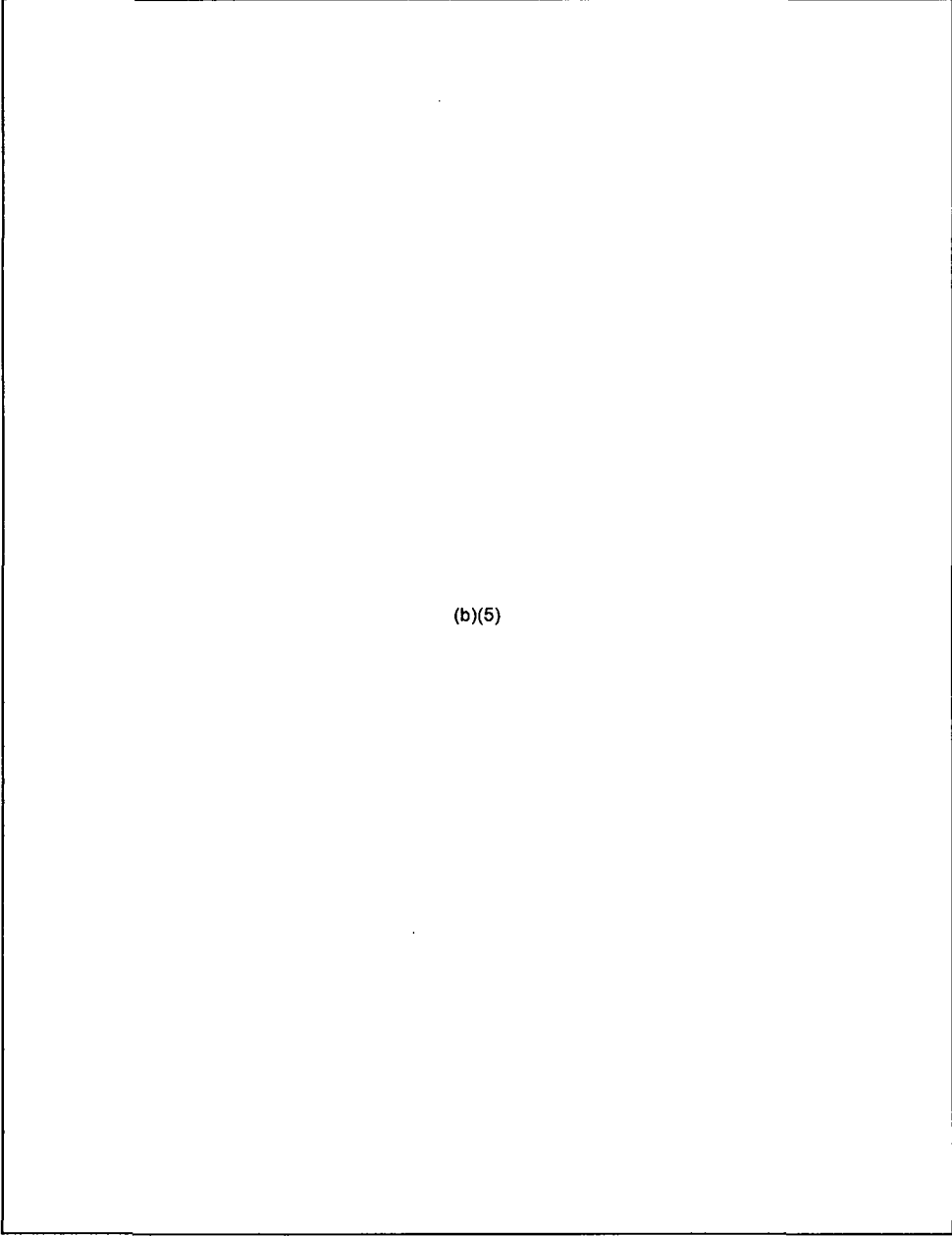
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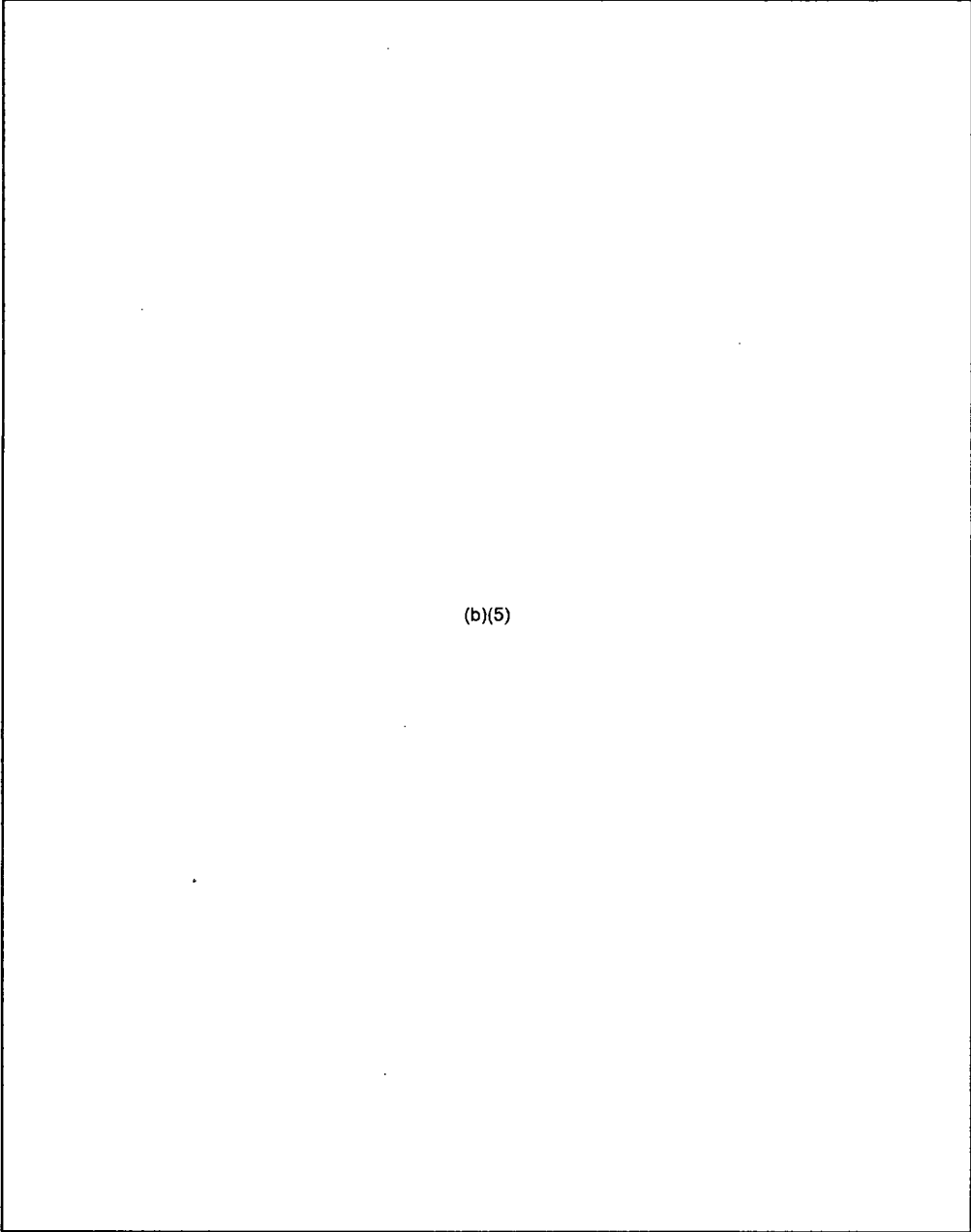
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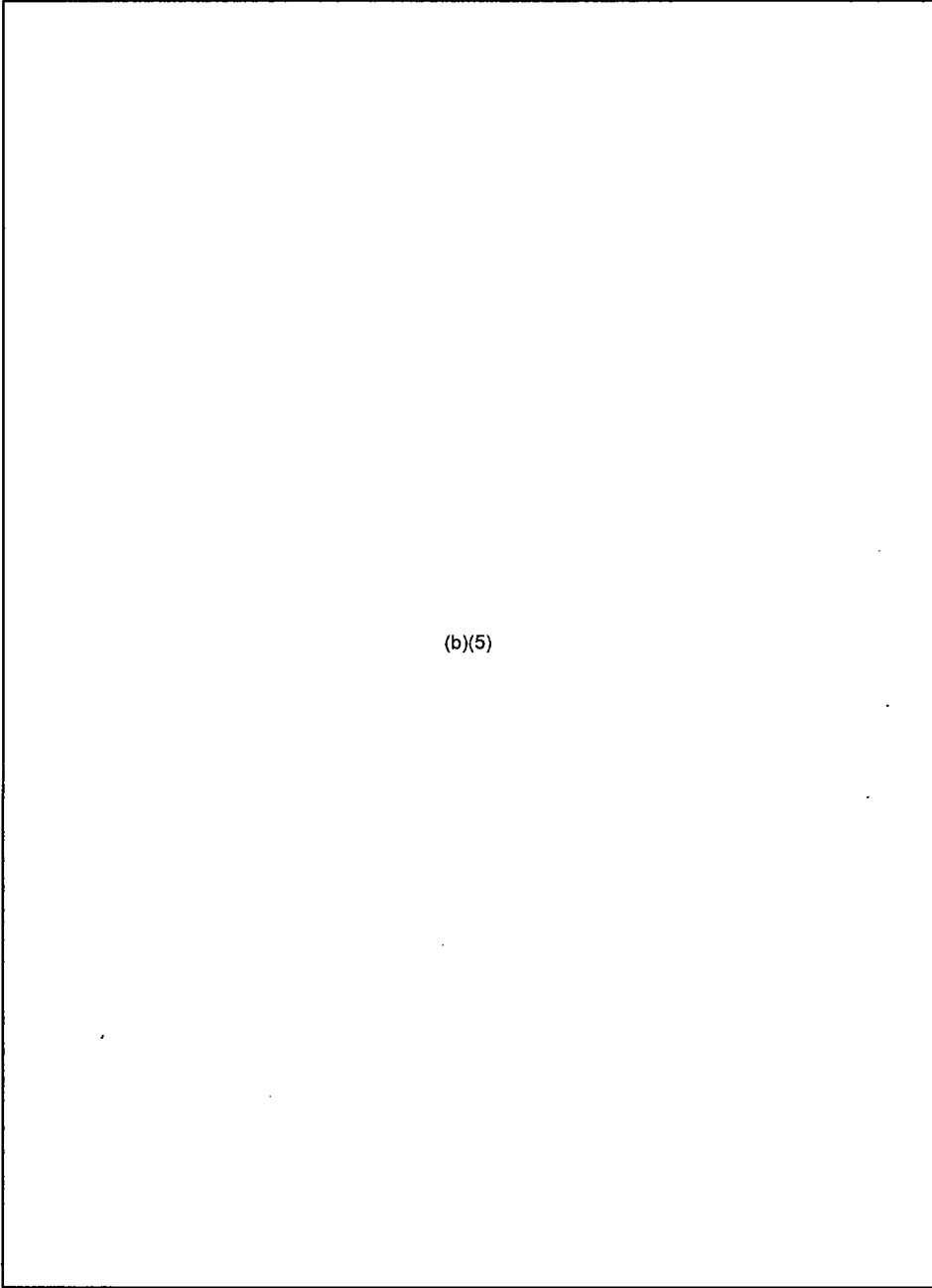
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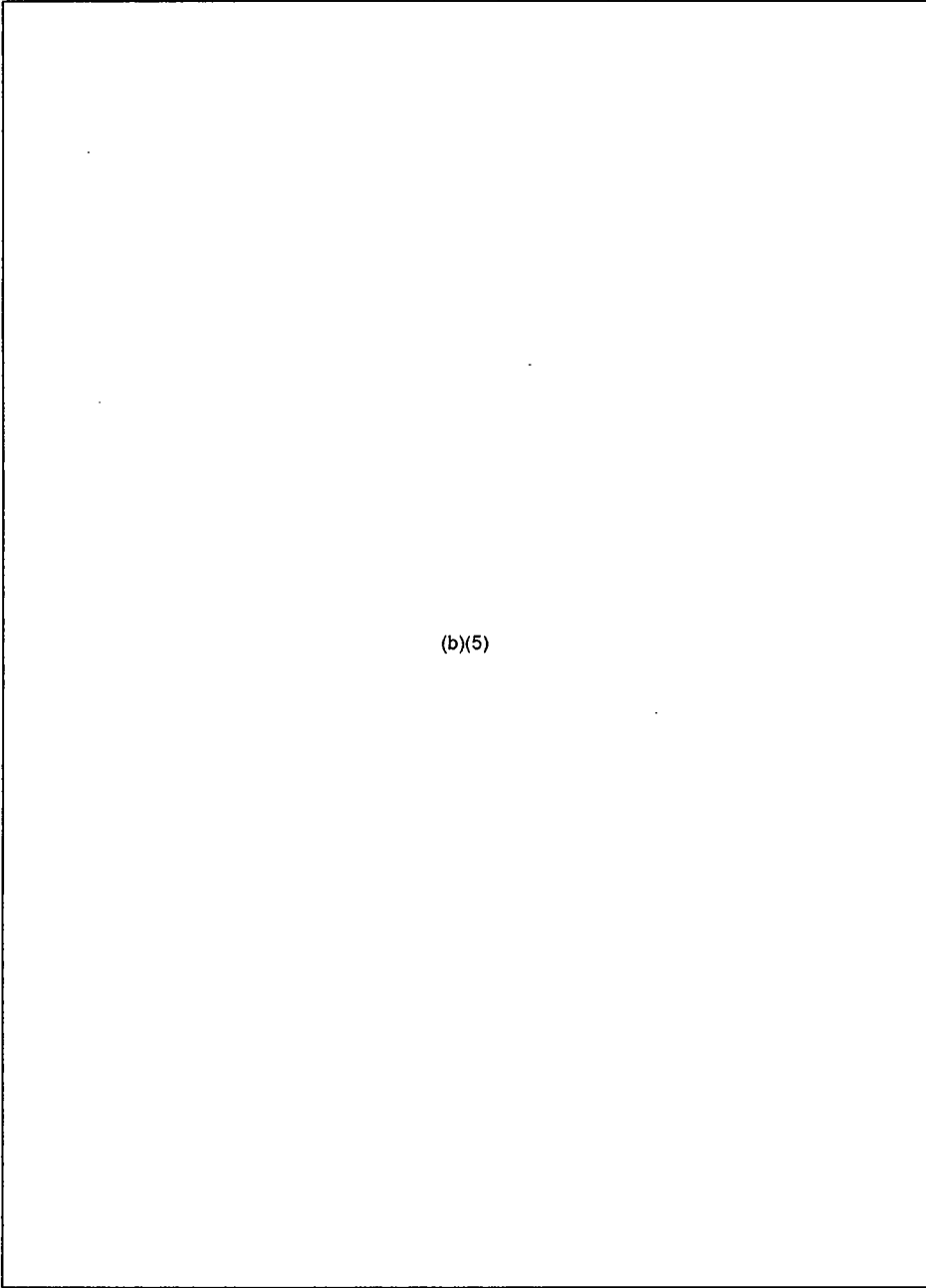
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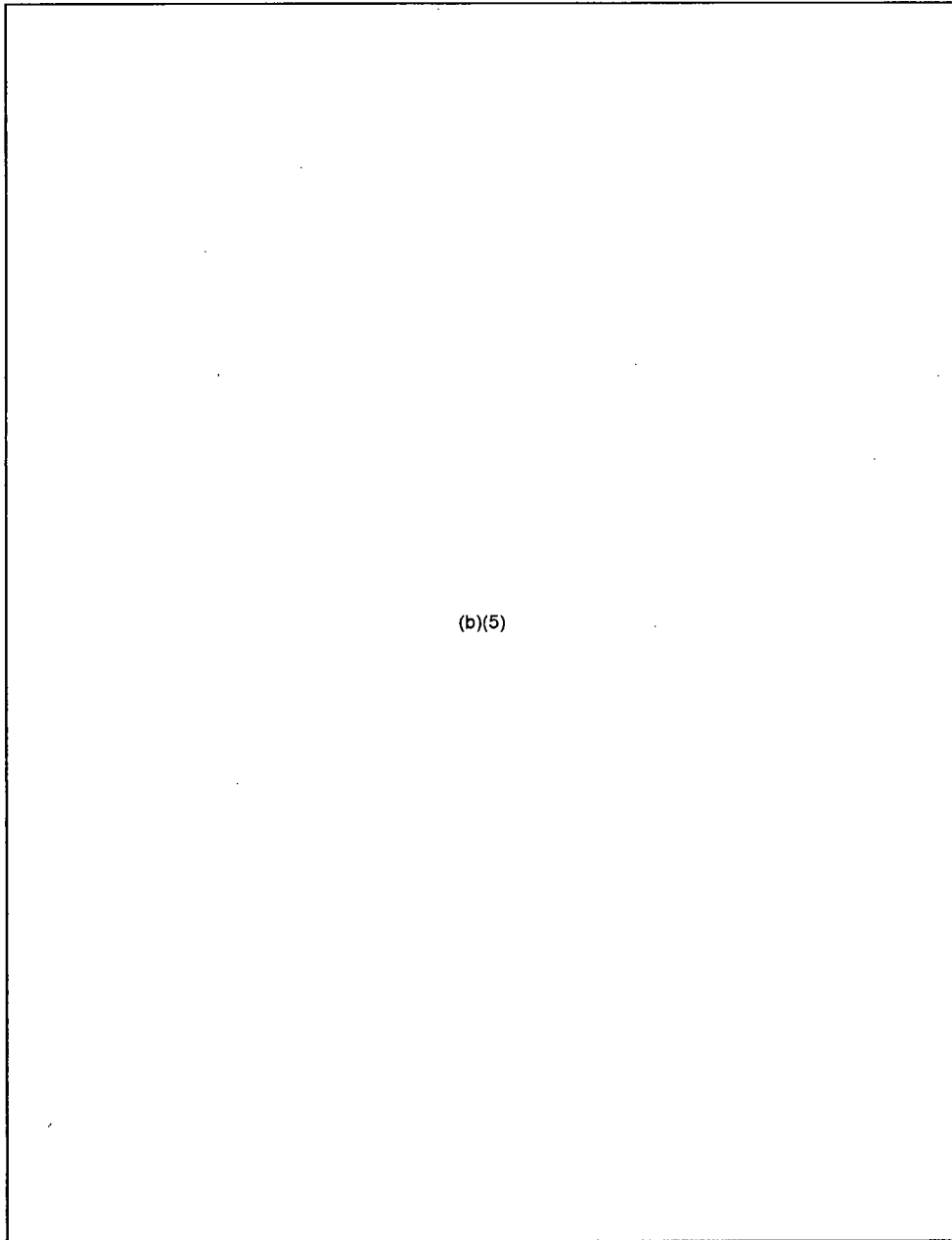


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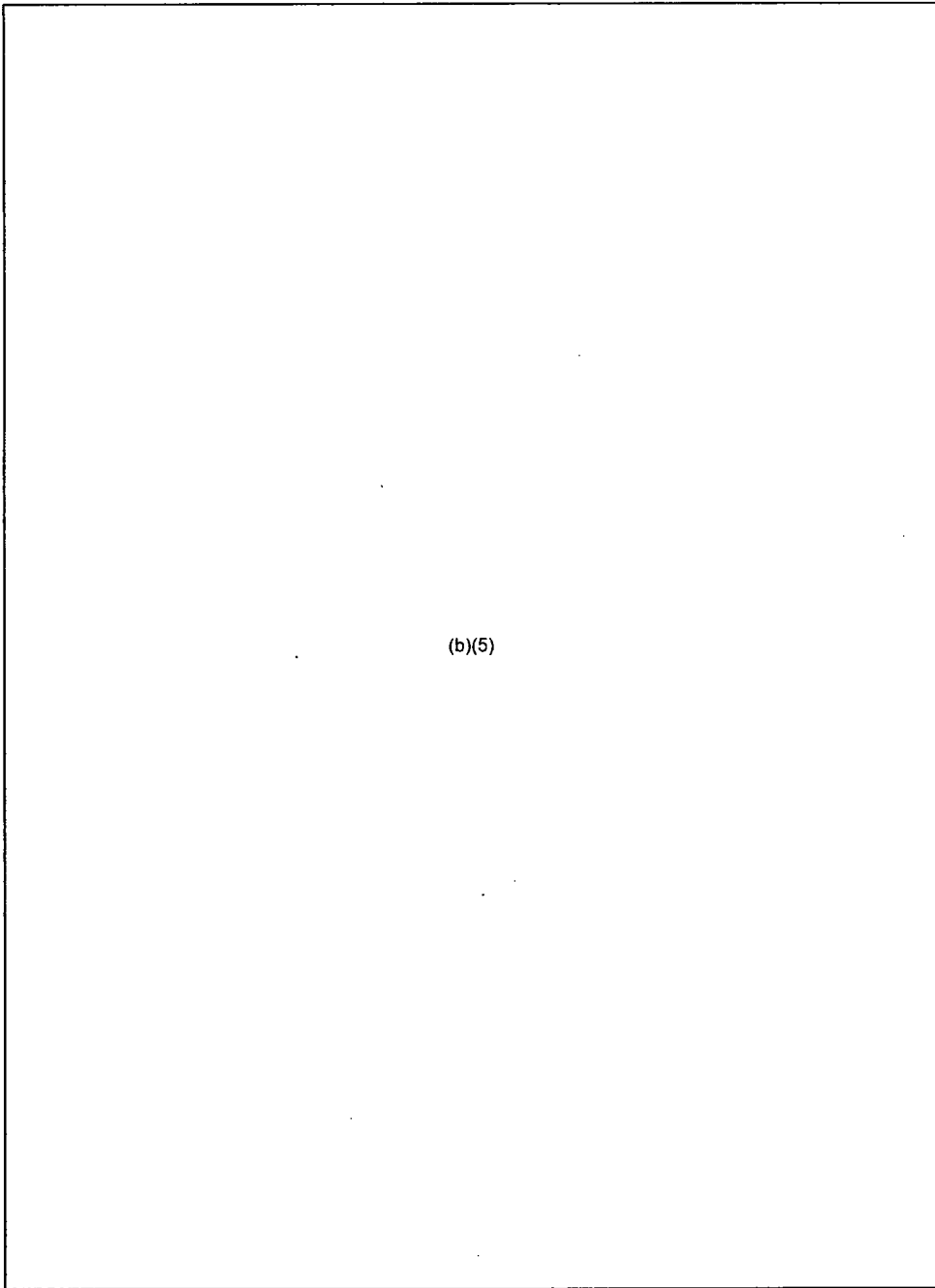


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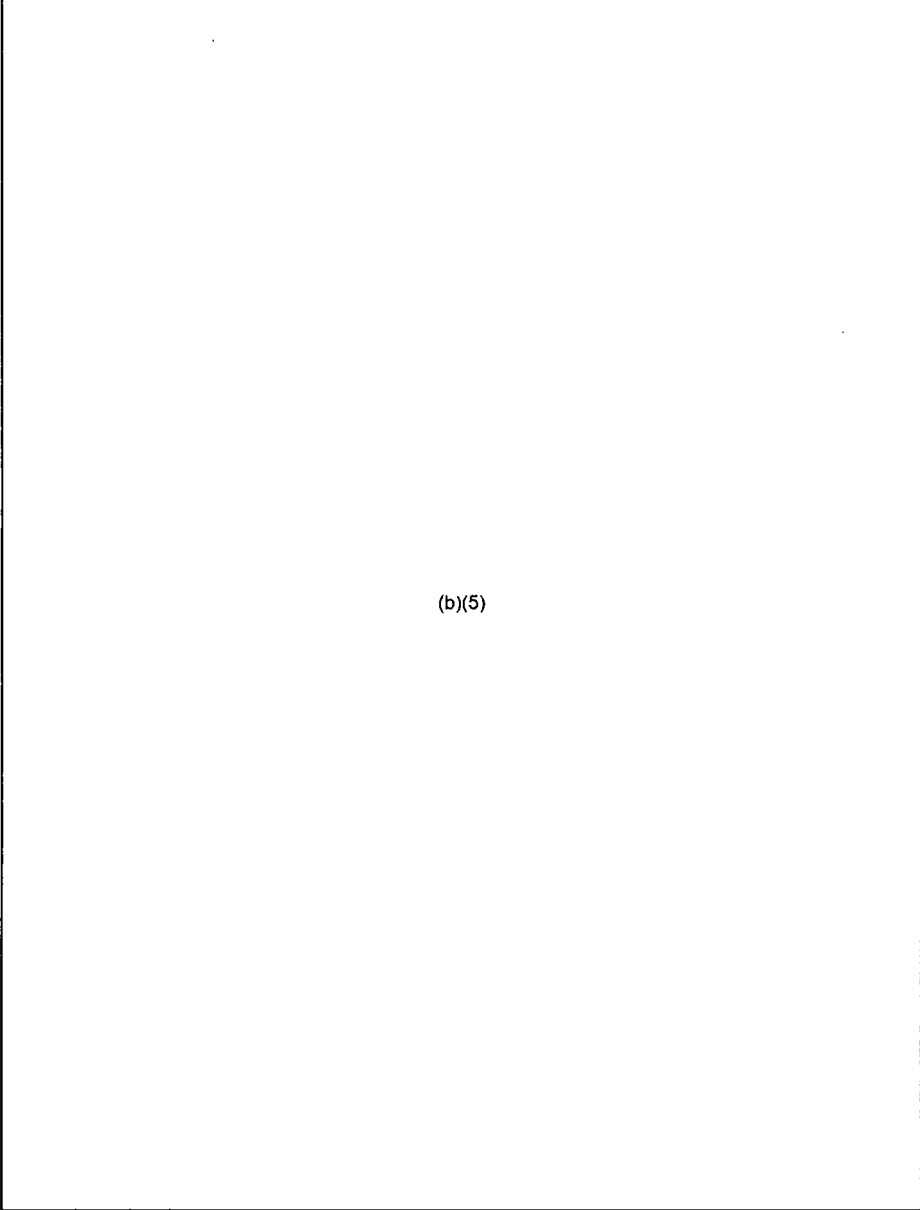
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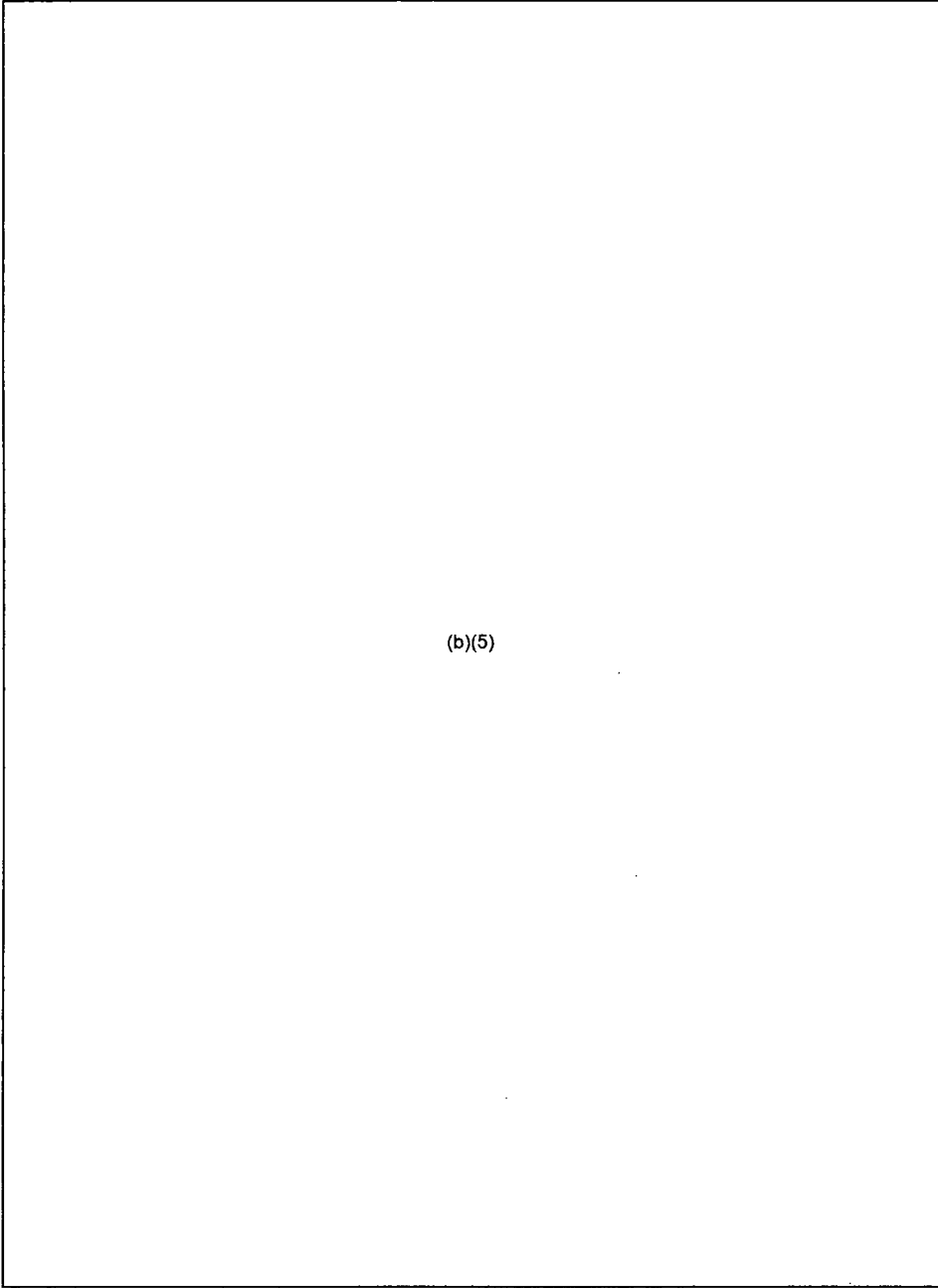
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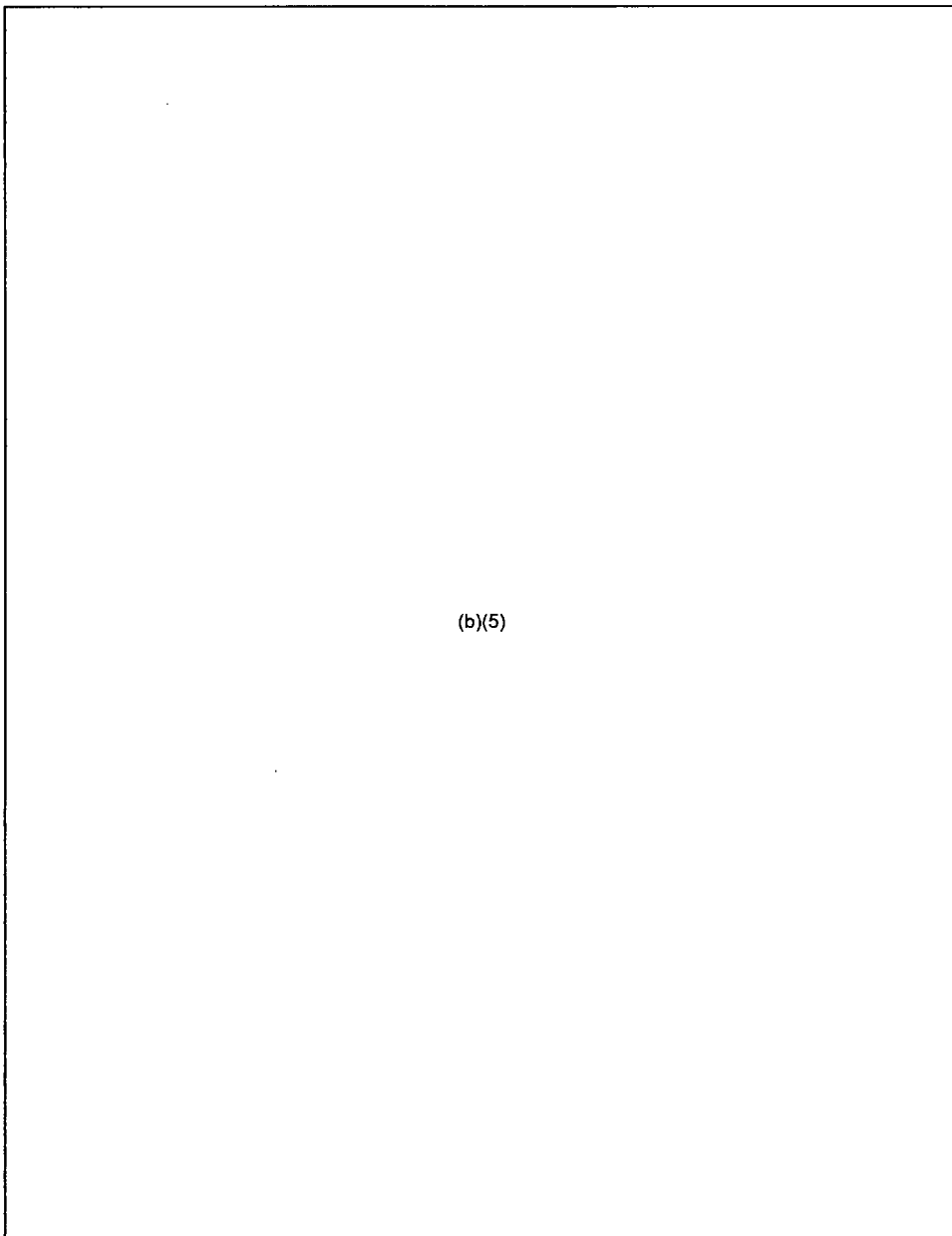
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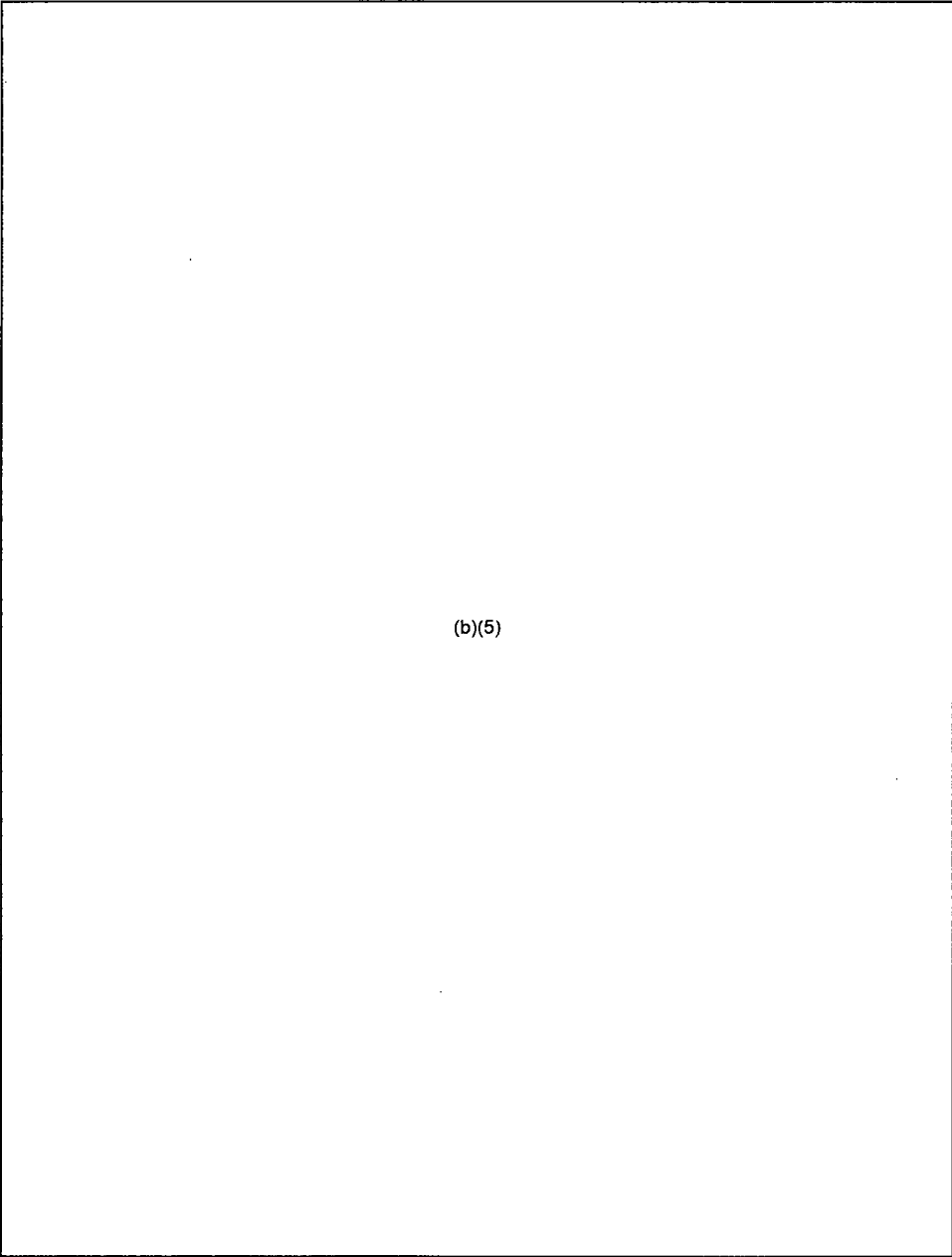
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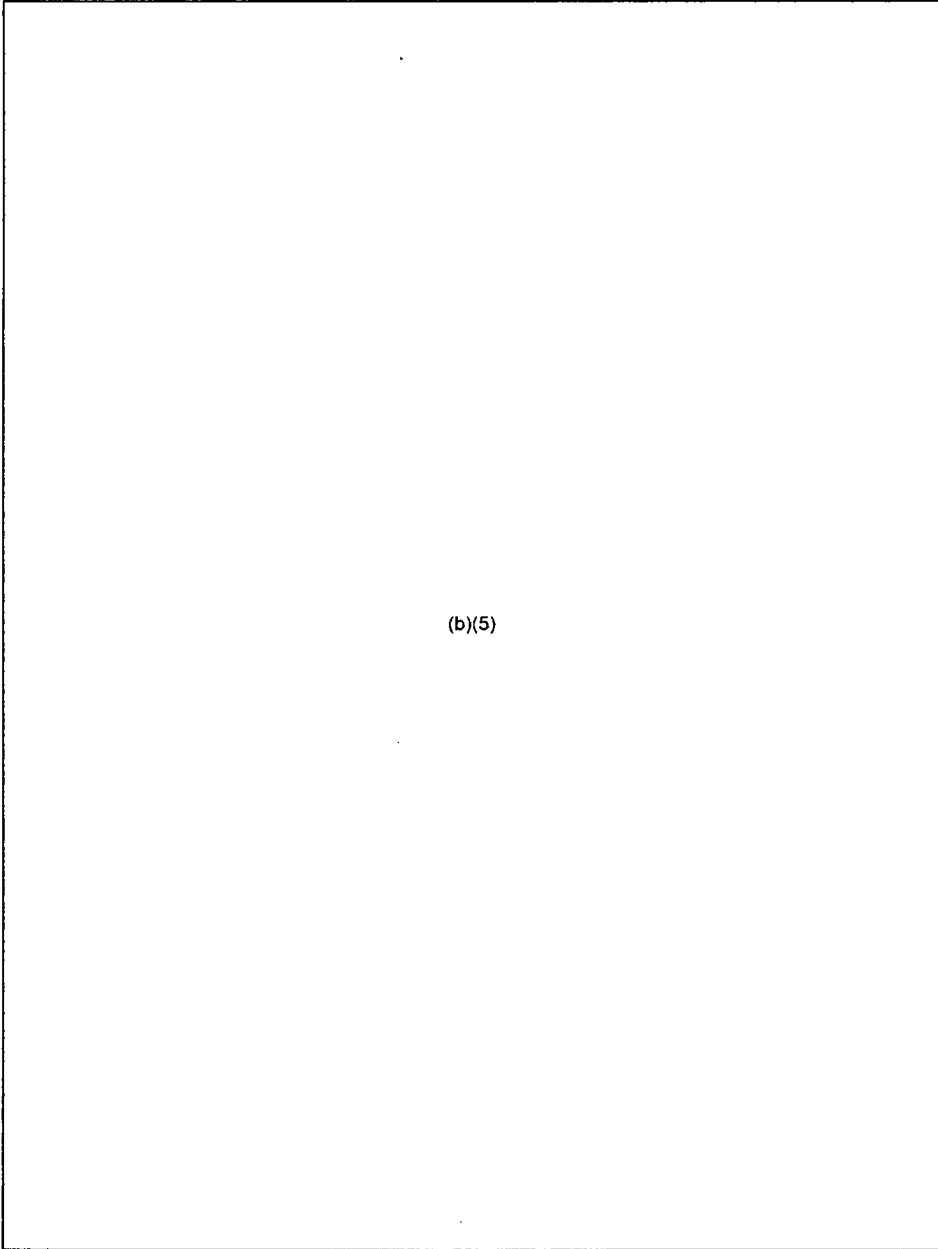
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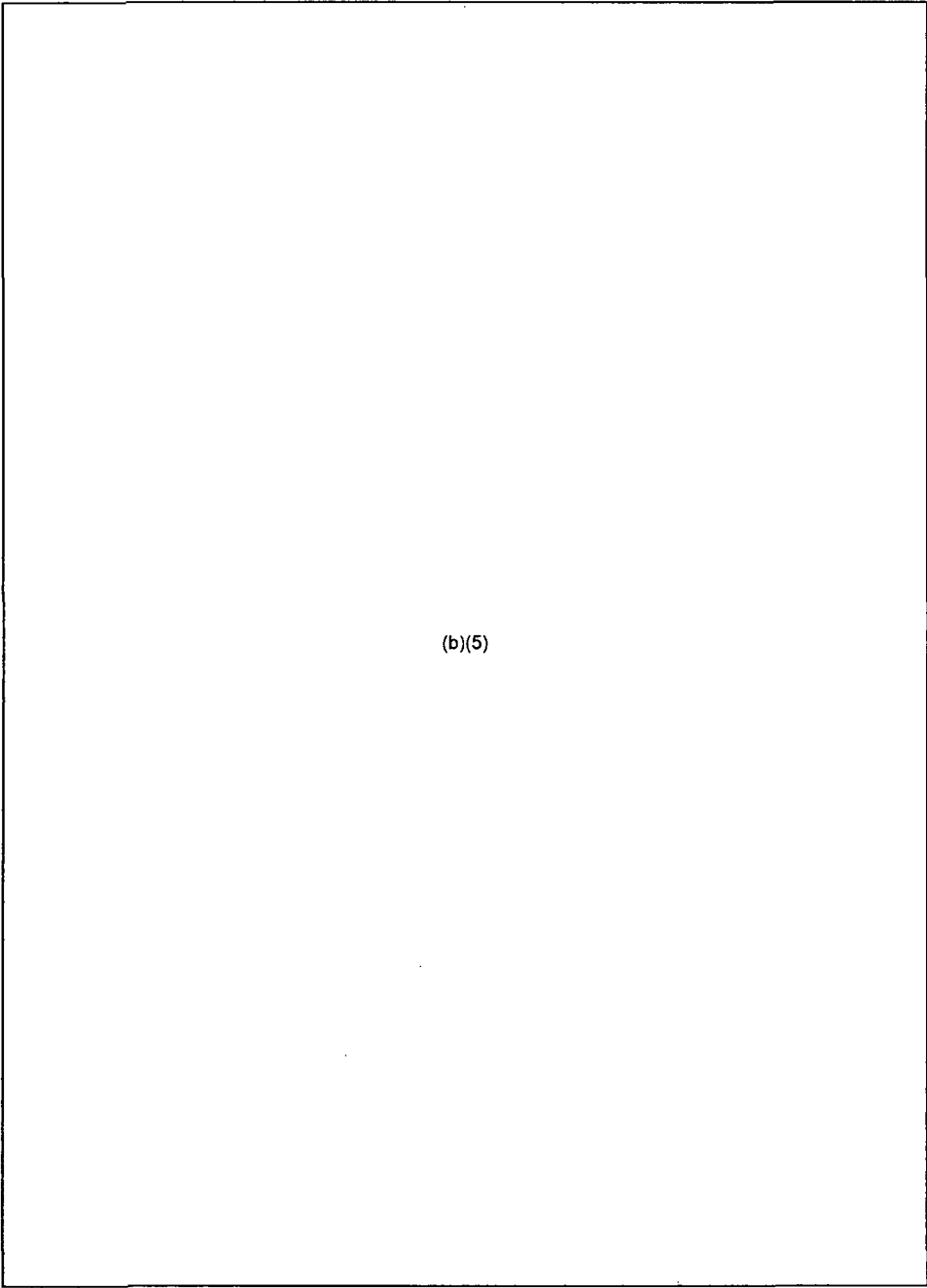
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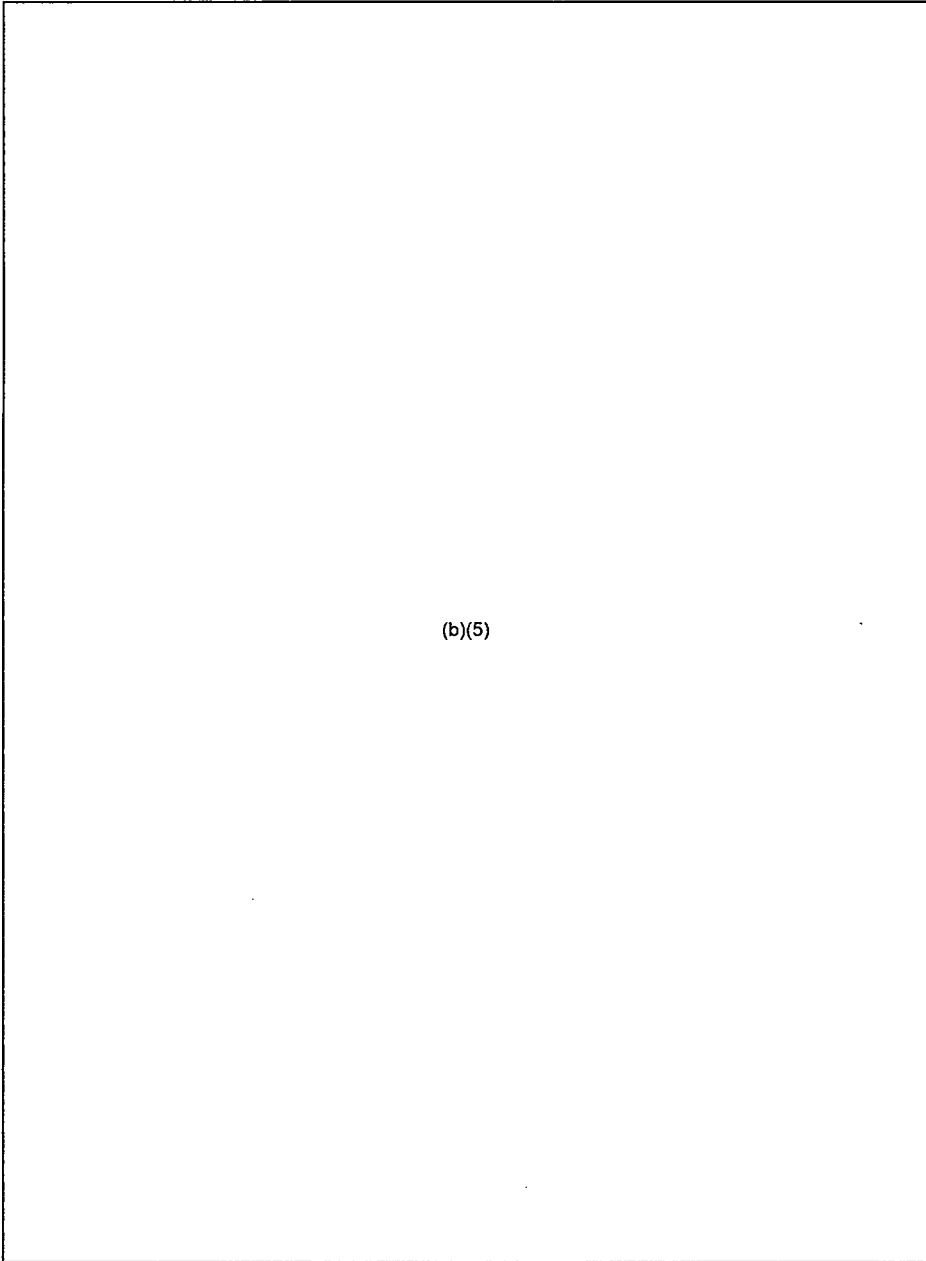
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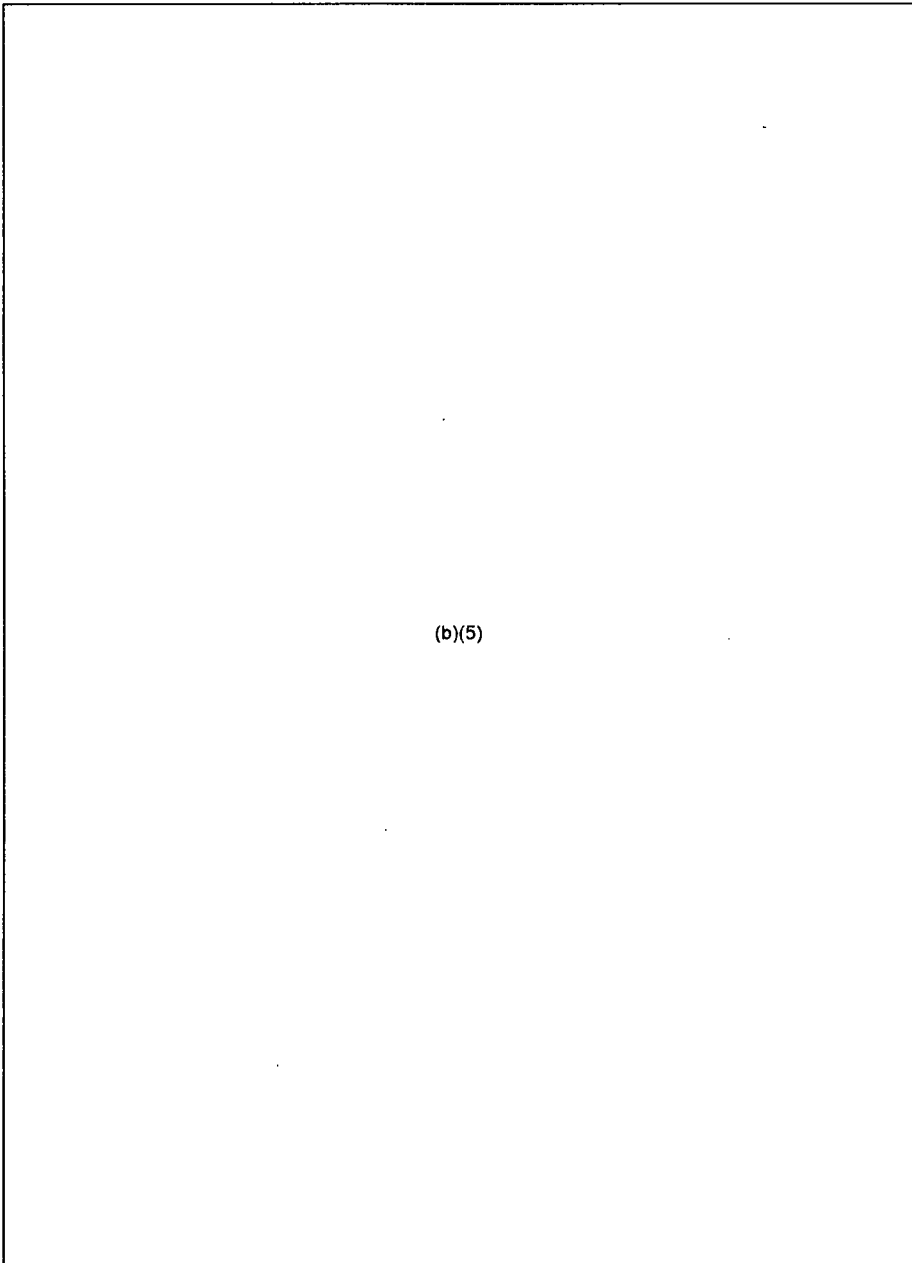
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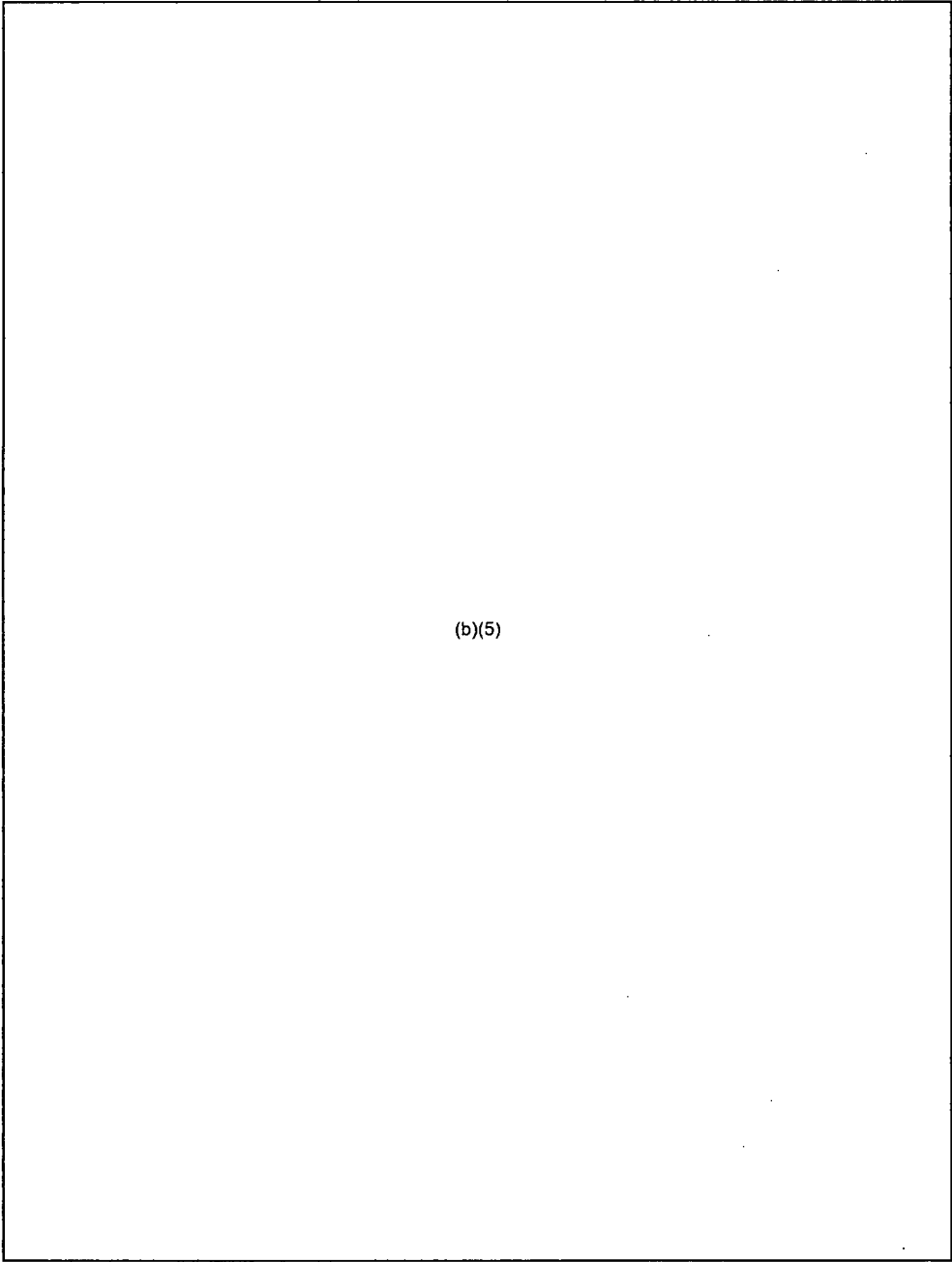
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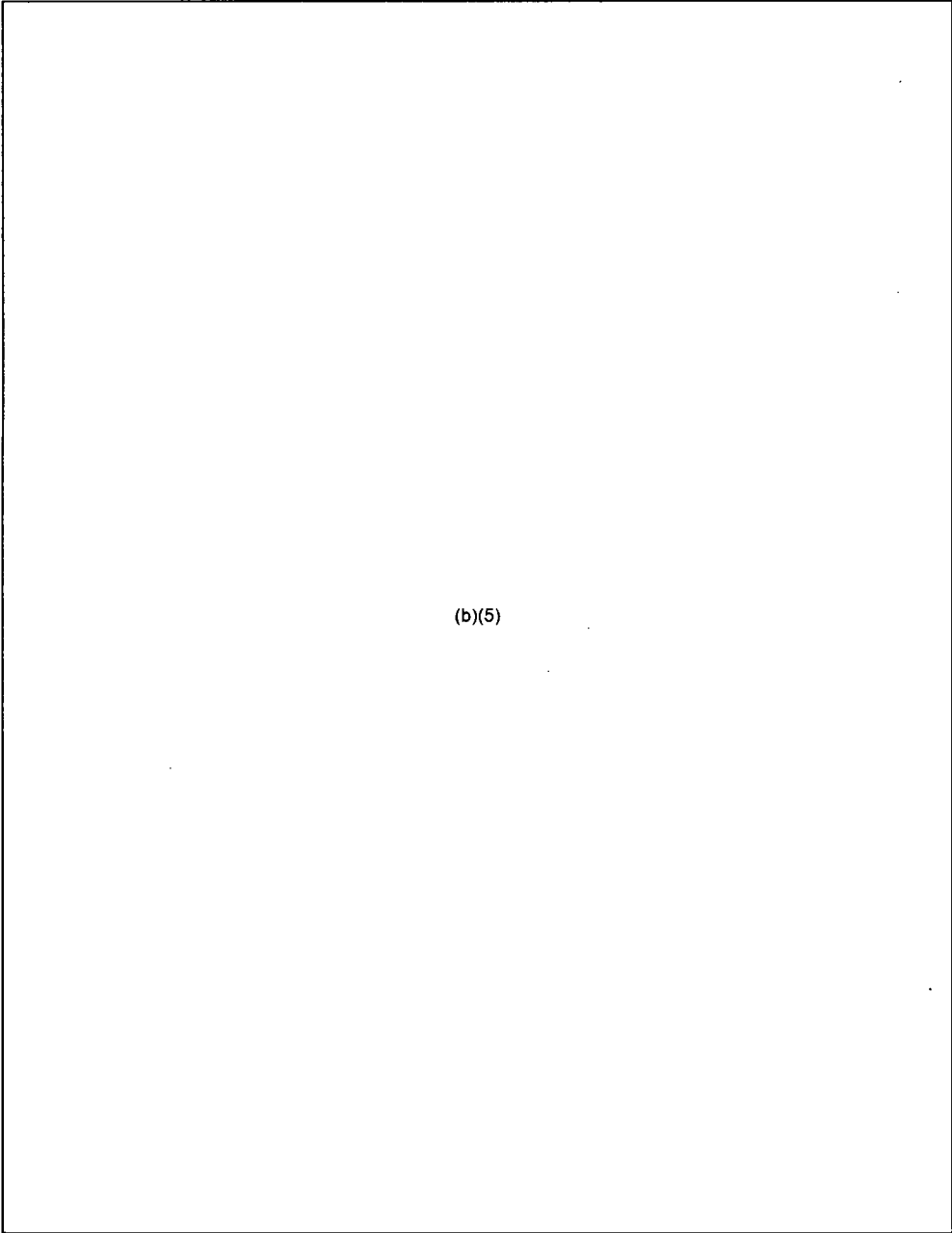
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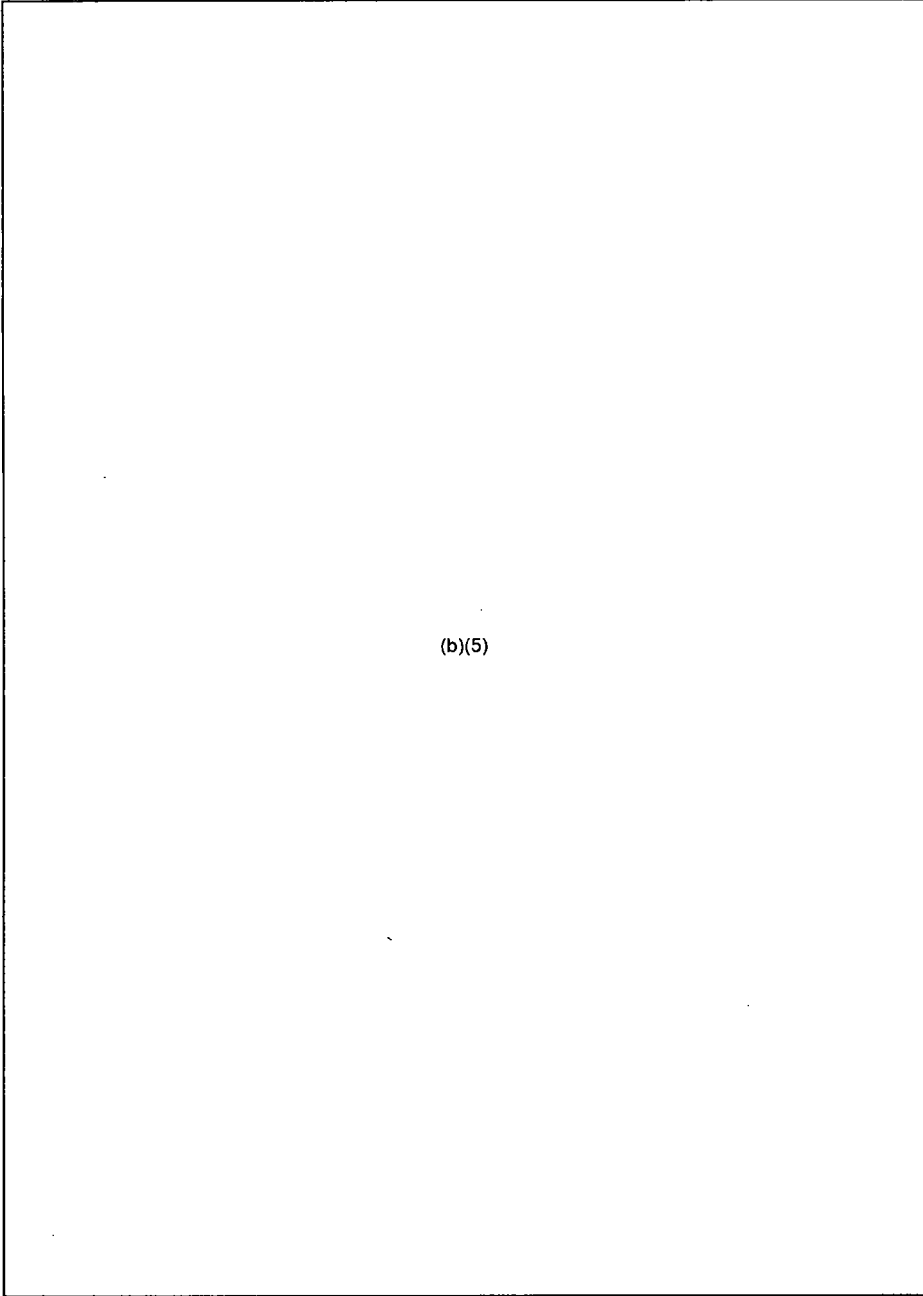
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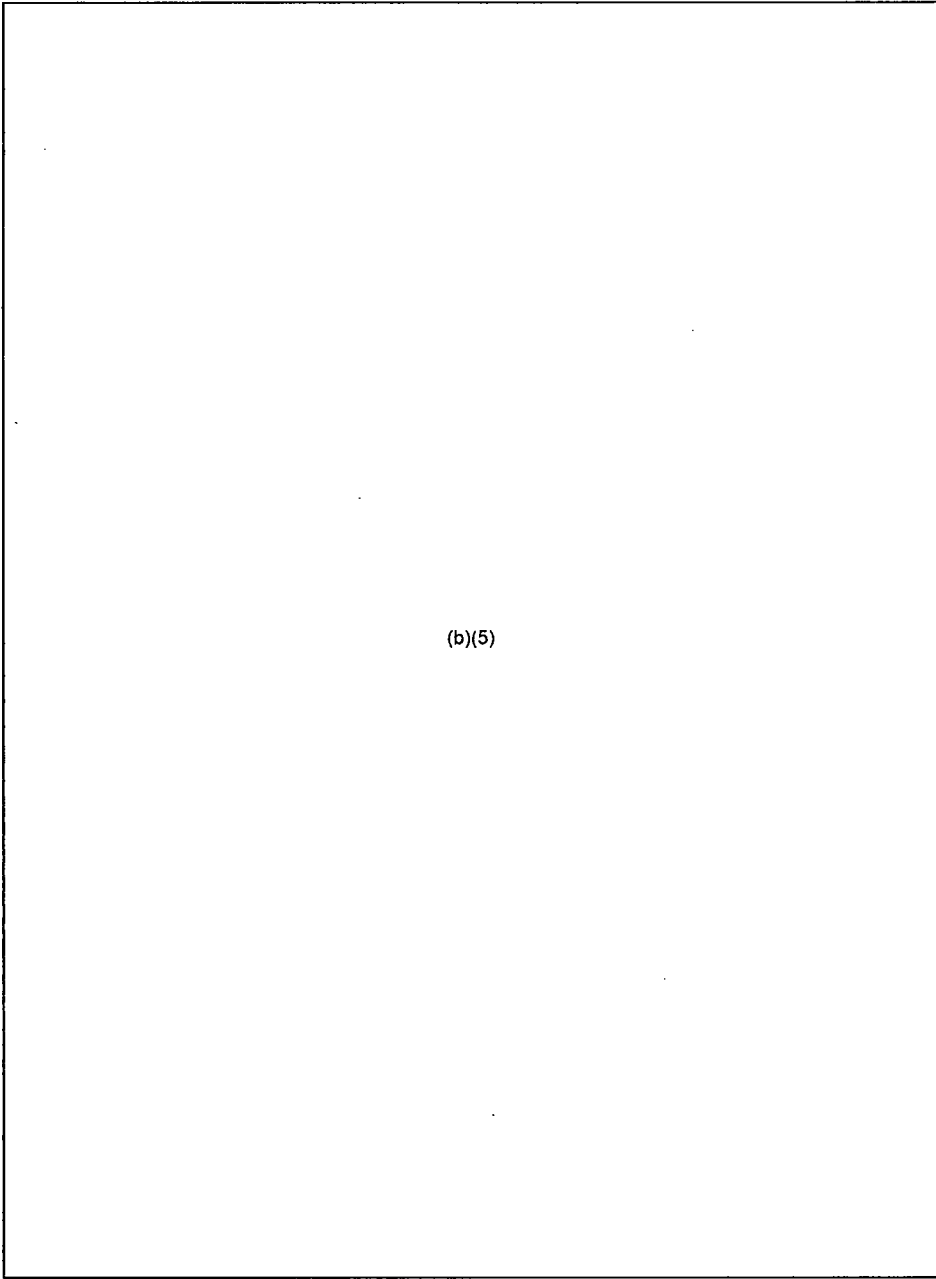
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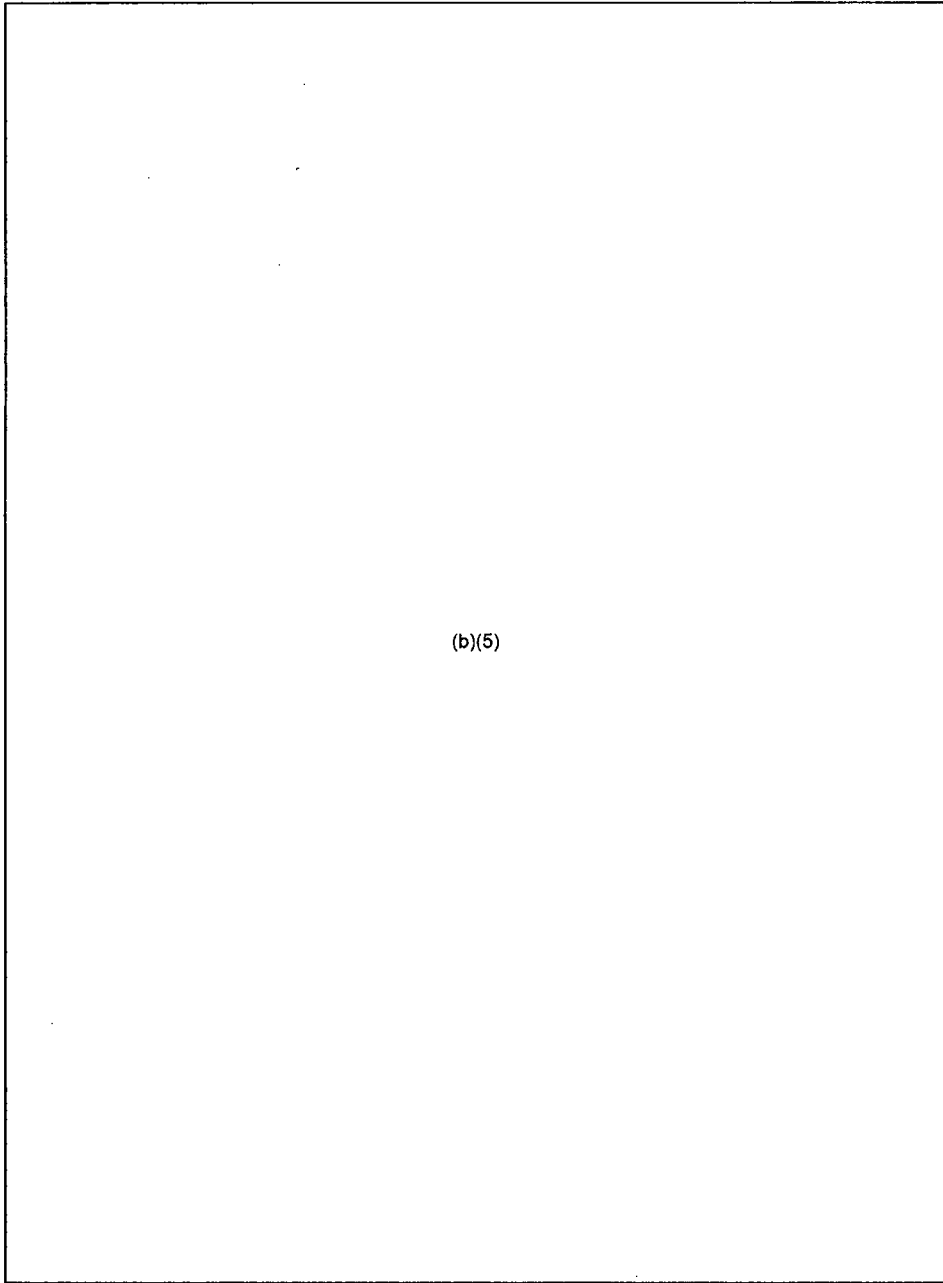
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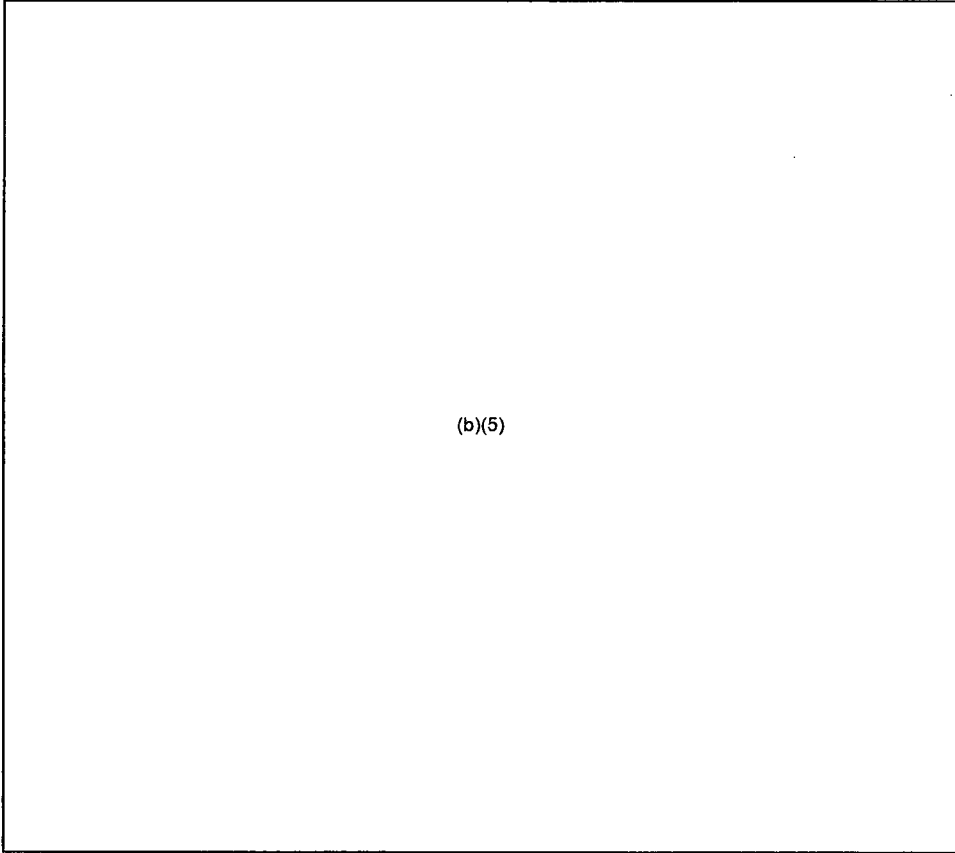
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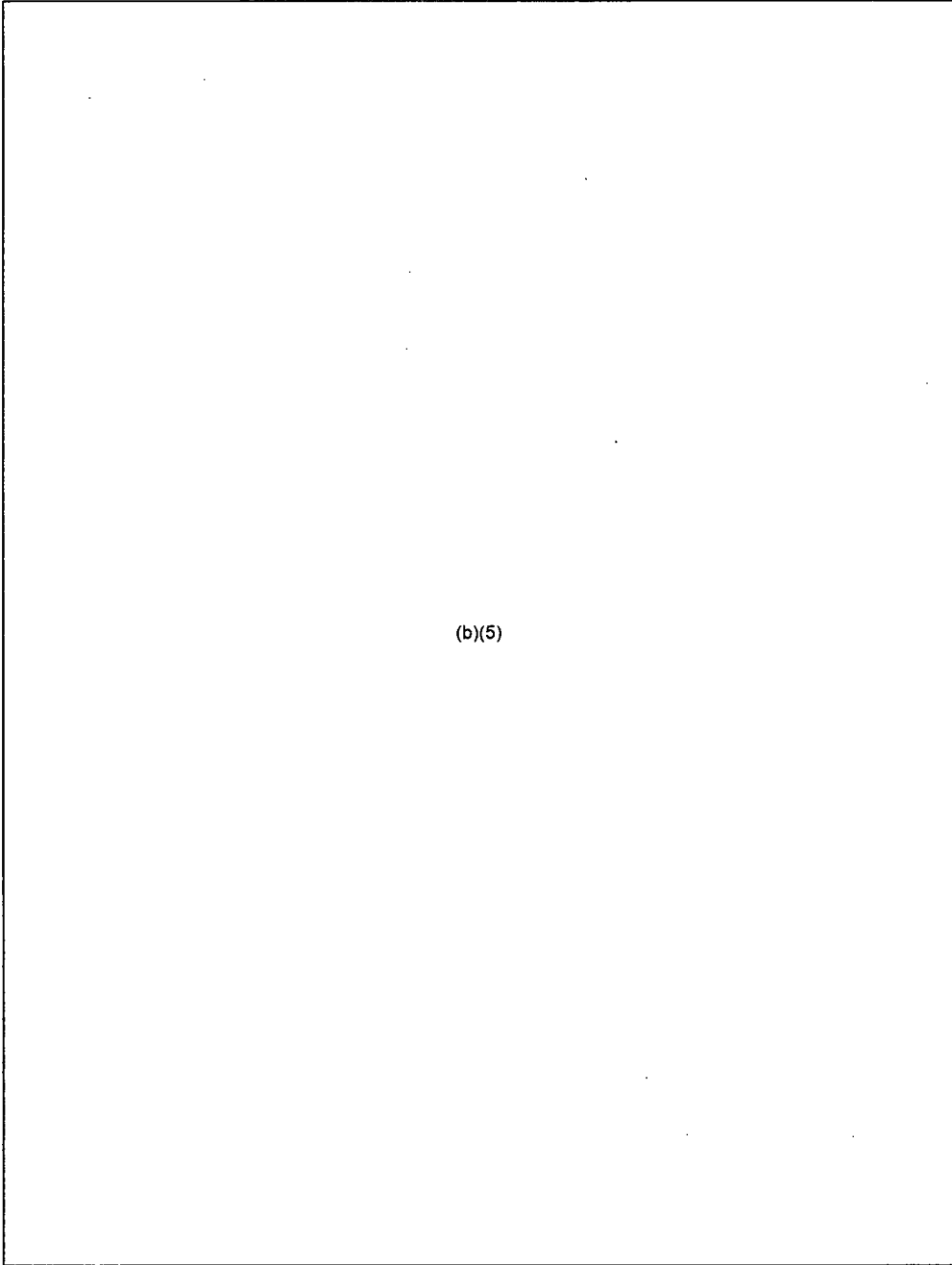


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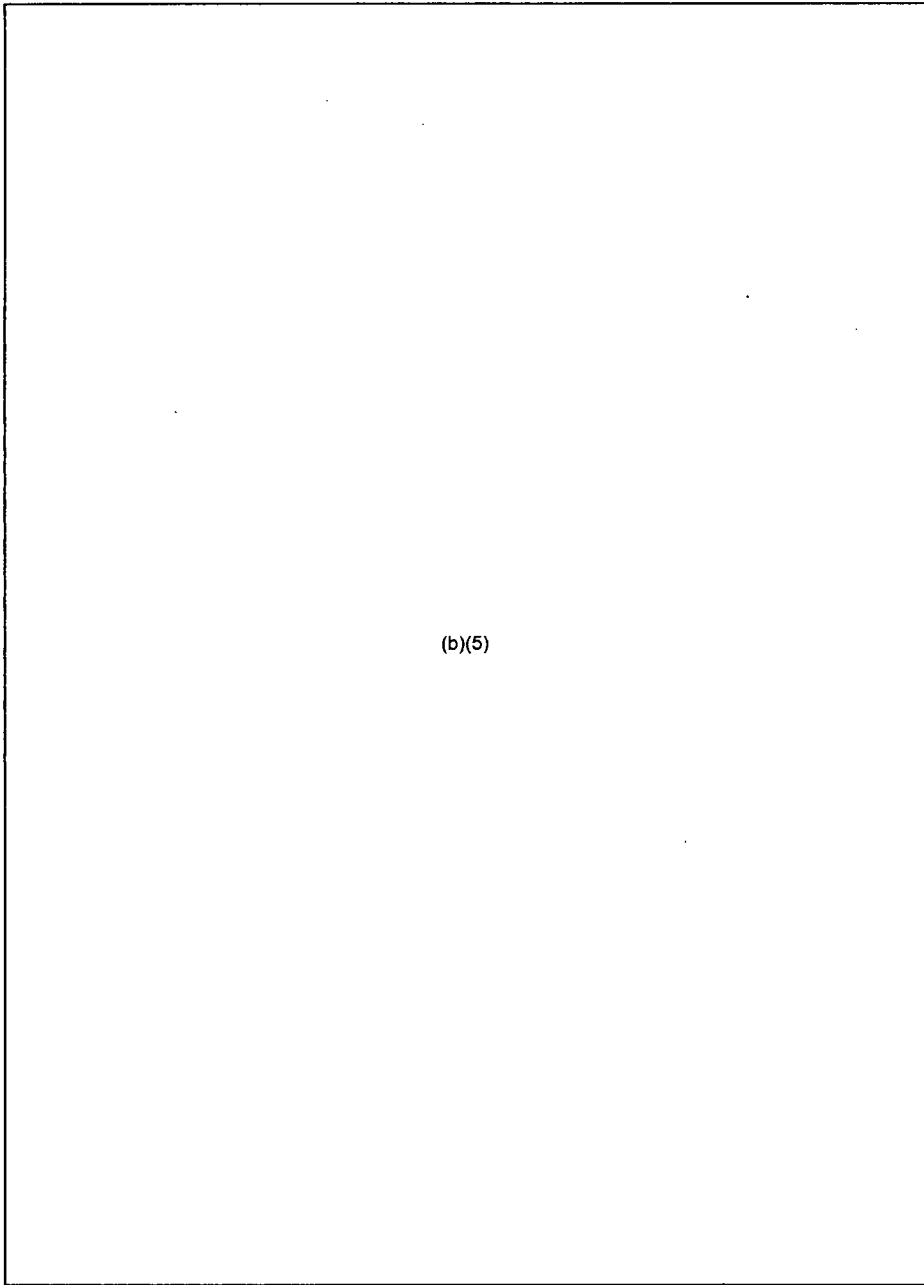


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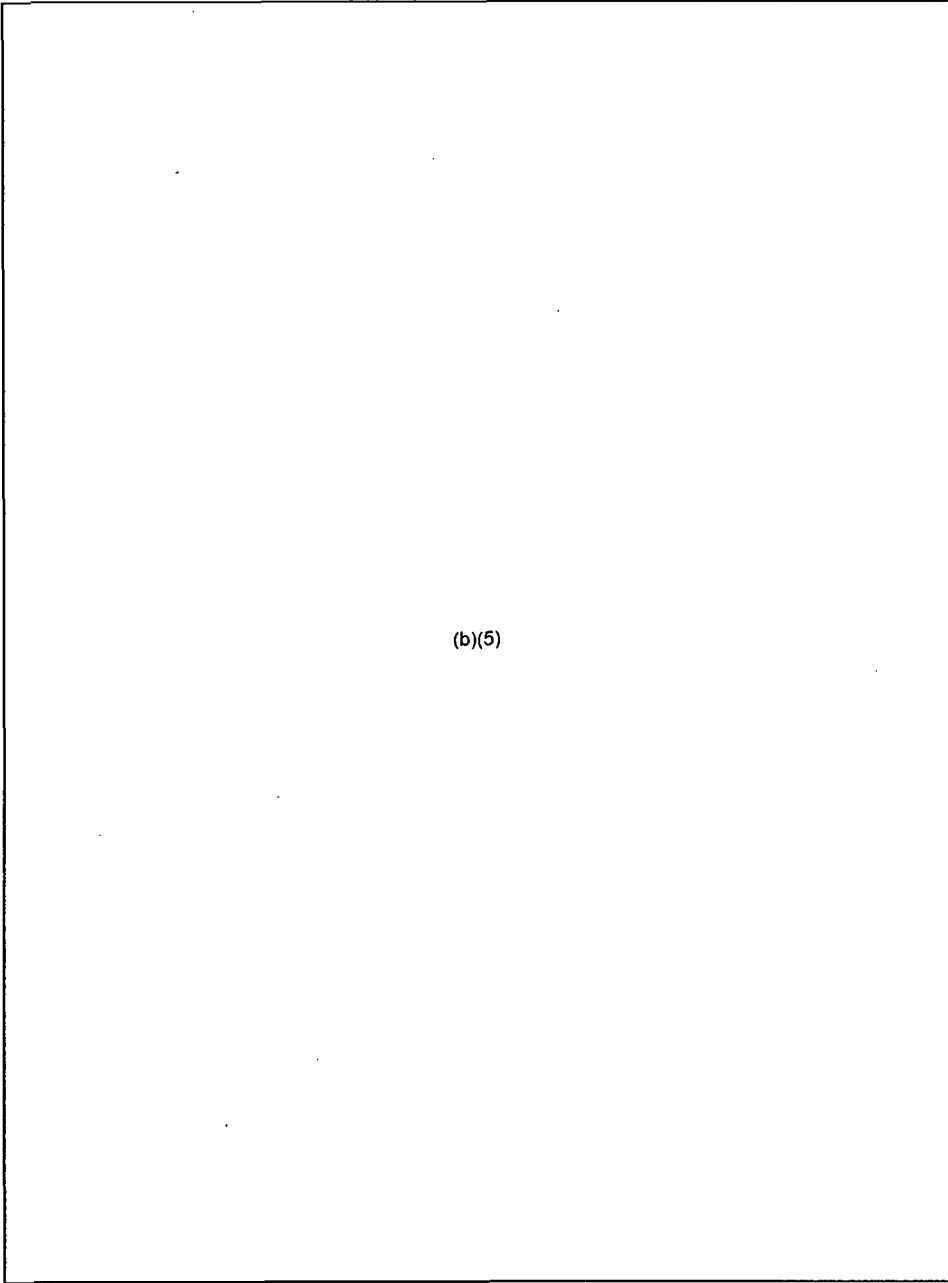
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