

#### November 2, 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 the identified Attachment 2.

L-2011-465 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 2 Docket No. 50-389

Renewed Facility Operating License No. NPF-16

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

#### References:

- (1) R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2011-021), "License Amendment Request for Extended Power Uprate," February 25, 2011, Accession No. ML110730116.
- (2) Email from T. Orf (NRC) to C. Wasik (FPL), "St. Lucie 2 EPU draft RAIs Instrumentation & Control (EICB)," July 26, 2011.
- (3) R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2011-346), "Response to NRC Instrumentation & Controls Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request," August 25, 2011, Accession No. ML11242A148.
- (4) 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.

By letter L-2011-021 dated February 25, 2011 [Reference 1], Florida Power & Light Company (FPL) requested to amend Renewed Facility Operating License No. NPF-16 and revise the St. Lucie Unit 2 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).

ADDI

By email from the NRC Project Manager dated July 26, 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 four questions (EICB-1 through EICB-4).

During the review of the St. Lucie <u>Unit 1</u> EPU LAR, NRC staff requested changes related to new footnotes proposed for TS Table 2.2-1, Reactor Protective Instrumentation Trip Setpoint Limits. As these changes were also applicable to St. Lucie Unit 2, FPL letter L-2011-346 [Reference 3], dated August 25, 2011, submitted the TS Table 2.2-1 changes proposed by the NRC staff. In addition, in response to RAI question EICB-1, Reference 3 included a copy of the Westinghouse Electric Company, LLC (Westinghouse) CN-TAS-09-5 Revision 1, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2." By email from the NRC Project Manager dated September 16, 2011 [Reference 4], additional information related to the Allowable Value for the reactor protective system steam generator level – low setpoint was requested.

Attachment 1 to this letter provides the FPL response to the requests for additional information. Attachment 2 provides Westinghouse calculation CN-TAS-09-5 Revision 2, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2." 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-2011-021 [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 02 - 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 NRC Questions Regarding EPU LAR Requests for Additional Information Dated July 26, 2011 and September 16, 2011

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 Extended Power Uprate (EPU) License Amendment Request (LAR) for St. Lucie Unit 2 that was submitted to the NRC by FPL via letter (L-2011-021), February 25, 2011, Accession No. ML110730116.

In an email dated July 26, 2011 from NRC (Tracy Orf) to FPL (Chris Wasik), Subject: St. Lucie 2 EPU draft RAIs – Instrumentation & Control (EICB), the NRC staff requested additional information regarding FPL's request to implement the Extended Power Uprate. The RAI consisted of four (4) questions from the NRC Instrumentation and Controls Branch (EICB). FPL letter (L-2011-346), August 25, 2011 Accession No. ML11242A148 submitted the Westinghouse Electric Company, Inc. (Westinghouse) calculation for determining the steam generator level low setpoint requested by EICB-1. These four RAI questions and the FPL responses are documented below.

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 information regarding FPL's request to implement the Extended Power Uprate. The RAI consisted of two (2) questions from the NRC Instrumentation and Control (I&C) Engineering Branch. These two RAI questions (designated by FPL as EICB-01F and EICB-02F) and the FPL responses are documented below.

#### EICB-1

Staff needs documentation of the setpoint methodology being used to determine the revised setpoint as well as a sample calculation for review. Since only one limiting safety system setpoint is being changed as a result of the Extended Power Uprate (EPU), the licensee is requested to provide the staff with the setpoint calculation and the methodology. The calculation should clearly state the analytical limit, the limiting trip setpoint, the nominal trip setpoint, total loop uncertainty, the allowable value, as-left tolerance, and as-found tolerance, and the methodology should describe the basis for determining these values.

#### Response

Westinghouse setpoint calculation CN-TAS-09-5, Revision 1, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2" was previously provided via FPL letter L-2011-346. Revision 2 of calculation CN-TAS-09-5 is provided as Attachment 2 to this letter (proprietary) and reflects updated as-found and as-left tolerance bands as discussed in the response to EICB-01F and EICB-02F below. This response provides supplemental information to support the review of the Westinghouse calculation.

The St. Lucie Unit 2 Steam Generator Level - Low Field Trip Setpoint (FTSP) is equivalent to the Nominal Trip Setpoint (NTSP), which is defined in TSTF-493, "Clarify Application of Setpoint Methodology for LSSS Functions," as the Limiting Trip Setpoint (LTSP) with margin added. As documented in Table 2.8.5.0-4 of Attachment 5 to the EPU LAR, the safety analyses used an

analytical limit (AL) of 1% for the Steam Generator Level - Low reactor trip function. As discussed in Attachment 5, Appendix E of the EPU LAR, minimum required uncertainty margins for each protection function are maintained as safety analysis input parameters. For the Steam Generator Level - Low protection function, the minimum required uncertainty margins are 5% and 14% for normal and harsh conditions respectively. The selected AL value of 1% was conservatively based on the current Technical Specifications (TS) setpoint of ≥ 20.5% and added additional margin beyond the minimum 14% required uncertainty allowance. As documented in Westinghouse setpoint calculation CN-TAS-09-5, Revision 2, the RPS Steam Generator Level - Low trip function total loop uncertainty (TLU) plus setting tolerance (ST) is 2.86% span for the normal environment and 12.97% span for the harsh environment. The FTSP of 35.5% water level and TS setpoint of ≥ 35% have significant margin with respect to the LTSP. Based on the TLU + ST of 12.97% span for the harsh environment, the LTSP would be 1% + 12.97% = 13.97% water level for the harsh environment. Thus, there is 35.5% - 13.97% = 21.53% margin between the FTSP and the LTSP and 35% - 13.97% = 21.03% margin between the TS setpoint and the LTSP.

#### EICB-2

Please state whether or not the licensee is committed to meeting the guidance of TSTF-493, Rev. 4.

#### Response

As discussed in Attachment 5, Appendix E of the EPU LAR, the Steam Generator Level - Low setpoint calculations and the updated surveillance procedures are structured to meet the methodology requirements of 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," pertaining to inclusion of setting tolerance as a bias term and inclusion of an as-found tolerance band constructed around the FTSP. In addition, the proposed TS changes for EPU add two notes to Table 4.3-1 pertaining to the Steam Generator Level - Low function which meet the guidance of TSTF-493 Rev 4. Full compliance with TSTF-493 Rev 4 is not a part of EPU.

#### EICB-3

The licensee has stated that it is following the guidance in the September 7, 2005 letter from Patrick Hiland of Nuclear Regulatory Commission (NRC) to Nuclear Energy Institute (NEI) (ML052500004). In this regard please clarify the following:

(i) The notes do not match the notes in NRC September 7, 2005. Please justify the differences. For example note 1 in the September 7, 2005 letter states:

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

The corresponding note, note 6 in the Technical Specifications Table 2.2- 1, Attachment 3 to the licensing amendment request states:

"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."

- (ii) Part B of the attachment to the September 7, 2005 letter provides guidance for updating the technical specification basis document. The licensee has not addressed all four points in this part of the guidance in the technical specification basis. Please update the technical
- (iii) specification basis document or justify why there is no need to update the technical specification basis.

#### Response

- (i) The proposed TS note to the Steam Generator Level Low setpoint is more conservative than the note reflected in the September 7, 2005 NRC letter. The proposed TS for Steam Generator Level Low allowable value (35.0%) is equal to the lower limit (i.e., non-conservative side) of the as-found tolerance band (36.0% to 35.0%). This eliminates the need for the TS note to address the situation where the setpoint has drifted to beyond the as-found limits, but is still within the allowable value. In all other respects, the proposed TS note is functionally equivalent to the note reflected in the September 7, 2005 NRC letter.
- (ii & iii) As reflected in the proposed second note as transmitted by FPL letter L-2011-346, dated August 25, 2011, information pertaining to derivation of the field trip setpoint and the associated asfound and as-left tolerance bands will be maintained in Section 7.2 of the UFSAR (rather than in the TS Bases document). The information to be added to UFSAR Section 7.2 will address the four points in part B of the September 7, 2005 letter.

#### EICB-4

Please explain whether the field trip setpoint (FTSP) (NRC term for this is Nominal Trip Setpoint or NTSP) is the setpoint that is implemented by your calibration and surveillance procedures and that the as-left tolerance (ALT) and the as-found tolerances (AFT) are determined with respect to the FTSP (NTSP). Also explain how your surveillance and corrective action program (CAP) requirements for the Steam Generator Level Low-Low setpoint deviations and evaluations are based on the FTSP (NTSP) rather than the Trip Setpoint as indicated on Table 2.2-1, page 2-5 of Attachment 3, Technical Specifications Markups and Clean Pages.

#### Response

The field trip setpoint is the setpoint implemented in the surveillance procedures. The as-left and as-found tolerances are determined with respect to the field trip setpoint. This response is supported by Westinghouse proprietary setpoint calculation CN-TAS-09-5, Revision 2, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2", which is provided as Attachment 2 to this letter.

As reflected in FPL letter L-2011-346 dated August 25, 2011, the proposed TS notes pertaining to the Steam Generator Level – Low trip function have been relocated and modified to clarify the question raised in EICB-4. Specifically, the notes are relocated from Table 2.2-1 "Reactor Protective Instrumentation Trip Setpoint Limits" to Table 4.3-1 "Reactor Protective Instrumentation Surveillance Requirements," and the words "trip setpoint" have been replaced with "field trip setpoint." The first note requires that if the setpoint is found outside of the as-found tolerance band, then the channel must be evaluated (under the corrective action program) to verify that it is functioning as required before returning the channel to service. As stated in the first paragraph of this response, the as-found tolerance band is determined based on the field trip setpoint.

#### 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 stats 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

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 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-09-5, 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 ± 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 Level – Low bistable will be changed to ± 20 millivolts, which is equivalent to ± 0.50%. The associated Westinghouse proprietary setpoint calculation, CN-TAS-09-5, 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



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e-mail: greshaja@westinghouse.com

Proj letter: FPL-11-273

CAW-11-3276 October 20, 2011

### APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

Subject: Calculation Note CN-TAS-09-5, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced calculation note is further identified in Affidavit CAW-11-3276 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-11-3276, 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 day of octobe 2011

Public, in and for County of Hartford

and State of Connecticut, this 20

JOAN GRAY
Notary Public

My Commission Expired January 31, 2012

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- (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.
- (4) 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

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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.
- (c) 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-09-5, "Setpoint Uncertainties and Operability Limits for the Steam Generator Level RPS and AFAS Functions for St. Lucie Unit 2" (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 2 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 2 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 2 Technical Specifications Table 2.2-1 Revision to Proposed Change Submitted by FPL Letter L-2011-021 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 8 - Steam Generator Level – Low.

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

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

• FUNCTIONAL UNIT 8, Steam Generator Level – Low – Allowable Value is changed from the current TS value of ≥19.5% and the EPU LAR proposed TS value of ≥ 34.1% to ≥ 35.0%.

Note that EPU LAR proposed change to Table 2.2-1 has been revised by FPL letter L-2011-346 dated August 25, 2011 (Accession No. ML11242A148). The marked-up and clean pages in Attachment 4 also contain the changes identified in the referenced letter.

#### Basis for the Change

As discussed in EPU LAR Attachment 1, the revised setpoint for the reactor protective instrumentation trip on low steam generator (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 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  $\pm 0.5\%$ . 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 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 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 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

	<b>FUNCTIONAL UNIT</b>	TRIP SETPOINT	ALLOWABLE VALUES
1.	Manual Reactor Trip	Not Applicable	Not Applicable
2.	Variable Power Level – High <sup>(1)</sup>		
	Four Reactor Coolant Pumps Operating	$\leq$ 9.61% above THERMAL POWER, with a minimum setpoint of 15% of RATED THERMAL POWER, and a maximum of $\leq$ 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.	Pressurizer Pressure – High	≤ 2370 psia	≤ 2374 psia
4.	Thermal Margin/Low Pressure <sup>(1)</sup>		
	Four Reactor Coolant Pumps Operating	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-3 and 2.2-4. Minimum value of 1900 psia	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-3 and 2.2-4. Minimum value of 1900 psia.
5.	Containment Pressure – High	$\leq$ 3.0 psig $\begin{cases} psia^{(2)} \end{cases}$	≤ 3.1 psig
6.	Steam Generator Pressure – Low	≥ 626.0 <del>psia (2) &lt;</del>	≥ 621.0 psia (2)
7.	Steam Generator Pressure <sup>(1)</sup> Difference – High (Logic in TM/LP Trip Unit)	≤ 120.0 psid (35.0%(3))	≤ 132.0 psid
8.	Steam Generator Level – Low	≥ <del>20.5% (3)</del>	≥ <del>19.5% (3)</del> { 35.0% (3) }

TABLE 2.2-1
REACTOR PROTECTIVE INSTRUMENTATION TRIP SETPOINT LIMITS

	<b>FUNCTIONAL UNIT</b>	TRIP SETPOINT	ALLOWABLE VALUES	
1.	Manual Reactor Trip	Not Applicable	Not Applicable	
2.	Variable Power Level – High <sup>(1)</sup>			
	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.	Pressurizer Pressure – High	≤ 2370 psia	≤ 2374 psia	
4.	Thermal Margin/Low Pressure (1)			
	Four Reactor Coolant Pumps Operating	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-3 and 2.2-4. Minimum value of 1900 psia.	Trip setpoint adjusted to not exceed the limit lines of Figures 2.2-3 and 2.2-4. Minimum value of 1900 psia.	
5.	Containment Pressure – High	≤ 3.0 psig	≤ 3.1 psig	
6.	Steam Generator Pressure – Low	≥ 626.0 psia <sup>(2)</sup>	≥ 621.0 psia <sup>(2)</sup>	
7.	Steam Generator Pressure <sup>(1)</sup> Difference – High (Logic in TM/LP Trip Unit)	≤ 120.0 psid	≤ 132.0 psid	
8.	Steam Generator Level – Low	≥ 35.0% <sup>(3)</sup>	≥ 35.0% <sup>(3)</sup>	