





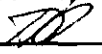










VARIOUS CHECKLISTS

FOR THE DUANE ARNOLD INITIAL EXAMINATION - JAN/FEB 2005

Facility: <u>DUANE ARNOLD</u>		Date of Examination: <u>January 31 - February 4, 2005</u>
Examinations Developed by: <input checked="" type="checkbox"/> Facility <input type="checkbox"/> NRC (circle one)		
Target Date*	Task Description / Reference	Chief Examiner's Initials
-180	1. Examination administration date confirmed (C.1.a; C.2.a & b)	
-120	2. NRC examiners and facility contact assigned (C.1.d; C.2.e)	
-120	3. Facility contact briefed on security & other requirements (C.2.c)	9/7/04 
-120	4. Corporate notification letter sent (C.2.d)	9/14/04 
[-90]	[5. Reference material due (C.1.e; C.3.c)]	N/A
-75	6. Integrated examination outline(s) due (C.1.e & f; C.3.d)	11/4/04 
-70	7. Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)	11/9/04 
-45	8. Proposed examinations, supporting documentation, and reference materials due (C.1.e, f, g & h; C.3.d)	12/13-17/04 
-30	9. Preliminary license applications due (C.1.i; C.2.g; ES-202)	
-14	10. Final license applications due and assignment sheet prepared (C.1.i; C.2.g; ES-202)	
-14	11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)	
-14	12. Examinations reviewed with facility licensee (C.1.j; C.2.f & h; C.3.g)	
-7	13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)	
-7	14. Final applications reviewed; assignment sheet updated; waiver letters sent (C.2.g, ES-204)	
-7	15. Proctoring/written exam administration guidelines reviewed with facility licensee and authorization granted to give written exams (if applicable) (C.3.k)	
-7	16. Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)	
<p>* Target dates are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.</p> <p>[] Applies only to examinations prepared by the NRC.</p>		

Duane Arnold

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of January 31, 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of January 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
	1. <u>Kelly Grassman</u>	<u>Ops Training / Exam Project Mgr.</u>	<u>Kelly Grassman</u>	<u>4-15-04</u>	<u>Kelly A</u>	<u>2/7/05</u>	
	2. <u>Marilyn J. Barton</u>	<u>RPA</u>	<u>Marilyn J. Barton</u>	<u>6/2/04</u>	<u>Marilyn J. Barton</u>	<u>2/8/05</u>	
	3. <u>George Thullen</u>	<u>INSTRUCTOR</u>	<u>George Thullen</u>	<u>2/14/04</u>	<u>George Thullen</u>	<u>2/7/05</u>	
	4. <u>Wayne Rander</u>	<u>Instructor</u>	<u>Wayne Rander</u>	<u>8/18/04</u>	<u>Wayne Rander</u>	<u>2/9/05</u>	
jmo	5. <u>DENNIS STIEFEL</u>	<u>SEC IEC</u>	<u>Dennis Stiefel</u>	<u>8/26/04</u>	<u>Dennis Stiefel</u>	<u>2/9/05</u>	
jmo	6. <u>Bob Van Roon</u>	<u>SEC. IIC</u>	<u>Bob Van Roon</u>	<u>8/26/04</u>	<u>Bob Van Roon</u>	<u>2-9-05</u>	
	7. <u>Jerry Wehr</u>	<u>RO</u>	<u>Jerry Wehr</u>	<u>9/24/04</u>	<u>Jerry Wehr</u>	<u>2/12/05</u>	
	8. <u>RC Hart</u>	<u>Simulator</u>	<u>RC Hart</u>	<u>9/24/04</u>	<u>RC Hart</u>	<u>2/9/05</u>	
	9. <u>Lowell Johnson</u>	<u>Simulator Support</u>	<u>Lowell Johnson</u>	<u>9/24/04</u>	<u>Lowell Johnson</u>	<u>2-9-05</u>	
	10. <u>Steven C. Allen</u>	<u>Simulator Support</u>	<u>Steven C. Allen</u>	<u>9/24/04</u>	<u>Steven C. Allen</u>	<u>2/9/05</u>	
	11. <u>Scott Arebaugh</u>	<u>SRO</u>	<u>Scott Arebaugh</u>	<u>9/24/04</u>	<u>Scott Arebaugh</u>	<u>2/12/05</u>	
	12. <u>Jesse Latham</u>	<u>RO</u>	<u>Jesse Latham</u>	<u>9-24-04</u>	<u>Jesse Latham</u>	<u>2-12-5</u>	
	13. <u>Kenneth Marsen</u>	<u>RO/NISPEE</u>	<u>Kenneth Marsen</u>	<u>10-1-04</u>	<u>Kenneth Marsen</u>	<u>2-12-5</u>	
	14. <u>David Mankin</u>	<u>SRO</u>	<u>David Mankin</u>	<u>10-1-04</u>	<u>David Mankin</u>	<u>2-15-05</u>	
	15. <u>MARK FRITZ</u>	<u>RO</u>	<u>Mark Fritz</u>	<u>10-1-04</u>	<u>Mark Fritz</u>	<u>2-9-5</u>	

NOTES:

Duane Arnold

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of January 31, 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of January 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1. <u>David Gibson</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>10-1-2004</u>	<u>[Signature]</u>	<u>2-7-05</u>	
2. <u>Mike Davis</u>	<u>ops support mgr.</u>	<u>[Signature]</u>	<u>10-7-04</u>	<u>[Signature]</u>	<u>2-7-05</u>	
3. <u>JOHN KRUEGER</u>	<u>NSOE</u>	<u>[Signature]</u>	<u>10/8/04</u>	<u>[Signature]</u>	<u>2/9/05</u>	
4. <u>Mark Gilbert</u>	<u>CRS</u>	<u>[Signature]</u>	<u>10/8/04</u>	<u>[Signature]</u>	<u>2-8-05</u>	
5. <u>HALVAN RASMUSSEN</u>	<u>NSPEO</u>	<u>[Signature]</u>	<u>10/8/04</u>	<u>[Signature]</u>	<u>2-14-5</u>	
6. <u>Jeffrey N. Pladsen</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>10-15-4</u>	<u>[Signature]</u>	<u>2-9-5</u>	
7. <u>Dennis L. Stancel</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>10-15-4</u>	<u>[Signature]</u>	<u>2-9-5</u>	
8. <u>Russell H. Caraffon</u>	<u>RP Instructor</u>	<u>[Signature]</u>	<u>10-25-04</u>	<u>[Signature]</u>	<u>2/9/05</u>	
9. <u>Andrew K. Hess</u>	<u>NOS Assessor</u>	<u>[Signature]</u>	<u>11-1-04</u>	<u>[Signature]</u>	<u>2-9-05</u>	
10. <u>Joe Rush</u>	<u>OPs Ingr.</u>	<u>[Signature]</u>	<u>11/2/04</u>	<u>[Signature]</u>	<u>2/11/05</u>	
11. <u>Buddy Maddox</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>11/5/04</u>	<u>[Signature]</u>	<u>2/12/5</u>	
12. <u>JOE ICKES</u>	<u>NSOE</u>	<u>[Signature]</u>	<u>11/5/04</u>	<u>[Signature]</u>	<u>2/17-05</u>	
13. <u>Gary Ryan</u>	<u>NSOE</u>	<u>[Signature]</u>	<u>11/7-04</u>	<u>[Signature]</u>	<u>2-17-05</u>	
14. <u>John Hoogland</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>11/17/04</u>	<u>[Signature]</u>	<u>2/17/5</u>	
15. <u>Jeff White</u>	<u>ANSOE</u>	<u>[Signature]</u>	<u>1/17/4</u>	<u>[Signature]</u>	<u>3/1/05</u>	

NOTES:

2/6

Duane Arnold

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Jan 31, 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of Jan 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	Ben Westcott	OSM	<i>Ben Westcott</i>	11-18-04	<i>Ben Westcott</i>	2-17-05	
2.	KEVIN STRAUB	RO	<i>Kevin Straub</i>	11-22-04	<i>Kevin Straub</i>	2/8/05	
3.	George Ludwick	RO / ANSOG	<i>George Ludwick</i>	11-22-04	<i>George Ludwick</i>	2-17-05	
4.	Merle Pettengill	SKO	<i>Merle Pettengill</i>	11/29/04			Signal Fax
5.	JOHN VAN SICKLE	OSM	<i>John Van Sickle</i>	11-30-04	<i>John Van Sickle</i>	2-9-05	
6.	Edward P. Harrison	OSM	<i>Edward P. Harrison</i>	30NOV04	<i>Edward P. Harrison</i>	12-7-05	
7.	Ken Moreland	Peer Review (Exelon)	<i>Ken Moreland</i>	12-2-04			Signal FAX
8.	Joel Sorenson	VP - Training	<i>Joel Sorenson</i>	12-6-04	<i>Joel Sorenson</i>	2/15/05	
9.	TOM GORDON	OPS TRN. SUPERVISOR	<i>Tom Gordon</i>	12-8-04	<i>Tom Gordon</i>	2-8-05	
10.	GLEN PRY	OUTAGE MANAGER	<i>Glen Pry</i>	12/9/04	<i>Glen Pry</i>	2/9/05	
11.	ERIC ROSEN	RO	<i>Eric Rosen</i>	12-9-04	<i>Eric Rosen</i>	2-14-05	
12.	RUSS BECKER	OUTAGE Scheduler	<i>Russ Becker</i>	12/10/04	<i>Russ Becker</i>	2/9/05	
13.	GORDON FULLER	INSTRUCTOR - LOR	<i>Gordon Fuller</i>	2/11/04	<i>Gordon Fuller</i>	4/9/05	
14.	LONNIE GRASS	RO	<i>Lonnie Grass</i>	12-13-04	<i>Lonnie Grass</i>	2-19-05	
15.	RICHARD L. CHAVOLLE	RO	<i>Richard L. Chavolle</i>	12-13-04	<i>Richard L. Chavolle</i>	2-8-05	

NOTES:

3/6

Duane Arnold

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Jan 31 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of Jan 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	John Cookson	N50E	<i>John Cookson</i>	12-14-04	<i>John Cookson</i>	2-9-05	
2.	Steve Brewer	CLS	<i>Steve Brewer</i>	1/17/05	<i>Steve Brewer</i>	2/9/05	
3.	MICHAEL FEZREN	CRS	<i>M Fezren</i>	1/17/05	<i>M Fezren</i>	2-17-05	
4.	Tony Browning	Principle Eng/Reg. Affairs	<i>Tony Browning</i>	1/19/05	<i>Tony Browning</i>	2/14/05	
5.	Kahamaya	Sen. EL manager	<i>Kahamaya</i>	1-20-05	<i>Kahamaya</i>	2-9-05	
6.	DAVE SCHYSSER	WCCS	<i>Dave Schysser</i>	1/24/05	<i>Dave Schysser</i>	2/9/05	
7.	Dwight DARTON	Procedure writer	<i>Dwight Darton</i>	1-24-05	<i>Dwight Darton</i>	2-14-05	
8.	Glenn Rushworth	OPS MANAGER	<i>Glenn Rushworth</i>	1/28/05	<i>Glenn Rushworth</i>	2/9/05	
9.	Jason J. Grimm	OPS INSTRUCTOR	<i>Jason J. Grimm</i>	1/31/05	<i>Jason J. Grimm</i>	2/9/05	
10.	Rob Spading	OPS INSTRUCTOR	<i>Rob Spading</i>	1/31/05	<i>Rob Spading</i>	2/9/05	
11.	Ellis Van N	ILC lead	<i>Ellis Van N</i>	2/7/05	<i>Ellis Van N</i>	2/7/05	
12.	RM RUTAN	ILC INSTRUCTOR	<i>RM Rutan</i>	2-7-05	<i>RM Rutan</i>	2/9/05	
13.							
14.							
15.							

NOTES:

4/6

Duane Arnold

02/09/05 08:09 FAX 3198517571

DAEC TRAINING

0002

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Jan 31, 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of Jan 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	Ben Westcott	OSM	<i>Ben Westcott</i>	11-18-04			
2.	LEWIN STROUB	RO	<i>[Signature]</i>	11-22-04	<i>[Signature]</i>	2/05	
3.	George Ludwick	RO / ANSOG	<i>[Signature]</i>	11-22-04			
4.	Merle Peffermitt	SRO	<i>[Signature]</i>	11/22/04			
5.	John VanSticker	OSM	<i>[Signature]</i>	11-22-04			
6.	Edward P Harrison	OSM	<i>[Signature]</i>	200004			
7.	Ken MacLeland	Neop Review (Eradon)	<i>[Signature]</i>	12-2-04	<i>[Signature]</i>	2-9-05	
8.	Joel Sorensen	VP - Training	<i>[Signature]</i>	12-6-04			
9.	TOM GORDON	OPS TRN. SUPERVISOR	<i>[Signature]</i>	12-8-04	<i>[Signature]</i>	2-8-05	
10.	GLEN PRY	OUTAGE MANAGER	<i>[Signature]</i>	12/9/04			
11.	ERIC BOREN	RO	<i>[Signature]</i>	12-9-04			
12.	Russ BECKER	OUTAGE Scheduler	<i>[Signature]</i>	12/10/04			
13.	GORDON FULLER	INSTRUCTOR - LOR	<i>[Signature]</i>	2/11/04			
14.	LONNIE GRASS	RO	<i>[Signature]</i>	12-13-04			
15.	RICHARD L. CHARLTON	RO	<i>[Signature]</i>	12-17-04	<i>[Signature]</i>	2-8-05	

NOTES:

5/6

Duane Arnold

MERLE PETTENGILL

ES-201

Examination Security Agreement

Form ES-201-3

1. Pre-Examination

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Jan 31, 2005 as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC. Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of Jan 31, 2005. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	Ben Westrot	OSM	Ben Westrot	11-18-04			
2.	LEVIN STROUB	RD	[Signature]	11-22-04	[Signature]	2/8/05	
3.	Genove Lueking	RD / ANSOG	[Signature]	11-27-04			
* 4.	Merle Pettengill	SRD	Merle Pettengill	11-29-04	Merle Pettengill	2/15/05	
5.	John Van Sticke	OSM	[Signature]	12-20-04			
6.	Edward P Harrison	OSM	[Signature]	2-20-05			
7.	Ken Maceland	Peer Review (Exten)	[Signature]	12-2-04			
8.	Joel Sorenson	VP - Training	[Signature]	12-6-04			
9.	Tom Gordon	OPS TRN. SUPERVISOR	[Signature]	12-8-04	[Signature]	2-8-05	
10.	GLEN PRY	OUTAGE MANAGER	[Signature]	12-12-04			
11.	ERIC BORN	RD	[Signature]	12-9-04			
12.	RUSS BECKER	OUTAGE SCHEDULE	[Signature]	12/10/04			
13.	GORDON FULLER	INSTRUCTOR - LOR	[Signature]	2/11/05			
14.	LONNIE BRASS	RD	[Signature]	12-13-04			
15.	RICHARD A. CHANDLER	RD	[Signature]	12-17-04	[Signature]	2-8-05	

NOTES:

6/6

001

DAEC TRAINING

02/14/05 08:04 FAX 3198517571

Facility: <u>DAEC</u>		Date of Examination: <u>01/31/05</u>		Operating Test Number: <u>2005-01</u>	
1. General Criteria			Initials		
			a	b*	c#
a.	The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10 CFR 55.45, operational importance, safety function distribution).	WR	Y	AB	
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.	WR	Y	AB	
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)	WR	Y	AB	
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.	WR	Y	AB	
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.	WR	Y	AB	
2. Walk-Through Criteria			--	--	--
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> • initial conditions • initiating cues • references and tools, including associated procedures • reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time-critical by the facility licensee • operationally important specific performance criteria that include: <ul style="list-style-type: none"> - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable 	WR	Y	AB	
b.	Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2.	WR	Y	AB	
3. Simulator Criteria			--	--	--
The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached.			WR	Y	AB
	Printed Name / Signature		Date		
a.	Author	<u>Wayne Render / Wayne Render</u>	<u>12/08/04</u>		
b.	Facility Reviewer(*)	<u>Tom Gordon / [Signature]</u>	<u>12-10-4</u>		
c.	NRC Chief Examiner (#)	<u>Hironori Peterson / [Signature]</u>	<u>12-29-04 / 01/04/05</u>		
d.	NRC Supervisor	<u>[Signature] / [Signature]</u>	<u>1/28/05</u>		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.					

* Post changes approved.

Facility: DAEC		Date of Exam: 01/31/05		Scenario Numbers: 1 2 3		Operating Test No.: 2005-01	
QUALITATIVE ATTRIBUTES			Initials				
			a	b*	CH		
1.	The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events.	WR	Y	HP			
2.	The scenarios consist mostly of related events.	WR	Y	HP			
3.	Each event description consists of <ul style="list-style-type: none"> • the point in the scenario when it is to be initiated • the malfunction(s) that are entered to initiate the event • the symptoms/cues that will be visible to the crew • the expected operator actions (by shift position) • the event termination point (if applicable) 	WR	Y	HP			
4.	No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event.	WR	Y	HP			
5.	The events are valid with regard to physics and thermodynamics.	WR	Y	HP			
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	WR	Y	HP			
7.	If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given.	N/A	Y	HP			
8.	The simulator modeling is not altered.	WR	Y	HP			
9.	The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios.	WR	Y	HP			
10.	Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301.	WR	Y	HP			
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	WR	Y	HP			
12.	Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios).	WR	Y	HP			
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	WR	Y	HP			
Target Quantitative Attributes (Per Scenario; See Section D.5.d)		Actual Attributes		-	-	-	
1.	Total malfunctions (5-8)	6	6	7	WR	Y	HP
2.	Malfunctions after EOP entry (1-2)	1	1	1	WR	Y	HP
3.	Abnormal events (2-4)	2	2	2	WR	Y	HP
4.	Major transients (1-2)	1	1	1	WR	Y	HP
5.	EOPs entered/requiring substantive actions (1-2)	2	1	2	WR	Y	HP
6.	EOP contingencies requiring substantive actions (0-2)	0	1	2	WR	Y	HP
7.	Critical tasks (2-3)	2	2	2	WR	Y	HP

Forms ES-301-5 and 301-6.

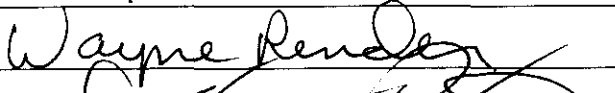
These forms have been changed due to the re-ordering of the Exam Scenario **Events**. These Events have been changed based on communications with the Chief Examiner.

ES-301		Transient and Event Checklist						Form ES-301-5				
Facility:		DAEC		Date of Exam:		01/31/05		Operating Test No.:			2005-01	
Scenarios												
A P P L I C A N T T Y P E	E V E N T	ESG 1			ESG 2			ESG 3			T O T A L	M I N I M U M
		Crew Position			Crew Position			Crew Position				
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		
RO	Rx		E-1								1	1
	NO R						E-1		E-1		2	1
	I/C		E-2 E-4				E-4 E-5 E-6 E-9		E-3 E-5 E-6 E-9		10	4
	MAJ		E-7				E-8		E-8		3	2
	TS											
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		
SR O/I	Rx	E-1				E-2		E-7			3	1
	NO R	E-3						E-1			2	1
	I/C	E-2 E-4 E-5 E-6 E-8				E-3 E-7		E-2 E-3 E-4 E-5 E-6 E-9			13	4
	MAJ	E-7				E-8		E-8			3	2
	TS	E-2 E-5						E-3 E-4 E-6			5	2
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP		
SR O/I	Rx				E-2				E-7		2	1
	NO R			E-3	E-1						2	1
	I/C			E-5 E-6 E-8	E-3 E-4 E-5 E-6 E-7 E-9				E-2 E-4		11	4
	MAJ			E-7	E-8				E-8		3	2
	TS				E-3 E-4 E-5						3	2

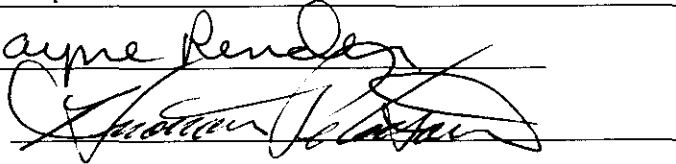
Instructions:

1. Circle the applicant level and enter the operating test number and Form ES-D-1 event numbers controls (ATC)" and the "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
2. Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. *Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis
3. whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



NRC Reviewer



Facility: DAEC Date of Exam: 01/31/05 Operating Test No.: 2005-01

A P P L I C A N T	E V E N T T Y P E	Scenarios														
		ESG 1			ESG 3			T O T A L	M I N I M U M	Spare/ESG 2						
		Crew Position			Crew Position					Crew Position						
		SRO	ATC	BOP	SRO	ATC	BOP	SRO	ATC	BOP	T O T A L	M I N				
RO	Rx		E-1						1	1			1	1		
	NOR						E-1		1	1			E-1	2	1	
	I/C		E-2 E-4				E-3 E-5 E-6 E-9		5	4			E-4 E-5 E-6 E-9	10	4	
	MAJ		E-7				E-8		3	2			E-8	3	2	
	TS															
		SRO	ATC	BOP	SRO	ATC	BOP					SRO	ATC	BOP		
RO	Rx						E-7		1	1			E-2	2	1	
	NOR			E-3					1	1				1	1	
	I/C			E-5 E-6 E-8			E-2 E-4		5	4			E-3 E-7	7	4	
	MAJ			E-7			E-8		3	2			E-8	3	2	
	TS															
		SRO	ATC	BOP	SRO	ATC	BOP					SRO	ATC	BOP		
SRO/ U	Rx	E-1			E-7				2	1			E-2	3	1	
	NOR	E-3			E-1				2	1			E-1	3	1	
	I/C	E-2 E-4 E-5 E-6 E-8			E-2 E-3 E-4 E-5 E-6 E-9				10	4			E-3 E-4 E-5 E-6 E-7 E-9	17	4	
	MAJ	E-7			E-8				3	2			E-8	3	2	
	TS	E-2 E-5			E-3 E-4 E-6				5	2			E-3 E-4 E-5	8	2	
			SRO	ATC	BOP	SRO	ATC	BOP					SRO	ATC	BOP	

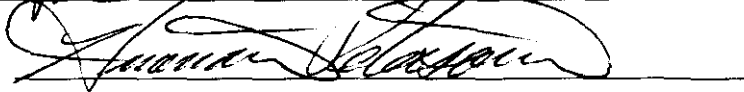
Instructions:

1. Circle the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and the "balance-of-plant (BOP)" positions; Instant SROs must do one scenario, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position.
2. Reactivity manipulations may be conducted under normal or controlled abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. *Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis
3. whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirement.

Author:



NRC Reviewer



Facility <u>DAEC</u>		Date of Examination: <u>01/31/2005</u>						Operating Test NO: <u>2005-01</u>				
Competencies	APPLICANTS											
	<u>RO</u> /SRO-I/SRO-U			<u>RO</u> /SRO-I/SRO-U			<u>RO</u> / <u>SRO-I</u> /SRO-U			RO/SRO-I/ <u>SRO-U</u>		
	Scenario			Scenario			Scenario			Scenario		
	1	2	3	1	2	3	1	2	3	1	2	3
Interpret/Diagnose Events and Conditions	E-2, E-4, E-7	E-3, E-7, E-8,	E-2, E-4, E-8	E-3, E-5, E-6, E-7, E-8	E-4, E-5, E-6, E-8, E-9	E-3, E-5, E-6, E-8, E-9	E-2, E-4, E-5, E-6, E-7, E-8	E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-2, E-4, E-5, E-6, E-7, E-8	E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9
Comply with and Use Procedures (1)	E-1, E-2, E-4, E-7	E-2, E-3, E-7, E-8,	E-2, E-4, E-7, E-8,	E-3, E-5, E-6, E-7, E-8	E-1, E-4, E-5, E-6, E-8, E-9	E-1, E-3, E-5, E-6, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9
Operate Control Boards (2)	E-1, E-2, E-4, E-7	E-2, E-3, E-7, E-8	E-2, E-4, E-7, E-8	E-3, E-5, E-6, E-7, E-8	E-1, E-4, E-5, E-6, E-8, E-9	E-1, E-3, E-5, E-6, E-8, E-9						
Communicate and Interact	E-1, E-2, E-4, E-7	E-2, E-3, E-7, E-8	E-2, E-4, E-7, E-8	E-3, E-5, E-6, E-7, E-8	E-1, E-4, E-5, E-6, E-8, E-9	E-1, E-3, E-5, E-6, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9
Demonstrate supervisory Ability (3)							E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9	E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9
Comply With and Use Tech. Specs. (3)							E-2, E-5	E-3, E-4, E-5	E-3, E-4, E-6	E-2, E-6	E-3, E-4, E-5	E-3, E-4, E-6

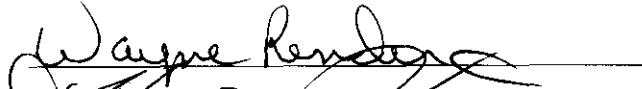
Notes:

- (1) Includes Technical Specification compliance for RO.
- (2) Optional for an SRO-U.
- (3) Only applicable to SROs

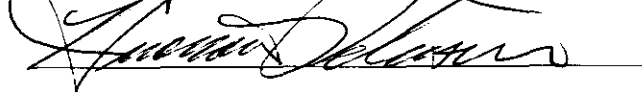
Instructions:

Circle the applicants' license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Author:



NRC Reviewer



Facility: DAEC		Date of Exam: 01/31/2005		Exam Level: RO/SRO		
Item Description	Initial					
	a	b*	c*			
1. Questions and answers are technically accurate and applicable to the facility.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
4. If more than four RO and two SRO questions are repeated from the last two NRC licensing exams, the facility licensee's sampling process was random and systematic.			<i>AB</i>			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input type="checkbox"/> the audit exam was systematically and randomly developed <input type="checkbox"/> the audit exam was completed before the license exam was started <input type="checkbox"/> the examinations were developed independently <input checked="" type="checkbox"/> the licensee certifies that there is no duplication <input type="checkbox"/> other (explain)	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right.	Bank	Modified	New	<i>gts</i>	<i>JMD</i>	<i>AB</i>
	1711	1011	48123			
7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right.	Memory	CIA		<i>gts</i>	<i>JMD</i>	<i>AB</i>
	35' 5 29#	40' 20 42#				
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
11. The exam contains the required number of one-point, multiple choice items; the total is correct and agrees with the value on the cover sheet.	<i>gts</i>	<i>JMD</i>	<i>AB</i>			
a. Author		Printed Name / Signature		Date		
b. Facility Reviewer (*)		<i>G. R. Thullen / G. R. Thullen</i>		<i>12/16/04</i>		
c. NRC Chief Examiner (#)		<i>J. Michael Davis / J. Michael Davis</i>		<i>12/16/04</i>		
d. NRC Regional Supervisor		<i>Therese Peterson / Therese Peterson</i>		<i>12/30/04</i>		
		<i>RD Leman / RD Leman</i>		<i>1/28/05</i>		
Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						

* Just changes approval.

Facility: DAEC		Date of Exam: 01/31/2005				
Category	K/A #	Topic	RO		SRO-Only	
			IR	#	IR	#
1. Conduct of Operations	2.1.3	Knowledge of shift turnover practices. (CFR: 41.10 / 45.13)	3.0	1		
	2.1.8	Ability to coordinate personnel activities outside the control room. (CFR: 45.5 / 45.12 / 45.13)	3.8	1		
	2.1.33	Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications. (CFR: 43.2 / 43.3 / 45.3)	3.4	1		
	2.1.					
	2.1.					
	2.1.					
	Subtotal				3	
2. Equipment Control	2.2.12	Knowledge of surveillance procedures. (CFR: 41.10 / 45.13)	3.0	1		
	2.2.30	Knowledge of RO duties in the control room during fuel handling such as alarms from fuel handling area / communication with fuel storage facility / systems operated from control room in support of fueling operations / and supporting instrumentation. (CFR: 45.12)	3.5	1		
	2.2.					
	2.2.					
	2.2.					
	2.2.					
Subtotal				2		
3. Radiation Control	2.3.2	Knowledge of facility ALARA program. (CFR: 41.12 / 43.4 / 45.9 / 45.10)	2.5	1		
	2.3.14 4	Knowledge of radiation exposure limits and contamination control / including permissible levels in excess of those authorized. (CFR: 43.4 / 45.10) Ability to control radiation releases. (CFR: 45.9 / 45.10)	2.72.5	1		
	2.3.					
	2.3.					
	2.3.					
	2.3.					
Subtotal				2		
4. Emergency Procedures / Plan	2.4.11 8	Knowledge of the specific bases for EOPs. (CFR: 41.10 / 45.13) Knowledge of EOP entry conditions and immediate action steps. (CFR: 41.10 / 43.5 / 45.13)	4.32.7	1		
	2.4.16	Knowledge of EOP implementation hierarchy and coordination with other support procedures. (CFR: 41.10 / 43.5 / 45.13)	3.0	1		
	2.4.45	Ability to prioritize and interpret the significance of each annunciator or alarm. (CFR: 43.5 / 45.3 / 45.12)	3.3	1		
	2.4.					
	2.4.					
	2.4.					
Subtotal				3		
Tier 3 Point Total				10		7

Tier / Group	Randomly Selected K/A	Reason for Rejection
RO Tier 1 Group 1	Question 12 295025 EA2.06	Emergency High Reactor Pressure was combined with "ability to determine and/or interpret the following as they apply to High Reactor Pressure: Reactor water level". A Search of industry questions showed that some plants must pressure compensate for water level indicators. Operators at DAEC do not adjust RPV level for high reactor pressure. Randomly selected another EA2, EA2.01 , Reactor Pressure as a replacement.
RO Tier 1 Group 1	Question 13 295026 EK2.02	Emergency High Torus Water Temperature was combined with Knowledge of interrelations with Torus Spray. Normally, initiation of Torus Spray at DAEC is not dependent on Torus Water Temperature. NPSH limits might apply if Torus very hot, >190°. An SRO might be asked to interpret the NPSH EOP curves, but this is not a major EOP breakpoint suitable for ROs. Randomly selected another EK2, EK2.01 , as a replacement.
RO Tier 1 Group 1	Question 16 295031 2.4.49	Reactor Low Level (Emergency) was combined with generic ability to perform immediate actions without procedures. The resulting question conflicted with the Low Level (Abnormal) question in T1G2. Also, at the emergency/EOP stage of this transient, there would be no immediate operator actions. Randomly selected another Generic, 2.1.32 , Ability to apply system limits and precautions, as a replacement.
RO Tier 1 Group 2	Question 19 600000 AA1.08	Plant Fire on site was combined with the knowledge of fire fighting equipment used on each class of fire. Resulting questions had low discriminatory value. Randomly selected another AA1, AA1.05 , as a replacement.
RO Tier 1 Group 2	Question 24 295012 2.1.28	Abnormal High Drywell Temperature was combined with system generic "knowledge of the purpose and function of major system components and controls". Since a High Drywell temperature event does not have components or controls, it would not be possible to write a question about their purpose and function. Randomly selected another Generic, 2.1.33 , as a replacement.
RO Tier 1 Group 2	Question 27 295035 EK3.01	Secondary Containment high DP was combined with "Knowledge of the reasons for the following responses as they apply to Secondary Containment high DP: Blow out panel operation." Any question that addressed the reason for blowout panels would always have the answer of "preventing overpressure", making this combination <u>too easy</u> . Selected the only other 295035 EK3, EK3.02 as a replacement.

Tier / Group	Randomly Selected K/A	Reason for Rejection
RO Tier 2 Group 1	Question 29 205000 K6.03	Shutdown Cooling was combined with knowledge of the effect of a loss or malfunction of Recirculation System. Topic was too closely related to SRO 295001 Loss of forced circulation with 2.4.9 Knowledge of low power implications in an accident. Randomly selected K6.04, Reactor water level, as a replacement, but that K/A would still have the same problem. Randomly selected another K6 topic K6.05 , Component Cooling Water, as a replacement.
RO Tier 2 Group 1	Question 32 211000 A3.04	SBLC was combined with the ability to monitor reactor power which is read on panel 1C05 right next to SBLC control and which obviously goes down when SBLC is initiated. A question to this combination would be <u>too easy</u> . The clincher was that we could not find any industry bank questions on this combination. Randomly selected another A3 topic A3.07 , Lights and alarms, as a replacement.
RO Tier 2 Group 1	Question 34/35 215003 (IRM) K2.01 and 215004 (SRM) K2.01	K2.01, Knowledge of power supply to channel/detectors, was randomly selected for both IRM and SRM. The answer in both cases is 24 VDC, which is too similar. IRM has only one K2 topic and SRM has only one K2 topic with an importance rating of ≥ 2.5 . Randomly selected 215003 (IRM) and then randomly selected A4.01 for that system.
RO Tier 2 Group 1	Question 34 215003 (IRM) A4.01	IRM system was combined with the "ability to manually operate and/or monitor in the control room: IRM recorder Indication." A question to this combination would be <u>too easy</u> . The recorders are frequently read at 1C05. Any question that used IRM indication in response to range switches positioning or reactivity changes would match up better with another K/A. Randomly selected another A4 topic, A4.06 , Detector Drives, as a replacement.
RO Tier 2 Group 1	Question 51 239002 A1.01	SRV system was combined with "ability to predict and/or monitor changes in parameters associated with operating the SRV controls including: Tail Pipe Temperatures". This ability would also be measured during a planned simulator normal evolution. Randomly selected another A1 topic, A1.08 , Torus water temperature, as a replacement.
RO Tier 2 Group 1	Question 52 300000 K6.04	Instrument Air was combined with the knowledge of the effect of a loss or malfunction of a service air refusal valve. DAEC has no air system valve by this name. DAEC does have a valve that isolates the Service Air Header first as pressure lowers during abnormal conditions. Closing it would have no effect on Instrument Air during normal operations. Randomly selected another K6 topic, K6.03 , Temperature Indicators, as a replacement.
RO Tier 2 Group 1	Question 52 300000 K6.03	Instrument Air was combined with the knowledge of the effect of a loss or malfunction of Temperature Indicators. A Loss of a temperature indicator could not have an effect other than loss of the ability to read that temperature. This would result in a question that was <u>too easy</u> . Randomly selected another K6 topic, K6.12 , Breakers, relays and disconnects, as a replacement.
RO Tier 2 Group 2	Question 60 239001 A4.08	Main and Reheat Steam was combined with the ability to operate or monitor Reactor Level, which is already the topic in 295031(T1G1), 295009 (T1G2) and 259002 (T2G1). Randomly selected another A4 topic, A4.10 Reactor Power as a replacement. This would result in a question that was <u>too easy</u> . Randomly selected another A4 topic, A4.05 System Temperature as a replacement.
RO Tier 3	Question 73 2.4.1	Knowledge of EOP entry conditions and immediate action steps was in conflict with several SRO questions. In addition, DAEC EOPs have no immediate operator actions and a memory level question on EOP entry conditions would be too easy. Randomly selected another Generic 2.4 topic, 2.4.18 , Knowledge of specific bases for EOPs as a replacement.

Tier / Group	Randomly Selected K/A	Reason for Rejection
SRO Tier 1 Group 1	Question 3 295006 2.4.49	Reactor SCRAM was combined with Ability to perform immediate actions without reference to procedures. This Generic K/A had already been selected with 295031 (RPV Low Water Level) on the RO exam. The two questions would be too similar. Randomly selected another Generic, 2.1.7 , as a replacement.
SRO Tier 1 Group 1	Question 4 295019 AA2.01	Partial or complete loss of instrument air was randomly selected. This Evolution must also be selected for the RO exam in Tier 1. In Tier 2 Group 1, some systems must be selected more than once. On the RO exam, System 300000, Instrument Air was one such system. Therefore, on the SRO exam, randomly selected 295030 EA2.03 in its place rather than have four questions on Instrument Air or loss of Instrument Air.
SRO Tier 1 Group 1	Question 5 295025 2.4.16	System Generic 2.4.16 "Knowledge of EOP implementation hierarchy and coordination with other support procedures" was also selected for the RO exam in Tier 3. To avoid duplication, randomly selected generic 2.1.14 in its place.
SRO Tier 1 Group 2	Question 8 295008 2.1.14	2.1.14 is a System Generic K/A (System status that requires notification of plant personnel) that was also selected for System 218000 (ADS) in Tier 2 and Event 295025 in Tier 1. To avoid duplication, randomly selected generic 2.1.32 as a replacement.
SRO Tier 1 Group 2	Question 9 295035 2.1.32	295035 High Secondary Containment Differential Pressure was also selected in Tier 1 Group 2 on the RO exam. Questions would conflict. Randomly selected 295017 from a field of T1G2 Evolutions that were not previously selected on RO exam. 2.1.32 remained as the Generic topic.
SRO Tier 2 Group 1	Question 12 215003 A2.03	Ability to predict impact of a Stuck Detector (2.03) on IRMs and use procedures to correct. DAEC has no procedures for a stuck detector. (Checked ARPs, OIs, and System Descriptions) A stuck detector would read higher or lower than normal but those are covered by other K/As. All other A.2 topics for IRMs would conflict with a scenario segment for an upscale/inoperable IRM. Randomly selected another T2 G1 System, HPCI 206000 , and randomly selected another A.2 topic, A2.09 , on low CST level.
SRO Tier 2 Group 1	Question 15 262002 2.4.30	Uninterruptible AC was combined with the Knowledge of system events that should be reported to outside agencies. A loss of UPS was used as the bases for SRO T1G1 295006 so another question on this topic would conflict. Randomly Selected System 215005 , APRM/LPRM, as a replacement. 2.4.30 remained as the Generic topic.
SRO Tier 3	Question 22 2.2.33	2.2.33 "Knowledge of control rod programming" could not be converted into a relevant SRO level question. Programming at DAEC is performed by the Reactor Engineers who load the program into the Rod Worth Minimizer. All questions must therefore be "systems" questions about the RWM bases, procedure, or hardware. Randomly selected Generic 2.2.21 "Knowledge of pre and post maintenance operability requirements" as a replacement.
SRO Tier 3	Question 23 2.3.2	2.3.2 "Knowledge of ALARA" was randomly selected first for the RO exam. Randomly selected 2.3.3 "Knowledge of SRO responsibilities for Auxiliary systems outside of control room" as a replacement for the SRO Exam
SRO Tier 3	Question 24 2.3.6	2.3.6 "Knowledge of requirements for reviewing and approving release permits." This activity is not relevant to the DAEC. The Radwaste Liquid Release line at DAEC has been isolated for more than 25 years. Randomly selected 2.3.9 , "Knowledge of the process for performing a containment purge" as a replacement for the SRO Exam.

<u>Amended Outline</u>		
<u>Tier / Group</u>	<u>Randomly Selected K/A</u>	<u>Reason for Rejection</u>
<u>RO Tier 3</u>	<u>Question 72 2.3.11</u>	<p><u>Ability to control radiation releases was initially selected. There are a limited number of RO tasks that fit this topic and all were used in other questions or JPMs on either the RO or SRO exams : RO Q# 18 295038, SRO Q#9 295017, SRO Q# 24 2.3.9, RO Q# 26 295034, RO Q# 27 295035, JPM 272000-03. From a field of Radiation Control (2.3) topics that were not already selected, randomly selected 2.3.4 "Knowledge of radiation exposure limits and contamination control..." as a replacement.</u></p>

Facility: <i>DAEC</i>		Date of Exam: <i>Feb 7 '05</i>		Exam Level: <u>R</u> /SRO	
Item Description		Initials			
		a	b	c	
1.	Clean answer sheets copied before grading	<i>SV</i>	<i>JMD</i>	<i>AP</i>	
2.	Answer key changes and question deletions justified and documented	<i>SV</i>	<i>JMD</i>	<i>AP</i>	
3.	Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<i>SV</i>	<i>JMD</i>	<i>AP</i>	
4.	Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	<i>SV</i>	<i>JMD</i>	<i>AP</i>	
5.	All other failing examinations checked to ensure that grades are justified	<i>SV</i>	<i>JMD</i>	<i>N/A</i>	
6.	Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<i>SV</i>	<i>JMD</i>	<i>AP</i>	
		Printed Name/Signature		Date	
a.	Grader	<i>E. Ellis Vann</i>		<i>2/11/05</i>	
b.	Facility Reviewer(*)	<i>J. Michael Davis</i>		<i>2/11/05</i>	
c.	NRC Chief Examiner (*)	<i>Hironori Peterson</i>		<i>2/17/05</i>	
d.	NRC Supervisor (*)	<i>RD Dankburg</i>		<i>2/28/05</i>	
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

Facility: <i>DAEC</i>		Date of Exam: <i>Feb 7 '05</i>		Exam Level: RO <u>SRO</u>	
Item Description	Initials				
	a	b	c		
1. Clean answer sheets copied before grading	<i>EV</i>	<i>JMD</i>	<i>AB</i>		
2. Answer key changes and question deletions justified and documented	<i>EV</i>	<i>JMD</i>	<i>AB</i>		
3. Applicants' scores checked for addition errors (reviewers spot check > 25% of examinations)	<i>EV</i>	<i>JMD</i>	<i>AB</i>		
4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail	<i>EV</i>	<i>JMD</i>	<i>AB</i>		
5. All other failing examinations checked to ensure that grades are justified	<i>EV</i>	<i>JMD</i>	<i>N/A</i>		
6. Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants	<i>EV</i>	<i>JMD</i>	<i>AB</i>		
Printed Name/Signature		Date			
a. Grader	<i>E. Elia Vann</i> <i>E. Elia Vann</i>	<i>2/11/05</i>			
b. Facility Reviewer(*)	<i>J. Michael Davis</i> <i>JMD</i>	<i>2/11/05</i>			
c. NRC Chief Examiner (*)	<i>Hironori Peterson</i> <i>Hironori Peterson</i>	<i>2/17/05</i>			
d. NRC Supervisor (*)	<i>R.D. Linksby</i> <i>R.D. Linksby</i>	<i>2/28/05</i>			
(*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.					

Facility: Duane Arnold

Post-Examination Check Sheet	
Task Description	Date Complete
1. Facility written exam comments or graded exams received and verified complete	02/14/2005
2. Facility written exam comments reviewed and incorporated and NRC grading completed, if necessary	02/16/2005
3. Operating tests graded by NRC examiners	02/17/2005
4. NRC chief examiner review of operating test and written exam grading completed	02/18/2005
5. Responsible supervisor review completed	2/28/05
6. Management (licensing official) review completed	2/28/05
7. License and denial letters mailed	3/01/05
8. Facility notified of results	3/01/05
9. Examination report issued (refer to NRC MC 0612)	3/18/05
10. Reference material returned after final resolution of any appeals	—