

**Jon A. Franke**  
Site Vice President

**Susquehanna Nuclear, LLC**  
769 Salem Boulevard  
Berwick, PA 18603  
Tel. 570.542.2904 Fax 570.542.1504  
jon.franke@talenergy.com



JAN 08 2016

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555-0001

**SUSQUEHANNA STEAM ELECTRIC STATION  
SUPPLEMENTAL INFORMATION TO LICENSE AMENDMENT  
REQUEST TO ADOPT EMERGENCY ACTION LEVEL  
SCHEME PURSUANT TO NEI 99-01, REVISION 6  
PLA-7425**

---

**Docket No. 50-387  
and No. 50-388**

- References:*
1. Letter PLA-7285, "[Proposed Amendments to] Adopt Emergency Action Level Scheme Pursuant to NEI 99-01, Revision 6, Development of Emergency Action Levels for Non-Passive Reactors," dated March 19, 2015 (Accession ML15091A657).
  2. Federal Register 80 FR 38756; Docket NRC-2015-0163, dated July 7, 2015, [Basis for proposed no significant hazards consideration determination], (ML15176A422).
  3. Public Meeting between Susquehanna Nuclear, LLC and the Nuclear Regulatory Commission on September 23, 2015, to discuss additional proposed changes to the SSES Bases document in response to the NRC Emergency Preparedness White Finding documented in NRC Inspection Report 05000387/2015504 and 05000388/2015504, dated June 22, 2015, and the SSES Emergency Operating Procedure (EOP) Upgrade Project, dated October 9, 2015 (ML15278A492).
  4. Letter PLA-7399, "Proposed Additional Changes to the SSES Emergency Plan Basis Document, Since Submittal of Response to NRC Request for Additional Information," dated October 15, 2015
  5. Letter PLA-7393, "Response to NRC Request for Additional Information Regarding License Amendment Request to Nuclear Energy Institute 99-01, Revision 6, Emergency Action Level Scheme Change (TAC Nos. MF6057 and MF6058)," dated October 16, 2015

Susquehanna Nuclear, LLC is providing a revised evaluation of a no significant hazards consideration (NSHC) in the Attachment to this letter. This replaces information previously provided for the License Amendment Request (LAR) in Reference 1. The LAR is a request to adopt Emergency Action level Scheme pursuant to NEI 99-01, Revision 6 for the Susquehanna Steam Electric Station (SSES), Units 1 and 2. In References 3, 4 and 5, supplemental information was provided in connection with making these changes. The supplemental information is now to be included as a basis for the determinations of the NSHC in Reference 2.

The implementation period for the approval of these proposed changes must also support SSES training cycles in 2016, such that implementation may not be practical within 90 to 180 days, and if required to be made final before the end of the year. Susquehanna Nuclear, LLC therefore requests these license amendments to be made effective as of the date of their issuance, with the obligation stating that they be implemented on or before December 31, 2016.

Susquehanna Nuclear, LLC has determined that the supplemental information continue to support the prior determination of a NSHC. Furthermore, the additional information also does not affect the basis for concluding that neither an environmental impact statement nor an environmental assessment needs to be prepared in connection with the proposed amendment.

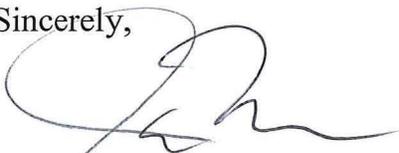
There are no new regulatory commitments associated with this submittal.

If you have any questions or require additional information, please contact Mr. Jason Jennings, Manager, Nuclear Regulatory Affairs, at (570) 542-3155.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on: January 8, 2016

Sincerely,



J. A. Franke

Attachment: Revised Information in the No Significant Hazards Consideration

Copy: NRC Region I  
Mr. J. E. Greives, NRC Sr. Resident Inspector  
Ms. T. E. Hood, NRC Project Manager  
Mr. M. Shields, PA DEP/BRP

---

**Attachment to PLA-7425**

**Revised Information in the  
No Significant Hazards Consideration**

---

## Revised Information in the No Significant Hazards Consideration

**Susquehanna Nuclear, LLC,  
Docket Nos. 50-387 and 50-388,  
Susquehanna Steam Electric Station (SSES), Units 1 and 2  
Luzerne County, Pennsylvania**

*Date of amendment request:* March 19, 2015. A publicly-available version is available in ADAMS under Package Accession No. ML15091A657, and as supplemented by changes in letters dated October 15 and October 16, 2015.

*Description of amendment request:* The amendment would revise the Emergency Plan for SSES to adopt the Nuclear Energy Institute's (NEI's) revised Emergency Action Level (EAL) scheme described in NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors" (ADAMS Accession No. ML12326A805), which was endorsed by the NRC, as documented in NRC letter dated March 28, 2013 (ADAMS Accession No. ML12346A463). Supplemental changes in this amendment were discussed in a September 23, 2015 public meeting held with Susquehanna Nuclear, LLC. The public meeting summary was issued October 9, 2015, and is available in ADAMS under Accession No. ML15278A492. The additional information and the changes discussed at the public meeting are included in the two Susquehanna Nuclear, LLC letters dated October 15 and October 16, 2015. The revised Emergency Plan includes the appropriate plant specific changes as a result of an Emergency Operating Procedure Upgrade project and corrective action in response to an Emergency Preparedness White Finding, discussed by an Inspection Report 05000837/05000388-2015504, dated June 22, 2015, (ADAMS Accession No. ML16173A297 and ML15181A332).

On June 1, 2015, the NRC staff issued an amendment changing the name on the SSES license from PPL Susquehanna, LLC, to Susquehanna Nuclear, LLC. This amendment was issued subsequent to an order issued on April 10, 2015, to SSES, approving an indirect license transfer.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of any accident previously evaluated?

*Response:* No.

The proposed changes to the EAL scheme to adopt the NRC-endorsed guidance in NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors," do not reduce the capability to meet the emergency planning requirements established in 10 CFR 50.47 and 10 CFR 50, Appendix E. The proposed changes do not reduce the functionality, performance, or capability of the ERO [Emergency Response Organization] to respond in mitigating the consequences of any design basis accident.

The probability of a reactor accident requiring implementation of Emergency Plan EALs has no relevance in determining whether the proposed changes to the EALs reduce the effectiveness of

**Revised Information in the No Significant Hazards Consideration**  
*(continued)*

the Emergency Plan. As discussed in Section I.D, "Planning Basis," of NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants";

. . . The overall objective of emergency response plans is to provide dose savings (and in some cases immediate life saving) for a spectrum of accidents that could produce offsite doses in excess of Protective Action Guides (PAGs). No single specific accident sequence should be isolated as the one for which to plan because each accident could have different consequences, both in nature and degree. Further, the range of possible selection for a planning basis is very large, starting with a zero point of requiring no planning at all because significant offsite radiological accident consequences are unlikely to occur, to planning for the worst possible accident, regardless of its extremely low likelihood . . .

Therefore, risk insights are not considered for any specific accident initiation or progression in evaluating the proposed changes.

The proposed changes do not involve any physical changes to plant equipment or systems, nor do they alter the assumptions of any accident analyses. The proposed changes do not adversely affect accident initiators or precursors nor do they alter the design assumptions, conditions, and configuration or the manner in which the plants are operated and maintained. The proposed changes do not adversely affect the ability of Structures, Systems, or Components (SSCs) to perform their intended safety functions in mitigating the consequences of an initiating event within the assumed acceptance limits.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

*Response:* No.

The proposed changes to the EAL scheme to adopt the NRC-endorsed guidance in NEI 99-01, Revision 6 do not involve any physical changes to plant systems or equipment. The proposed changes do not involve the addition of any new plant equipment. The proposed changes will not alter the design configuration, or method of operation of plant equipment beyond its normal functional capabilities. All ERO functions will continue to be performed as required. The proposed changes do not create any new credible failure mechanisms, malfunctions, or accident initiators.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from those that have been previously evaluated.

**Revised Information in the No Significant Hazards Consideration**  
*(continued)*

3. Does the proposed change involve a significant reduction in a margin of safety?

*Response:* No.

The proposed changes to the EAL scheme to adopt the NRC-endorsed guidance in NEI 99-01, Revision 6 do not alter or exceed a design basis or safety limit. There is no change being made to safety analysis assumptions, safety limit, or limiting safety system settings that would adversely affect plant safety as a result of the proposed changes. There are no changes to setpoints or environmental conditions of any SSC or the manner in which any SSC is operated. Margins of safety are unaffected by the proposed changes to adopt the NEI 99-01, Revision 6 EAL scheme guidance. The applicable requirements of 10 CFR 50.47 and 10 CFR 50, Appendix E will continue to be met.

Therefore, the proposed changes do not involve any reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

*Attorney for licensee:* Damon D. Obie, Associate General Counsel, Talen Energy Supply, LLC, 835 Hamilton St., Suite 150, Allentown, PA 18101.