GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775

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Gentlemen:

River Bend Station - Unit 1
Docket No. 50-458

Gulf States Utilities (GSU) Company hereby files an amendment to the River Bend Station - Unit 1 Facility Operating License NPF-47, pursuant to 10CFR50.90. This application is filed to allow continued plant operation in the event that feedwater heater(s) become inoperable. The attachment to this letter includes the proposed revisions to NPF-47 and the Technical Specifications including justifications for this change.

Pursuant to 10CFR170.12, GSU has enclosed a check in the amount of one hundred fifty dollars ($150.00) for the license amendment application fee. Your prompt attention to this application is appreciated.

Sincerely,

J. C. Deddens
Senior Vice President
River Bend Nuclear Group

JCD/JEB/LAE/ROK/DAS/ch

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

STATE OF LOUISIANA)

PARISH OF WEST FELICIANA)

In the Matter of)

GULF STATES UTILITIES COMPANY)

(River Bend Station - Unit 1)

Docket No. 50-458

AFFIDAVIT

J. C. Deddens, being duly sworn, states that he is a Senior Vice President of Gulf States Utilities Company; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the documents attached hereto; and that all such documents are true and correct to the best of his knowledge, information and belief.

J. C. Deddens

Subscribed and sworn to before me, a Notary Public in and for the State and Parish above named, this 5th day of August, 1988. My Commission expires with Life.

Claudia F. Hurst
Claudia F. Hurst
Notary Public in and for
West Feliciana Parish, Louisiana

ATTACHMENT

GULF STATES UTILITIES COMPANY RIVER BEND STATION
DOCKET 50-458/LICENSE NO. NPF-47

FEEDWATER HEATER(S) OUT OF SERVICE
CONTROL ROD BLOCK INSTRUMENTATION

LICENSING DOCUMENTS INVOLVED: OPERATING LICENSE NPF-47
TECHNICAL SPECIFICATIONS

ITEMS: LICENSE CONDITION 2.C(13)
Table 3.3.6-2

PAGES: 5
3/4 3-62

REASON FOR REQUEST

This amendment request is being submitted in accordance with 10CFR50.90 to clarify License Condition 2.C(13) and revise Technical Specification Table 3.3.6-2, Item 1.b, High Power Setpoint. River Bend Station (RBS) Operating License NPF-47 License Condition 2.C(13), Partial Feedwater Heating, currently states, "The facility shall not be operated with partial feedwater heating for the purpose of extending the normal fuel cycle without prior written approval of the staff." This proposed change would clarify this license condition to allow continued operation of the facility with up to 100°F reduction from the rated feedwater temperature of 420°F during the normal fuel cycle. Planned operation in this mode for the purposes of extending the normal fuel cycle would continue to be prohibited.

In addition, it is proposed that Technical Specification Table 3.3.6-2, Item 1.b, High Power Setpoint, be revised from a trip setpoint of 62.5 ±3% of rated thermal power and an allowable value of 62.5 ±7.5% of rated thermal power to a trip setpoint of ≤ 67.9% of rated thermal power and an allowable value of ≤ 68.2% of rated thermal power. This change is desired to facilitate operation in the partial feedwater heating mode.

Continued operation with partial feedwater heating is desirable in the event certain feedwater heater(s) or string(s) of heaters become inoperable or are necessary to be removed from service to perform non-routine maintenance during a reactor fuel cycle. Operational flexibility and plant capacity factor are improved if the plant is able to continue operating until full heating can be restored.

DESCRIPTION

During NRC review of the RBS operating license application, the NRC staff requested a quantitative analysis for operation with partial feedwater heating (Questions 440.50 and 440.59). Gulf States Utilities' (GSU) response stated the analysis would be provided for staff review and approval prior to operation in this mode. This commitment resulted in the current License Condition 2.C(13). Accordingly, GSU hereby provides the analysis results contained in NEDO-31583 dated May 1988, "Feedwater Heater(s) Out-of-Service Analysis for River Bend Station" (Reference 1) and associated request to clarify License Condition 2.C(13).

Design evaluations reported in the RBS Updated Safety Analysis Report (USAR) and the RBS Cycle 2 Reload Licensing Submittal (Reference 2) justify operation with full feedwater heating which corresponds to a rated feedwater temperature of 420°F. The largest feedwater temperature loss due to inoperable, out-of-service or unavailable heaters is estimated to be 100°F. Thus, the analysis performed to justify operation with partial feedwater heating was based upon operation at rated thermal power and rated core flow conditions with up to 100°F reduction in rated feedwater temperature. This corresponds to operation with a range of rated feedwater temperature from 420°F to 320°F. The analysis performed bounds operation at all power levels up to rated core power with any combination of out-of-service heater stages that would yield up to 100°F feedwater temperature reduction at rated core power and flow conditions. Operation with heater stages that yield 100°F feedwater temperature drop at rated core power and flow conditions would yield less than 100°F feedwater temperature drop at less than rated core power and flow conditions. As depicted in Figure 1 from Reference 7, at reactor power levels below rated, the final feedwater temperature may be less than 320°F. The analysis and the proposed license condition clarification applies to abnormal or unplanned partial feedwater heating during the normal fuel cycle including coastdown.

As detailed in Reference 1, the design evaluations potentially affected by partial feedwater heating operation were reevaluated to determine the effects of this mode of operation. The items considered potentially affected are transient response, reactor core thermal-hydraulic stability margins, emergency core cooling system (ECCS) thermal-hydraulic analysis, acoustic loads during postulated loss of cooling accident (LOCA) events, annulus pressurization loads during postulated LOCA events, containment responses and loads during postulated LOCA events, and fatigue usage of feedwater nozzles, spargers and piping.

Three of the design evaluations - transient response, reactor core thermal-hydraulic stability margins and ECCS thermal-hydraulic analysis - may be cycle and fuel-type dependent, and the impact of partial feedwater heating operation upon these items will be reconsidered in future reload license analyses. The remainder of the design evaluations are independent of cycle and fuel-type.

The evaluation results described in Reference 1 justify safe partial feedwater heating operation for a rated feedwater temperature range of 420°F to 320°F, provided that applicable limits are observed. With respect to limits, the only change as a result of operating in this mode is that the number of days of operation in this mode will have constraints in order to remain within the feedwater sparger fatigue usage factor limit of 1.0. The forty-year average number of days allowable during an operating year at a 50°F drop in rated feedwater temperature is 256 days. The forty-year average number of days allowable during an operating year at a 100°F drop in rated feedwater temperature is 61 days. Administrative controls to track the number of days that the unit is operating with partial feedwater heating and the magnitude of the temperature drop will ensure that this limit is not exceeded.

As described in Reference 1, all USAR Chapter 15 core-wide transients were examined for FWHOS operation. This mode of operation results in decreased

feedwater temperature and increased subcooling in the core downcomer region and at the core inlet.

Three limiting transients were reevaluated in detail. They are:

(1) Generator Load Rejection with Bypass Failure (LRBPF)
(2) Feedwater Flow Controller Failure, Maximum Demand (FWCF)
(3) Loss of 100°F Feedwater Heating (LFWH)

Approved transient analysis methods referred to as GEMINI and described in Reference 4 were used to analyze RBS Cycle 2. This transient analysis method was approved for use in letter G. C. Lainas (NRC) to J. S. Charnley (GE) dated March 22, 1986 (Reference 5). Consistent with RBS Cycle 2 analyses, the evaluations for transients (1) & (2) were performed at 100% power and 100% core flow conditions corresponding to a rated feedwater temperature of 320°F for RBS Cycle 2 conditions. Initial conditions, transient responses, transient peak value results, and minimum critical power ratio (MCPR) results for the first two transients listed above are provided in Reference 1.

For FWHOS operation, the results of GEMINI yielded a delta critical power ratio (CPR) of 0.07 for LRBPF and a delta CPR of 0.08 for FWCF. These delta CPRs are below the limiting delta CPR of 0.11 documented in Sections 10 & 11 of the reload license submittal for RBS Cycle 2 (Reference 2). Therefore, the consequences of these events are bounded by the current Technical Specification limits with respect to LRBPF and FWCF events.

The RBS plant specific analysis for the 100°F loss of feedwater heating transient (transient (3) above) was performed consistent with RBS Cycle 2 analysis initial conditions of 102% power and 100% core flow for RBS Cycle 2. The resulting delta CPR for the 100°F loss initiated from 320°F is 0.09. Therefore, the LFWH analysis for FWHOS operation is adequately bounded by the 420°F normal feedwater temperature delta CPR results of 0.11 currently identified in Section 10 of Reference 2.

The rod withdrawal error (RWE) transient analyses were also reevaluated. As shown in Reference 1, the results of this evaluation indicate that the resulting delta CPR is unchanged from 0.11 as reported in Reference 2.

Since the resulting delta CPRs for the events analyzed above remain bounded by the limiting delta CPR of 0.11 documented in Section 11 of Reference 2, the operating limit MCPR (OLMCPR) does not need to be changed as a result of FWHOS operation. Additionally, the off-rated power-dependent MCPRp limits are not affected by FWHOS operation and remain bounded by the current RWE off-rated power-dependent MCPRp limits. As explained in Reference 1, the off-rated flow-dependent $MCPR_f$ limits for FWHOS operation are bounded by the current $MCPR_f$ limits.

Under operation with reduced feedwater temperature, the relationship between vessel steam flow and core thermal power changes. Less steam flow is generated at the same thermal power and therefore turbine first stage pressure (TFSP) is reduced. This TFSP is utilized for a variety of functions as an indication of core thermal power, including: initiating bypasses of the reactor scram inputs to the reactor protection system on turbine stop valve (TSV) position and turbine control valve (TCV) fast closure, bypass of

the end-of-cycle recirculation pump trip (EOC RPT), and providing information to the rod control and information system (RCIS) to initiate control rod movement restrictions at the high power and low power setpoints. Therefore, the effect of reduced feedwater temperature is to raise the thermal power for which EOC RPT and scram bypass and the RCIS high power and low power setpoint functions are set.

Conservatism in the current RBS Technical Specification scram bypass TFSP nominal setpoint was assessed by comparing it to the RBS startup test data for "TFSP vs. Reactor Power." The current Technical Specification setpoint is conservative in the scram bypass power level by approximately 6% for feedwater temperature operation at 420°F and by approximately 4% for feedwater temperature operation at 320°F when compared to the setpoint actually required. Therefore, the conservatism in the current Technical Specification setpoint adequately accounts for feedwater heater(s) out-of-service (FWHOS) operation.

This reduced TFSP will also have an effect on the rod withdrawal limiter subsystem of the RCIS. The purpose of the rod withdrawal limiter (RWL) is to mitigate the consequences of an operator initiated rod withdrawal error. The RWL restricts control rod movement to fixed displacements as a function of core power. The design basis withdrawal distances are 2 feet between 20% and 70% of rated thermal power and 1 foot above 70% of rated thermal power (Reference 3). Below the low power setpoint (LPSP), the banked position withdrawal sequence mode of the RCIS forces adherence to certain constraints on control rod movement to mitigate the consequences of a control rod drop accident.

Since TFSP is the power signal input to the RCIS, reduced feedwater temperature will have biasing effects as explained above. Analysis has shown this reduced TFSP corresponds to 1.5 and 5.4% of rated thermal power at the LPSP and high power setpoint (HPSP), respectively, for operation with 100°F reduction in rated feedwater temperature.

Technical Specification Table 3.3.6-2 currently specifies a trip setpoint of 27.5 ±3 and 62.5 ±3% of rated thermal power for the LPSP and HPSP, respectively. For partial feedwater heating operation, adequate margin currently exists in the LPSP trip setpoint specified in Technical Specification Table 3.3.6-2. However, with respect to the HPSP trip setpoint, the specified range of ±3% of rated thermal power is not adequate to account for the effects of the reduced TFSP while operating with up to 100°F reduction in rated feedwater temperature. Therefore, the proposed HPSP change to a trip setpoint of $\leq$ 67.9% rated thermal power and an allowable value of $\leq$ 68.2% rated thermal power will allow RBS to calibrate the instrument in order to conservatively account for the reduced TFSP while operating in this mode. The proposed allowable value and trip setpoints were determined using the setpoint methodology provided in Reference 8. These proposed values will ensure that the analytical limit of 70% rated thermal power will not be exceeded by including the appropriate uncertainties as described in Reference 8. As stated above, this proposed change is consistent with the RWE analysis, which assumed control rod withdrawals would be limited to 1 foot above 70% of rated thermal power. The proposed change is also consistent with the upper allowable value currently specified in RBS Technical Specification Table 3.3.6-2, the Standard Technical Specifications and the Technical Specifications of other licensed BWR/6 plants.

SIGNIFICANT HAZARDS CONSIDERATION

In accordance with the requirements of 10CFR50.92, the following discussions are provided in support of the determination that no significant hazards are created or increased by the changes proposed in this amendment request.

1. No significant increase in the probability or the consequences of an accident previously evaluated results from this request because:

   As described in Reference 1, all USAR Chapter 15 core-wide transients were examined for FWHOS operation. This mode of operation results in decreased feedwater temperature and increased subcooling in the core downcomer region and at the core inlet. As shown below, the effects of this do not increase the probability of any previously evaluated accidents or transients.

   Three limiting transients were reevaluated in detail. They are:

   (1) Generator Load Rejection with Bypass Failure (LRBPF)
   (2) Feedwater Flow Controller Failure, Maximum Demand (FWCF)
   (3) Loss of 100°F Feedwater Heating (LFWH)

   The results of the evaluations for transients (1) & (2) demonstrate that these delta CPRs are below the limiting delta CPR of 0.11 documented in Section 10 & 11 of the reload license submittal for RBS Cycle 2 (Reference 2). Therefore, the consequences of these events are bounded by the current Technical Specification limits with respect to LRBPF and FWCF events.

   The RBS plant specific analysis for the 100°F loss of feedwater heating transient (transient (3) above) for FWHOS operation is adequately bounded by the 420°F normal feedwater temperature delta CPR results of 0.11 currently identified in Section 10 of Reference 2.

   The RWE transient analyses were also reevaluated. As shown in Reference 1, the results of this evaluation indicate that the resulting delta CPR is unchanged from 0.11 as reported in Reference 2.

   Since the resulting delta CPRs for the events analyzed above remain bounded by the limiting delta CPR of 0.11 documented in Section 11 of Reference 2, the operating limit MCPR (OLMCPR) does not need to be changed as a result of a RWE during FWHOS operation. Additionally, the off-rated power-dependent MCPRp limits are not affected by FWHOS operation and remain bounded by the current RWE off-rated power-dependent MCPRp limits. As explained in Reference 1, the off-rated flow-dependent $MCPR_f$ limits for FWHOS operation are bounded by the current $MCPR_f$ limits.

   The consequences of anticipated transient without scram (ATWS) and reactor vessel overpressurization transients are less severe under the initial conditions of partial feedwater heating than that of normal feedwater heating. With reduced feedwater temperature at

rated thermal power, the initial steaming rate is less, which would yield less severe results during an ATWS event. Lower initial operating pressure and lower steam flow rate during FWHOS operation yield lower peak vessel pressure for the most limiting main steam line isolation valve closure event.

An evaluation of the impact of FWHOS operation on the RBS LOCA analysis was also performed. The results of this evaluation show that the resulting peak cladding temperature would be lower than the 2144°F value reported in USAR Chapter 6 and below the 2200°F limit identified in 10CFR50.46.

Acoustic and flow-induced loads on reactor internals created during a LOCA with FWHOS operation were evaluated as described in Reference 1. While these loads would increase slightly, the results of this evaluation concluded that there is adequate conservatism in the evaluation and significant design margin remains available to account for these loads during FWHOS operation.

The impact of FWHOS operation on the containment LOCA response was also evaluated. Both the main steamline break and recirculation line break cases were reanalyzed over the FWHOS operation power/flow region. The peak drywell and wetwell pressure and temperature, pool swell, condensation oscillation and chugging loads were evaluated. The peak drywell-to-wetwell differential pressure during the FWHOS operation occurred under recirculation line break at the maximum vessel subcooling condition on the power/flow map. This peak differential pressure increased by 1.02 psi. However, the resulting differential pressure is still below the design differential pressure of 25 psid presented in USAR Table 6.2-1. Also, the pool swell, condensation oscillation, and chugging loads evaluated at the worst power/flow condition during the FWHOS operation vary slightly over the peak values presented in USAR Section 6. The analysis concluded that this variation is insignificant and there is adequate design margin to account for these loads during FWHOS operation.

A study was performed to assess the impact of FWHOS operation on the annulus pressurization (AP) loads for River Bend Station. The feedwater line break case results in the greatest forces upon the reactor pressure vessel and the greatest pressure differentials across the biological shield wall. The break flow for this case with FWHOS operation was determined to be less than that presented in the USAR during the inventory depletion period when the peak AP loads occur. Therefore, the normal operation AP loads calculated in the RBS USAR bound those expected to result under FWHOS.

An evaluation of the effect of FWHOS operation on the feedwater nozzle at RBS was also performed. Assuming 80% capacity factor with continuous FWHOS operation, the fatigue usage factor for the feedwater nozzle would increase by 0.0214 over 40 years of continuous FWHOS operation. However, the fatigue usage factor would still be less than 0.8, which is below the limit of 1.0.

A standard stress analysis was performed on the feedwater system piping up to the first feedwater guide lug outside the containment for a bounding feedwater temperature of 250°F. Results of this study show that with FWHOS operations, the feedwater piping fatigue usage factor is less than that at rated conditions due to a lower temperature gradient through the piping wall.

An evaluation was performed to examine the impact of FWHOS operation on the feedwater sparger for RBS. A case was analyzed to determine the number of days of FWHOS operation allowable per year (for 40 years) without exceeding the feedwater sparger fatigue usage factor limit of 1.0. The results show that the 40-year average number of days allowable during an operating year for FWHOS operation is 256 days for a rated feedwater temperature of 370°F and 61 days for a rated feedwater temperature of 320°F. Administrative controls to ensure that the number of days and the magnitude of temperature reduction during FWHOS operation is tracked will ensure that FWHOS operation cannot increase the probability or consequences of any accident previously evaluated.

As explained in detail in Reference 1, with regard to reactor core thermal-hydraulic stability, FWHOS operation is bounded by the fuel integrity analyses described in Reference 6, "Compliance of the General Electric Boiling Water Reactor Fuel Designs to Stability Licensing Criteria," NEDE-22277-P-1, October 1984. Therefore, the generic operator recommendations on thermal-hydraulic stability are still applicable and adequately address FWHOS operation.

Impact of FWHOS operation on the TSV position and TCV fast closure reactor scram bypass setpoints and the EOC RPT bypass setpoint and the RCIS high power and low power setpoints was also evaluated. The required upper bound for bypass of the TSV position and TCV fast closure reactor scrams and EOC RPT is 40% of rated thermal power. Below 40% rated thermal power, high neutron flux, vessel pressure, and other normal scram functions are sufficient to provide margin to the safety limits (even with TSV or TCV closures) as identified in USAR Section 15.2.3.2.3.2. Therefore, below 40% rated thermal power, the TSV and TCV scrams and EOC RPT functions are bypassed.

Turbine first-stage pressure (TFSP) is the parameter used to activate these reactor scram and EOC RPT bypasses below 40% rated thermal power. Under operation with reduced feedwater temperature, the relationship between vessel steam flow (and therefore TFSP) and core thermal power changes. Less steam flow is generated at the same thermal power and the TFSP is reduced. Therefore, the effect of reduced feedwater temperature is to raise the thermal power level for which the EOC RPT and scram bypass functions are set.

Conservatism in the current RBS Technical Specification scram bypass TFSP nominal setpoint was assessed by comparing it to the RBS startup test data for "TFSP vs. Reactor Power." The current Technical Specification setpoint is conservative in the scram bypass power level by approximately 6% for feedwater temperature operation at 420°F and by approximately 4% for FWHOS operation at 320°F when

compared to the setpoint actually required. Therefore, the conservatism in the current Technical Specification setpoint adequately accounts for FWHOS operation.

The proposed change in RBS Technical Specification Table 3.3.6-2, Item 1.b, High Power Setpoint, restricts plant operation to conditions assumed in the RWE analysis and is consistent with the upper range of the allowable value currently specified. The proposed change is also consistent with the Standard Technical Specifications and the Technical Specifications of other licensed BWR/6 plants.

Based upon these considerations, it is concluded that operation with FWHOS and the proposed change to the high power setpoint Technical Specification do not increase the probability or consequences of any accidents previously evaluated.

2. This request would not create the possibility of a new or different kind of accident from any accident previously evaluated because:

   FWHOS operation results in decreased feedwater temperature and increased subcooling in the core downcomer region and at the core inlet. As shown in Item 1 above, the impact of FWHOS operation has been found to be adequately bounded by the current analysis provided in the River Bend Station USAR with the exception of the feedwater sparger fatigue usage factor. The number of days of FWHOS operation must be limited to ensure that the feedwater sparger fatigue usage factor does not exceed 1.0. Administrative controls to ensure that the number of days and magnitude of temperature reduction during FWHOS operation is tracked will ensure that FWHOS operation cannot create the possibility of a new or different kind of accident from any previously evaluated. Additionally, FWHOS operation does not involve any hardware changes and is well within the capability of existing equipment. Hence, no new failure modes are introduced.

   The proposed change in RBS Technical Specification Table 3.3.6-2, Item 1.b, High Power Setpoint, restricts operation to conditions assumed in the RWE analysis and is consistent with the upper range currently specified. The proposed change is also consistent with the Standard Technical Specifications and the Technical Specifications of other licensed BWR/6 plants. Therefore, this mode of operation does not create the possibility of a new or different kind of accident from any previously evaluated.

3. This request would not involve a significant reduction in the margin of safety because:

   As stated in the response to Item 1 above, the results of the 320°F feedwater temperature FWHOS operation case are bounded by the results of the analyses previously approved on the RBS docket with respect to transient results of OLMCPR, MCPRp and $MCPR_f$, ATWS, vessel overpressurization, peak clad temperature during a LOCA, annulus pressurization loads during a LOCA, reactor core thermal-hydraulic stability, and feedwater piping fatigue usage factor.

The acoustic and flow-induced loads on reactor internals created during a LOCA with FWHOS operation would increase slightly; however, the results of the evaluation concluded that there is adequate conservatism in the evaluation and significant design margin remains available to account for these loads.

With respect to impact of FWHOS on containment LOCA response, the peak drywell-to-wetwell differential pressure for the recirculation line break case increased by 1.02 psi. This differential pressure is still considerably less than the design differential pressure of 25 psid presented in USAR Table 6.2-1. Also, the pool swell, condensation oscillation, and chugging loads evaluated at the worst power/flow condition during FWHOS operation increase slightly over the peak values presented in USAR Section 6. The analysis concluded this increase is insignificant and that adequate design margin exists to account for these loads.

The fatigue usage factor for the feedwater nozzle during FWHOS operation increased by 0.0214 over 40 years of continuous FWHOS operation assuming an 80% capacity factor. However, the fatigue usage factor would still be less than 0.8, which is below the limit of 1.0.

The number of days of FWHOS operation must be limited to ensure that the feedwater sparger fatigue usage factor does not exceed 1.0. Administrative controls to ensure the number of days and magnitude of temperature reduction during FWHOS operation is tracked will ensure that FWHOS operation cannot decrease the margin of safety as defined in the bases to any Technical Specification.

Conservatism in the current TFSP Technical Specification setpoint for the 40% rated thermal power bypass of reactor scram on turbine stop valve position and turbine control valve fast closure and bypass of EOC RPT adequately accounts for FWHOS operation. Therefore, since the setpoint is unchanged, there is no reduction in the margin of safety for this setpoint.

The proposed change in Technical Specification Table 3.3.6-2, Item 1.b, High Power Setpoint, is consistent with current design bases. Additionally, the proposed change is consistent with the conditions assumed in the RWE analysis and is consistent with the upper range currently specified. The proposed change is also consistent with the Standard Technical Specifications and the Technical Specifications of other licensed BWR/6 plants.

It is thus concluded that FWHOS operation and the proposed change to high power setpoint Technical Specification do not reduce the margin of safety.

In conclusion, the proposed operating change will not increase the possibility or the consequences of a previously evaluated event and will not create a new or different kind of accident from any previously evaluated. Also, the results of this request are within all acceptable criteria with respect to system components and design requirements. The ability to perform

as described in the USAR is maintained and therefore, the proposed change does not involve a significant reduction in the margin of safety. Therefore, GSU proposes that no significant hazards are involved.

REVISED LICENSE CONDITION AND TECHNICAL SPECIFICATION

The requested revisions are provided in the Enclosure.

SCHEDULE FOR ATTAINING COMPLIANCE

As indicated above, River Bend Station is currently in compliance with the applicable Technical Specification and license condition. However, in the event that it becomes necessary to remove a feedwater heater from service, this amendment request would be requested to be reviewed on an expedited basis.

NOTIFICATION OF STATE PERSONNEL

A copy of this amendment application has been provided to the State of Louisiana, Department of Environmental Quality - Nuclear Energy Division.

ENVIRONMENTAL IMPACT APPRAISAL

Gulf States Utilities Company (GSU) has reviewed the proposed Technical Specification change against the criteria of 10 CFR 51.22 for environmental considerations. As shown above, the proposed change does not involve a significant hazards consideration, nor increase the types and amounts of effluents that may be released offsite, nor significantly increase individual or cumulative occupational radiation exposures. Based on the foregoing, GSU concludes that the proposed Technical Specification change meets the criteria given in 10 CFR 51.22(c)(9) for a categorical exclusion from the requirement for an Environmental Impact Statement.

REFERENCES

1. "Feedwater Heater(s) Out-of-Service Analysis for River Bend Station," NEDO-31583, May 1988.

2. "Supplemental Reload License Submittal for River Bend Station Reload 1," GE Document 23A5819 Revision 0, July 1987.

3. Klapproth, J. F., BWR/6 Generic Rod Withdrawal Analysis, March 1980 (Appendix 15B, GESSAR II).

4. J. S. Charnley (GE) to H. N. Berkow (NRC), "Revised Supplementary Information Regarding Amendment 11 to GE Licensing Topical Report NEDE-24011-P-A," January 16, 1986.

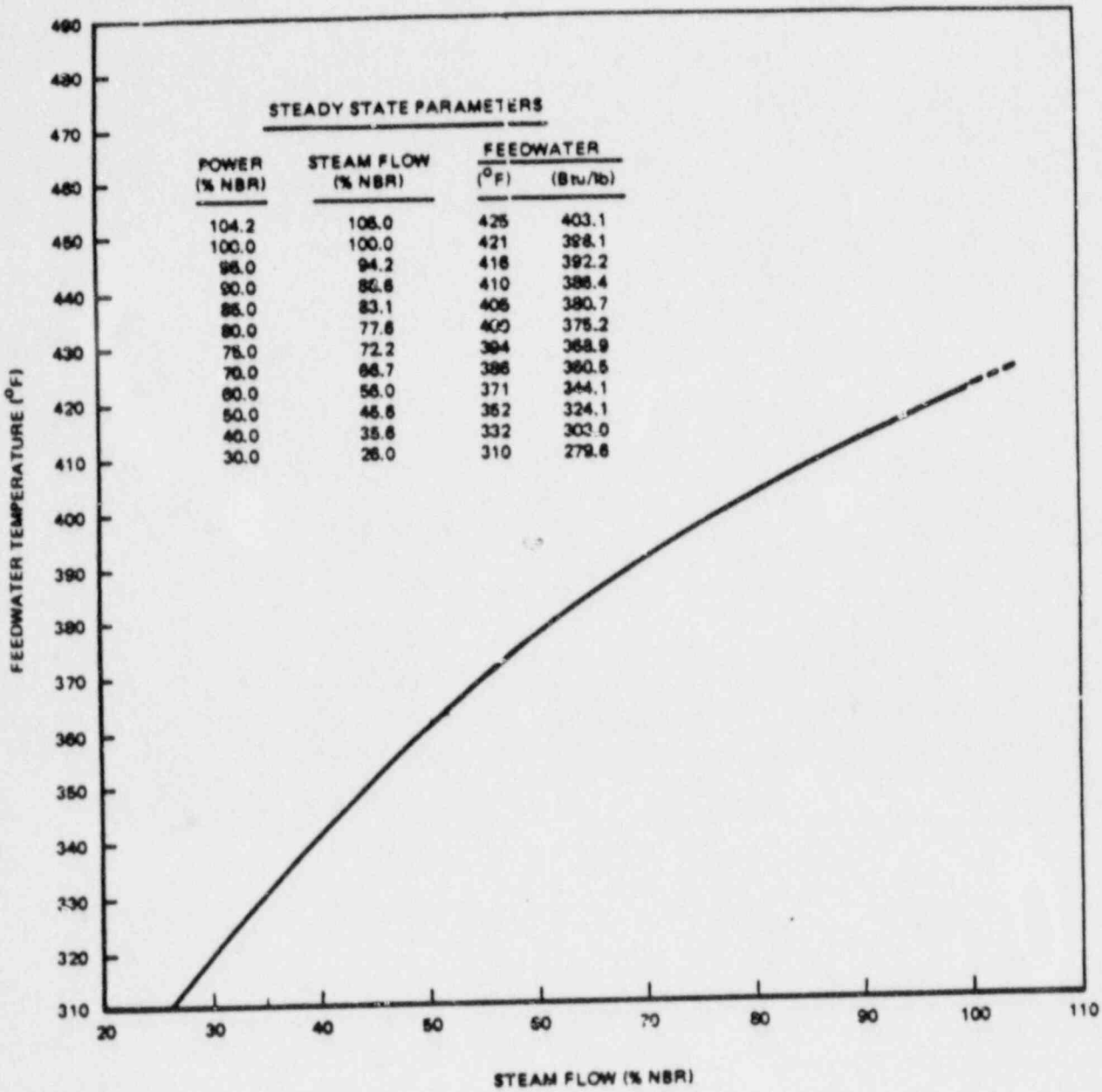
5. Letter, G. C. Lainas (NRC) to J. S. Charnley (GE), "Acceptance for Referencing of Licensing Topical Report NEDE-24011-P-A, 'GE Generic Licensing Reload Report,' Supplement to Amendment 11," March 22, 1986.

6. G. A. Watford, "Compliance of the General Electric Boiling Water Reactor Fuel Designs to Stability Licensing Criteria," NEDE-22277-P-1, October 1984.

7. C. H. Yen, et. al., "River Bend Power Station Transient Safety Analysis Design Report," GEZ-7357, March 1985.

8. W.H. Cooley, Jr., et. al., "General Electric Instrument Setpoint Methodology," NEDC-31336, October 1986.

Figure 1



Estimated Feedwater Temperature and Enthalpy Versus Steam Flow

ENCLOSURE