June 3, 2005

Mr. Edward J. Weinkam Director of Regulatory Services Nuclear Management Company, LLC. 700 First Street Hudson, WI 54016

SUBJECT: DUANE ARNOLD ENERGY CENTER, KEWAUNEE NUCLEAR POWER PLANT, MONTICELLO NUCLEAR GENERATING PLANT, PALISADES NUCLEAR PLANT, PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2 - REQUEST FOR ADDITIONAL INFORMATION REGARDING REVISIONS TO EMERGENCY ACTION LEVELS (TAC NOS. MC4956, MC5055, MC5017, MC5194, MC4930, AND MC4931)

Dear Mr. Weinkam:

Nuclear Management Company's letters of October 22 and October 26, 2004, submitted proposed, revised emergency plan and procedure changes to upgrade emergency action levels at the above subject nuclear plants. The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing the submittals, and finds that additional information is needed as shown in the enclosed requests for additional information (RAIs). I discussed these RAIs with Mr. Martin Vonk of your organization on May 23, 2005, and he agreed to respond as follows:

- Duane Arnold Energy Center June 24, 2005
- Kewaunee Nuclear Power Plant August 31, 2005
- Monticello Nuclear Generating Plant June 24, 2005
- Palisades Nuclear Plant June 30, 2005
- Prairie Island Nuclear Generating Plant, Units 1 and 2 July 30, 2005

E. Weinkam

Please respond separately to the appropriate NRC project manager for each plant. You can contact me at (301) 415-1423 if you have questions.

Sincerely,

/**RA**/

L. Mark Padovan, Fleet Project Manager, Section 1 Project Directorate III Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket Nos. 50-331, 50-305, 50-263, 50-255, 50-282 and 50-306

- Enclosures: 1. Duane Arnold Energy Center RAI
 - 2. Kewaunee Nuclear Power Plant RAI
 - 3. Monticello Nuclear Generating Plant RAI
 - 4. Palisades Nuclear Plant RAI
 - 5. Prairie Island Nuclear Generating Plant RAI

cc w/encls: See next page

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cc w/encls: See next page

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OFFICE	PM:PDIII-1	LA:PDIII-1	SC:PDIII-1
NAME	MPadovan	DClarke	JStang for/LRaghavan
DATE	6/3/05	6/3/05	6/3/05

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Duane Arnold Energy Center

CC:

Mr. John Paul Cowan Executive Vice President & Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, MI 54016

John Bjorseth Plant Manager Duane Arnold Energy Center 3277 DAEC Road Palo, IA 52324

Steven R. Catron Manager, Regulatory Affairs Duane Arnold Energy Center 3277 DAEC Road Palo, IA 52324

U.S. Nuclear Regulatory Commission Resident Inspector's Office Rural Route #1 Palo, IA 52324

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

Jonathan Rogoff Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Bruce Lacy Nuclear Asset Manager Alliant Energy/Interstate Power and Light Company 3277 DAEC Road Palo, IA 52324 Daniel McGhee Utilities Division Iowa Department of Commerce Lucas Office Buildings, 5th floor Des Moines, IA 50319

Chairman, Linn County Board of Supervisors 930 1st Street SW Cedar Rapids, IA 52404

Craig G. Anderson Senior Vice President, Group Operations 700 First Street Hudson, WI 54016

Mark A. Peifer Site Vice President Duane Arnold Energy Center Nuclear Management Company, LLC 3277 DAEC Road Palo, IA 52324-0351

Kewaunee Nuclear Power Plant

CC:

John Paul Cowan Executive Vice President & Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Plant Manager Kewaunee Nuclear Power Plant N490 Highway 42 Kewaunee, WI 54216-9511

Manager, Regulatory Affairs Kewaunee Nuclear Power Plant N490 Highway 42 Kewaunee, WI 54216-9511

David Molzahn Nuclear Asset Manager Wisconsin Public Service Corporation 600 N. Adams Street Green Bay, WI 54307-9002

Resident Inspectors Office U.S. Nuclear Regulatory Commission N490 Hwy 42 Kewaunee, WI 54216-9511

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 2443 Warrenville Road, Suite 210 Lisle, IL 60532-4352

Jonathan Rogoff Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Larry L. Weyers Chairman, President and CEO Wisconsin Public Service Corporation 600 North Adams Street Green Bay, WI 54307-9002 David Zellner Chairman - Town of Carlton N2164 County B Kewaunee, WI 54216

Mr. Jeffery Kitsembel Electric Division Public Service Commission of Wisconsin P.O. Box 7854 Madison, WI 53707-7854

Mr. Michael G. Gaffney Site Vice President Kewaunee Nuclear Power Plant Nuclear Management Company, LLC N490 Highway 42 Kewaunee, WI 54216-9511 Monticello Nuclear Generating Plant

CC:

Jonathan Rogoff, Esquire Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

U.S. Nuclear Regulatory Commission Resident Inspector's Office 2807 W. County Road 75 Monticello, MN 55362

Manager, Regulatory Affairs Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637

Robert Nelson, President Minnesota Environmental Control Citizens Association (MECCA) 1051 South McKnight Road St. Paul, MN 55119

Commissioner Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, MN 55155-4194

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, IL 60532-4351

Commissioner Minnesota Department of Health 717 Delaware Street, S. E. Minneapolis, MN 55440

Douglas M. Gruber, Auditor/Treasurer Wright County Government Center 10 NW Second Street Buffalo, MN 55313 Commissioner Minnesota Department of Commerce 85 7th Place East, Suite 500 St. Paul, MN 55101-2198

Manager - Environmental Protection Division Minnesota Attorney General's Office 445 Minnesota St., Suite 900 St. Paul, MN 55101-2127

John Paul Cowan Executive Vice President & Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Nuclear Asset Manager Xcel Energy, Inc. 414 Nicollet Mall, R.S. 8 Minneapolis, MN 55401

Mr. Thomas J. Palmisano Site Vice President Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637 **Palisades Plant**

CC:

Robert A. Fenech, Senior Vice President Nuclear, Fossil, and Hydro Operations Consumers Energy Company 1945 Parnall Rd. Jackson, MI 49201

Arunas T. Udrys, Esquire Consumers Energy Company 1 Energy Plaza Jackson, MI 49201

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, IL 60532-4351

Supervisor Covert Township P.O. Box 35 Covert, MI 49043

Office of the Governor P.O. Box 30013 Lansing, MI 48909

U.S. Nuclear Regulatory Commission Resident Inspector's Office Palisades Plant 27782 Blue Star Memorial Highway Covert, MI 49043

Michigan Department of Environmental Quality Waste and Hazardous Materials Division Hazardous Waste and Radiological Protection Section Nuclear Facilities Unit Constitution Hall, Lower-Level North 525 West Allegan Street P.O. Box 30241 Lansing, MI 48909-7741 Michigan Department of Attorney General Special Litigation Division 525 West Ottawa St. Sixth Floor, G. Mennen Williams Building Lansing, MI 48913

Manager, Regulatory Affairs Nuclear Management Company, LLC 27780 Blue Star Memorial Highway Covert, MI 49043

Director of Nuclear Assets Consumers Energy Company Palisades Nuclear Plant 27780 Blue Star Memorial Highway Covert, MI 49043

John Paul Cowan Executive Vice President & Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Jonathan Rogoff, Esquire Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Douglas E. Cooper Senior Vice President - Group Operations Palisades Nuclear Plant Nuclear Management Company, LLC 27780 Blue Star Memorial Highway Covert, MI 49043

Daniel J. Malone Site Vice President Palisades Nuclear Plant Nuclear Management Company, LLC 27780 Blue Star Memorial Highway Covert, MI 49043

October 2003

Prairie Island Nuclear Generating Plant, Units 1 and 2

CC:

Jonathan Rogoff, Esquire Vice President, Counsel & Secretary Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Manager, Regulatory Affairs Prairie Island Nuclear Generating Plant Nuclear Management Company, LLC 1717 Wakonade Drive East Welch, MN 55089

Manager - Environmental Protection Division Minnesota Attorney General's Office 445 Minnesota St., Suite 900 St. Paul, MN 55101-2127

U.S. Nuclear Regulatory Commission Resident Inspector's Office 1719 Wakonade Drive East Welch, MN 55089-9642

Regional Administrator, Region III U.S. Nuclear Regulatory Commission 801 Warrenville Road Lisle, IL 60532-4351

Administrator Goodhue County Courthouse Box 408 Red Wing, MN 55066-0408

Commissioner Minnesota Department of Commerce 85 7th Place East, Suite 500 St. Paul, MN 55101-2198 Tribal Council Prairie Island Indian Community ATTN: Environmental Department 5636 Sturgeon Lake Road Welch, MN 55089

Nuclear Asset Manager Xcel Energy, Inc. 414 Nicollet Mall, R.S. 8 Minneapolis, MN 55401

John Paul Cowan Executive Vice President & Chief Nuclear Officer Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Craig G. Anderson Senior Vice President, Group Operations Nuclear Management Company, LLC 700 First Street Hudson, WI 54016

Mr. Joseph M. Solymossy Site Vice President Prairie Island Nuclear Generating Plant Nuclear Management Company, LLC 1717 Wakonade Drive East Welch, MN 55089

November 2004

Duane Arnold Energy Center (DAEC) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
RA3.2	NRC (Nuclear Regulatory Commission) expects licensees to <1> determine areas of concern in accordance with NEI 99-01 (Methodology for Development of EALs) guidance, and <2> determine radiation levels that would significantly impede normal access.
	<1> Areas of concern should be determined by performing a review of station emergency operating procedures, abnormal operating procedures, normal operating procedures, and Appendix R criteria (fire protection) to determine what areas are required to be accessed for normal plant operations and normal shutdown. This access is required to monitor or manipulate equipment.
	<2> The appropriate radiation level should be that which causes a significant impediment to access.
	Please review and revise the EAL accordingly.
RS1.2, RG1.2	Licensee EALs require effluent monitor thresholds to be considered only if dose assessment is unavailable. However, the licensee does not define what constitutes "dose assessment is unavailable" or provide guidance consistent with NEI 99-01 NOTE, which states, "If dose assessment results are available at the time of declaration [i.e., effluent monitor reading is sustained above threshold for 15 minutes or longer] the classification should be based on EAL #2 [dose assessment] instead of EAL #1 [effluent monitors]." Provide statement under EAL Threshold Value, consistent with NEI 99-01 example EAL NOTE and licensee Basis, clearly defining unavailability of dose assessment.
RS1	Clarify whether thyroid committed dose equivalent (CDE) is based on adult or child dose conversion factors. In addition, indicate whether this methodology is consistent with the State of Iowa per NEI 99-01 Basis.
CU3.1, CA3.1, SU1.1, SS1.1, SG1.1	Please justify the use of 'busses' vs 'transformers' as intended in NEI 99-01. The staff considers this a potential deviation.
CU5.2	Per licensee TS (technical specification) 3.4.6, specific activity of the reactor coolant is only applicable in Modes 1, 2, and 3 (with any main steam line not isolated). Clarify whether reactor coolant sampling capability is required to be in service in cold shutdown and refueling modes based on plant-specific TS requirements.
	If you are creating a table, or tables, for listing areas of concern for a specific EAL or a group of EALs, please ensure that:
GENERIC ISSUE	<1> The table is labeled appropriately, i.e., do not label a table "VITAL AREAS" if it also includes other areas such as "safe shutdown" or "areas contiguous to" Label the table to accurately reflect the composition of the list of areas,
	And
	<2> Be very clear in the EAL Basis Document, for each EAL you are using the table, HOW you derived the table.
HA1.8	Define the meaning of the term, "damage," in relation to the term, "SIGNIFICANT DAMAGE," which is already defined by the licensee, consistent with NEI 99-01 guidance.

Duane Arnold Energy Center (DAEC) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
HU1	(1) Provide the basis for including the switchyard under Safe Shutdown/Vital Areas, since a loss of offsite power is evaluated separately under SU1 and CU3.
	(2) Address applicability to HU1.8/HA1.6 for internal flooding and HU2 for fires within protected area boundary.
	(3) Clarify the following based on the inclusion of the switchyard in Safe Shutdown/Vital Area matrix, and provide justification for potential over-classification per the NEI 99-01 guidance:
	•[HA2.1] Would a fire or explosion in the switchyard resulting in a loss of offsite power be classified as an ALERT, rather than an Unusual Event per SU1.1?
	•[HA3.1 / HA3.2] Would a toxic or flammable gas release within or contiguous to the switchyard, reaching an atmosphere immediately dangerous to life and health (IDLH) or greater than the lower flammability limit (LFL) be classified as an ALERT, rather than an Unusual Event per HU3?
	•[HS1.2] Would a security event that results in the loss of control of the switchyard be classified as a SITE AREA EMERGENCY?
	Address the following dealing with definitions contained in Section 5 (Definitions):
	a. Under CIVIL DISTURBANCE, provide "site-specific number" of persons per definition in Section 5.4 (Definitions) to NEI 99-01.
EBD-REF	b. Under Section 3.5 (Operating Mode Availability), the licensee provides definitions for operating modes consistent with Section 3.17.2 (Operating Modes) to NEI 99-01. In Section 5, the licensee defines operating modes with the exception of REFUELING and DEFUELED, and does not address DEFUELED mode under OPERATING MODES definition consistent with Section 3.17.2 to NEI 99-01. Provide justification for inconsistencies, or incorporate appropriate changes to resolve.
	c. Provide justification for not including Recognition Category E in Section 3.5 matrix describing mode applicability, consistent with Section 3.17.1 (Mode Applicability Matrix) to NEI 99-01.
HU4.2	Clarify basis for apparent redundancy with EU2 regarding security events affecting the independent spent fuel storage installation (ISFSI).
SA2.1	Clarify applicable plant procedure that defines what constitutes: (1) auto Scram failure, and (2) successful manual scram.
SU4.1	Describe how the Pretreatment Offgas System (RM-4104) Hi-Hi Radiation Alarm equates to the TS allowable limits (e.g., equivalent, times) and radiation RM (radiation monitor)-4104 reading of 4E+3 mR/hr (identified in last NRC approved EAL value), since NEI 99-01 guidance specifies a monitor reading equivalent to TS allowable limits.

Kewaunee Nuclear Power Plant (KNPP) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
RA2.1	Please clarify whether the EAL is based on a high alarm or a high reading, and if so, what reading would cause this EAL to be declared.
	NRC (Nuclear Regulatory Commission) expects licensees to <1> determine areas of concern in accordance with NEI 99-01 (Methodology for Development of EALs) guidance, and <2> determine radiation levels that would significantly impede normal access.
RA3.2	<1> Areas of concern should be determined by performing a review of station emergency operating procedures, abnormal operating procedures, and Appendix R criteria (fire protection) to determine what areas are required to be accessed for normal plant operations and normal shutdown. This access is required to monitor or manipulate equipment.
	<2> The appropriate radiation level should be that which causes a significant impediment to access.
	Please review and revise the EAL accordingly.
CU3.1, CA3.1, SU1.1, SS1.1, SG1.1	Please justify the use of 'busses' vs 'transformers' as intended in NEI 99-01. The staff considers this a potential deviation.
CA4.1, CA4.2	EALs 4.1 and 4.2 use the term "Containment Closure." Page 5.1 defines Containment Closure as follows: "defined by N-CCI-56A, 'Open Containment Boundary Tracking'." Operating Procedure N-CCI-56A provides methods to identify open containment boundaries, but does not provide a clear definition of containment closure. Please provide a definition of the term "Containment Closure" for event classification purposes.
CA4.3	Please provide justification for the use of the proposed pressure indicator. Specifically, can this instrument actually read the proposed pressure value? What is the minor and major scale graduations? If using a computer point, what is the calibrated range of the computer point and how will it be controlled in accordance with 10 CFR 50.54(q)?
CS2, CG1	Please provide further documentation supporting the determination of the Containment High Range Radiation Monitor EAL threshold.
CU5.2	Clarify whether reactor coolant sampling capability is required to be in service in cold shutdown and refueling modes based on plant- specific TS (technical specification) requirements.
CU6.1, SU6.1	Are sound-powered phones a viable routine communications method? Please provide justification for including sound-powered phones.
CU7.1, SS3.1	EAL CU7.1 specifies that less than 105 VDC (volts – direct current) on Train A and Train B Safeguards DC (direct current) Distribution Systems for greater than 15 minutes is a loss of all vital DC power. The EAL basis states that a loss of power to the BRA (BRB)-104 panel, which does not have voltage indication, also constitutes a loss of the associated DC distribution train. Please clarify how the end user will determine the loss of BRA (BRB)-104 panels if there are no voltage indications of these panels.

Kewaunee Nuclear Power Plant (KNPP) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
FB-PWR-CONT-P3	The basis for this EAL states that the functional restoration procedure FR-C.2 specifies parameters defined by Core Cooling-Orange path, i.e., RVLIS (reactor vessel level indicating system) void fraction and RCS (reactor coolant system) subcooling. The second of three potential loss conditions states "Core exit thermocouples greater than or equal to 700 EF with RCPs (reactor coolant pump) not running" but does not contain a value for RCS subcooling (subcooling less than or equal to 30 EF) as does the third potential loss condition. Additionally, the basis for EAL FB-PWR-FUEL-P1 states that Core Cooling-Orange path is entered if "RCS subcooling based on CETs (core exit thermocouple) is equal to or less than 30 EF" while the third potential loss condition states "RCS subcooling less 30 EF." Please explain these inconsistencies in the use of conditions for Core Cooling-Orange path in this EAL.
FB-PWR-CONT-7	The EAL basis states that the EAL is intended to cover other site-specific indications that may indicate a loss or potential loss of the containment barrier, including indications from area or ventilation monitors in containment annulus or other contiguous areas. The plant parameters used for the containment barrier EALs do not address containment leakage resulting from existing penetration failures or containment bypasses. Please revise the EALs and their bases to provide the other site-specific indications suggested in the NEI-99-01 bases or provide further justification for the site-specific differences.
FB-PWR-FUEL- PL4	This EAL states one condition of the Core Cooling-Orange path as "RCS subcooling less than 30 EF" while the basis for FB-PWR-FUEL- P1 states this condition as "RCS subcooling based on CETs is equal to or less than 30 EF" (In accordance with functional restoration procedure F-0.2). Please explain this inconsistency in Core Cooling-Orange path condition.
	If you are creating a table, or tables, for listing areas of concern for a specific EAL or a group of EALs, please ensure that:
GENERIC ISSUE	<1> The table is labeled appropriately, i.e., do not label a table "VITAL AREAS" if it also includes other areas such as "safe shutdown" or "areas contiguous to" Label the table to accurately reflect the composition of the list of areas,
	And
	<2> Be very clear in the EAL Basis Document, for each EAL you are using the table, HOW you derived the table.
HA1.1	If it does not, please provide more justification for its inclusion in the EALs.
HU1.2, HA1.2	Clarify whether the proposed wind speed threshold is within the calibrated range of the instrument used for determining wind speed.
HA1.6	The EAL states that high or low lake level in excess of column "Alert," Lake-Forebay Level Thresholds, Table H-2 for greater than 15 minutes. The low lake level Alert is one foot below the UE (unusual event) level. The high lake level Alert is 3.9 feet above the UE level. The EAL basis states that lake water level greater than or equal to 588 feet IGLD (international great lakes datum) corresponds to levels approaching design limits which if exceeded threatens operability of safety-related equipment. Please clarify the specific design limits which are referred to and which safety-related equipment is threatened, and at what level.
HS1.2	The EAL states that "imminent loss of physical control of the facility (remote shutdown capability) due to a security event" would be classified as an SAE (site area emergency). The EAL basis states that loss of plant control would escalate this event to a GE (general emergency). Please provide clarification as to why the imminent loss of physical control of the facility would not be a GE.

Kewaunee Nuclear Power Plant (KNPP) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
HU1.1	The EAL basis states that "For most plants with seismic instrumentation, the seismic switches are set at an acceleration of about 0.01g." Reference 2, Alarm Response procedure 47023-K states that the SER 330 Seismic monitor Trigger setpoint is .03g horizontal/vertical ground acceleration. Please provide clarification for the disparity between the EAL statement and EAL basis concerning operator assessment. Also, provide the justification for deviation from NEI 99-01 guidance concerning instrumentation setpoint for ground acceleration, or provide the proposed change to comply with NEI 99-01 guidance. Also, does this alarm in the Control Room?
HU1.6	The EAL basis refers to flooding that could impact areas that contain systems required for safe shutdown of the plant. There is no reference to any systems in the plant areas mentioned which are necessary for safe shutdown. Additionally, there is no mention of the RHR (residual heat removal) Pump Pits in Reference #5, which would warrant including them as one of the plant areas vulnerable to flooding? Please provide clarification of systems required for safe shutdown, and justification for inclusion of RHR Pump Pits as areas vulnerable to flooding.
HU1.7	The EAL basis states that lake water level less than 569.5 ft IGLD corresponds to one foot below the Alert (design) threshold. This should read one foot above the Alert level, which is 568.5 ft. Also, alarm response procedure 47051-N specifies that the Forebay low level alarm comes in at 567.5 ft, which is 2 ft below the UE level and 1 ft below the Alert level. How will the operators be warned of reaching the UE and Alert levels if the alarm level is set below these levels?
HU2.1	The NEI 99-01 basis states that the purpose of the IC (initiating condition) is to address fires that may be potentially significant precursors to damage to safety systems. You changed the EAL wording from "fire in buildings or areas contiguous to certain site-specific areas" to read "fire in the PA (protected area)." Please clarify this difference since the intent of the IC is to exclude buildings or areas not adjacent to vital areas?
HU4.1	By NEI and your definition, this should be "strike action" not "strike." Please justify the deviation or correct the term.
SA2.1, SS2.1, SG2.1	Only actions taken at the Reactor Control Console (RCC) count, need to make sure Basis reflects this. Can Busses 33 and 43 be de-energized from the RCC? Also, why did you pick 5 percent? By your own definition it seems like it should be about 2 percent (definition of Op modes). Please explain and justify.
SA4.1	The EAL basis describes the definition of "significant transient" for the end user, but omits the example of "electrical load rejection >25%, full electrical load." Please provide clarification for this omission. Also, the Justification Matrix states that "Compensatory Non-Alarming Indications" is capitalized in the EAL because it is a definition in the basis document. Please clarify as the reviewer could not find this term in the definitions.
SS6.1	NEI 99-01 guidance statement "annunciators for this EAL should be limited to those identified in the Abnormal Operating Procedures, in the Emergency Operating Procedures, and in other EALs" was incorporated into EAL SA4.1, but not into this EAL. Please clarify the reason for this inconsistency.

Monticello Nuclear Generating Plant (MNGP) Request for Additional Information Revision to Emergency Action Levels

Plant EAL #	RAI
RA3.2	NRC (Nuclear Regulatory Commission) expects licensees to <1> determine areas of concern in accordance with NEI 99-01 (Methodology for Development of EALs) guidance, and <2> determine radiation levels that would significantly impede normal access.
	<1> Areas of concern should be determined by performing a review of station emergency operating procedures, abnormal operating procedures, and Appendix R criteria (fire protection) to determine what areas are required to be accessed for normal plant operations and normal shutdown. This access is required to monitor or manipulate equipment.
	<2> The appropriate radiation level should be that which causes a significant impediment to access.
	Please review and revise the EAL accordingly.
RS1	Clarify whether the State and local emergency management agencies use adult thyroid versus child thyroid for Protective Actions.
CU3.1, CA3.1, SU1.1, SS1.1, SG1.1	Please justify the use of 'busses' vs 'transformers' as intended in NEI 99-01. The staff considers this a potential deviation.
CA4.3	In CU4, RCS (reactor coolant system) temperatures are measured. However, in CA4.3 RPV (reactor pressure vessel) temperatures are measured. Please describe which is the correct reference, RCS or RPV.
	Please provide justification for the use of the proposed pressure indicator. Specifically, can this instrument actually read the proposed pressure value? What is the minor and major scale graduations? If using a computer point, what is the calibrated range of the computer point and how will it be controlled in accordance with 10 CFR 50.54(q)?
CS2, CG1	Please provide further documentation supporting the determination of the Containment High Range Radiation Monitor EAL threshold.
CU1	In section 5.3 of NEI 99-01, it states, "Each utility will need to revise the IC (initiating condition)/EALs to meet site-specific needs with regards to instrumentation" Discuss what instrumentation is available to monitor RCS inventory and level. In addition, discuss whether the means exist to identify the EAL threshold in Modes 4 and 5 and the change in wording from "are" to "may."
CU2	Discuss the change in wording from "are" to "may" as it relates to RPV level and inventory.
CU5.2	Clarify whether reactor coolant sampling capability is required to be in service in cold shutdown and refueling modes based on plant- specific TS (technical specification) requirements.
CU6.1, SU6.1	Are cell phones and radios identified in the procedures as primary or alternate back-up methods to notify offsite agencies? In addition, are cell phones a viable communication method in the Control Room, i.e., has it been properly evaluated for it's effect on surrounding instrumentation and control equipment. Provide justification for documenting cell phones and radios as viable 'routine' communications methods.
CU7.1	Describe what the "critical devices equipment" are as it relates to safe shutdown equipment based on NEI 99-01 guidance and discuss the rationale for removing the 15 minute margin.

Monticello Nuclear Generating Plant (MNGP) Request for Additional Information Revision to Emergency Action Levels

Plant EAL #	RAI
GENERIC ISSUE	If you are creating a table, or tables, for listing areas of concern for a specific EAL or a group of EALs, please ensure that:
	<1> The table is labeled appropriately, i.e., do not label a table "VITAL AREAS" if it also includes other areas such as "safe shutdown" or "areas contiguous to" Label the table to accurately reflect the composition of the list of areas,
	And
	<2> Be very clear in the EAL Basis Document, for each EAL you are using the table, HOW you derived the table.
HU4.2	The submittal letter states, "The enclosed security EALs are in compliance with NEI 99-01 Revision 4, but are not aligned with the "Issuance of Order For Interim Safeguards and Security Compensatory Measures for-Monticello Nuclear Generating Plant," dated February 25, 2002." Discuss why a deviation from NEI 99-01 Revision 4, is not proposed in order to be in alignment with the February 25, 2002, Orders.
SS3.1	Clarify whether the loss of Division I and II 250 VDC (volts – direct current) has an impact on the ability to maintain and control safe shutdown functions. Specifically, are you taking credit for RCIC (reactor core isolation cooling) in TS for safe shutdown?

Palisades Nuclear Plant (PNP) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
RA1.2	Addendum #2 to the justification matrix states a threshold less than 200 times ODCM (offsite dose calculation manual) limit was used to avoid an overlap with licensee RS1.1 effluent monitor readings (which are based on a LOCA (loss of coolant accident) source term rather than ODCM default). Per Appendix E (Section A.7) to NEI 99-01 (Methodology for Development of EALs), the same source terms used for establishing monitor EAL thresholds in NEI 99-01 AU1 and AA1 should be used in NEI 99-01 AS1 and AG1 to avoid potential overlaps between effluent monitor EALs for NEI 99-01 AA1 and AS1. Clarify whether the effluent monitor overlap between licensee RA1.2 and RS1.1 would exist if the ODCM source term was used in calculations for licensee RS1.1.
RA3.1	Per the NEI 99-01 AA3 Basis guidance for EAL 1, the radwaste control room should be considered, as appropriate, as an area requiring continuous occupancy. Clarify whether the radwaste control room was considered or is applicable based on the NEI 99-01 guidance.
RA3.2	 NRC (Nuclear Regulatory Commission) expects licensees to <1> determine areas of concern in accordance with NEI 99-01 guidance, and <2> determine radiation levels that would significantly impede normal access. <1> Areas of concern should be determined by performing a review of station emergency operating procedures, abnormal operating procedures, and Appendix R criteria (fire protection) to determine what areas are required to be accessed for normal plant operations and normal shutdown. This access is required to monitor or manipulate equipment. <2> The appropriate radiation level should be that which causes a significant impediment to access. Please review and revise the EAL accordingly.
RS1.1, RG1.1	 The NEI 99-01 Basis guidance states that the same meteorology (annual average methodology in the most limiting downwind sector) and source term (ODCM default) used in determining the effluent monitor reading in NEI 99-01 Initiating Conditions (ICs) AU1 and AA1 should be used in NEI 99-01 ICs AS1 and AG1. Basis document for licensee RS1 and RG1 states that Site Area and General Emergency effluent monitor readings were derived per NMC (Nuclear Management Company) Calculation EA-JLV-04-01. Section 5.5 (Item 4), and Assumptions 1.d and 2.d in Attachment A2, to this calculation state that annual average meteorology was used for licensee RS1 and RG1. However, the deviation statement under licensee RA1.2 justification states that the Site Area Emergency limits were based on EPA (Environmental Protection Agency) guidance and used adverse meteorology. Resolve inconsistency, and identify and provide justification for any deviations from the NEI 99-01 guidance. Section 5.5 (Item 3), and Assumptions 1.c and 2.c in Attachment A2, to NMC Calculation EA-JLV-04-01 states that a LOCA source term was used in lieu of the ODCM default source term per NEI 99-01 guidance. Resolve inconsistency with the NEI 99-01 guidance, or identify as a deviation and provide sufficient technical justification.
RS1	Clarify whether thyroid committed dose equivalent (CDE) is based on adult or child dose conversion factors. In addition, indicate whether this methodology is consistent with the State of Michigan per NEI 99-01 Basis.

Palisades Nuclear Plant (PNP) Request for Additional Information (RAI) Revision to Emergency Action Levels

Plant EAL #	RAI
CU3.1, CA3.1, SU1.1, SS1.1, SG1.1	Please justify the use of 'busses' vs 'transformers' as intended in NEI 99-01. The staff considers this a potential deviation.
CA4.3	Please provide justification for the use of the proposed pressure indicator. Specifically, can this instrument actually read the proposed pressure value. What is the minor and major scale graduations? If using a computer point, what is the calibrated range of the computer point and how will it be controlled in accordance with 10 CFR 50.54(q)?
CS2, CG1	In Calculation EA-JLV-04-01 (Attachment A3), the licensee states that a Alert alarm threshold (40 R/hr) provides a reasonable threshold while Containment monitors provide an alarm at 10 R/hr. It is not clear that these monitors would respond to direct radiation from core uncovery based on their location. Identify at what dose rate the Containment monitors are expected to respond to direct radiation from core uncovery.
CU5.2	If not applicable in TSs for this operating mode, please justify inclusion into EAL Basis Document.
CU6.1, SU6.1	The licensee's site-specific justification states that while inter-communications system and sound-powered phones are identified as in-plant communications per FSAR (final safety analysis report) Chapter 7.7.8, they were not considered in Table C-1 since they would not support routine operations. However, the licensee Basis (3rd paragraph) still includes sound-powered phones as an example of onsite communications to be considered. Resolve inconsistency.
FB-PWR-CONT- L7	Clarify whether the PNP emergency operating procedures provide for venting of the containment during an emergency as a measure of preventing catastrophic failure. If applicable, provide proposed threshold for a Containment LOSS per NEI 99-01 guidance.
	If you are creating a table, or tables, for listing areas of concern for a specific EAL or a group of EALs, please ensure that:
GENERIC	<1> The table is labeled appropriately, i.e., do not label a table "VITAL AREAS" if it also includes other areas such as "safe shutdown" or "areas contiguous to" Label the table to accurately reflect the composition of the list of areas,
1880E	And
	<2> Be very clear in the EAL Basis Document, for each EAL you are using the table, HOW you derived the table.
HA1.1	The licensee inserted the qualifier, "as indicated by VISIBLE DAMAGE to any of the following (Table H-2) plant structures / equipment." This is a deviation to NEI 99-01 HA1 / EAL 1 guidance, which only requires a seismic event greater than an Operating Basis Earthquake (OBE), without further assessment of damage. Provide change consistent with NEI 99-01 guidance, or identify as a deviation and provide further technical justification.
HU4.1	Clarify whether "strike" should be revised to read "STRIKE ACTION" to reflect the term definition in NEI 99-01, Section 5.4 and Section 5 to Enclosure 4 (EAL Detailed Information).

Plant EAL #	RAI
RA2.1	Proposed EAL states, "A VALID alarm or reading on one or more of the following radiation monitors." For the listed monitors that do not have an explicit reading identified, is the EAL threshold: (1) any increase, (2) an alarm? If there are multiple alarms on the monitors (e.g., High, High-High) which alarm applies? Please revise the site-specific monitor list to clarify the intent of this EAL
RA2.2	The proposed EAL RA2.2 cites the site-specific threshold "inadequate makeup rate." AA2 basis suggests use of increased makeup rate as an indicator in lieu of direct spent fuel pool level instrumentation. Neither the proposed EAL nor its basis identifies what constitutes inadequate makeup. Please revise the EAL and its basis to define inadequate makeup or provide further justification of why this site-specific difference is acceptable.
RA3.2	NRC (Nuclear Regulatory Commission) expects licensees to <1> determine areas of concern in accordance with NEI 99-01 (Methodology for Development of EALs) guidance, and <2> determine radiation levels that would significantly impede normal access. <1> Areas of concern should be determined by performing a review of station emergency operating procedures, abnormal operating procedures, and Appendix R criteria (fire protection) to determine what areas are required to be
	accessed for normal plant operations and normal shutdown. This access is required to monitor or manipulate equipment.
	Please review and revise the EAL accordingly. The control room dose rate threshold is given as 15 mR/hr in the proposed EAL RA3.1 and as 12 R/hr in the proposed EAL RA3.2. The staff believes that Table H-1 is in error for including the control room as an applicable area for this IC. Please revise Table H-1 appropriately.
CA1.1	Proposed EALs CA1.1 (cold shutdown) and CA2.1 (refueling) both refer to RCS (reactor coolant system) narrow range level, RCS ultrasonic level, and refueling canal level instruments. CA1.1 also refers to RVLIS (reactor vessel level indication system) indication. The staff believes that refueling cavity level should be omitted from EAL CA1.1 since refueling canal level is not an indication of RPV (reactor pressure vessel) level when the RCS is intact and the head in place as it would be during cold shutdown. Please revise the proposed EAL CA1.1 and its basis or provide further justification for your site-specific differences.
CU3.1, CA3.1, SU1.1, SS1.1, SG1.1	Please justify the use of 'busses' vs 'transformers' as intended in NEI 99-01. The staff considers this a potential deviation.
CA4.3	Please provide justification for the use of the proposed pressure indicator. Specifically, can this instrument actually read the proposed pressure value? What is the minor and major scale graduations? If using a computer point, what is the calibrated range of the computer point and how will it be controlled in accordance with 10 CFR 50.54(q)?
CS2, CG1	Please provide further documentation supporting the determination of the Containment High Range Radiation Monitor EAL threshold.

Plant EAL #	RAI
CG1.1	The proposed EAL CG1.1 establishes site-specific indications of containment challenge, including containment pressure greater than 46 psig (pounds per square inch – gauge). The basis for EAL CG1.1 states that the containment design pressure is well in excess of the pressure expected from a design basis LOCA (loss of coolant accident). Although this is a true statement, it does not support the use of 46 psig as the EAL threshold for shutdown conditions. It is doubtful that outage-related temporary penetration seals will withstand a 46 psid (pounds per square inch – differential) pressure since the bases for PINGP TS (technical specifications) 3.9.4 allow temporary seals that establish "…a temporary, atmospheric pressure, ventilation barrier…" As such, a containment pressure less than 46 psig may challenge containment and result in fission product releases. Please revise the proposed EAL and its basis or provide further justification for your site-specific differences.
CS2.1, CS2.2	The basis for the proposed CS2 contains a caveat that the EAL should not be used unless the RPV level is below the bottom inside diameter of the RCS hot leg penetration. This caveat is not shown in the proposed EAL. Since the TBD (technical basis document) will not be required to be used during classification, please revise the proposed EALs CS2.1 and CS2.2 to reflect this caveat.
CU5.2	Clarify whether reactor coolant sampling capability is required to be in service in cold shutdown and refueling modes based on plant- specific TS requirements.
DEFINITIONS	In Section 5 of the TBD, you have provided a site-specific definition for CONTAINMENT CLOSURE that references an attachment to EOP (emergency operating procedure) 1E-4 and states that "all containment penetrations having one or more isolation valves closed and one door in each airlock penetration closed." The proposed definition in Section 5 is more encompassing than the definition provided in the NEI and PINGP basis for CG1 in that the Section 5 definition would not exclude isolation valve failures that did not result in a direct path to the environment and could result in an unnecessary GE (general emergency) declaration. For example, consider a failure of an isolation valve on a closed loop cooling system that is not directly connected to the reactor coolant system pressure boundary or the containment atmosphere. Please revise the site-specific definition in Section 5 to make it consistent with the basis of CG1 or provide further justification for your difference.
FB-PWR-CONT-L7, FB-PWR-CONT-PL7, FB-PWR-RCS-L5, FB-PWR-RCS-PL5	The proposed containment barrier EAL "Other site-specific indications" is marked "not applicable." The bases for this EAL in NEI 99- 01 states that the EAL is intended to cover other site-specific indications that may indicate a loss or potential loss of the containment (RCS) barrier, including indications from area or ventilation monitors in containment annulus or other contiguous areas. You cite the EOPs as satisfying the need for other indicators. However, the integrity CSFST (critical safety function status tree) addresses situation in which the containment (RCS) barrier is currently intact, but is being challenged. The integrity CSFST does not address containment (RCS) leakage resulting from existing penetration failures or containment bypasses. Please revise the proposed EALs and their bases to provide the other site-specific indications identified in the NEI 99-01 bases or provide further justification for your site-specific differences.

Plant EAL #	RAI
FB-PWR-CONT-PL1, FB-PWR-FUEL-L1, FB-PWR-FUEL-PL1, FB-PWR-RCS-PL1	The proposed critical safety function EALs for all three barriers in Table F-1 were modified from the NEI 99-01 guidance by the addition of the phrase "Conditions requiring entry into" The bases state, "The barrier loss/potential loss occurs when the plant parameter associated with the CSFST path is reached (not when the operator reads the CSFST in the EOP network)." Although the intent to call the appropriate declaration without waiting on shift personnel to actually call the CSFST terminus is appropriate, the language could be interpreted as requiring a separate assessment of the plant parameters even after the operators have declared the appropriate CSFST terminus. This appears to potentially reduce the effectiveness of the EALs. Please revise the proposed EALs and their bases to clarify your intent that the EAL is met by either the separate evaluation or the operators' CSFST terminus call, whichever comes first, or provide further justification for your site-specific differences.
FB-PWR-RCS-PL2	The proposed RCS barrier EAL substitutes the site-specific value of 60 gpm (gallons per minute) for the original NEI 99-01 text "capacity of one charging pump in the normal charging mode." The staff believes that this site-specific change potentially reduces the effectiveness of the original NEI 99-01 language since the change implies the need for a quantification of the leak rate that was not required in the original NEI 99-01 EAL. As stated in the NEI bases, the need to start a second charging pump, in of itself, is indicative of a substantial leak. Please revise the proposed EAL and its basis or provide further justification for your site-specific differences.
GENERIC ISSUE 1	If you are creating a table, or tables, for listing areas of concern for a specific EAL or a group of EALs, please ensure that: <1> The table is labeled appropriately, i.e., do not label a table "VITAL AREAS" if it also includes other areas such as "safe shutdown" or "areas contiguous to" Label the table to accurately reflect the composition of the list of areas, And <2> Be very clear in the EAL Basis Document, for each EAL you are using the table, HOW you derived the table.

Plant EAL #	RAI
GENERIC ISSUE 2	The electrical distribution EALs use a notation "X(Y)" to identify equipment, in which "X" is the designator that applies to Unit 1, and "Y" is the designator that applies to Unit 2. However, the notation is also used in the proposed EALs and bases to indicate redundant trains within a unit. The staff believes that this inconsistency could have an effect on accurate and timely classifications. Because of this inconsistency, it is not always clear whether a statement such as "…only one of…emergency diesels D1(D5) and D2(D6)" is interpreted as one out of two, or one out of four. (A clearer presentation would be "…emergency diesels D1 or D2 (D5 or D6)…" Please review the EALs and their bases, and revise as necessary, to ensure that the intended classification logic is clear.
	The bases for the proposed electrical distribution EALs state that cross-ties exist between buses and that these may be credited. None of the proposed electrical distribution EALs provide the logic for how the cross-ties may be credited. There is also apparently contradictory language. The basis of EAL CU3.1 states that no credit is provided for restoration of power to a "non-affected" unit bus, but goes on to state "PINGP takes credit for the redundant power source for this IC." As an example of one possible approach: "At least one emergency generator D1 or D2(D5 or D6) is supplying power to its emergency bus OR the Safeguard bus is being powered from the companion unit's Safeguard bus via cross-tie XXX" or comparable language that clearly identifies how the cross-ties are to be credited. Since the TBD is not required to be used in classification, this logic should appear in the EAL itself and be explained in the basis. Please revise the affected EALs and their bases or provide additional justification for this site-specific change.
	The proposed electrical distribution EALs and their bases use the terms "essential buses," "emergency buses," and "Safeguards buses," interchangeably. Please revise the proposed EALs and their bases to use a consistent site-specific nomenclature to improve the usability of these EALs.
	The proposed electrical distribution EALs generally refer to "emergency generators." The associated bases clarify this reference to be "D1(D5) or D2(D6)." Since the TBD will not be required to be used during classification, the staff requests that you incorporate the site- specific EDG designators (e.g., "D1 or D2(D5 or D6)") in the proposed EALs to increase the usability of the EALs.
HU1.2, HA1.2	Clarify whether the proposed wind speed threshold is within the calibrated range of the instrument used for determining wind speed.
HA4.2	The proposed EAL HA4.2 includes a site-specific list of security events, including "a suspicious FIRE or EXPLOSION" that persists for greater than 30 minutes. Since a FIRE or EXPLOSION is an actual event (as opposed to the threat of plant damage) does the 30-minute persistence refer to length of time that the FIRE or EXPLOSION is "suspicious" or does it refer to the duration of the FIRE (it is unlikely that an EXPLOSION duration would be measured in terms of minutes)? Please revise the basis to explain the intent of this persistence and to explain the relationship of this EAL with proposed EALs HU2.1 and HA2.1.
HS1.2	Proposed HS1 is "Confirmed security event in a plant VITAL area." Such an event escalates to proposed HG1 "Security event resulting in loss of physical control of the facility." The distinction made in the bases of these two ICs is that for HS1, the hostile force has progressed to a vital area, whereas, in HG1, the hostile force has taken control of vital areas or equipment need to maintain safety functions. However, the proposed EAL HS1.2 includes two site-specific events that address loss of control, which would appear to be more appropriate as EALs under IC HG1. Please revise the proposed EALs and their bases or provide further justification for your site-specific differences.

Plant EAL #	RAI
SU3.1, SA4.1	Proposed EALs SU3.1 and SA4.1 specify "loss of most or all" annunciators and provides a site-specific list of the control boards and racks that contain the annunciators. The proposed basis defines "most" as being approximately 75 percent. Since the TBD will not be required to be used during classification, the staff requests that you revise these EALs to include this important numerical threshold (e.g., "loss of most (>75%) or all")
SA5.1	Proposed SA5.1 provides a list of AC (alternating current) power sources to essential. The EAL list appears to co-mingle Unit 1 and Unit 2 sources. For example, 1RY and 2RY, and CT11 and CT12 are identified separately rather than in the typical notation "1RY(2RY)" or "CT11(CT12)". As a result of this presentation, it is not clear whether the phrase "any one of the following sources" allows a Unit 1 source to be credited for Unit 2 or vice versa, or even a single source supplying both units. Please revise the proposed EAL and its bases to clarify the intended logic or provide further justification for your site-specific differences.
SS3.1	The proposed EAL SS3.1 addresses the loss of ALL safeguards DC (direct current) power and identifies a minimum voltage on site- specific "Panel 11(21) and Panel 12(22)." One possible interpretation of this EAL is that power would need to be lost from all four panels before the declaration would be made. Although not mentioned in the basis, the staff notes that FSAR (final safety analysis report) Figure 8.5-1a and 8.5-1b shows an apparent cross-tie capability between panels 14 and 16 to panel 22 and 17 and 19 to panel 21. Please revise the proposed EALs and their bases to clarify the intended logic or provide further justification for your site-specific differences.
SS6.1	In the proposed basis for SS6, the statement "The scope of annuciators considered for determining 'most or all' is all-inclusive," is inconsistent with the site-specific paragraph that starts "However, annunciators for this EAL should be limited those" This latter caveat is consistent with the NEI 99-01 bases. Please revise the basis for consistency with the NEI 99-01 bases or provide further justification. The staff notes that this caveat only applies to EAL SS6.1, but that proposed EALs SU3.1, SA4.1, and SS6.1 list the same annunciator panels and alarms. Since the TBD will not be required to be used during classification, please revise the proposed EALs SS6.1 to reflect this caveat.
SU4.1	The proposed EAL SU4.1 states a threshold of 2.4 R/hr on the letdown monitor. However, the proposed basis for this EAL discusses an alternative indication not addressed in the EAL: a reading of 2.4 R/hr with portable survey instruments. Please revise the EAL or its basis for consistency. If the portable survey instrument indication is retained, is the portable survey instrument detector geometry and efficiency equivalent to that of the installed letdown monitor?
SU4.2	The NEI 99-01 bases for SU4 state that the site-specific threshold should be based on the TS for iodine spiking. The proposed basis for EAL SU4.4 deletes the reference to "iodine spike" and simply refers to TS 3.4.17. This could be interpreted as operation in LCO (limiting condition for operation) 3.4.17 Condition A (i.e., >1.0 uCi/gm (microcuries per gram)) even though the NEI 99-01 intent was operation in LCO Condition C. Please revise the proposed EALs and their bases or provide further justification for your site-specific differences.