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DAEC EMERGENCY PLANNING DEPARTMENT PROCEDURE TRANSMITTAL ACKNOWLEDGEMENT MEMO (TAM-62)

To: NRC-NRR Document Control Desk
US NRC
Washington DC 20555

Re: Entire EPIP Document (Copy 28)

PSM Title: n/a

Distribution Date: 08 / 29 / 2003
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Return by: 09 / 17 / 2003

Please perform the following to your assigned manual. If you have any questions regarding this TAM please contact Don A. Johnson at 319-851-7872.

	REMOVE	INSERT
EPIP Table of Contents Revision	Rev. 139	Rev. 140
EPIP EAL-01 (PWR: 21932)	Rev. 3	Rev. 4

PERFORMED BY:

Print Name _____ Sign Name _____ Date _____

Please return to: K. Dunlap
PSC/Emergency Planning
3313 DAEC Rd.
Palo, IA 52324

To be completed by DAEC EP personnel only:
Date TAM returned: _____
EPTools updated: _____

A045

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Duane Arnold Energy Center
Operated by Nuclear Management Company, LLC

Wednesday, August 27, 2003

NRC-NRR Document Control Desk
US NRC
Washington, DC 20555

To: NRC-NRR Document Control Desk
From: DAEC Emergency Planning Department

Re: Description of changes to the following documents

EPIP EAL-01 Abnormal Rad Levels/Radioactive Effluent EAL Table

Revising form to ensure consistency with the EAL Basis Document to allow usage of the table without continually refering to the EAL Bases Document.

Add equipment IDs where ever they are missing to enhance timely & Accurate EAL Declarations.

Raise the Unusual Event entry setpoint to 2 times the ODAM limit (CAP)28632) for Offgas Stack and LLRPSF Kamans as shown in Bases Document table.

Please contact Paul Sullivan, Manager of Emergency Preparedness at DAEC, (319)851-7191, if you require further information.

3313 DAEC Road - Palo, Iowa 52324-9785
Telephone: 319.851.7191 - Fax: 319.851.7364

Procedure	Title	Revision Number	Date
1.1	Determination of Emergency Action Levels	20	8/5/03
1.2	Notification	28	4/4/03
1.3	Plant Assembly and Site Evacuation	9	09/12/01
1.4	Release of Emergency-Related Information	4	09/04/02
1.5	Activation and Operation of the EOF	4	6/11/03
2.1	Activation and Operation of the OSC	13	09/12/01
2.2	Activation and Operation of the TSC	23	10/23/02
2.3	Operation of the FTS-2001 Phone Network	6	09/04/02
2.4	Activation and Operation of the ORAA	8	09/12/01
2.5	Control Room Emergency Response Operation	14	10/15/01
2.6	Activation and Operation of the ORAL	9	12/30/02
2.7	Activation and Operation of the ODEF	6	10/15/01
2.8	Security Threat	2	7/30/03
3.1	In-Plant Radiological Monitoring	12	9/2/02
3.2	Field Radiological Monitoring	13	9/2/02
3.3	Dose Assessment and Protective Action	19	6/25/03
4.2	First Aid, Decontamination and Medical Support	7	8/23/02
4.3	Rescue and Emergency Repair Work	11	8/23/02
4.5	Administration of Potassium Iodide (KI)	7	2/10/03
5.2	Recovery and Re-entry	9	10/15/01

Form Number	Title	Revision Number	Referencing Procedure
CR-01	OSM/OSS Checklist	Rev. 2	EPIP 2.5
CR-02	Back Panel Communicator Checklist	Rev. 1	EPIP 2.5
CR-03	Dose Projection & ARM Data Sheet	Rev. 0	EPIP 2.5
CR-04	Control Room to TSC Command and Control Transfer Checklist	Rev. 1	EPIP 2.5
EAL-01	Abnormal Rad Levels/Radioactive Effluent Table	Rev. 4	EPIP 1.1
EAL-02	Fission Barrier Table	Rev. 3	EPIP 1.1
EAL-03	Hazards & Other Conditions Affecting Plant Safety	Rev. 3	EPIP 1.1
EAL-04	System Malfunction Table	Rev. 3	EPIP 1.1
EAL-05	ISFSI Table	Rev. 0	EPIP 1.1
EOF - 02	NRC - HPN Communicator Checklist	Rev. 3	EPIP 1.5
EOF - 03	Technical Recorder Checklist	Rev. 2	EPIP 1.5
EOF - 04	Summary of Computer Data Backup Collection Activities	Rev. 1	EPIP 1.5
EOF - 05	EOF Information Services Representative Checklist	Rev. 3	EPIP 1.5
EOF - 06	DAEC Key Parameter Log	Rev. 0	EPIP 1.5
EOF - 07	Emergency Response and Recovery Director Checklist	Rev. 4	EPIP 1.5
EOF - 08	Rad & EOF Manager Checklist	Rev. 6	EPIP 1.5, 3.3
EOF – 09	EOF STA/OPS Liaison Checklist	Rev. 0	EPIP 1.5
EOF – 10	EOF-TSC Communicator Checklist	Rev. 3	EPIP 1.5
EOF – 11	Support Services Coordinator Checklist	Rev. 3	EPIP 1.5
EOF – 12	Field Team Director Checklist	Rev. 0	EPIP 1.5, 3.3
EOF – 13	Radiological Data Communicator Checklist	Rev. 0	EPIP 1.5, 3.3

EOF – 14	EOF MIDAS Operator Checklist	Rev. 1	EPIP 1.5, 3.3
EOF – 15	Radiological Data Plotter Checklist	Rev. 0	EPIP 1.5, 3.3
EOF – 16	Radiological Assessment Coordinator Checklist	Rev. 1	EPIP 1.5, 3.3
EOF – 17	EOF Security Access Clerk Checklist	Rev. 2	EPIP 1.5
EOF – 18	EOF Staffing Accountability Roster	Rev. 3	EPIP 1.5
EOF – 19	Drill Announcement Message	Rev. 0	EPIP 1.4, 1.5
EOF – 20	Emergency Announcement Message	Rev. 1	EPIP 1.4, 1.5
EOF – 21	Personnel Access Log	Rev. 1	EPIP 1.4, 1.5
EOF – 22	Registration Form	Rev. 0	EPIP 14, 1.5
EOF – 23	Security Post Log	Rev. 2	EPIP 1.4, 1.5
EOF – 24	First Floor Security Post Description	Rev. 2	EPIP 1.4, 1.5
EOF – 25	Fourteenth Floor Security Post Description	Rev. 11	EPIP 1.5
EOF – 27	Status Update Message – EOF Communicator	Rev. 0	EPIP 1.5
EOF – 28	Verbal Closeout Summary	Rev. 0	EPIP 1.5
EOP – 29	Written Closeout Summary	Rev. 0	EPIP 1.5
EOF – 30	Status Board	Rev. 1	EPIP 1.5
EOF – 31	Access B adge Example	Rev. 0	EPIP 1.5
EOF – 32	EOF Staff Response	Rev. 3	EPIP .15
EOF – 33	Recovery Issues	Rev. 0	EPIP 5.2
EOF – 34	EOF Activities	Rev. 0	EPIP 5.2
EOF – 35	Recovery Phase Plan Outline Guidance	Rev. 0	EPIP .52
EOF – 36	RE-Entry Briefing Guide	Rev. 0	EPIP 5.2
EOF – 37	RE-Entry Debriefing Guide	Rev. 0	EPIP 5.2
EOF – 38	EOF Messenger Checklist	Rev. 1	EPIP 1.5
ERO – 01	ERO Position Equivalency Table	Rev. 0	EPIP 1.5
JPIC – 01	JPIC Manager Checklist	Rev. 4	EPIP 1.4
JPIC – 03	Alliant Spokesperson Checklist	Rev. 3	EPIP 1.4

JPIC – 04	Technical Liaison Checklist	Rev. 4	EPIP 1.4
JPIC – 05	Sequence of Events	Rev. 0	EPIP 1.4
JPIC – 06	Public Information Officer Support Checklist	Rev. 5	EPIP 1.4
JPIC – 07	Logistics Coordinator Checklist	Rev. 4	EPIP 1.4
JPIC – 08	Logistics Support Checklist	Rev. 4	EPIP 1.4
JPIC – 09	Audiovisual Support Checklist	Rev. 4	EPIP 1.4
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JPIC – 12	Rumor Control Event Summary Log	Rev. 1	EPIP 1.4
JPIC – 13	Rumor Control Coordinator II Checklist	Rev. 2	EPIP 1.4
JPIC – 14	Public Rumor Control Checklist	Rev. 2	EPIP 1.4
JPIC – 15	News Media Rumor Control Checklist	Rev. 4	EPIP 1.4
JPIC – 16	Assistant JPIC Manager Checklist	Rev. 3	EPIP 1.4
JPIC – 17	JPIC Security Access Control Checklist	Rev. 3	EPIP 1.4
JPIC – 18	Sixth Floor Security Post Description	Rev. 2	EPIP 1.4
JPIC – 19	JPIC Distribution List	Rev. 2	EPIP 1.4
NOTE-01	ERO Notification –Phone System Callout	Rev. 4	EPIP 1.2
NOTE-02	ERO Notification – Alphanumeric Paging System Callout	Rev. 3	EPIP 1.2
NOTE-03	Event Notification Worksheet	Rev. 1	EPIP 1.2
NOTE-04	Plant Assembly Notification	Rev. 2	EPIP 1.2
NOTE-05	Emergency Action Level Notification	Rev. 7	EPIP 1.2
NOTE-06	Plant Page for Emergency Classification Changes	Rev. 1	EPIP 1.2
NOTE-07	Basic Notification Flowpath	Rev. 1	EPIP 1.2
ODEF-01	ODEF Decontamination Waiting Area	Rev. 0	EPIP 2.7
ODEF-02	Floor Plan for ORAL/ODEF	Rev. 0	EPIP 2.7
ODEF-03	Travel Route to ORAL/ODEF	Rev. 0	EPIP 2.7
ODEF-04	12th Avenue Entrance to ORAL/ODEF	Rev. 0	EPIP 2.7
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	Checklist		
ORAA-02	Health Physics Support for the Offsite Relocation and Assembly Area	Rev. 0	EPIP 2.4
ORAA-03	Security Support for the Offsite Relocation and Assembly Area	Rev. 0	EPIP 2.4
ORAA-04	Offsite Relocation and Assembly Area	Rev. 0	EPIP 2.4
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OSC-01	OSC Layout	Rev. 0	EPIP 2.1
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OSC-03	Minimum Staffing Level	Rev. 1	EPIP 2.1
OSC-04	Recommended Log Entry Topics	Rev. 0	EPIP 2.1
OSC-05	Emergency Event Log Sheet	Rev. 0	EPIP 2.1
OSC-06	Personal Statement Concerning Incident	Rev. 0	EPIP 2.1
OSC-07	Emergency Exposure Tracking Log	Rev. 0	EPIP 2.1
OSC-08	OSC Supervisor Checklist	Rev. 0	EPIP 2.1
OSC-09	Health Physics Supervisor Checklist	Rev. 0	EPIP 2.1
OSC-10	Electrical, Mechanical, I&C Maintenance Supervisor Checklist	Rev. 0	EPIP 2.1
OSC-11	Emergency Assignment Staffing Board Duties	Rev. 0	EPIP 2.1
OSC-12	External Exposure Limits	Rev. 0	EPIP 4.3
OSC-13	Guidance on Dose Limits for Workers Performing Emergency Services	Rev. 0	EPIP 4.3
OSC-14	Guidelines Regarding Selection of Volunteers	Rev. 0	EPIP 4.3
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OSC-16	Repair Team Datasheet Flowpath	Rev. 0	EPIP 4.3
PAR – 01	PAR Decision Making – Recommendations	Rev. 0	EPIP 3.3
PAR – 02	PAR Decision Making – Flowchart	Rev. 0	EPIP 3.3
PASE-02	Onsite Assembly Locations	Rev. 2	EPIP 1.3

PASE-05	Site Evacuation Routes	Rev. 1	EPIP 1.3
SAM-01	EOP-SAG Transition Checklist	Rev. 0	EPIP 2.2
TSC-01	Emergency Coordinator Checklist	Rev. 3	EPIP 2.2
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TSC-03	Site Radiation Protection Coordinator Checklist	Rev. 1	EPIP 2.2
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TSC-07	Administrative Supervisor Checklist	Rev. 1	EPIP 2.2
TSC-08	Material Management Supervisor Checklist	Rev. 1	EPIP 2.2
TSC-09	TSC-CR-OSC Communicator Checklist	Rev. 2	EPIP 2.2
TSC-10	CR-TSC-OSC Communicator Checklist	Rev. 2	EPIP 2.2
TSC-11	TSC-EOF-JPIC Communicator Checklist	Rev. 1	EPIP 2.2
TSC-12	ENS Communicator Checklist	Rev. 2	EPIP 2.2
TSC-13	HPN Communicator Checklist	Rev. 1	EPIP 2.2
TSC-14	TSC/OSC Operations Liaison Checklist	Rev. 2	EPIP 2.2
TSC-15	Radiological Support Staff Checklist	Rev. 1	EPIP 2.2
TSC-16	Radio Operator – Offsite Checklist	Rev. 0	EPIP 2.2
TSC-17	Radio Operator – Onsite Checklist	Rev. 0	EPIP 2.2
TSC-18	TSC MIDAS Operator Checklist	Rev. 0	EPIP 2.2
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TSC-28	NRC Roles During A Nuclear Power Plant Emergency Checklist	Rev. 0	EPIP 2.2
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TSC-33	Typical Organization of the NRC Site Team	Rev. 0	EPIP 2.2
TSC-34	TSC Organization Chart	Rev. 3	EPIP 2.2
TSC-35	Assignment Form	Rev. 0	EPIP 5.2
TSC-36	Deactivation Report	Rev. 0	EPIP 5.2
TSC-37	Plant Operations Status	Rev. 0	EPIP 5.2
TSC-38	TSC/Control Room/OSC Activities	Rev. 0	EPIP 5.2
TSC-39	TSC Clerical Checklist	Rev. 0	EPIP 2.2
TSC-40	ARM Locations	Rev. 0	EPIP 3.1/4.3
TSC-41	PASS Capabilities	Rev. 0	EPIP 3.1
TSC-42	On-Site Map	Rev. 0	EPIP 3.2
TSC-43	ESB Logon Instructions (TSC/CR/EOF)	Rev. 0	EPIP 2.2

EAL TABLE
ABNORMAL RAD LEVEL RADIOACTIVE EFFLUENT

EVENT TYPE	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
OFFSITE RAD CONDITIONS	***AU1*** **Any Unplanned Release of Gaseous or Liquid Radioactivity to the Environment That Exceeds Two Times the Offsite Dose Assessment Manual (ODAM) Limit and Is Expected to Continue For 60 Minutes or Longer** **Operating Modes: ALL** Valid Reactor Building ventilation rad monitor (Kaman 3/4, 5/6, 7/8) or Turbine Building ventilation rad monitor (Kaman 1/2) reading above 1 E-3 µCi/cc and is expected to continue for 60 minutes or longer. **OR** Valid Offgas Stack rad monitor (Kaman 9/10) reading above 2.0 E-1µCi/cc and is expected to continue for 60 minutes or longer. **OR** Valid LLRPSF rad monitor (Kaman 12) reading above 1.0 E-3 µCi/cc and is expected to continue for 60 minutes or longer. **OR** Valid GSW rad monitor (RIS-4767) reading above 3E+3 CPS and is expected to continue for 60 minutes or longer. **OR** Valid RHRSW & ESW rad monitor (RM-1997) reading above 8E+2 CPS and is expected to continue for 60 minutes or longer. **OR** Valid RHRSW & ESW Rupture Disc rad monitor (RM-4268) reading above 1E+3 CPS and is expected to continue for 60 minutes or longer. **OR** Confirmed sample analyses for gaseous or liquid releases indicates concentrations or release rates in excess of 2 times ODAM limits and is expected to continue for 60 minutes or longer. **OR** Valid perimeter radiation monitor reading of greater than 0.10 mr/hr above normal background and is expected to continue for 60 minutes or longer **OR** Valid dose assessment indicating dose rates beyond the site boundary above 0.1 mr/hr TEDE and is expected to continue for 60 minutes or longer.	***AA1*** **Any Unplanned Release of Gaseous or Liquid Radioactivity to the Environment that Exceeds 200X the Offsite Dose Assessment Manual (ODAM) Limit and Is Expected to Continue for 15 Minutes or Longer** **Operating Modes: ALL** Valid Reactor Building ventilation rad monitor (Kaman 3/4, 5/6, 7/8) or Turbine Building ventilation rad monitor (Kaman 1/2) reading above 3 E-2 µCi/cc and is expected to continue for 15 minutes or longer. **OR** Valid Offgas Stack rad monitor (Kaman 9/10) reading above 6 E+0 µCi/cc and is expected to continue for 15 minutes or longer. **OR** Valid LLRPSF rad monitor (Kaman 12) reading above 1 E-1 µCi/cc and is expected to continue for 15 minutes or longer. **OR** Valid GSW rad monitor (RIS-4767) reading above 3E+5 CPS and is expected to continue for 15 minutes or longer. **OR** Valid RHRSW & ESW rad monitor (RM-1997) reading above 8E+4 CPS and is expected to continue for 15 minutes or longer. **OR** Valid RHRSW & ESW Rupture Disc rad monitor (RM-4268) reading above 1E+5 CPS and is expected to continue for 15 minutes or longer. **OR** Confirmed sample analyses for gaseous or liquid releases indicates concentrations or release rates with a release duration expected to continue for 15 minutes or longer in excess of 200 times ODAM limit. **OR** Valid site boundary radiation reading of greater than 10 mr/hr above normal background and is expected to continue for 15 minutes or longer. **OR** Valid indication on MIDAS of a release greater than 200 times ODAM limit and expected to last for 15 minutes or longer.	***AS1*** **Site Boundary Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity Exceeds 100 mrem TEDE or 500 mrem CDE Thyroid for the Actual or Projected Duration of the Release** **Operating Modes: ALL** Valid Reactor Building ventilation rad monitor (Kaman 3/4, 5/6, 7/8) or Turbine Building ventilation rad monitor (Kaman 1/2) reading above 6 E-2 µCi/cc and is expected to continue for 15 minutes or longer. (Dose assessment not available) **OR** Valid Offgas Stack rad monitor (Kaman 9/10) reading above 4 E+1 µCi/cc and is expected to continue for 15 minutes or longer. (Dose assessment not available) **OR** Field survey results indicate site boundary dose rates exceeding 100 mrem/hr expected to continue for more than one hour; or analyses of field survey samples indicate CDE Thyroid of 500 mrem for one hour of inhalation. **OR** Dose assessment determines integrated accident dose projection outside the site boundary above 100 mrem TEDE or above 500 mrem CDE Thyroid.	***AG1*** **Site Boundary Dose Resulting from an Actual or Imminent Release of Gaseous Radioactivity that Exceeds 1000 mrem TEDE or 5000 mrem CDE Thyroid for the Actual or Projected Duration of the Release** **Operating Modes: ALL** Valid Reactor Building ventilation rad monitor (Kaman 3/4, 5/6 7/8) or Turbine Building ventilation rad monitor (Kaman 1/2) reading above 6 E-1 µCi/cc and expected to continue for 15 minutes or longer. (Dose assessment not available) **OR** Valid Offgas Stack rad monitor (Kaman 9/10) reading above 4 E+2 µCi/cc and expected to continue for 15 minutes or longer. (Dose assessment not available) **OR** Field survey results indicate site boundary dose rates exceeding 1,000 mrem/hr expected to continue for more than one hour; or analyses of field survey samples indicate CDE Thyroid of 5,000 mrem for one hour of inhalation. **OR** Dose assessment determines integrated accident dose projection outside the site boundary above 1,000 mrem TEDE or above 5,000 mrem CDE Thyroid.
ONSITE RAD CONDITIONS	***AU2*** **Unexpected Increase In Plant Radiation** **Operating Modes: ALL** Uncontrolled loss of reactor cavity or fuel pool water level with all spent fuel assemblies remaining covered by water as indicated by ANY of the following: • Report to control room • Valid fuel pool level indication (LI-3413) below 36 feet and lowering • Valid WR GEMAC Floodup indication (LI-4541) coming on scale. **OR** Unexpected ARM reading offscale high or above 1000 times normal* reading. *Normal levels can be considered as the highest reading in the past twenty-four hours excluding the current peak value.	***AA2*** **Major Damage to Irradiated Fuel or Loss of Water Level that Has or Will Result in the Uncovering of Irradiated Fuel Outside the Reactor Vessel** **Operating Modes: ALL** Report of either of the following: • Valid Refueling Floor North End (RM-9163), Refueling Floor South End (RM-9164), or New Fuel Storage Area (RM-9153) ARM Reading above 10 mr/hr • Valid Spent Fuel Storage Area (RM-9178) ARM Reading above 100 mr/hr **OR** Report of visual observation of irradiated Fuel uncovered **OR** Valid water level reading below 450" as indicated on LI-4541 (floodup) for the Reactor Refueling Cavity that will result in Irradiated Fuel uncovering. **OR** Valid Fuel Pool water level indication (LI-3413) below 16 feet that will result in Irradiated Fuel uncovering.		
		AA3 **Release of Radioactive Material or Increases In Radiation Levels Within the Facility That Impedes Operation of Systems Required to Maintain Safe Operations or to Establish or to Maintain Cold Shutdown** **Operating Modes: ALL** Valid Control Room Area Radiation Monitor (RM-9162) reading above 15 mr/hr. **OR** Valid North CRD Module Area Rad Monitor (RM-9168), reading above 500 mr/hr affecting the Remote Shutdown Panel, 1C388.		