

## **NRR-PMDAPEm Resource**

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**From:** Huffman, William  
**Sent:** Friday, August 22, 2014 1:30 PM  
**To:** Jack Gadzala (Generation - 4); Craig Sly (craig.d.sly@dom.com)  
**Cc:** Broaddus, Doug  
**Subject:** Draft RAI to Kewaunee Power Station on Control Room Staffing Issue

**Expires:** Thursday, November 20, 2014 12:00 AM

Mr. Jack Gadzala,

### DRAFT REQUEST FOR ADDITIONAL INFORMATION

### LICENSE AMENDMENT REQUEST FOR PERMANENTLY DEFUELED TECHNICAL

### DOMINION ENERGY KEWAUNEE, INC.

### KEWAUNEE POWER STATION

### DOCKET NO. 50-305

By letter dated May 29, 2013, as supplemented by letters dated September 23, October 15, October 17, October 31, and November 7, 2013, and January 7, March 13, and April 29, 2014, Dominion Energy Kewaunee, Inc. (DEK), proposed an amendment to modify the operating TSs at KPS to be consistent with the current permanently shutdown and defueled status of the reactor. In general, the changes proposed by the original request would only eliminate those TSs that are applicable in operating modes or modes where fuel is emplaced in the reactor vessel. Changes to other TSs, definitions, administrative controls, as well as several license conditions have also been proposed.

The NRC staff has determined that additional information is needed to continue the review as discussed below.

Please call me at 301-415-2046 if you would like to set up a conference call to clarify the request for information.

Respectfully,

*Bill Huffman  
Project Manager  
NRR/DORL/LPL4-2  
U.S. Nuclear Regulatory Commission*

During the NRC staff's review of DEK's proposed licensing actions related to the permanently defueled technical specifications, in conjunction with parallel reviews of the permanently defueled emergency plan, and an exemption request from the continuous communications requirements of 10 CFR 73.55(j)(4)(ii), the staff has determined that it needs additional information to complete its review of the proposed permanently defueled technical specifications.

## **Background for RAI #1:**

DEK has proposed the following administrative requirements in the permanently defueled Technical Specifications:

TS 5.2.2 (in conjunction with the table below) establishes the minimum operations shift crew.

Table 5.2.2-1  
Minimum Shift Crew Composition

<u>POSITION</u>	<u>MINIMUM STAFFING</u>
<u>CERTIFIED FUEL HANDLER</u>	1
<u>Non-Certified Operator</u>	1

However, the technical specification is silent as to the location of the crew. DEK has not proposed any other technical specification that addresses or restricts the location of the operations shift onsite. For a reactor authorized to operate, the regulations in 10 CFR 50.54(m) specify a minimum control room staffing level at all times. For a permanently shutdown and defueled reactor, 10 CFR 50.54(m) is not applicable. There is no equivalent regulation that directly requires control room staffing for a permanently shutdown and defueled reactor. As such, it is conceivable that the control room at KPS could be unoccupied for periods of time if the technical specifications, as proposed, were approved.

In a previous RAI response related to this concern (DEK letter dated November 7, 2014), DEK addressed the possible absence of the shift manager from the control room (the shift manager is the same as the Certified Fuel Handler specified in the table above). DEK stated that the shift manager does not need to be in the control room to be responsible for and fulfill the shift command function. The location of the command center is functionally where the shift manager is located. Control of activities may be performed either remotely from the control room or locally in the plant. Spent fuel handling activities are performed locally at the spent fuel pool. Accordingly, the shift manager is responsible for directing response to abnormal situations from either the control room, or locally at the spent fuel pool, in accordance with applicable response procedures. DEK further stated that being absent from the control room does not relieve the shift manager of responsibility for the shift command function.

The staff recognizes that management, oversight and control of spent fuel pool operations may not require a presence in the control room and resolution of most operational issues related to spent fuel pool function may be more readily accomplished at the SFP location. Because of the robust design of the SFP and the low decay heat load of the stored fuel, events involving the SFP are expected to evolve slowly and continuous manning of the control room by the shift manager may not be necessary at all times. However, the DEK has not fully justified its basis for proposing technical specifications that would permit no staffing presence in the control room.

Specifically;

- The DEK response to the staff's previous question of control room staffing only addressed that absence of the shift supervisor. DEK did not address why the absence of all staff from control room would be acceptable.
- No discussion has been provided on how the operations staff would become aware of and respond to any control room alarms or instrument indications of abnormal conditions (such as off-normal radiation, fire, or electrical anomalies) if no one is present in the control room.
- The control room is a communications focal point. DEK has not addressed how communications are coordinated, both internally to the site and with external agencies (such as the NRC), without an

operations crew present in the control room. Given a condition where the control room is not staffed, an explanation of the communications systems that would be used for coordination of activities and notifications, both onsite and with external agencies, should be provided. For example, how would KPS receive an important security related notification from NRC that may be placed via the ENS system? The staff notes that 10 CFR 73.55(j)(4)(ii) requires a system for continuous communications system between the control room and the security alarm stations. The intent of this regulation is clearly based on the expectation that the control room is occupied by operations staff to receive any such communication, as necessary, from the security alarm stations. DEK has recognized this requirement, and consist with its technical specification proposal, requested exemption from this regulation to establish the capability of continuous communications between the security alarm stations and the shift manager.

## **RAI-1**

Please provide a comprehensive discussion and justification supporting the absence of a requirement for minimum control room staffing in the technical specifications. The discussion should specifically address how the current functions of the control room will be accomplished if the control room is not continuously staffed by qualified personnel.

## **Background for RAI #2:**

DEK has also not addressed the impact of operations staffing location flexibility, as proposed in the defueled technical specifications, on the proposed permanently defueled emergency plan (PDEP) provided in DEK letter dated June 19, 2014. The DEK proposed PDEP states:

- The control room is where plant systems and equipment parameters are monitored. The control room is the onsite center for emergency command and control. Control room personnel assess plant conditions; evaluated the magnitude and potential consequences of abnormal conditions; investigate preventative, mitigating and corrective actions; and preform notifications. When activated, the ERO reports to the control room.
- The Shift Manager is at the station 24 hours a day and is the senior management position at the station during off-hours. This position is responsible for monitoring conditions and approving all onsite activities. When an abnormal situation becomes apparent, the Shift Manager shall assume the position of Emergency Director (ED) once the emergency classification has been made.
- The Emergency Director assumes overall Command and Control of a classified event. The Emergency Director cannot delegate the following responsibilities:
  - o Classification of event
  - o Authorization of radiation exposures in excess of 10 CFR 20 limits
- Other responsibilities assumed by the Emergency Director include:
  - o Notification of the emergency classification to the NRC, State of Wisconsin, and Kewaunee County
  - o Management of available station resources
  - o Initiation of mitigative actions
  - o Initiation of corrective actions
  - o Initiation of onsite protective actions
  - o Decision to call for offsite police, fire or ambulance assistance
  - o Augmentation of the emergency staff, as deemed necessary
  - o Coordination of Security activities
  - o Termination of the emergency condition when appropriate
  - o Performance of initial Dose Assessment
  - o Maintaining a record of event activities

## **RAI-2**

Please provide an assessment that demonstrates the proposed emergency plan functions can be conducted assuming the shift supervisor and/or the non-certified operator are absent from the control room and are at the most distant permitted locations from the control room. An evaluation which demonstrates that the operations staff can perform its emergency plan functions without a reduction in effectiveness to the proposed PDEP, given the staff may be anywhere in the protected area when compared to being present in the control room, similar to a 10 CFR 50.54(q)(3) evaluation per the guidance provided in Regulatory Guide 1.219, would be acceptable. The staff notes that evaluation of the permanently defueled technical specifications may be completed prior to implementation of the PDEP. The impact of any changes to control room staffing and location, regardless of timing, would require assessment for a reduction in effectiveness of the emergency plan in effect at the time the changes are implemented, pursuant to 10 CFR 50.54(q)(3).

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