Tennessee Valley Authority, Post Office Box 2000, Decatur, Alabama 35609-2000

July 3, 2007

TVA-BFN-TS-461S1

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop: OWFN P1-35
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of)
Tennessee Valley Authority)

Docket No. 50-259

BROWNS FERRY NUCLEAR PLANT (BFN) - UNIT 1 - TECHNICAL SPECIFICATIONS (TS) CHANGE TS-461 - MODIFICATION OF RESTART LARGE TRANSIENT TESTING LICENSE CONDITION 2.(G)2 - SUPPLEMENT 1

On June 25, 2007, the Tennessee Valley Authority (TVA) submitted a request for a license amendment (TS-461) to Operating License DPR-33 for BFN Unit 1 to modify license condition 2.G(2) to postpone the performance of a load reject transient test from full power. License condition 2.G(2) currently requires that a main steam isolation valve (MSIV) closure test and a turbine generator load reject from full power be performed prior to exceeding 30 days of plant operation above 3293 megawatt thermal power. After additional consideration, TVA has decided to modify TS-461 to request elimination of the license condition requirement to perform the full power load reject.

The full power MSIV closure transient test was performed on June 23, 2007, in accordance with the existing license condition 2.G(2). Regarding the subject turbine generator load reject test, on June 9, 2007, Unit 1 experienced an unplanned turbine trip and scram from 80 percent power. The integrated plant response to the trip was as expected and the transient was uneventful. Based on the favorable plant response to the unplanned turbine trip from 80 percent power and to the full

D030
NRR

power MSIV closure transient test, TVA is requesting that the license condition 2.G(2) requirement to perform a full power turbine generator load reject transient test be removed.

Additionally, on approval of the BFN Unit 1 extended power uprate (EPU) license amendment, TS-431, which was submitted on June 28, 2004, TVA is agreeable to performing a load reject transient test from EPU conditions.

TVA is requesting approval of this modified license condition as soon as practicable. TVA implementation of the proposed amendment will be made within 10 days of NRC approval.

TVA has determined that there are no significant hazards considerations associated with the proposed amendment and that the change qualifies for a categorical exclusion from environmental review pursuant to the provisions of 10 CFR 51.22(c)(9). Additionally, in accordance with 10 CFR 50.91(b)(1), TVA is sending a copy of this letter and enclosures to the Alabama State Department of Public Health.

There are no new regulatory commitments associated with this submittal. If you have any questions about this submittal, please contact me at (256) 729-3046.

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 03, 2007.

R. G. Jones
General Manager, Site Operations

Enclosures:
1. TVA Evaluation of the Proposed Change
2. Proposed License Condition Change (mark-up)
3. Plant Response - June 9, 2007 - Turbine Trip from 80 Percent Power
4. Plant Response - June 23, 2007 - Main Steam Isolation Valve Closure Test from 100 Percent Power

cc: See page 3

Enclosures
cc: (Enclosures):
State Health Officer
Alabama State Department of Public Health
RSA Tower - Administration
Suite 1552
P.O. Box 303017
Montgomery, Alabama 36130-3017

U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

Mr. James H. Moorman, III, Branch Chief
U.S. Nuclear Regulatory Commission
Region II
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, Georgia 30303-8931

Eva Brown, Project Manager
U.S. Nuclear Regulatory Commission
(MS 08G9)
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

DTL:BCM:BAB
Enclosures
cc (w/o Enclosures):
A. S. Bhatnagar, LP 6A-C
R. H. Bryan, BR 4X-C
W. R Campbell, LP 6A-C
J. C. Fornicola, LP 6A-C
W. M. Justice II, LP 6A-C
R. F. Marks, PAB 1C-BFN
R. G. Jones, NAB 1A-BFN
B. J. O'Grady, PAB 1E-BFN
E. J. Vigluicci, ET 11A-K
NSRB Support, LP 5M-C
EDMS WT CA-K (w/Enclosures)

s:lic/submit/Techspec/TS-461S1 - License Amendment to delete Unit 1 Load Reject Test

Enclosure 1

Browns Ferry Nuclear Plant (BFN) Unit 1

Exigent Technical Specifications (TS) Change TS-461S1 Modification of Restart Large Transient Testing License Condition 2.G(2)

TVA Evaluation of the Proposed Change

1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, the Tennessee Valley Authority (TVA) is submitting a request for a license amendment (TS-461S1) to Operating License DPR-33 for BFN Unit 1. The proposed amendment would modify Unit 1 license condition 2.G(2) to remove the requirement to perform a full power turbine generator load reject transient test.

2.0 PROPOSED CHANGE

The proposed amendment would modify Unit 1 license condition 2.G(2) to eliminate the requirement to perform a full power turbine generator load reject transient test. Since the main steam isolation valve (MSIV) closure transient test referred to in license condition is now complete, the entire license condition 2.G(2) is proposed to be deleted as shown in the marked-up Unit 1 license condition page provided in Enclosure 2.

3.0 BACKGROUND

On June 28, 2004, TVA submitted a Unit 1 license amendment request (TS change request No. 431) for extended power uprate (EPU) operation (ADAMS Accession No. ML04840109). The EPU amendment would increase the maximum authorized power level from the original licensed thermal power (OLTP) of 3293 megawatts thermal (MWt) to 3952 MWt, an approximate 20 percent increase in thermal power. That license amendment is still under NRC review.

In the course of the EPU amendment review, it became apparent that NRC concerns associated with the analysis of the Unit 1 steam dryer for 120 percent operations could not be resolved in a timeframe needed to support the planned restart of Unit 1 from its extended outage. This is due to length of time needed to instrument the steam lines and take in situ steam line data, to develop an acceptable steam dryer model, and to calculate steam

dryer loads. These activities are in progress and the results will be submitted to NRC later this year.

On September 22, 2006, TVA submitted a supplemental TS change request (ML062680459), which revised the original June 28, 2004, Unit 1 EPU application to request approval of a 5 percent increase in thermal power over OTLP (i.e., 3293 MWt to 3458 MWt) until such time as the steam dryer analyses could be completed. A power level increase of this magnitude is traditionally referred to as a "stretch" power uprate. BFN Units 2 and 3 were previously licensed and each has operated for several years at this stretch power level (3458 MWt). This approach to EPU approval for Unit 1 provided a means for Unit 1 to restart from its extended outage with a 5 percent uprate in thermal power with the review of the remainder of the EPU application continuing in parallel.

The September 22, 2006, supplemental TS-431 request for operation at 3458 MWt was approved by NRC on March 6, 2007 (ML063350404) and included approved TS changes for the 5 percent increase in thermal power. This uprated power of 3458 MWt is referred to as the current licensed thermal power (CLTP) in the remainder of this letter. The NRC TS approval also contained two license conditions, 2.G(1) and 2.G(2), on conducting large transient tests. License condition 2.G(1) included a condensate pump trip, a condensate booster pump trip, and a main feedpump test from 100 percent CLTP. License condition 2.G(2) required the performance of a turbine generator load reject and a MSIV closure test from full power. License Condition 2.G(2) is repeated below for reference;

> During the power uprate power ascension test program and prior to exceeding 30 days of plant operation above a nominal 3293 megawatts thermal power level (100-percent OLTP) or within 30 days of satisfactory completion of steam dryer monitoring and testing that is necessary in order to achieve 105-percent OLTP (whichever is longer), with plant conditions stabilized at 105-percent OLTP, TVA shall perform a MS isolation valve closure test and a turbine generator load reject test. Following each test, TVA shall confirm that plant response to the transient is as expected in accordance with previously established acceptance criteria. The evaluation of the test results for each test shall be completed, and all discrepancies resolved, prior to resumption of power operation.

BFN 1 restarted in late May 2007 and first achieved CLTP on June 8, 2007, after a period of fuel preconditioning. Power was then reduced to continue restart testing, and on June 9, 2007,

Unit 1 experienced an unplanned turbine trip and scram from high power (approximately 80 percent CLTP) due to a moisture separator instrumentation problem. The moisture separator problem was remedied and Unit 1 resumed power operation on June 12, 2007.

The Unit 1 integrated plant response to the June 9, 2007, turbine trip was as expected and the scram was uneventful. Based on the favorable plant response to the unplanned turbine trip from 80 percent CLTP, TVA is requesting that license condition 2.G(2) be modified to eliminate the requirement to perform a 100 percent turbine generator load reject transient test. The full power condensate, condensate booster pump, and main feedpump trip tests, and the full power MSIV closure transient tests were performed on June 23, 2007, in accordance with the current existing license conditions. The Unit 1 integrated plant response to these transients was as expected and the scram and scram recovery response for the June 23, 2007, full power MSIV transient test was also uncomplicated.

Since the MSIV closure transient test referred to in license condition 2.G(2) is now complete, the proposed deletion of the full power load reject transient test results in all of license condition 2.G(2) being deleted as shown in Enclosure 2. TVA is requesting approval of this license condition change as soon as practicable. TVA implementation of the proposed amendment will be made within 10 days of NRC approval.

4.0 TECHNICAL ANALYSIS

BFN Unit 1 commenced start-up activities in late May 2007 after a lengthy outage. Descriptions of the return-to-service system testing plan, post-modification testing process, and power ascension testing programs for Unit 1 have been extensively described in several NRC submittals in support of the original EPU amendment request and Unit 1 restart. The overall objective of the Unit 1 test program is to provide a controlled and systematic return of the unit to service. The return-to-service and power ascension testing programs are similar to those successfully employed for the return of Units 2 and 3 to service from their extended outages. NRC reviewed the test plan and found it acceptable as summarized in Section 2.12 of the March 6, 2007, safety evaluation referenced in Section 3 above.

Unit 1 Restart Testing Program

Procedure 1-TI-319, Master Refueling Test Instruction, was established to provide a systematic and sequenced means to restart test Unit 1. The procedure ensures that core verification and all beginning-of-cycle tests are completed prior to commencing fuel loading and power operations for the Unit 1

restart. In addition, this procedure defined a refueling test program to verify the proper reconstruction of the reactor core and operation of equipment to meet regulatory requirements. This test procedure is in addition to TS required surveillance testing and other routine maintenance tests.

The test instruction is organized into several phases with milestones as follows;

- Fuel Load Testing up to Startup
- Zero Power - Reactor Startup Prerequisites
- Initial Critical
- Rated Temperature and Pressure
- Mode Switch to Run
- Raising Reactor Thermal Power from 40% to 55% CLTP
- Reactor Thermal Power from 55% to 80% CLTP
- Reactor Power to 100% CLTP

The test instruction specifies the testing to be performed at each phase, establishes acceptance criteria, and provides requisite steps for the review and management approvals to advance to the next testing phase. Dynamic testing includes control rod scram testing, actuation of reactor main steam safety relief valves (SRVs), high pressure coolant system injection tests, and turbine control and feedwater system testing and control system tuning. Several full power transient tests serve as the culmination of the restart program as captured in Unit 1 license conditions 2.G(1) and 2.G(2). These include a condensate pump trip, a condensate booster pump trip, and a main feedpump trip from full power, as well as a turbine generator load reject and a MSIV closure test from full power. The turbine generator load reject and MSIV closure transient tests result in a reactor shutdown (auto-scram). These transient tests demonstrate the combined integrated response of Unit 1 systems to transients that might be experienced during routine power operations.

June 9, 2007 - Unit 1 Turbine Trip Scram

Unit 1 went critical on May 22, 2007, first achieved CLTP on June 8, 2007, and was in the high power phases of the 1-TI-319 testing sequence on June 9, 2007, when an unplanned main turbine trip occurred from approximately 80 percent CLTP due to a moisture separator instrumentation malfunction. The moisture separator problem was remedied and Unit 1 resumed power operation on June 12, 2007.

As discussed in Section 14.5.2.2 and 14.5.2.4 of the Updated Final Safety Analysis Report, turbine trips and generator load rejects are rapid reactor pressurization transients. The reactor pressurization rates are similar since the turbine stop valve and control valve closure times are both very fast. Above 30 percent

reactor power, a turbine trip or load reject will initiate a direct reactor scram and trip both recirculation pumps.

Due to the scram and rapid vessel pressurization, reactor water level will exhibit a sharp drop as voids collapse, then recover somewhat as the core revoids. From high power conditions with equilibrium decay heat, SRVs will briefly operate to relieve the initial pressurization increase caused by the rapid closure of the main turbine stop/control valves. After this initial pressurization, the turbine Electro-Hydraulic Control (EHC) system has the capacity to control reactor pressure via bypass valve operation to the condenser and the EHC system will quickly return reactor pressure to a zero turbine load pressure setting. The feedwater system should respond to the drop in vessel level and automatically return level to normal following the trip.

The Unit 1 initial reactor conditions at the time of the June 9, 2007, turbine trip were as follows;

Thermal Power - 2761 MWt (79.8% rated CLTP)
Reactor Core Flow - 81 million pounds/hour (79% rated)
Initial reactor pressure - 1020 psig
Feedwater temperature - 361.8°F

A post-trip analysis of the reactor response was performed in accordance with plant procedures. The post-trip analysis determined that the integrated plant response of the reactor shutdown systems and level/pressure control systems was as expected and the scram recovery actions following the turbine trip were uncomplicated. One malfunction was observed in that the D traversing incore probe failed to automatically withdraw and isolate. This problem has since been corrected.

Key observations of the post-trip analysis:

1) All control rods fully inserted
2) Both reactor recirculation pumps tripped as expected
3) Feedwater and turbine EHC system satisfactorily controlled reactor pressure and water level
4) Turbine bypass valves operated properly
5) Main condenser remained available as a heat sink throughout the event
6) Minimum reactor water level was approximately -5 inches (-40 inches from normal operating range)
7) Operation of the High Pressure Coolant Injection (HPCI) or the Reactor Core Isolation Coolant (RCIC) systems was not required
8) Peak recorded reactor pressure was 1099 psig (+79 psi)
9) No SRVs operated

A plot generated from the plant process computer showing reactor water level, average neutron power, and reactor pressure is provided in Enclosure 3. The plot shows the expected initial pressure increase from the stop valve closure and then a return to turbine set pressure as the bypass valves opened. A smooth recovery of reactor water level is seen as the EHC/feedwater control system responded to the turbine trip and maintained reactor vessel level and pressure well within expected values. Peak reactor pressure was approximately 1099 psig, which is about 35 psig below the lowest set SRV; therefore, no SRVs lifted.

Due to a higher initial power level, a turbine trip or load reject from 100 percent CLTP would be nominally more severe than a turbine trip from 80 percent CLTP in terms of pressure increase. The integrated plant response, however, will be similar.

Comparison of June 9, 2007 Turbine Trip to Analytic Cases

For benchmarking, General Electric performed a turbine trip simulation using the plant parameters from the June 9, 2007, scram as initial conditions. For comparison purposes, a 100 percent CLTP turbine trip simulation was also performed.

The initial key parameters used in the two analytic cases are shown in Table 1. The inputs in Table 1 for the 80% case represent actual plant conditions for the June 9 turbine trip. The 100% CLTP case inputs are the nominal expected values for 100% power operation. For remaining input parameters such as bypass valve speed and control rod scram speed, the transient cases used conservative ODYN licensing inputs, so the analytic cases should overpredict the peak reactor pressure and minimum water level. Table 2 provides a comparison of the peak vessel pressure observed during the June 9, 2007, turbine trip with the 80% ODYN analytic case. The results of the 100% ODYN case are also shown.

Table 1 - Key Parameter Initial Conditions For Turbine Trip Cases

Parameter	Based on Plant Event (80% Power)	100% Power Case
Reactor Power (MWt)	2761	3458
Reactor Power (% of Rated)	79.8	100
Core Flow (% of Rated)	79.0	95.9
Reactor Pressure (psia)	1035	1050
Feedwater Temperature (°F)	361.8	381.7
Initial Water Level (inches NR)	36.5	36.5

Table 2 - Comparison of Turbine Trip Cases

Parameter	Plant Event	80% Power ODYN Case	100% Power ODYN Case
Peak Reactor Pressure Increase (psi)	79	86	117
Minimum Reactor Water Level (inches from vessel zero reference)	-5	-15	-15

The ODYN simulation of the plant event predicts larger changes in reactor pressure and level than were actually observed. This is expected with the ODYN licensing basis model assumptions. The ODYN model predicted a vessel pressure change of about 86 psi, while the plant recorded a pressure change of approximately 79 psi. The ODYN model predicted a minimum water level approximately 15 inches below narrow range (NR) instrument zero, while the plant recorded a level drop to approximately 5 inches below NR instrument zero. Though conservative, the ODYN results are reasonably close to the observed values of the actual plant event.

The results for the 100% CLTP turbine trip case are also shown in Table 2. The largest difference in predicted response is in the calculated vessel pressure rise. At 100% power, the reactor pressurization rate will be higher since there is a larger mismatch between the vessel steaming rate and the turbine bypass valve capacity. ODYN predicts the vessel pressure to increase about 117 psi, which is above the lowest set group of reactor SRVs (1035 psig). Therefore, in the ODYN case, SRVs open very briefly (~2 sec) after which the turbine bypass system has the capacity to control reactor pressure. Both analysis cases showed a similar water level decrease due to the scram and initial reactor pressurization. The minimum level was very similar for both simulations with a minimum vessel level approximately 15 inches below instrument zero.

June 23, 2007 - Performance of MSIV Isolation Transient Test from 100% CLTP

A full power MSIV closure transient test was performed on June 23, 2007, in accordance with the existing license condition 2.G(2). The MSIV closure test from full power constitutes a challenging transient event since all four main steam lines (eight MSIVs) are simultaneously isolated from the main condenser during the test.

The Unit 1 reactor initial conditions at the time of the June 23, 2007, MSIV closure test were as follows;

Thermal Power - 3456 MWt (99.9% rated CLTP)
Reactor Core Flow - 88.3 million pounds/hour (86.1% rated)
Initial reactor pressure - 1032 psig
Feedwater temperature - 348.9°F

A post-trip analysis of the reactor response was performed in accordance with plant procedures. The analysis determined that the integrated plant response of the reactor shutdown systems responded as expected. and the scram recovery actions following the trip were uncomplicated.

1) All control rods fully inserted
2) All eight MSIVs met the established test closure criteria of between 3 to 5 seconds
3) HPCI and RCIC successfully autostarted on Low Low reactor water level and reached rated flow
4) Both reactor recirculation pumps tripped as expected on Low Low reactor water level
5) HPCI and RCIC restored vessel level
6) Minimum reactor water level was approximately -46 inches from vessel reference zero
7) Peak recorded reactor pressure was 1072 psig (+40 psi)
8) No SRVs operated as a result of the initial MSIV closure

A plot generated from the plant process computer showing reactor narrow and wide range water level, average neutron power, and reactor pressure is provided in Enclosure 4.

For an MSIV closure event, the scram signal is generated early in the sequence by the MSIV position switches (≤10% closed). As the MSIVs close, the turbine control valves will open to try to maintain turbine throttle pressure. Normally, it would be expected that the initial pressurization of the reactor from the isolation of the main steam lines would be sufficient to lift SRVs. However, BFN Unit 1 is very early in its operating cycle with a core of primarily new fuel, hence, core decay heat is small. For this situation, sufficient steam escapes the vessel during the reactor scram to avoid lifting SRVs as is evidenced by the vessel pressure response recorded in Enclosure 4. After the MSIVs close fully, vessel pressure will slowly rise as seen in the data plot since the reactor is isolated from the normal heat sink provided by main condenser. Reactor steam consumed by the HPCI and RCIC steam turbines and the cold HPCI/RCIC injection water both also serve to relieve reactor pressure. In this event, peak reactor pressure was approximately 1072 psig during the initial pressurization. This is about 60 psig below the lowest set SRV; therefore, no SRVs lifted. At about 100 seconds into the event, operators took control of reactor pressure by

remotely operating SRVs in accordance with plant operating instructions.

Regarding reactor water level, isolation of the steam lines results in the loss of feedwater flow, so reactor level will quickly start declining. In this event, minimum vessel level was approximately -46 inches from vessel zero, which is slightly below the reactor water level Low Low setpoint. As expected, this resulted in the initiation of HPCI and RCIC, and the trip of both recirculation pumps. The plot in Enclosure 4 shows the rapid recovery of vessel level due to the operation of HPCI and RCIC. These two injection systems were allowed to operate and subsequently tripped on high vessel level at about 2 1/2 minutes into the event. A failure of the upper gasket on the HPCI gland seal condenser was observed and was subsequently repaired.

In summary, the Unit 1 integrated plant response to the scram and scram recovery from the June 23, 2007, full power MSIV transient test was uncomplicated. The established test criteria for the MSIV full closure transient test were met and Unit 1 returned to power operation on June 26, 2007. This MSIV transient test provides a comprehensive demonstration of integrated reactor system response in addition to that already demonstrated during the June 9, 2007, 80 percent CLTP turbine trip.

Regulatory Guidance on Avoiding Challenges to the Power Grid

The request for test elimination is consistent with recent NRC guidance provided in NRC Regulatory Issue Summary 2004-05, Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power, and in Generic Letter 2006-02, Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power. These publications stress the importance of maintaining stable grid conditions and managing the risk of activities that potentially represent challenges to the offsite power system. The proposed elimination of the full power load reject would avoid an unnecessary perturbation to the electrical grid system.

Summary

The combination of the June 23, 2007, MSIV full isolation trip and the June 9, 2007, turbine trip from 80 percent CLTP satisfactorily demonstrates the integrated response of BFN Unit 1 to plant pressurization transients. Additionally, a fuel vendor analysis simulation of the turbine trip shows that the reactor response is consistent with the vendor code predictions. The plant response to the planned 100 percent CLTP generator load reject test is expected to be similar to that already demonstrated during the June 9, 2007, turbine trip from 80 percent power. Since a full power load reject test is expected

to simply reaffirm satisfactory safety system performance and reactor level/pressure control systems performance from a nominally higher power level, the proposed elimination of the 100 percent CLTP load reject test is justified.

5.0 REGULATORY SAFETY ANALYSIS

The Tennessee Valley Authority (TVA) is submitting a proposed amendment which modifies Unit 1 license condition 2.G(2) to eliminate the current requirement to conduct a full power turbine generator load reject test.

5.1 No Significant Hazards Consideration

TVA has evaluated whether or not a significant hazards consideration is involved with the proposed change by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of Amendment," as discussed below:

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

Response: No

The requested licensing action would eliminate the current license condition schedule requirement to perform a full power turbine generator load reject transient test. No other changes are proposed. This proposed licensing action will not affect any system, structure, or component designed for the mitigation of previously analyzed events. Therefore, the proposed change does not involve an increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The requested licensing action would eliminate the current schedule requirement to perform a full power turbine generator load reject transient test. No other changes are proposed. Therefore, the proposed TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No

Performance of the full power load reject transient test is not necessary to ensure acceptable plant operation at the high thermal power level. Simple, integrated systems tests have been performed, and a turbine trip from a high power and a main steam isolation valve transient test from full power have been experienced. In addition, other testing has been performed which demonstrated the satisfactory performance of individual components and subsystems. Thus, the proposed elimination of the load reject transient test will not significantly reduce any margin of safety.

Based on the above, TVA concludes that the proposed TS change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

10 CFR 50, Appendix B, Criterion XI, "Test Control" specifies that a testing program be established that demonstrates that plant systems will perform satisfactorily in service and that written test procedures are developed which incorporate the requirements and acceptance limits contained in applicable design documents. As discussed in the previous sections, TVA believes that performance of the subject transient test is not necessary to demonstrate acceptable plant operation. Accordingly, applicable regulatory requirements and criteria will continue to be met.

In conclusion, based on the considerations discussed above, (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 the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed TS changes would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed TS changes do not involve (i) a significant hazards consideration, (ii) a significant

change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed TS change.

Enclosure 2

Browns Ferry Nuclear Plant (BFN) Unit 1

Exigent Technical Specifications (TS) Change TS-461S1
Modification of Restart Large Transient
Testing License Condition 2.G(2)

Proposed Licensed Condition Change (mark-up)

G. (1) During the power uprate power ascension test program and prior to exceeding 30 days of plant operation above a nominal 3293 megawatts thermal power level (100-percent OLTP) or within 30 days of satisfactory completion of steam dryer monitoring and testing that is necessary for achieving 105-percent OLTP (whichever is longer), with plant conditions stabilized at 105-percent OLTP, TVA shall trip a condensate booster pump, a condensate pump, and a main feedwater pump on an individual basis (i.e., one at a time). Following each pump trip, TVA shall confirm that plant response to the transient is as expected in accordance with previously established acceptance criteria. Evaluation of the test results for each test shall be completed and all discrepancies resolved in accordance with corrective action program requirements and the provisions of the power ascension test program.

Deleted.

(2) ~~During the power uprate power ascension test program and prior to exceeding 30 days of plant operation above a nominal 3293 megawatts thermal power level (100-percent OLTP) or within 30 days of satisfactory completion of steam dryer monitoring and testing that is necessary in order to achieve 105-percent OLTP (whichever is longer), with plant conditions stabilized at 105-percent OLTP, TVA shall perform a MS isolation valve closure test and a turbine generator load reject test. Following each test, TVA shall confirm that plant response to the transient is as expected in accordance with previously established acceptance criteria. The evaluation of the test results for each test shall be completed, and all discrepancies resolved, prior to resumption of power operation.~~

H. The licensee must complete the thirteen (13) Unit 1 restart commitments that are discussed in Appendix F of the license renewal application, dated December 31, 2003, as supplemented by letters dated January 31, 2005, March 2, and April 21, 2006. Completion of these activities must be met prior to power operation of Unit 1.

I. This renewed license is effective as of the date of issuance and shall expire midnight on December 20, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By
J. E. Dyer
J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachments:
1. Unit 1 - Technical Specifications - Appendices A and B

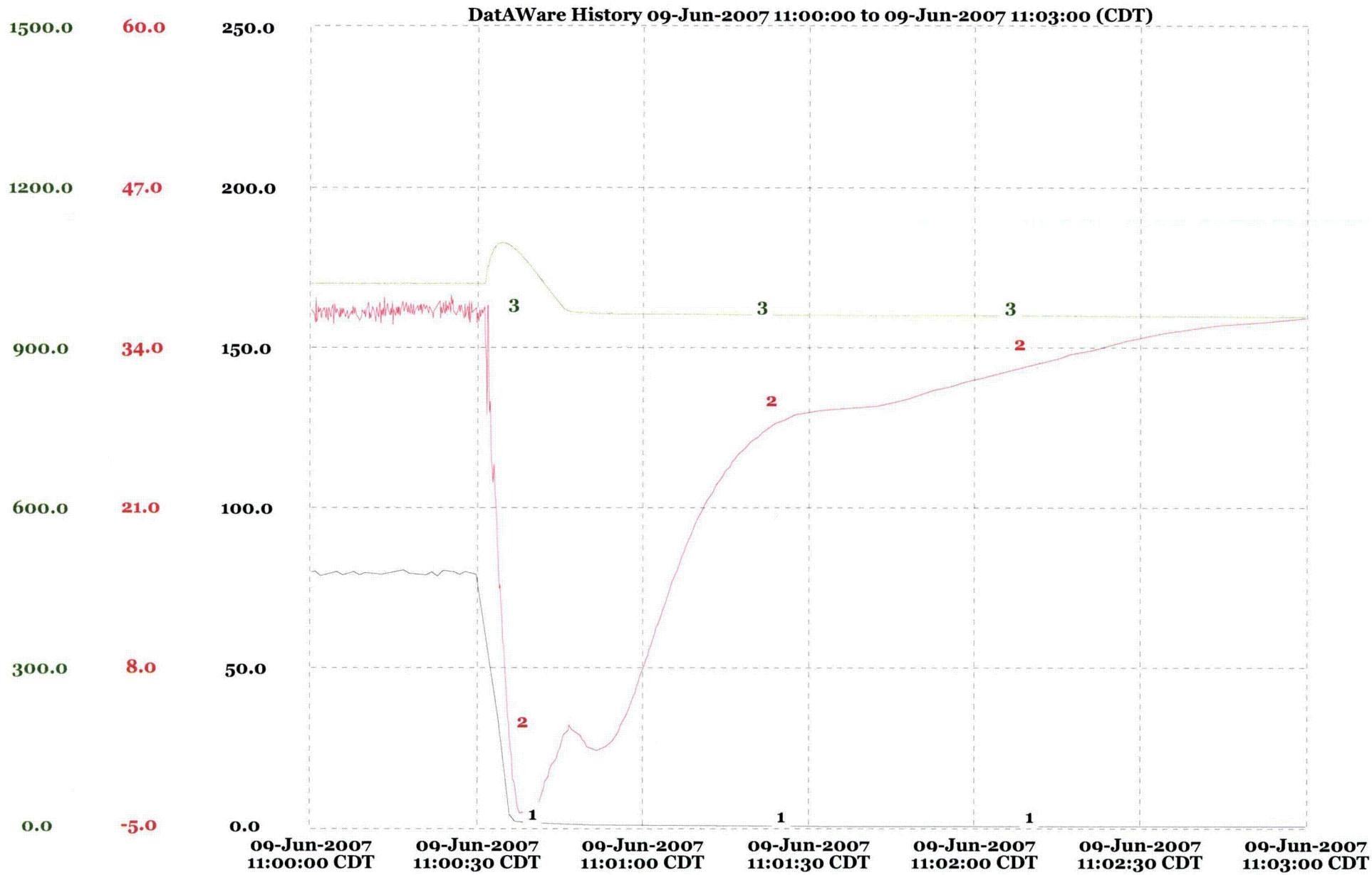
Date of Issuance: May 4, 2006

Enclosure 3

Browns Ferry Nuclear Plant (BFN) Unit 1

Exigent Technical Specifications (TS) Change TS-461S1
Modification of Restart Large Transient
Testing License Condition 2.G(2)

Plant Response - June 9, 2007 - Turbine Trip from
80 Percent Power



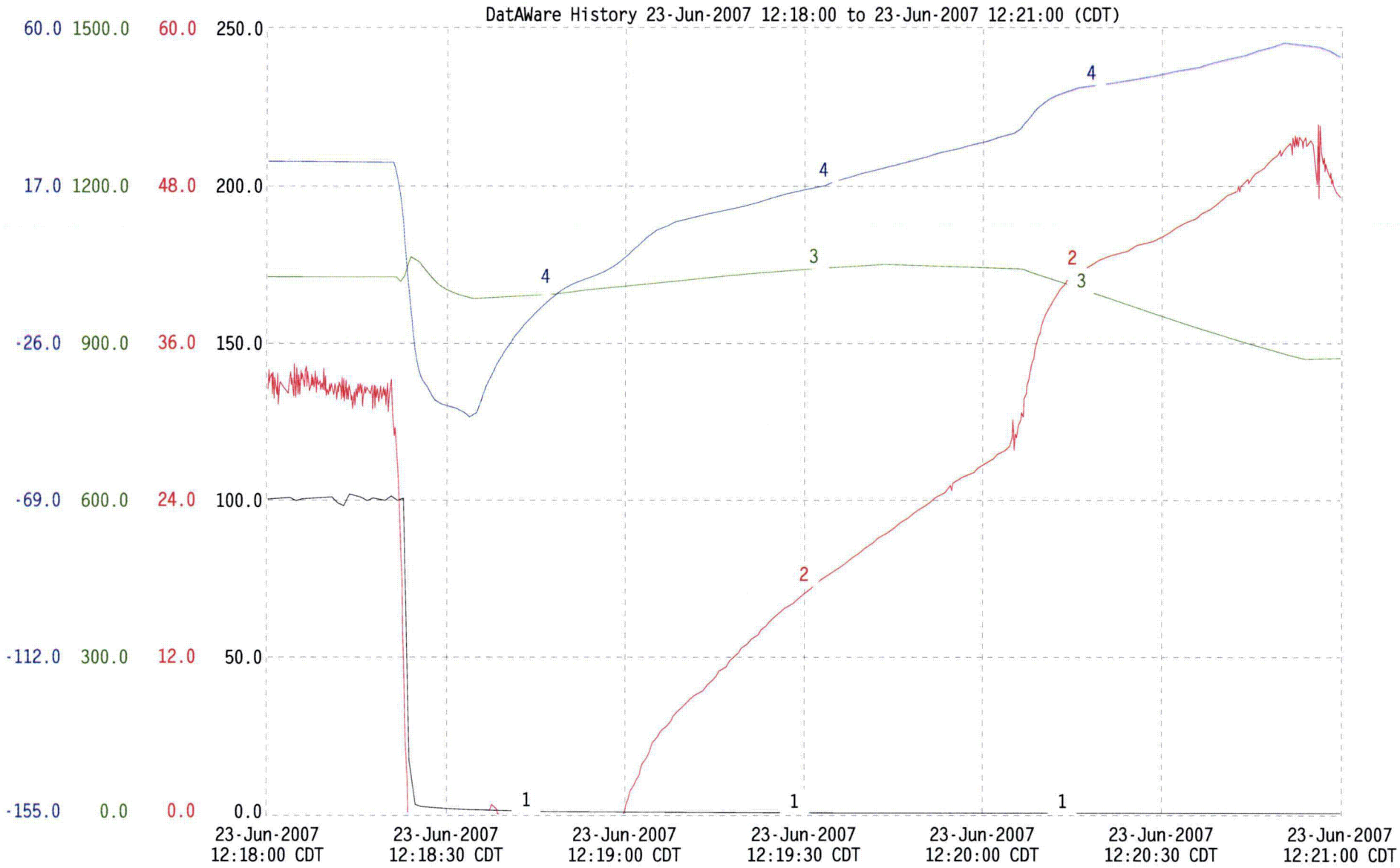
Description	Low-Y	Hi-Y	Units
(1) 92-ANA01 (B1:U1) APRM 1 FLUX	0	250	%
(2) 3-203A (B1:U1) REACTOR WATER LEVEL A	-5	60	IN
(3) 3-204A (B1:U1) REACTOR PRESSURE A	0	1500	PSIG

Enclosure 4

Browns Ferry Nuclear Plant (BFN) Unit 1

Exigent Technical Specifications (TS) Change TS-461S1
Modification of Restart Large Transient
Testing License Condition 2.G(2)

Plant Response - June 23, 2007 - Main Steam Isolation
Valve Closure Test from 100 Percent Power



Description	Low-Y	Hi-Y	Units
(1) 92-ANA01 (B1:U1) APRM 1 FLUX	0	250	%
(2) 3-203A (B1:U1) REACTOR WATER LEVEL A	0	60	IN
(3) 3-204A (B1:U1) REACTOR PRESSURE A	0	1500	PSIG
(4) 3-58A (B1:U1) RX LEVEL-EMERGENCY SYSTEMS RANGE	-155	60	IN