

November 1, 2011

## Proprietary Information – Withhold From Public Disclosure Under 10 CFR 2.390 The balance of this letter may be considered non-proprietary upon removal of Attachment 2.

L-2011-464 10 CFR 50.90 10 CFR 2.390

U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555

Re: St. Lucie Plant Unit 1 Docket No. 50-335 Renewed Facility Operating License No. DPR-67

> Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request

### **References:**

- R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2010-259), "License Amendment Request for Extended Power Uprate," November 22, 2010, Accession No. ML103560419.
- (2) Email from T. Orf (NRC) to C. Wasik (FPL), "St. Lucie Unit 1 EPU request for additional information (I&C)," March 9, 2011, Accession No. ML110680373.
- (3) R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2011-117), "Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request," April 1, 2011, Accession No. ML110950058.
- (4) Email from T. Orf (NRC) to C. Wasik (FPL), "St. Lucie 1 EPU RAI clarifications (Instrumentation & Controls)," June 6, 2011.
- (5) R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2011-341), "Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request," August 25, 2011, Accession No. ML11242A150.
- (6) Email from T. Orf (NRC) to C. Wasik (FPL), "St. Lucie 1 and 2 EPUs draft RAIs

   Instrumentation and Controls Branch (EICB) (possibly proprietary?),"
   September 16, 2011.

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By letter L-2010-259 dated November 22, 2010 [Reference 1], Florida Power & Light Company (FPL) requested to amend Renewed Facility Operating License No. DPR-67 and revise the St. Lucie Unit 1 Technical Specifications (TS). The proposed amendment will increase the unit's licensed core thermal power level from 2700 megawatts thermal (MWt) to 3020 MWt and revise the Renewed Facility Operating License and TS to support operation at this increased core thermal power level. This represents an approximate increase of 11.85% and is therefore considered an extended power uprate (EPU).

By email from the NRC Project Manager dated March 9, 2011 [Reference 2], additional information related to the proposed instrumentation & controls setpoint methodology was requested by the NRC staff in the Instrumentation & Controls Branch (EICB) to support their review of the EPU License Amendment Request (LAR). The request for additional information (RAI) identified five questions (EICB-4 through EICB-8). The responses to these five RAI questions were provided by FPL letter dated April 1, 2011 [Reference 3]. By email from the NRC Project Manager dated June 6, 2011 [Reference 4], clarification of the responses to RAI questions EICB-4, EICB-5, and EICB-6 was requested. During a July 21, 2011 audit of the reactor protective system (RPS) steam generator level setpoint calculation at the Westinghouse Electric Company (Westinghouse) office in Rockville, MD, the NRC staff identified eight concerns to be addressed in the responses to the RAI clarifications requested in the June 6, 2011 email. The response to the clarifications and concerns was provided by FPL letter dated August 25, 2011 [Reference 5]. By email from the NRC Project Manager dated September 16, 2011 [Reference 6], additional information related to the Allowable Value for the reactor protective system steam generator water level - low setpoint was requested.

Attachment 1 to this letter provides the FPL response to the September 16, 2011 request for additional information. Attachment 2 provides Westinghouse calculation CN-TAS-08-36, Revision 2, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 1." This calculation contains information proprietary to Westinghouse. Attachment 3 provides the description and basis for a change to the EPU LAR proposed change to TS Table 2.2-1, Reactor Protective Instrumentation Trip Setpoint Limits. Attachment 4 contains the marked-up and clean pages for the proposed TS change.

Attachment 5 contains the Proprietary Information Affidavit. The purpose of this attachment is to withhold the proprietary information contained in the setpoint methodology calculation (Attachment 2) from public disclosure. The Affidavit signed by Westinghouse as the owner of the information sets forth the basis for which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of § 2.390 of the Commission's regulations. Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR 2.390.

In accordance with 10 CFR 50.91(b)(1), a copy of this letter is being forwarded to the designated State of Florida official.

This submittal does not alter the significant hazards consideration or environmental assessment previously submitted by FPL letter L-2010-259 [Reference 1].

This submittal contains no new commitments and no revisions to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Christopher Wasik, St. Lucie Extended Power Uprate LAR Project Manager, at 772-467-7138.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on 01 - November -2011

Very truly yours,

Richard L. Anderson Site Vice President St. Lucie Plant

Attachments (5)

cc: Mr. William Passetti, Florida Department of Health

## Attachment 1

#### **Response to Request for Additional Information**

The following information is provided by Florida Power & Light in response to the U.S. Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI). This information was requested to support the Extended Power Uprate (EPU) License Amendment Request (LAR) for St. Lucie Unit 1 that was submitted to the NRC by FPL via letter (L-2010-259) dated November 22, 2010 (Accession Number ML103560419).

In an email dated June 6, 2011 from NRC (Tracy Orf) to FPL (Chris Wasik), Subject: St. Lucie 1 EPU RAI clarifications (Instrumentation & Controls), the NRC requested additional information to clarify the responses provided by FPL in letter L-2011-117 dated April 1, 2011 (Accession Number ML110950058). During a July 21, 2011 audit of the reactor protective system (RPS) steam generator level setpoint calculation at the Westinghouse Electric Company (Westinghouse) office in Rockville, MD, the NRC staff identified eight concerns to be addressed in the responses to the RAI clarifications requested in the July 6, 2011 email. By letter L-2011-341, dated August 25, 2011(Accession Number ML11242A150), FPL provided its response to the NRC clarifications and concerns.

In an email dated September 16, 2011 from NRC (Tracy Orf) to FPL (Chris Wasik), Subject: St. Lucie 1 and 2 EPUs draft RAIs - Instrumentation and Controls Branch (EICB) (possibly proprietary?), the NRC staff requested additional follow-up information. The RAI consisted of two questions from the NRC Instrumentation and Controls Engineering Branch (EICB). These two RAI questions (designated by FPL as EICB-01F and EICB-02F) and the FPL responses are documented below.

#### EICB-01F

Based on the July 26, 2011, clarifications request by the NRC staff, the licensee submitted a partial response on August 25, 2011. In this response the licensee included and coordinated its input from the July 21, 2011, meeting between the NRC and FPL for St. Lucie Plant 1. This response only addresses one of the clarification requests (EICB-1). The licensee further stated that response to the remaining clarification questions (EICB-2 through EICB-4) will follow in a future correspondence. Attachment 3 to the August 25, 2011, licensee letter provided the Westinghouse setpoint calculation (CN-TAS-09-5, Rev 1). On page 21 of this calculation in Section 4.6.5, it states that the steam generator level trip setting tolerance, ST\_BTU\_RPS (where BTU is bistable trip unit and RPS is reactor trip system) is  $\pm 0.028$  mV or  $\pm 0.70\%$  span. St. Lucie uses an as-found tolerance of twice the value of as-left tolerance (ALT). This practice is based on assuming that the as-left tolerance is treated as a bias. Based on this assumption the Westinghouse calculation (page 27) notes that the OL+ and the OL-operability limits (or the as-found limits) are -2.476 and -2.364 Volts with an OL band of 112 mV for total OL band of 2.80% (this equates to AFT of  $\pm 1.40\%$  with respect to the field trip setpoint (FTSP).

The licensee's letter of August 25, 2011, provided additional clarifications and the setpoint calculation explaining that the note pertaining to as-found tolerance (AFT) has been revised and that both the notes have been moved from technical specifications trip setpoint Table 2.2-1 to the surveillance requirements in Table 4.3-1. The revised notes read as follows:

(8) - If the as-found channel setpoint is either outside its predefined as-found acceptance criteria band or is not conservative with respect to the Allowable Value, then the channel shall be declared inoperable and shall be evaluated to verify that it is functioning as required before returning the channel to service.

(9) - The instrument channel setpoint shall be reset to a value that is within the as-left tolerance of the Field Trip Setpoint, otherwise that channel shall not be returned to OPERABLE status. The Field Trip Setpoint and the methodology used to determine the Field Trip Setpoint, the as-found acceptance criteria band, and the as-left acceptance criteria are specified in the UFSAR Section 7.2.

Westinghouse proprietary calculation CN-TAS-09-5, Rev 1, on page 22 states that the setting tolerance (ST) for the RPS Bistable is $\pm$  0.28 mV (or  $\pm$ 0.70% of span). The OL or the AFT values are two times this value or 1.40% on both sides of FTSP.

RIS 2006-17, under summary of the issue, states, "The NRC staff review concluded that if specific conditions are met, then the NRC staff would find a NSP-based assessment of as-found values acceptable. Those conditions are: (1) the setting tolerance band is less than or equal to the square root of the sum of the squares of reference accuracy, measurement and test equipment, and readability uncertainties; (2) the setting tolerance is included in the total loop uncertainty, and (3) the pre-defined test acceptance criteria band for the as-found value includes either, the setting tolerance or the uncertainties associated with the setting tolerance band, but not both of these."

The RPS bistable channel functional test is monthly and the RPS bistable accuracy is  $\pm 0.08\%$  and the corresponding M&TE error is  $\pm 0.08\%$ . In addition, the readability error has not been included. These terms result in a setting tolerance of less than 0.25%. The basis for the as-left setting tolerance of  $\pm 0.70\%$  of span is not clear from this information. The licensee is requested to justify the value of ALT. As an alternative, the licensee should amend the information provided in the August 25, 2011, letter to state a more realistic as-left tolerance.

#### **Response**

Although the RAI is written to reflect St. Lucie Unit 2 specific information (including Westinghouse proprietary calculation CN-TAS-09-5), the RAI was designated as being applicable to both St. Lucie Units 1 and 2. The associated Westinghouse setpoint calculation for St. Lucie Unit 1 is CN-TAS-08-36.

As discussed with the EICB reviewers during the September 21, 2011 public meeting, the as-left setting tolerance for the reactor protective system (RPS) Steam Generator Water Level – Low bistable will be changed to  $\pm 10$  millivolts, which is equivalent to  $\pm 0.25\%$ . The associated Westinghouse proprietary setpoint calculation, CN-TAS-08-36, has been revised to reflect this change and is provided as Attachment 2 to this letter.

#### EICB-02F

Westinghouse proprietary calculation CN-TAS-09-5, Rev 1 on page 14 states that the operability limit (OL) setting is  $2xST_BTU$  (where ST is the setting tolerance and BTU is the bistable trip unit). In Attachment 5, Appendix E of licensing amendment request the licensee stated that for St. Lucie, the OL band is synonymous with the as-found acceptance criteria band. This attachment further stated that historically, St. Lucie has used an as-found tolerance band width equal to 2 times the procedure ST as the basis for the initiation of the corrective action under the CAP (corrective action program). Thus an as-found tolerance of greater than  $\pm 0.50\%$  does not seem to be justified and should not be used. The intent of RIS 2006-17 is to identify instrument deviations that exceed the expected deviations at an early stage so that potential instrument failures can be detected. The licensee is requested to justify the large OL (as-found value) values used in the Westinghouse calculation. As an alternative, the licensee should amend the information provided in the August 25, 2011, letter to indicate more realistic OL allowances per the clarifications contained in RIS 2006-17.

#### **Response**

As discussed with the EICB reviewers during the September 21, 2011 public meeting, the as-found tolerance (OL Limits) for the RPS Steam Generator Water Level - Low bistable will be changed to  $\pm 20$  millivolts, which is equivalent to  $\pm 0.50\%$ . The associated Westinghouse proprietary setpoint calculation, CN-TAS-08-36, has been revised to reflect this change and is provided as Attachment 2 to this letter.

# **ATTACHMENT 5**

Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request

Westinghouse Electric Company, LLC Application for Withholding Proprietary Information From Public Disclosure

This coversheet plus 7 pages



Westinghouse Electric Company Nuclear Services 1000 Westinghouse Drive Cranberry Township, Pennsylvania 16066 USA

U.S. Nuclear Regulatory Commission Document Control Desk 11555 Rockville Pike Rockville, MD 20852 Direct tel: (412) 374-4643 Direct fax: (724) 720-0754 e-mail: greshaja@westinghouse.com Proj letter: FPL-11-272 CAW-11-3275

October 20, 2011

## APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

Subject: Calculation Note CN-TAS-08-36, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 1" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced calculation note is further identified in Affidavit CAW-11-3275 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

The subject document was prepared and classified as Westinghouse Proprietary Class 2. Westinghouse requests that the document be considered proprietary in its entirety. As such, a non-proprietary version will not be issued.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Florida Power and Light.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-11-3275, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance, Westinghouse Electric Company LLC, Suite 428, 1000 Westinghouse Drive, Cranberry Township, Pennsylvania 16066.

Very truly yours,

J. A. Gresham, Manager **Regulatory** Compliance

Enclosures

### **AFFIDAVIT**

STATE OF CONNECTICUT:

SS WINDSOR Locks

COUNTY OF HARTFORD:

Before me, the undersigned authority, personally appeared C. M. Molnar, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

C. M. Molnar, Senior Engineer Regulatory Compliance

Sworn to and subscribed before me this  $\frac{\partial U}{\partial ay}$  of  $\frac{\partial C T \partial B \in P}{\partial C = 2011}$ 

Subscribed and Suparty Phetote me, a Notary Public, In and for County of Hartford and State of Connecticut. this \_\_\_\_\_\_day of \_\_\_\_\_\_\_. 20 //.

JOAN GRAY Notary Public My Commission Expires January 31, 2012

- (1) I am Senior Engineer, Regulatory Compliance, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.
- (2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse Application for Withholding Proprietary Information from Public Disclosure accompanying this Affidavit.
- (3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.
- Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations,
   the following is furnished for consideration by the Commission in determining whether the
   information sought to be withheld from public disclosure should be withheld.
  - (i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.
  - (ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

- (b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.
- Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.
- (d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.
- (e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.
- (f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

- (a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.
- (b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.
- (c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

- (d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.
- (e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.
- (f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.
- (iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390; it is to be received in confidence by the Commission.
- (iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.
- (v) The proprietary information sought to be withheld in this submittal is that which is contained in Calculation Note CN-TAS-08-36, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 1" (Proprietary), for submittal to the Commission, being transmitted by Florida Power and Light letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse is that associated with justifying setpoint uncertainties and operability limits for St. Lucie Unit 1 under extended power uprate (EPU) conditions and may be used only for that purpose

This information is part of that which will enable Westinghouse to:

(a) Support the St. Lucie Unit | EPU License Amendment Request.

Further this information has substantial commercial value as follows:

- (a) Westinghouse plans to sell the use of similar information to its customers for the purpose of defending setpoint uncertainties and operability limits in licensing submittals.
- (b) Westinghouse can sell support and defense of analyses involving setpoint uncertainties and operability limits.
- (c) The information requested to be withheld reveals the distinguishing aspects of a methodology which was developed by Westinghouse.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar calculations and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

## **PROPRIETARY INFORMATION NOTICE**

Transmitted herewith is the proprietary version of a document furnished to the NRC in connection with requests for generic and/or plant-specific review and approval. The document is to be considered proprietary in its entirety.

## **COPYRIGHT NOTICE**

The report transmitted herewith bears a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in this report which is necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

## Attachment 3

## St. Lucie Unit 1 Technical Specifications Table 2.2-1 Revision to Proposed Change Submitted By FPL Letter L-2010-259 Regarding Extended Power Uprate License Amendment Request

### Description of the Change

EPU LAR Attachment 1, Section 3.1, Renewed Facility Operating License and Technical Specification Changes, Item 7. TS 2.2 LIMITING SAFETY SYSTEM SETTINGS – TABLE 2.2-1 – REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS revised the setpoint for Functional Unit 7 - Steam Generator Water Level – Low.

Based on a revised Westinghouse setpoint calculation provided in Attachment 2, FPL is revising the Allowable Value for the Steam Generator Water Level – Low setpoint from the EPU LAR proposed value of ≥34.78% to ≥35.0%.

The proposed Technical Specification (TS) Table 2.2-1 is modified as follows:

 FUNCTIONAL UNIT 7, Steam Generator Water Level – Low – Allowable Value is changed from the current TS value of ≥19.5% Water Level - each steam generator and the EPU LAR proposed TS value of ≥34.78% Water Level - each steam generator to ≥35.0% Water Level - each steam generator.

Note that EPU LAR proposed changes to Table 2.2-1 have been revised by FPL letters L-2011-341 (dated August 25, 2011, Accession No. ML11242A150) and L-2011-423 (dated October 10, 2011, Accession No. ML11285A045). The marked-up and clean pages in Attachment 4 also contain the changes identified in the referenced letters.

#### Basis for the Change

As discussed in EPU LAR Attachment 1, the revised setpoint for the reactor protective instrumentation trip on low SG level was determined using the methodology described in RIS 2006-17, NRC Staff Position on the Requirements of 10 CFR 50.36, "Technical Specifications," Regarding Limiting Safety System Settings During Periodic Testing and Calibration of Instrument Channels. To implement this methodology, an Allowable Value was established for the setpoint, and required actions were added to the TS should the setpoint be outside the Allowable Value limits.

Based on the revised Westinghouse setpoint calculation for the steam generator water level – low, FPL is revising the Allowable Value setpoint to  $\geq$ 35.0%. Although the Allowable Value is the same as the TS setpoint, the Field Trip Setpoint (procedure setpoint) is 35.5% and the as-found tolerance is ±0.5%. The Field Trip Setpoint and the methodology used to determine the Field Trip Setpoint, the as-found acceptance criteria band, and the as-left acceptance criteria are specified in UFSAR Section 7.2.

Marked-up and retyped pages for the revised change to TS Table 2.2-1 are provided in Attachment 4 to this letter.

#### No Significant Hazards Consideration

The proposed Allowable Value is consistent with RIS 2006-17 since it is based on the Field Trip Setpoint, rather than the TS setpoint and the associated as-found acceptance criteria is sufficiently tight to identify abnormal instrument channel performance at an early stage. The change in the Allowable Value setpoint does not affect the conclusions of the no significant hazards consideration. As such, the conclusions of EPU LAR Attachment 1, Section 5.2.C, "No Significant Hazards Consideration for the Steam Generator Water Level Limiting Safety System Setting" remain valid. Accordingly, the proposed change 1) does not involve a significant increase in the probability or consequences of an accident previously evaluated, 2) does not create the possibility of a new or different kind of accident from any previously evaluated, and 3) does not result in a significant reduction in a margin of safety.

#### Environmental Evaluation

This change is conservative with respect to the value of the EPU LAR proposed TS setpoint for the steam generator water level – low. The environmental considerations evaluation contained in EPU LAR remains valid. Accordingly, the proposed license amendment is eligible for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 50.22(b), no environmental impact statement or environmental assessment is needed in connection with the approval of the proposed license amendment.

# ATTACHMENT 4

# Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request

Marked-Up and Clean Technical Specification Pages

This coversheet plus 2 pages

## **TABLE 2.2-1**

## **REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS**

Manual Reactor Trip Power Level – High (1)	Not Applicable	Not Applicable	
Power Level – High (1)		Not Applicable	
Four Reactor Coolant Pumps Operating	≤ 9.61% above THERMAL POWER, with a minimum setpoint of 15% of RATED THERMAL POWER, and a maximum of < 107.0% of RATED THERMAL POWER.	<ul> <li>9.61% above THERMAL POWER, and a minimum setpoint of 15% of RATED THERMAL POWER and a maximum of &lt; 107.0% of RATED THERMAL POWER.</li> </ul>	
Reactor Coolant Flow – Low (1)	Eminimum		
Four Reactor Coolant Pumps Operating	> 95% of design reactor coolant flow with 4 pumps operating *	> 95% of design reactor coolant flow with 4 pumps operating *	
Pressurizer Pressure – High	<u>&lt;</u> 2400 psia	<u>≤</u> 2400 psia	34.78%
Containment Pressure – High	<u>≤</u> 3.3 psig	≤ 3.3 psig	fun
Steam Generator Pressure Low (2)	<u>≥</u> 600 psia	≥ 600 psia	35.0%
Steam Generator Water Level – Low	≥ <del>20.5%</del> Water Level – each steam	≥ 19.5% Water Level – each steam generator	
Local Power Density – High (3)	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.	Trip set point adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.	
			_
Design reactor coolant flow with 4 pumps of	perating is 365,000 gpm. (, refer to T , refer to COLR T	echnical Specification LCO 3.2.5.	
	Reactor Coolant Flow – Low (1) Four Reactor Coolant Pumps Operating Pressurizer Pressure – High Containment Pressure – High Steam Generator Pressure Low (2) Steam Generator Water Level – Low Local Power Density – High (3)	Initiation Coolant Fumps Operating       ≥ 0.01/0 dbote intraction of 15% of RATED THERMAL POWER, and a maximum of < 107.0% of RATED THERMAL POWER.	Inductor Coolant Pumps Operating       2 of the animum setpoint of 15% of RATED THERMAL POWER, and a maximum of < 107.0% of RATED THERMAL POWER.       3 of the animimum setpoint of 15% of RATED THERMAL POWER and a maximum of < 107.0% of RATED THERMAL POWER.         Reactor Coolant Flow – Low (1)       minimum 9 5% of decign reactor coolant flow with 4 pumps operating *       2 95% of decign reactor coolant flow with 4 pumps operating *         Pressurizer Pressure – High       ≤ 3.3 psig       ≤ 3.3 psig         Containment Pressure – High       ≤ 3.3 psig       ≤ 3.3 psig         Steam Generator Water Level – Low       ≥ 20.6% Water Level – each steam generator       ≥ 40.0 psia         Steam Generator Water Level – Low       ≥ 20.6% Water Level – each steam generator       ≥ 40.5% Water Level – each steam generator         Local Power Density – High (3)       Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.       Trip set point adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.         Stear Generator coolant flow with 4 pumps operating is 266,000 gpm.       * refer to Technical Specification LCO 3.2.5.

## TABLE 2.2-1

# **REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS**

FUNCTIONAL UNIT		TRIP SETPOINT	ALLOWABLE VALUES	
1.	Manual Reactor Trip	Not Applicable	Not Applicable	
2.	Power Level – High (1)			
	Four Reactor Coolant Pumps Operating	9.61% above THERMAL POWER, with a minimum setpoint of 15% of RATED THERMAL POWER, and a maximum of < 107.0% of RATED THERMAL POWER.	≤ 9.61% above THERMAL POWER, and a minimum setpoint of 15% of RATED THERMAL POWER and a maximum of ≤ 107.0% of RATED THERMAL POWER.	
3.	Reactor Coolant Flow – Low (1)		· ·	
	Four Reactor Coolant Pumps Operating	> 95% of minimum reactor coolant flow with 4 pumps operating *	> 95% of minimum reactor coolant flow with 4 pumps operating *	
4.	Pressurizer Pressure – High	<u>≤</u> 2400 psia	<u>≤</u> 2400 psia	
5.	Containment Pressure – High	<u>≤</u> 3.3 psig	<u>≤</u> 3.3 psig	
6.	Steam Generator Pressure – Low (2)	<u>≥</u> 600 psia	<u>≥</u> 600 psia	
7.	Steam Generator Water Level – Low	> 35.0% Water Level – each steam generator	≥ 35.0% Water Level – each steam generator	
8.	Local Power Density – High (3)	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.	Trip set point adjusted to not exceed the limit lines of Figures 2.2-1 and 2.2-2.	

<sup>\*</sup> For minimum reactor coolant flow with 4 pumps operating, refer to Technical Specification LCO 3.2.5.