

December 2, 2003

Mr. James J. Sheppard
President and Chief Executive Officer
STP Nuclear Operating Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

SUBJECT: SOUTH TEXAS PROJECT, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS
TO ELIMINATE THE TURBINE MISSILE DESIGN BASIS (TAC NOS. MB7233
AND MB7234)

Dear Mr. Sheppard:

The Commission has issued the enclosed Amendment No. 158 to Facility Operating License No. NPF-76 and Amendment No. 146 to Facility Operating License No. NPF-80 for the South Texas Project, Units 1 and 2, respectively. The amendments consist of changes to the Updated Final Safety Analysis Report (UFSAR) in response to your application dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003.

The amendments would revise the UFSAR by eliminating the turbine missile design basis.

A copy of our related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

David Jaffe, Senior Project Manager, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-498 and 50-499

Enclosures: 1. Amendment No. 158 to NPF-76
2. Amendment No. 146 to NPF-80
3. Safety Evaluation

cc w/encls: See next page

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RidsNrrPMDJaffe	RidsRgn4MailCenter (B. Johnson)	

ACCESSION NO: ML033360481

*No substantive changes

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STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-498

SOUTH TEXAS PROJECT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 158
License No. NPF-76

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by STP Nuclear Operating Company* acting on behalf of itself and for Texas Genco, LP, the City Public Service Board of San Antonio (CPS), AEP Texas Central Company, and the City of Austin, Texas (COA) (the licensees), dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

*STP Nuclear Operating Company is authorized to act for Texas Genco, LP, the City Public Service Board of San Antonio, AEP Texas Central Company, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended to authorize revision to the Updated Final Safety Analysis Report (UFSAR), as set forth in the application for amendment by the licensee dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003. The licensee shall update the UFSAR to incorporate the revision to the basis as described in the amendment application dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003, and shall submit the revised description authorized by these amendments with the next update of the UFSAR.
3. The license amendment is effective as of its date of issuance shall be implemented within 30 days from the date of issuance. The UFSAR changes shall be implemented in the next periodic update to the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Robert A. Gramm, Chief, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Date of Issuance: December 2, 2003

STP NUCLEAR OPERATING COMPANY

DOCKET NO. 50-499

SOUTH TEXAS PROJECT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 146
License No. NPF-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by STP Nuclear Operating Company* acting on behalf of itself and for Texas Genco, LP, the City Public Service Board of San Antonio (CPS), AEP Texas Central Company, and the City of Austin, Texas (COA) (the licensees), dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

*STP Nuclear Operating Company is authorized to act for Texas Genco, LP, the City Public Service Board of San Antonio, AEP Texas Central Company, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

2. Accordingly, the license is amended to authorize revision to the Updated Final Safety Analysis Report (UFSAR), as set forth in the application for amendment by the licensee dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003. The licensee shall update the UFSAR to incorporate the revision to the basis as described in the amendment application dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003, and shall submit the revised description authorized by these amendments with the next update of the UFSAR.
3. The license amendment is effective as of its date of issuance shall be implemented within 30 days from the date of issuance. The UFSAR changes shall be implemented in the next periodic update to the UFSAR in accordance with 10 CFR 50.71(e).

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Robert A. Gramm, Chief, Section 1
Project Directorate IV
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Date of Issuance: December 2, 2003

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 158 AND 146 TO

FACILITY OPERATING LICENSE NOS. NPF-76 AND NPF-80

STP NUCLEAR OPERATING COMPANY, ET AL.

SOUTH TEXAS PROJECT, UNITS 1 AND 2

DOCKET NOS. 50-498 AND 50-499

1.0 INTRODUCTION

By application dated November 14, 2002, as supplemented by letters dated October 30, and November 6, 2003, STP Nuclear Operating Company (STPNOC - the licensee) proposed to eliminate the turbine missile design basis from the South Texas Project Electric Generating Station (STP), Unit 1 and Unit 2, Updated Final Safety Analysis Report (UFSAR) and remove the Turbine Overspeed operating specification from the Technical Requirements Manual (TRM) (Refs. 1, 2 and 3). The supplements dated October 30, and November 6, 2003, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on February 18, 2003 (68 FR 7821).

Section 3.5.1.3 of the STP UFSAR describes the station design basis for turbine missiles. TRM Specification 3/4.3.3.4 contains the operational requirements for the turbine overspeed components credited for the prevention/mitigation of turbine overspeed events that could contribute to the generation of a turbine missile. STPNOC proposes to eliminate UFSAR Section 3.5.1.3 design basis description by replacing the current description with the phrase, "Turbine missiles have been evaluated not to be a credible threat for the STP design basis." STPNOC also proposes to delete the TRM Specification 3/4.3.3.4.

The turbine system maintenance program (TSMP) requires inspections, maintenance, calibration, and/or testing of the functional integrity of turbine components at specified intervals. The components that are included in this program are the Low Pressure Turbine Rotors, Turbine Valves, Electrical Overspeed Protection device and the Mechanical Overspeed device. STPNOC states in Reference 3 that it does not plan to eliminate the turbine maintenance and monitoring program but it will no longer be governed by criteria described in licensing documents. A copy of the proposed change to the licensing documents was included in the submittal.

2.0 REGULATORY EVALUATION

The evaluation methodology that will be eliminated is specifically described in the UFSAR and STPNOC determined that the proposed change requires prior NRC approval as a departure

from a methodology as described in Title 10 of the *Code of Federal Regulations* (10 CFR), Section 50.59(c)(2)(viii).

STP's UFSAR states that it meets the intent of Regulatory Guide (RG) 1.115 Rev. 1, "Protection Against Low-Trajectory Turbine Missiles" (Ref. 4). RG 1.115 supports compliance with General Design Criterion 4, "Environmental and Dynamic Effects Design Bases," of Appendix A to 10 CFR Part 50, which requires, in part, that structures, systems, and components important to safety be appropriately protected against the effects of missiles that might result from equipment failures.

The regulatory evaluation applied in the review of the licensee's proposed changes has been developed consistent with the objectives of the NRC staff's Probabilistic Risk Assessment (PRA) Policy Statement, "Use of Probabilistic Risk Assessment Methods in Nuclear Activities: Final Policy Statement," for enhanced decisionmaking and will result in more efficient use of resources, improvement in safety, and reduction of unnecessary burden.

The staff finds that the licensee in Section 5 of Reference 1 identified the applicable regulatory requirements. The regulatory guidance on which the NRC staff based its acceptance is RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis" (Ref. 5). RG 1.174 describes a risk-informed approach, acceptable to the NRC, for assessing the nature and impact of proposed licensing-basis changes by considering engineering issues and applying risk insights.

3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment which are described in Sections 5 and 4, respectively, of Reference 1. The detailed evaluation below will support the conclusion that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Section 3.5.1.3.5 of the current UFSAR states, in part;

The results of the turbine missile analysis have demonstrated that the probability of damage to safety-related components is less than 10^{-7} per year, which satisfies [the] regulatory requirements. This probability is maintained below this value by maintaining the probability of turbine missile generation below 10^{-4} per year, which is accomplished by the South Texas Turbine System Maintenance Program described in section 3.5.1.3.4.

The UFSAR evaluation was found to be acceptable by the NRC staff (Ref. 6) based on consistency with RG 1.115 which states that the $1E-7$ per year frequency criterion is to be applied to a loss of an essential (safety-related) system. STPNOC's submittal (Ref. 1) concludes that turbine missiles pose no credible threat to the nuclear safety design of the STP units and warrant no regulatory consideration at STP. The licensee provides a risk evaluation of relocating the TSMP out of NRC controlled documentation to support the conclusion that turbine missiles pose no credible threat.

The risk from turbine generated missiles is a combination of the frequency of turbine missile generation, the likelihood that a missile will damage equipment, and the conditional core damage or large early release probabilities (CCDP and CLERP, respectively) given the damaged equipment. The frequency of missile generation was derived from a Westinghouse analysis, the probability that a missile would damage equipment was taken from the UFSAR analysis, and the CCDP was estimated using the STP probabilistic safety analysis. The CLERP was bounded by considering the likelihood of an early release following the type of accident sequence associated with the equipment failure caused by a turbine missile.

3.1 Frequency of Turbine Missile Generation

Westinghouse estimated the frequency of failure of the STP turbine (Ref. 7) using a methodology initially described in Westinghouse Topical Report WCAP-11525 (Ref. 8) and approved by the NRC staff for generic use (Ref. 9). Subsequently, the NRC staff determined that the results in WCAP-11525 were not valid for governor and throttle valves in Westinghouse BB-296 steam chests (Ref. 10) due to several incidents of sticking governor and throttle valves. Westinghouse revised WCAP-11525 and issued a new Topical Report, WCAP-14732, Revision 1 (Ref. 11), that addressed the NRC staff concerns. The NRC staff has not approved WCAP-14732, Revision 1, for generic use but has approved several plant specific license amendments (Refs. 10 and 12) based, in part, on evaluations described in the WCAP. Westinghouse applied the methodology in WCAP-14732, Revision 1 (Ref. 7), to the STP turbines as part of the evaluation performed to support the November 14, 2002, submittal.

A turbine can fail due to material failure at speeds up to design speed (120 percent to 130 percent of turbine operating speeds) or by runaway overspeed failure that may result in turbine speeds of 180 percent to 190 percent prior to destructive failure of the turbine wheels or shaft. In Reference 3 the licensee stated that the dominant contributor to turbine failure is destructive overspeed and that this type of failure is a function of the testing frequency of turbine valves. The current testing frequency is once per month and Westinghouse estimated the failure frequency for one month and three month test intervals to be $7.7E-7$ per year and $1.1E-6$ per year, respectively (Ref. 3). STPNOC states that they would not expect the test interval to exceed 12 months (Ref. 3). This frequency will allow the station to test the valves sufficiently in advance of refueling outages to be able to incorporate any required maintenance into the refueling outage schedule.

Based on the favorable orientation of the STP turbine and the limited number of structures, systems, and/or components (SSCs) credited in the PRA within the +/- five degree strike zone, the probability of a missile striking and damaging a SSC is very small. If no SSCs are damaged, the resulting transient is similar to a turbine trip and has a very small probability of becoming a core damage sequence. The licensee noted that conservatively assuming that the frequency of turbine failure as high as one per year will yield a change in risk estimate that does not exceed the change in risk guidelines in RG 1.174. The licensee chose to use a conservative estimate of 1.0 turbine failure event per year instead of performing additional turbine failure frequency calculations. The NRC staff finds that the turbine failure frequency estimates provided by STP indicate that the frequency of turbine failures is very small and this qualitative conclusion is sufficient to support the review of this licensing action.

3.2 Probability That a Missile Would Damage Equipment

An evaluation that estimated the conditional probability of turbine missile striking and damaging specified safety-related SSCs was performed during the design of the plant. The conditional damage probabilities for 13 SSCs were developed that range between about $6E-6$ and about $3E-4$. The damaged SSCs include SSCs that belong to each of the two units and the damage probabilities consider missiles that could be generated by the failure of either of the two turbines. The conditional damage probabilities are summarized in the individual plant examination (IPE) report (Ref. 13). The IPE obtained the SSCs and associated damage probabilities results from the UFSAR (Ref. 14). The evaluation and the results in the UFSAR were reviewed and were found by the NRC staff to be sufficient to support the conclusion that the conditional probability of damage to safety-related SSCs by turbine missiles is acceptably low, i.e., that the sum of the probabilities of damage to safety-related components by a turbine missile is less than $1E-3$ (Ref. 6). The NRC staff concludes that these quantitative results are also sufficient to support the risk informed analysis in the submittal.

There are several nonsafety-related SSCs within the potential damage zone that were not included in the original analysis but that are credited in the PRA. The nonsafety related SSCs include an instrument air system supporting a back-up control room ventilation capability, the small technical support center diesel generator, some ventilation dampers, and nonsafety-related switch gear and transformers. These SSCs are similar to the safety-related SSCs which include emergency power diesel generators, steam lines, an emergency cooling water train, and safety-related switchgear and transformers. The licensee reviewed the consequences of the failures of these nonsafety-related SSCs (Ref. 3) and determined that their failures have a similar but less significant impact on risk than the safety-related SSCs included in the analysis. Based on the very small impact on risk of the safety-related SSCs that are included in the analysis, the NRC staff finds that including the nonsafety-significant SSCs would result in an insignificant change in the risk estimate and conditional damage probability estimates for the nonsafety-related SSCs are not necessary.

3.3 Conditional Core Damage and Large Early Release Probabilities

The licensee identified the basic events in the PRA that represent the failure of the SSCs struck and damaged by turbine missiles. They estimated the CCDP given missile damage for each of the 13 identified SSCs by setting these events to fail in the event tree modeling of the initiating event associated with the failure of the damaged SSCs. The licensee then modified these CCDPs, given missile damage to SSCs caused by turbine failure, by multiplying the PRA result with the probability of missile damage to the SSC(s). The CCDP for a turbine failure without any missile damage to SSCs other than the turbine itself, is also included in the evaluation. This yields the CCDP, given turbine failure, for each SSC and for the sequence with no SSC failures. The licensee then summed these CCDPs to estimate a total CCDP, given turbine failure, of $5.4E-7$ and $6.0E-7$ for Units 1 and 2, respectively.

Summing the CCDPs assumes that the probability of damage to each of the 13 SSCs is independent of damage to any other SSC although SSCs in close proximity could be failed by a single missile. The acceptance criteria in RG 1.115 state that the sum of the missile damage probabilities should be less than $1E-3$. Generating results that can be summed for comparison to this criterion also requires that the probability of failure of the identified SSCs be independent of each other. Based on the above, the NRC staff finds the technique to estimate the total

CCDPs, given turbine failure, to be consistent with the methods used to develop the input parameters and is acceptable.

Revision 4 of STPNOC's PRA estimates a total core damage and large early release frequency of $9.08E-6$ per year and $5.37E-07$ per year, respectively. This version of the PRA was used to support this submittal. The STPNOCs PRA has been extensively reviewed and has been found to be of sufficient quality to support a graded quality assurance license amendment (ML992930101), a risk-informed inservice inspection relief request (ML003749167), and a special treatment requirements exemption request (ML012040370). Based, in part, on these previous reviews and, in part, on the very small risk implications of the proposed change that would require major inaccuracies in the PRA to influence the conclusion, the NRC staff finds the quality of the PRA adequate to support this licensing action.

As discussed above, the licensee chose to conservatively assume a frequency of 1.0 per year for turbine failure. Neglecting the current turbine failure frequency, a maximum increase in core damage frequency (CDF) is obtained by assuming that the proposed change will increase the turbine failure frequency from zero to 1 per year. The resulting increases in CDF of $5.4E-7$ per year and $6.0E-7$ per year for Units 1 and 2 respectively, are below the very small increase guideline of $1E-6$ per year in RG 1.174. The licensee reported that, with the exception of a turbine missile that penetrates the containment, the change in large early release frequency (LERF) would be, in most instances, at least a factor of 20 below the CDF. For the medium loss of coolant accident induced by a missile into the containment, the CCDP, given turbine failure, is $5.95E-9$, so the LERF would be dominated by the sum of the other core damage scenarios. Reducing the total CCDP, given turbine failure, by a factor of 20 and assuming a turbine frequency increase of 1 per year, the resulting increases in LERF of $2.7E-8$ per year and $3.0E-8$ per year for Units 1 and 2, respectively, are below the very small increase in LERF of $1E-7$ per year in RG 1.174.

The change in risk estimates are very conservative estimates because the frequency of turbine failure and missile generation is much smaller than the 1.0 assumed in the analysis. The licensee also stated that there is a decrease in risk that can be postulated from the reduction in the potential for a plant trip from reduced testing of the turbine governor and intercept valves. The NRC staff finds that the risk evaluation performed by STPNOC indicate that the increases in risk associated with removing the TSMP from the UFSAR and the TRM is very small and well below the acceptable change in risk criteria in RG 1.174.

3.4 Conclusions Regarding Safety Assessment

The proposed change was evaluated on the basis of PRA findings and risk insights using the guideline of Regulatory Guide 1.174. STPNOC's submittal addressed the five principles discussed in RG 1.174 and the NRC staff concurs with the following conclusions. The change is consistent with current regulations because the change does not require an exemption to any regulation. STPNOC is not proposing to change the design basis of the plant or how the plant responds to transient or accidents and, therefore, the proposed change is consistent with the defense-in-depth philosophy and does not involve a reduction in margin of safety. The change in risk is very small and well below the acceptable change in risk guideline in RG 1.174 and consistent with the intent of the Commission's Safety Goal Policy Statement. The turbine itself remains within the scope of the Maintenance Rule and STP will maintain a maintenance and

monitoring program for the turbine because of the critical nature of the turbine and associated systems to overall plant performance and reliability.

Based on the review and findings discussed above, the NRC staff concludes that STPNOC's proposal to remove the turbine system maintenance program from the UFSAR and TRM such that the TSMP will no longer be governed by criteria described in licensing documents is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (68 FR 7821, published February 18, 2003). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

7.0 REFERENCES

1. Letter, dated November 14, 2002, J. J. Sheppard (Vice President and Assistant to the President and CEO, STP Nuclear Operating Company), to U. S. Nuclear Regulatory Commission, South Texas Project, Units 1 & 2, Docket Nos. 50-498, 50-499, Proposed License Amendment to Eliminate the Turbine Missile Design Basis.
2. Letter, dated October 30, 2003, from T. L. Jordan (Vice President, Engineering & Technical Services, STP Nuclear Operating Company), to U. S. Nuclear Regulatory Commission, South Texas Project, Units 1 & 2, Docket Nos. 50-498, 50-499, Response to NRC Questions Regarding a Proposed License Amendment to Eliminate the Turbine Missile Design Basis.

3. Letter, dated November 6, 2003, T. J. Jordan (Vice President, Engineering & Technical Services, STP Nuclear Operating Company), to U. S. Nuclear Regulatory Commission, South Texas Project, Units 1 & 2, Docket Nos. 50-498, 50-499, Clarification of Response to NRC Questions Regarding a Proposed License Amendment to Eliminate the Turbine Missile Design Basis.
4. NRC Regulatory Guide 1.115, "Protection Against Low-Trajectory Turbine Missiles," July 1977.
5. NRC Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," November 2002.
6. NUREG-0781, Safety Evaluation Report Related to the Operation of South Texas Project, Units 1 and 2, April 1986.
7. STP Turbine Valve Test Frequency Extension to 3 months: An Evaluation of the Applicability of WCAP-14732, Revision 1, to STP Units 1 and 2, Letter Report ST-WN-NOC-01-000129, June 26, 2001.
8. WCAP-11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency," June 1987.
9. Letter, dated November 2, 1989, (U.S. Nuclear Regulatory Commission), to D. M. Musolf (Manager, Northern States Power Company), Use of WCAP-11525 in Future License Amendment Requests by Westinghouse Owners Group (Turbine Valve Test Frequency Evaluation Subgroup Members).
10. Letter, dated April 16, 1998, N. Kalyanam (U. S. Nuclear Regulatory Commission) to J. O'Hanlon (Senior Vice President - Nuclear, Virginia Electric and Power Company), North Anna Power Station, Units 1 and 2 - Issuance of Amendments Regarding a Proposed Technical Specification Change on Turbine and Governor Valves Surveillance Frequency (TAC Nos. MA0172 and MA0173).
11. WCAP-14732, Revision 1, "Probabilistic Analysis of Reduction in Turbine Valve Test Frequency for Nuclear Plants with BB-296 Turbines with Team Chests," Westinghouse Energy Systems, June 1997.
12. Letter, dated February 28, 2000, Kahtan N. Jabbour (U.S. Nuclear Regulatory Commission) to T. F. Plunkett (President - Nuclear Division, Florida Power and Light Company), St. Lucie Unit 2 - Issuance of Amendment Regarding Turbine Overspeed Protection System (TAC No. MA6372).
13. Letter, dated August 28, 1992, S. L. Rosen (Vice President, Nuclear Engineering, Houston Light and Power), to U. S. Nuclear Regulatory Commission, South Texas Project Units 1 and 2, Docket Nos. STN 50-498, STN 50-499, Response to Generic Letter 88-20, Supplements 1, 2, 3, and 4, Individual Plant Examination, Attachment 1, South Texas Project Electric Generating Station Level 2 Probabilistic Safety Assessment and Individual Plant Examination.

14. Houston Lighting & Power Company, "South Texas Project Electric Generating Station Updated Final Safety Analysis Report," Revision 2, December 1991.

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Date: December 2, 2003

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