

WBN2Public Resource

From: Boyd, Desiree L [dlboyd@tva.gov]
Sent: Thursday, September 15, 2011 3:57 PM
To: Epperson, Dan; Poole, Justin; Raghavan, Rags; Milano, Patrick; Campbell, Stephen
Cc: Hamill, Carol L; Boyd, Desiree L; Crouch, William D
Subject: TVA letter to NRC_09-15-2011 - WBN U2 FSAR A106
Attachments: 09-15-2011 - WBN U2 FSAR A106_Final.pdf

Please see attached TVA letter that was sent to the NRC today.

Thank You,

~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*~*

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Attachment 1 to be withheld from Public Disclosure Under 10 CFR 2.390. When separated from this Enclosure, this letter is decontrolled.



Tennessee Valley Authority, Post Office Box 2000, Spring City, Tennessee 37381-2000

September 15, 2011

10 CFR 50.4(b)(6)
10 CFR 50.34(b)
10 CFR 2.390(d)(1)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Watts Bar Nuclear Plant, Unit 2
Docket No. 50-391

Subject: WATTS BAR NUCLEAR PLANT (WBN) – UNIT 2 – FINAL SAFETY ANALYSIS REPORT (FSAR), AMENDMENT 106

- References:
1. TVA letter to NRC dated August 12, 2011, "Watts Bar Nuclear Plant (WBN) - Unit 2 - Final Safety Analysis Report (FSAR), Amendment 105"
 2. TVA letter to NRC dated December 10, 2010, "Watts Bar Nuclear Plant (WBN) Unit 2 – Final Safety Analysis Report (FSAR) – Response to Requests for Additional Information"

This letter transmits WBN Unit 2 FSAR Amendment 106 (A106), which reflects changes made since the issuance of Amendment 105 on August 12, 2011 (Reference 1).

Enclosure 1 contains a summary listing of FSAR sections and corresponding Unit 2 change package numbers associated with the A106 FSAR changes.

FSAR A106 is contained on the enclosed Optical Storage Media (OSM #1) (Attachment 1). The FSAR contains security-related information identified by the designation "Security-Related Information - Withhold Under 10 CFR 2.390." TVA hereby requests this information be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. A redacted version of the FSAR is contained on OSM #2 (Attachment 2), which is suitable for public disclosure.

Enclosure 2 contains a listing of the FSAR pages that have been redacted. Enclosure 3 lists the files and file sizes on the security-related OSM (OSM #1), and Enclosure 4 lists the files and file sizes on the publicly available OSM (OSM #2).

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In addition, one of the A106 changes involves additions to Sections 9.2.1.3 and 9.2.2.4. These additions stem from a recent calculation revision resulting in revised values for the component cooling and essential raw cooling water system individual loads. Although only total required flow values were placed into A106, the values for the individual system loads were previously provided in Enclosures 3 and 5 of Reference 2 in response to a NRC request for additional information. Revised Enclosures 3 and 5 of Reference 2 are being provided by separate correspondence.

There are no new commitments made in this letter. This amendment closes Supplemental Safety Evaluation Reports (SSERs) 22/23, Item No. 91 (See Enclosure 1, Item 7). This letter does not close any "Generic Communications." If you have any questions, please contact Gordon Arent at (423) 365-2004.

I declare under the penalty of perjury that the foregoing is true and correct. Executed on the 15th day of September, 2011.

Respectfully,



David Stinson
Watts Bar Unit 2 Vice President

Enclosures:

1. WBN Unit 2 FSAR A106, "Summary Listing of A106 FSAR Changes"
2. WBN Unit 2 FSAR A106, "Summary of Redacted Pages"
3. WBN Unit 2 FSAR A106, "List of files and file sizes on the security-related OSM (OSM #1)"
4. WBN Unit 2 FSAR A106, "List of files and file sizes on the publicly available OSM (OSM #2)"

Attachments:

1. OSM #1: WBN Unit 2 FSAR Amendment 106 - Security-Related Information - Withhold Under 10 CFR 2.390
2. OSM #2: WBN Unit 2 FSAR Amendment 106 - Publicly Available Version

cc: See Page 3

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cc (Enclosures):

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U.S. Nuclear Regulatory Commission
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bcc (Enclosures):

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ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
1.	Section 2.3	<ol style="list-style-type: none">1. On Pages 2.3-13 (A105), insert the following sentence between the first and second sentences of the first paragraph of Section 2.3.3.3 entitled, "Onsite Data Summaries of Parameters for Dispersion Meteorology:" "Tables 2.3-68 through 2.3-74 provide similar data for the time period of 1986 to 2005."2. On page 2.3-17 (A105), define the term "D/Qs" by inserting the words "Relative Deposition" in front of the term in the first sentence of the first paragraph under Section 2.3.5, "Long-Term (Routine) Diffusion Estimates."3. On Page 2.3-17 (A105), insert the letter "a" after Table 2.3-75, add the letter "s" onto the word "contain" and insert "Table 2.3-75b contains," between "and" and "D/Q's" in the third paragraph under Section 2.3.5, "Long-Term (Routine) Diffusion Estimates."4. For Table 2.3-75a on page 2.3-111 (A105), delete "and D/Q's" from the title.5. For Table 2.3-75b on page 2.3-112 (A105), delete "X/Q's and" from the title.	2-106-09

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
2.	Section 4.2.1.3.5 Section 15.3.1.3	<p>1. On page 4.2-19, replace the last paragraph of Section 4.2.1.3.5, "Evaluation of the Reactor Core for a Limiting LOCA Load Accumulator Line Break," with the following paragraph:</p> <p>"The fuel assembly grid impact forces were also obtained from the reactor core time history response. The maximum impact force occurred at the peripheral fuel assembly location adjacent to the baffle wall. The grid impact forces were rapidly attenuated for fuel assembly positions inward from the peripheral fuel. Only the periphery (outer) portion of the core experience significant grid impact forces. A calculation of the maximum LOCA and seismic grid impact forces, combined using the square root sum of the squares method (in accordance with NUREG 0800, Section 4.2, Appendix A), demonstrated that the maximum value is greater than the allowable grid strength for the RFA -2 assembly with IFMs in peripheral core locations. An analysis of the effects of this grid deformation has shown the core geometry will remain coolable."</p> <p>2. Add paragraph near the end of Section 15.3.1.3, Reactor Coolant System Pipe Break Results, which addresses the lower radial key stiffness value to read as follows:</p> <p>"An evaluation has been performed to determine the impact of change in the lower radial key stiffness value and concluded that the fuel assemblies on the core periphery are the only assemblies to experience grid deformation for Watts Bar Unit 2. An SBLOCA assessment has concluded that core coolable geometry is maintained if grid deformation remains in peripheral assembly locations. Therefore, it is further concluded that coolable core geometry is maintained for Watts Bar Unit 2 for cores of 17x17 RFA-2 fuel following a SBLOCA."</p>	2-106-05

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
3.	Table 7.1 Section 7.2	<ol style="list-style-type: none">1. For Table 7.1-1 (page 3 of 11) (A105), delete reference to Note 17 in the second line item from the top.2. For Table 7.1-1 (page 3 of 11) (A105), delete reference to Note 18 in the eighth line item from the top.3. For Table 7.1-1 (page 10 of 11) (A105), delete Note 17.4. For Table 7.1-1 (pages 10-11 of 11) (A105), delete Note 17.5. For Table 7.1-1 (page 11 of 11) (A105), delete Note 18.6. For Section 7.2 on page 7.2-5 (A105), change P to P' and P' to P in the list of defined terms at the top of page.	2-106-08

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
4.	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	<ol style="list-style-type: none"> 1. For Section 8.2.1, “Description,” on Page 8.2-1 (A105), in the next to last line of first paragraph, change “to” to “which can”. 2. For Section 8.2.1, “Description,” on Page 8.2-1 (A105), in the second line of the second paragraph, insert “and maintenance” between the words, “alternate” and “power.” 3. For Section 8.2.1, “Description,” on Page 8.2-1 (A105), insert the following between the first and second sentence of the fifth paragraph: “Additionally, studies have also been made that show one transmission line and transformer A, or one transmission line and transformer B are capable of starting and running the minimum required safety-related loads for one train in each unit.” 4. For Section 8.2.1.3, “Arrangement of the Start Boards, Unit Boards, Common Boards, and Reactor Coolant Pump (RCP) Boards,” on Page 8.2-5 (A105), insert the following between of the partial paragraph at the top of page and the first full paragraph at the top of the page: “From four of the 6.9kV unit boards located in the turbine building, maintenance feeder cables are routed to the 6.9kV shutdown boards located in the auxiliary building where they connect to the supply breakers. These feeder cables are routed in divisional raceway to maintain separation between the two offsite power sources.” 5. For Section 8.2.1.5, “Switchyard Control and Relaying,” on Page 8.2-5 (A105), insert the word, “normal,” between the words, “its,” and “provision.” 	2-106-07

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	<p>6. For Section 8.2.1.5, "Switchyard Control and Relaying," on Page 8.2-5 (A105), insert the following after the first paragraph of the section.</p> <p>"The CSST maintenance configurations can be aligned to provide either two immediate access circuits or one immediate and one delayed access circuit in accordance with Regulatory Guide 1.32, position C.1.a, requirements for acceptable designs."</p> <p>7. On Page 8.2-7 (A105), insert the following sentence after the third paragraph of Item 5:</p> <p>"Automatic transfers are not provided for CSST maintenance alignments."</p> <p>8. For Section 8.2.1.6, On Page 8.2-9 (A105), insert the word "and" between "D" and "Start" of the heading as shown below,"6.9kV Common Switchgear C and D and Start Board A and B."</p> <p>9. For Section 8.2.1.6, on Page 8.2-9 (A105), replace the verbiage starting with Item (3) at the bottom of the page and continue onto page 8.2-10 through Item (4) and stopping with the replacement of the sentence beginning with "Line-up," with the following replacement verbiage:</p> <p>"The secondaries of common station service transforms A and B feed into the 6.9kV start boards A and B. The start boards can be aligned to the 6.9kV shutdown boards through the unit boards as follows:</p> <p>3. Common station service transformer A:</p> <p>This transformer provides offsite power, from the secondary Y winding through circuit breaker 1512, for normal power to 6.9kV common board A and alternate power to 6.9kV unit boards 1A, 1C, 2A and 2C. When CSST D is not available this transformer can be aligned manually to provide power to the train B 6.9kV shutdown boards. Normal (offsite) power from the transformer secondary Y winding can be aligned to</p>	2-106-07

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	<p>Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2</p>	<p>6.9kV shutdown board 1B-B via 6.9kV start board A through circuit breaker 1512 to 6.9kV unit board 1C through circuit breakers 1524 and 1722 and to 6.9kV shutdown board 1B-B through circuit breaker 1726. Similarly, normal (offsite) power from transformer secondary Y winding can be aligned to 6.9kV shutdown board 2B-B via 6.9kV start board A through circuit breaker 1512 to 6.9kV unit board 2C through circuit breakers 1534 and 1822 and to 6.9kV shutdown board 2B-B through circuit breaker 1826.</p> <p>These circuits are identified as P separation designation.</p> <p>4. Common station service transformer B:</p> <p>This transformer provides offsite power, from the secondary Y winding through circuit breaker 1612, for normal power to 6.9kV common board B and alternate power to 6.9kV unit boards 1B, 1D, 2B and 2D. When CSST C is not available this transformer can be aligned manually to provide power to the train A 6.9kV shutdown boards. Normal (offsite) power from the transformer secondary Y winding can be aligned to 6.9kV shutdown board 1A-A via 6.9kV start board B through circuit breaker 1612 to 6.9kV unit board 1B through circuit breakers 1622 and 1714 and to 6.9kV shutdown board 1A-A through circuit breaker 1718. Similarly, normal (offsite) power from transformer secondary Y winding can be aligned to 6.9kV shutdown board 2A-A via 6.9kV start board B through circuit breaker 1612 to 6.9kV unit board 2B through circuit breakers 1632 and 1814 and to 6.9kV shutdown board 2B-B through circuit breaker 1818.</p> <p>These circuits are identified as R separation designation.</p> <p>The provisions made for independence of offsite sources are limited such that CSST A and B cannot be credited simultaneously for supply of 6.9kV class 1E power. Additionally, CSST A and B only have the capacity to supply one train of 6.9kV shutdown boards for each unit.”</p>	2-106-07

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	<p>10. For Section 8.2.1.6, on Page 8.2-11 (A105), replace verbiage contained under subsections entitled, "6.9kV Start Boards A & B, Unit Boards and Common Boards Control Power," "6.9kV Start Board Breaker Control - Bkr 1512 (N), Bkr 1612 (N)," and "6.9kv Unit Board 1B, 1C, 2B, 2C breaker control (maintenance feeder path)," with the following verbiage:</p> <p>"6.9kV Start Boards A & B, Unit Boards and Common Boards Control Power</p> <p>The normal control power for circuit breakers used to supply offsite power from CSST A and B to the 6.9kV shutdown boards is arranged to provide physically and electrically independent supplies.</p> <p>The normal and alternate control power feeds to the 250VDC control buses for 6.9kV Start Boards A and B, Unit Boards 1B, 1C, 2B, 2C and Common Board A and B are supplied from 250VDC Turbine Distribution Boards 1 and 2. The normal power feeder cables for 6.9kV Start Board control bus A are routed separately from those for control bus B. The normal power feeder cables for the 6.9kV Common Board A control bus are routed separately from those for 6.9kV Common Board B. The normal power feeder cables for the 6.9kV Unit Board 1B control bus are routed separately from those for 6.9kV Unit Board 1C. The normal power feeder cables for the 6.9kV Unit Board 2B control bus are routed separately from those for 6.9kV Unit Board 2C.</p> <p>Control cables associated with CSST A normal alignments are designated as P and control cables associated with CSST B normal alignments are designated as R for separation identification.</p> <p>6.9kV Start Board Breaker Control:</p> <p>The breaker control cables for 6.9kV Start Bus A normal feeder breaker 1512 are routed separately from those for 6.9kV Start Bus B normal feeder breaker 1612. Control cables associated with breaker 1512 are designated as P and control cables associated with breaker 1612 are designated as R for separation identification. 6.9kV start bus alternate feeder breakers 1614 and 1514 are not credited for supply of offsite power.</p>	2-106-07

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	<p>6.9kV Unit Board 1B, 1C, 2B, 2C Breaker Control:</p> <p>The breaker control cables for circuit breakers 1714, 1622 (NO) and 1114 (NC) at 6.9kV Unit Board 1B are routed separately from those for breakers 1722, 1524 (NO) and 1122 (NC) at 6.9kV Unit Board 1C. Similarly, the breakers control cables for circuit breakers 1814, 1632 (NO) and 1214 (NC) at 6.9kV Unit Board 2B are routed separately from those for breakers 1822, 1534 (NO) and 1222 (NC) at 6.9kV Unit Board 2C. Control cables associated with breakers 1114, 1214, 1622, 1632, 1714 and 1814 are designated as R and control cables associated with breakers 1122, 1222, 1524, 1534, 1722 and 1822 are designated as P for separation identification.”</p> <p>11. On Page 8.2-16 (A105), delete the paragraph that begins with “CSST A or B...”</p> <p>12. For Section 8.2.1.8, “Conformance with Standards) Functional Measures,” on Page 8.2-17 (A105), insert the following between the second and third full paragraphs of this section:</p> <p>“CSST A or B (but not both simultaneously) may be used as an immediate or delayed source replacement for CSSTs D or C, respectively, through the 6.9kV shutdown board maintenance supply breakers. CSST A and B each have sufficient FA rated capacity to maintain adequate voltage for one train of shutdown boards for each unit while supplying required BOP loads for a design basis accident in one unit and safe shutdown of the other unit. When used as a delayed source, the affected shutdown board maintenance feeders are supplied from the USSTs through the Unit Boards and are automatically transferred to CSST A or B in the event of a unit trip. Use of CSST A or B as an offsite source requires that CSST A and B both be available and that the associated power and control feeders be in their normal positions to ensure independence. Feeders for CSST A are independent of those for CSST C and feeders for CSST B are independent of those for CSST D. Supply of Class 1E power by CSST A or B requires manual breaker operations to align the CSST source to the applicable shutdown board maintenance feeders.”</p> <p>13. On Page 8.2-11 (A105), in the fourth line of the fifth full paragraph, insert “or maintenance” between the words, “alternate” and “feeder.”</p>	2-106-07

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	<p>14. On Page 8.2-19 (A105), replace the word “to” with the word “from” in the second line of the fourth full paragraph.</p> <p>15. On Page 8.2-19 (A105), insert the following after the word, “network” at the end of the first sentence of the fourth full paragraph:</p> <p>“under normal plant alignments and either two immediate access circuits or one immediate access circuit and one delayed access circuit under maintenance alignments.”</p> <p>16. On Page 8.2-19 (A105), replace the sentence in the sixth full paragraph that begins with “CSSTs A and B have been retrofitted...” with the following sentence:</p> <p>“Additionally CSST A or B may supply power to 6.9kV shutdown boards during maintenance of CSST D or C respectively in any operating mode.”</p> <p>17. On Page 8.2-19 (A105), replace the seventh and eighth full paragraphs with the following:</p> <p>“Power continuity to the 6.9kV shutdown boards is normally provided from common station service transformers C and D. To provide a stable voltage these transformers have automatic load tap changers on each secondary which adjust voltage based on the normally connected shutdown boards.</p> <p>During maintenance of common station service transformer C or D, power continuity to the normally connected train of 6.9kV shutdown boards is provided by the boards' maintenance feeds which connect to unit boards with access to common station service transformers B or A respectively. Use of transformers A and B is restricted such that they are not simultaneously credited as an independent source of offsite power for the Class 1E power system. Common station service transformers A and B have automatic load tap changers on the primary winding which adjust voltage based on the normally connected start board.</p>	2-106-07

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WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
4. (cont.)	Section 8.2.1 8.2.1.3 8.2.1.5 8.2.1.6 8.2.1.8 8.2.2	The automatic load tap changers for all common station service transformers are normally controlled in the automatic mode with the capability for manual adjustment from the main control room.” 18. For Section 8.2.2, on Page 8.2-20 (A105), replace the term, “CSSTs C and D,” with “its associated CSSTs,” in the first line of the first paragraph of the section.	2-106-07
5.	8.3.1.1	On Page 8.3-17 (A105), revise the cases entitled, “Cold Dead Load Pickup @95° F,” and “Hot Dead Load Pickup @95° F,” to read “Cold Engine Motor Start Capability, First Three Minutes (kW)” and “Hot Engine Motor Start Capability, Fully Turbo-Charged (kW),” respectively.	2-106-01
6.	Section 9.1.4.2.2	Revise the sixth sentence in the paragraph under the subtitle “Reactor Vessel Stud Tensioner,” to remove the words “in series.”	2-106-02
7.	Section 9.2.1.3 Section 9.2.2.4	1. Revise FSAR Section 9.2.1.3 to insert the following words on FSAR page 9.2-6 as shown below: “ERCW is a versatile system capable of providing sufficient flow and heat removal for a variety of conditions in each unit. As examples, a) during normal operations, the ERCW system can supply the highest flow demand of one unit in startup and the other in hot shutdown with a flow requirement of approximately 26,400 gpm and remove the highest heat removal demand of one unit in hot shutdown and the other unit in cold shutdown with a heat load of approximately 235,000 kBTU/hr. b) under design basis accident conditions with offsite power available, the ERCW system can supply the highest flow demand of one unit in startup and the other in LOCA Recirculation with a flow requirement of approximately 32,900 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 469,000 kBTU/hr.	2-106-04

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
7. (cont.)	Section 9.2.1.3 Section 9.2.2.4	<p>c) under design basis accident conditions with a LOOP coupled with a Loss of Train A, Train B of the ERCW system can supply the highest flow demand of one unit in either cold shutdown or refueling (equally demanding) and the other in LOCA Recirculation with a flow requirement of approximately 21,300 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 305,000 kBTU/hr.</p> <p>d) under design basis accident conditions with a LOOP coupled with a Loss of Train B, Train A of the ERCW system can supply the highest flow demand of one unit in cold shutdown and the other in LOCA Recirculation with a flow requirement of approximately 21,400 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 309,000 kBTU/hr."</p> <p>2. Revise FSAR Section 9.2.2.4 to insert the following words on FSAR page 9.2-6 as shown below:</p> <p>"CCS is a versatile system capable of providing sufficient flow and heat removal for a variety of conditions in each unit. As examples,</p> <p>a) during normal operations, the CCS system can supply the highest flow demand of both units in startup with a flow requirement of approximately 24,200 gpm and remove the highest heat removal demand of one unit in hot shutdown and the other unit in cold shutdown with a heat load of approximately 188,000 kBTU/hr.</p> <p>b) under design basis accident conditions with offsite power available, the CCS system can supply the highest flow demand of one unit in startup and the other in LOCA Recirculation with a flow requirement of approximately 22,900 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 150,000 kBTU/hr.</p>	2-106-04

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
7. (cont.)	Section 9.2.1.3 Section 9.2.2.4	<p>c) under design basis accident conditions with a LOOP coupled with a Loss of Train A, Train B of the CCS system can supply the highest flow demand of one unit in either cold shutdown or initial refueling (equally demanding) and the other in LOCA Recirculation with a flow requirement of approximately 10,200 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 129,000 kBTU/hr.</p> <p>d) under design basis accident conditions with a LOOP coupled with a Loss of Train B, Train A of the CCS system can supply the highest flow demand of one unit in either cold shutdown or initial refueling (equally demanding) and the other in LOCA Recirculation with a flow requirement of approximately 15,800 gpm and remove the highest heat removal demand of one unit in cold shutdown and the other unit in LOCA Recirculation with a heat load of approximately 149,000 kBTU/hr.”</p>	2-106-04
8.	Section 9.2.1.6	<p>FSAR Section 9.2.1.6 entitled "Corrosion, Organic Fouling, and Environmental Qualification System Description" is revised to add the following paragraph:</p> <p>“The water used in the Essential Raw Cooling Water (ERCW), High Pressure Fire Protection (HPFP) and Raw Cooling Water (RCW) system is chemically treated. The chemical treatment program injects chemicals to the ERCW, RCW, and HPFP raw water systems at the Intake Pumping Station pits, such that any pump taking suction from these pits, will introduce the chemicals into the system. This treatment includes oxidizing biocide, non-oxidizing biocide, phosphate, and zinc. The phosphate is used to sequester iron from existing corrosion products, the zinc is used to passivate the carbon steel surfaces, and the oxidizing and non-oxidizing biocide will control slime, clams, and microbiological induced corrosion.”</p>	2-106-03

ENCLOSURE 1

WBN Unit 2 FSAR A106

“Summary Listing of A106 FSAR Changes”

Item No.	Change Area	Change Description	Change Package Number
9.	Table 9.3-7	<ol style="list-style-type: none"> 1. Revise the "Function" for Item 12 on FSAR Table 9.3-7, Sheet 8 of 44, by replacing the word "control" with the word "content." 2. Revise the "Effect on System" for Item 21 on FSAR Table 9.3-7, Sheet 14 of 44, by inserting the words "open, check" after the word "stuck." 3. Revise the "Method of Failure Detection" for Item 35 on FSAR Table 9.3-7, Sheet 19 of 44, by inserting valve number "-391" as shown on the attached FSAR markup. Also add "Cooling Water Failure" to the "Failure Mode" for Item 35 and include the "Potential Cause," "Method of Failure Detection," "Effect on System" and "Effect on Plant" for this failure. 4. Revise the "Function" for Item 41 on FSAR Table 9.3-7, Sheet 22 of 44, by inserting the word "inlet" after the word "regulate." 5. Revise the "Method of Failure Detection" and "Effect on Plant" for Item 47 on FSAR Table 9.3-7, Sheet 27 of 44, by changing PI-32-105 to PT-32-105, changing the Dryer No. from 2 to 1 and deleting the word "if." 6. Revise the "Effect on System" for Item 48 on FSAR Table 9.3-7, Sheet 28 of 44, by changing the identification of the compressor from "SCAS" to "ACAS." 7. Revise the "Method of Failure Detection" for Item 50 on FSAR Table 9.3-7, Sheet 30 of 44, by changing the Dryer No. from 2 to 1. 8. Revise the "Effect on System" and "Remarks" for Item 67 on FSAR Table 9.3-7, Sheet 37 of 44, by replacing the words "backup. Manual" with "backup by manual" and by deleting the word "of" as shown on the attached FSAR markup. 	2-106-06

ENCLOSURE 1

WBN Unit 2 FSAR A106

"Summary Listing of A106 FSAR Changes"

Item No.	Change Area	Change Description	Change Package Number
9.	Table 9.3-7	<p>9. Revise the "Component Identification" and "Method of Failure Detection" for Item 73 on FSAR Table 9.3-7, Sheet 40 of 44, by changing "2-FCV-32-333" to "2-32-333" and "2-HS68340D" to "2-HS-68-340D."</p> <p>10. Revise the "Method of Failure Detection" and "Effect on Plant" for Item 79 on FSAR Table 9.3-7, Sheet 43 of 44, by replacing the words "function not effected; however, spray" with the word "valve" and changing "2-PCV-68-340B" to "2-PCV-68-340D."</p> <p>11. Revise the "Method of Failure Detection," "Effect on System" and "Effect on Plant" for Item 80 on FSAR Table 9.3-7, Sheet 44 of 44.</p>	2-106-06

ENCLOSURE 2

**WBN Unit 2 FSAR A106
“Summary of Redacted Pages”**

Chapter	Page(S)	Section No.	Figure No.	Basis For Redaction
1	1.2-15	1.2	1.2-1	Security Related, 10CFR2.390(d)(1)
1	1.2-16	1.2	1.2-2	Security Related, 10CFR2.390(d)(1)
1	1.2-17	1.2	1.2-3	Security Related, 10CFR2.390(d)(1)
1	1.2-18	1.2	1.2-4	Security Related, 10CFR2.390(d)(1)
1	1.2-19	1.2	1.2-5	Security Related, 10CFR2.390(d)(1)
1	1.2-20	1.2	1.2-6	Security Related, 10CFR2.390(d)(1)
1	1.2-21	1.2	1.2-7	Security Related, 10CFR2.390(d)(1)
1	1.2-22	1.2	1.2-8	Security Related, 10CFR2.390(d)(1)
1	1.2-23	1.2	1.2-9	Security Related, 10CFR2.390(d)(1)
1	1.2-24	1.2	1.2-10	Security Related, 10CFR2.390(d)(1)
1	1.2-25	1.2	1.2-11	Security Related, 10CFR2.390(d)(1)
1	1.2-26	1.2	1.2-12	Security Related, 10CFR2.390(d)(1)
1	1.2-27	1.2	1.2-13	Security Related, 10CFR2.390(d)(1)
1	1.2-28	1.2	1.2-14	Security Related, 10CFR2.390(d)(1)
1	1.2-29	1.2	1.2-15	Security Related, 10CFR2.390(d)(1)
2	2.2-7	2.2	2.2-1	Security Related, 10CFR2.390(d)(1)
2	2.2-8	2.2	2.2-2	Security Related, 10CFR2.390(d)(1)
2	2.4-89	2.4	2.4-2	Security Related, 10CFR2.390(d)(1)
2	2.4-159	2.4	2.4-24	Security Related, 10CFR2.390(d)(1)
2	2.4-162	2.4	2.4-27	Security Related, 10CFR2.390(d)(1)
2	2.4-163	2.4	2.4-28	Security Related, 10CFR2.390(d)(1)
2	2.4-168	2.4	2.4-40a Sheet 1	Security Related, 10CFR2.390(d)(1)
2	2.4-171	2.4	2.4-40b	Security Related, 10CFR2.390(d)(1)
2	2.4-172	2.4	2.4-40c	Security Related, 10CFR2.390(d)(1)
2	2.4-173	2.4	2.4-40d Sheet 1	Security Related, 10CFR2.390(d)(1)
2	2.4-178	2.4	2.4-40f Sheet 1	Security Related, 10CFR2.390(d)(1)
2	2.4-181	2.4	2.4-40g Sheet 1	Security Related, 10CFR2.390(d)(1)
2	2.4-206	2.4	2.4-76	Security Related, 10CFR2.390(d)(1)
2	2.4-209	2.4	2.4-79	Security Related, 10CFR2.390(d)(1)
2	2.4-212	2.4	2.4-82	Security Related, 10CFR2.390(d)(1)
2	2.4-213	2.4	2.4-83	Security Related, 10CFR2.390(d)(1)
2	2.4-218	2.4	2.4-88	Security Related, 10CFR2.390(d)(1)
2	2.4-219	2.4	2.4-89	Security Related, 10CFR2.390(d)(1)
2	2.4-220	2.4	2.4-90	Security Related, 10CFR2.390(d)(1)
2	2.5-471	2.5	2.5-185	Security Related, 10CFR2.390(d)(1)
2	2.5-472	2.5	2.5-185a	Security Related, 10CFR2.390(d)(1)
2	2.5-513	2.5	2.5-225	Security Related, 10CFR2.390(d)(1)
2	2.5-514	2.5	2.5-226	Security Related, 10CFR2.390(d)(1)
2	2.5-515	2.5	2.5-226a	Security Related, 10CFR2.390(d)(1)
2	2.5-575	2.5	2.5-273	Security Related, 10CFR2.390(d)(1)
2	2.5-690	2.5	2.5-358	Security Related, 10CFR2.390(d)(1)

ENCLOSURE 2

**WBN Unit 2 FSAR A106
“Summary of Redacted Pages”**

Chapter	Page(S)	Section No.	Figure No.	Basis For Redaction
2	2.5-934	2.5	2.5-592	Security Related, 10CFR2.390(d)(1)
3	3.5-53	3.5	3.5-3	Security Related, 10CFR2.390(d)(1)
3	3.5-54	3.5	3.5-4	Security Related, 10CFR2.390(d)(1)
3	3.6-73	3.6	3.6-21	Security Related, 10CFR2.390(d)(1)
3	3.6-74	3.6	3.6-22	Security Related, 10CFR2.390(d)(1)
3	3.6-75	3.6	3.6-23	Security Related, 10CFR2.390(d)(1)
3	3.6-76	3.6	3.6-24	Security Related, 10CFR2.390(d)(1)
3	3.7-217	3.7	3.7-39	Security Related, 10CFR2.390(d)(1)
3	3.7-218	3.7	3.7-40	Security Related, 10CFR2.390(d)(1)
3	3.7-219	3.7	3.7-41	Security Related, 10CFR2.390(d)(1)
3	3.7-222	3.7	3.7-44	Security Related, 10CFR2.390(d)(1)
3	3.8.3-60	3.8.3	3.8.3-6	Security Related, 10CFR2.390(d)(1)
3	3.8.3-61	3.8.3	3.8.3-7	Security Related, 10CFR2.390(d)(1)
3	3.8.4-94	3.8.4	3.8.4-2	Security Related, 10CFR2.390(d)(1)
3	3.8.4-95	3.8.4	3.8.4-3	Security Related, 10CFR2.390(d)(1)
3	3.8.4-96	3.8.4	3.8.4-4	Security Related, 10CFR2.390(d)(1)
3	3.8.4-97	3.8.4	3.8.4-5	Security Related, 10CFR2.390(d)(1)
3	3.8.4-98	3.8.4	3.8.4-6	Security Related, 10CFR2.390(d)(1)
3	3.8.4-101	3.8.4	3.8.4-9	Security Related, 10CFR2.390(d)(1)
3	3.8.4-109	3.8.4	3.8.4-17	Security Related, 10CFR2.390(d)(1)
3	3.8.4-110	3.8.4	3.8.4-18	Security Related, 10CFR2.390(d)(1)
3	3.8.4-111	3.8.4	3.8.4-19	Security Related, 10CFR2.390(d)(1)
3	3.8.4-112	3.8.4	3.8.4-20	Security Related, 10CFR2.390(d)(1)
3	3.8.4-116	3.8.4	3.8.4-24	Security Related, 10CFR2.390(d)(1)
3	3.8.4-120	3.8.4	3.8.4-28	Security Related, 10CFR2.390(d)(1)
3	3.8.4-127	3.8.4	3.8.4-35	Security Related, 10CFR2.390(d)(1)
3	3.8.4-128	3.8.4	3.8.4-36	Security Related, 10CFR2.390(d)(1)
3	3.8.4-129	3.8.4	3.8.4-36a	Security Related, 10CFR2.390(d)(1)
3	3.8.4-132	3.8.4	3.8.4-37	Security Related, 10CFR2.390(d)(1)
3	3.8.4-149	3.8.4	3.8.4-50	Security Related, 10CFR2.390(d)(1)
3	3.8.4-150	3.8.4	3.8.4-51	Security Related, 10CFR2.390(d)(1)
3	3.8.6-19	3.8.6	3.8.6-7	Security Related, 10CFR2.390(d)(1)
6	6.2.2-24	6.2.2	6.2.2-4	Security Related, 10CFR2.390(d)(1)
6	6.2.3-76	6.2.3	6.2.3-4	Security Related, 10CFR2.390(d)(1)
6	6.2.3-77	6.2.3	6.2.3-5	Security Related, 10CFR2.390(d)(1)
6	6.2.3-78	6.2.3	6.2.3-6	Security Related, 10CFR2.390(d)(1)
6	6.2.3-79	6.2.3	6.2.3-7	Security Related, 10CFR2.390(d)(1)
6	6.2.3-80	6.2.3	6.2.3-8	Security Related, 10CFR2.390(d)(1)
6	6.2.3-81	6.2.3	6.2.3-9	Security Related, 10CFR2.390(d)(1)
6	6.2.3-82	6.2.3	6.2.3-10	Security Related, 10CFR2.390(d)(1)
6	6.2.3-92	6.2.3	6.2.3-18	Security Related, 10CFR2.390(d)(1)
6	6.2.3-93	6.2.3	6.2.3-19	Security Related, 10CFR2.390(d)(1)
8	8.1-21	8.1	8.1-1	Security Related, 10CFR2.390(d)(1)
8	8.2-15	8.2	Text only	Security Related, 10CFR2.390(d)(1)
8	8.2-30	8.2	8.2-3	Security Related, 10CFR2.390(d)(1)

ENCLOSURE 2

**WBN Unit 2 FSAR A106
“Summary of Redacted Pages”**

Chapter	Page(S)	Section No.	Figure No.	Basis For Redaction
8	8.2-31	8.2	8.2-4	Security Related, 10CFR2.390(d)(1)
8	8.2-44	8.2	8.2-11	Security Related, 10CFR2.390(d)(1)
8	8.3-97	8.3	8.3-1	Security Related, 10CFR2.390(d)(1)
8	8.3-99	8.3	8.3-2	Security Related, 10CFR2.390(d)(1)
8	8.3-100	8.3	8.3-3	Security Related, 10CFR2.390(d)(1)
8	8.3-102	8.3	8.3-4b	Security Related, 10CFR2.390(d)(1)
8	8.3-205	8.3	8.3-46	Security Related, 10CFR2.390(d)(1)
8	8.3-218	8.3	8.3-59	Security Related, 10CFR2.390(d)(1)
9	9.2-211	9.2	9.2-40	Security Related, 10CFR2.390(d)(1)
9	9.4-276	9.4	9.4-21	Security Related, 10CFR2.390(d)(1)
9	9.4-280	9.4	9.4-22c	Security Related, 10CFR2.390(d)(1)
9	9.4-281	9.4	9.4-23	Security Related, 10CFR2.390(d)(1)
9	9.4-282	9.4	9.4-24	Security Related, 10CFR2.390(d)(1)
12	12.3-39	12.3	12.3-1	Security Related, 10CFR2.390(d)(1)
12	12.3-40	12.3	12.3-2	Security Related, 10CFR2.390(d)(1)
12	12.3-41	12.3	12.3-3	Security Related, 10CFR2.390(d)(1)
12	12.3-42	12.3	12.3-4	Security Related, 10CFR2.390(d)(1)
12	12.3-43	12.3	12.3-5	Security Related, 10CFR2.390(d)(1)
12	12.3-44	12.3	12.3-6	Security Related, 10CFR2.390(d)(1)
12	12.3-45	12.3	12.3-7	Security Related, 10CFR2.390(d)(1)
12	12.3-46	12.3	12.3-8	Security Related, 10CFR2.390(d)(1)
12	12.3-47	12.3	12.3-9	Security Related, 10CFR2.390(d)(1)
12	12.3-48	12.3	12.3-10	Security Related, 10CFR2.390(d)(1)
12	12.3-49	12.3	12.3-11	Security Related, 10CFR2.390(d)(1)
12	12.3-50	12.3	12.3-12	Security Related, 10CFR2.390(d)(1)
12	12.3-51	12.3	12.3-13	Security Related, 10CFR2.390(d)(1)
12	12.3-52	12.3	12.3-14	Security Related, 10CFR2.390(d)(1)
12	12.3-53	12.3	12.3-15	Security Related, 10CFR2.390(d)(1)
12	12.3-54	12.3	12.3-16	Security Related, 10CFR2.390(d)(1)
12	12.3-55	12.3	12.3-17	Security Related, 10CFR2.390(d)(1)
12	12.4-7	12.4	12.4-1	Security Related, 10CFR2.390(d)(1)

ENCLOSURE 3

**WBN Unit 2 FSAR A106
“List Of Files And File Sizes
On The Security-Related OSM (OSM #1)”**

ENCLOSURE 3
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 - List of Files on *Security-Related OSM*

File Name	File Size - Bytes
TVA_WBN-2_FSAR_Files	
001_TVA_WB_FSAR_TOC.pdf	371,367
002_TVA_WB_FSAR_LRP.pdf	85,233
003_TVA_WB_FSAR_Section_1.pdf	4,643,776
004_TVA_WB_FSAR_Section_2_A.pdf	10,467,268
005_TVA_WB_FSAR_Section_2_B_Part_1_of_2.pdf	44,606,416
005_TVA_WB_FSAR_Section_2_B_Part_2_of_2.pdf	49,572,150
006_TVA_WB_FSAR_Section_2_C.pdf	2,107,326
007_TVA_WB_FSAR_Section_2_D.pdf	31,323,879
008_TVA_WB_FSAR_Section_2_E.pdf	47,312,479
009_TVA_WB_FSAR_Section_3_A.pdf	2,623,168
010_TVA_WB_FSAR_Section_3_B.pdf	7,063,096
011_TVA_WB_FSAR_Section_3_C.pdf	30,016,106
012_TVA_WB_FSAR_Section_3_D.pdf	11,764,556
013_TVA_WB_FSAR_Section_4.pdf	12,554,946
014_TVA_WB_FSAR_Section_5.pdf	9,921,700
015_TVA_WB_FSAR_Section_6_A.pdf	26,047,715
016_TVA_WB_FSAR_Section_6_B.pdf	8,063,345
017_TVA_WB_FSAR_Section_7.pdf	14,020,663
018_TVA_WB_FSAR_Section_8.pdf	29,729,038
019_TVA_WB_FSAR_Section_9_A.pdf	24,538,388
020_TVA_WB_FSAR_Section_9_B.pdf	16,485,379
021_TVA_WB_FSAR_Section_10.pdf	14,163,281
022_TVA_WB_FSAR_Section_11.pdf	3,964,879
023_TVA_WB_FSAR_Section_12.pdf	5,993,776
024_TVA_WB_FSAR_Section_13.pdf	3,239,951
025_TVA_WB_FSAR_Section_14.pdf	1,169,887

ENCLOSURE 3
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 - List of Files on *Security-Related OSM*

File Name	File Size - Bytes
026_TVA_WB_FSAR_Section_15.pdf	46,593,712
027_TVA_WB_FSAR_Section_16.pdf	148,050
028_TVA_WB_FSAR_Section_17.pdf	144,934
Total	458,736,464
TVA_WBN-2_Oversized_FSAR_Figures	
001_TVA_WB_FSAR_Figure_2.5_3.pdf	1,757,743
002_TVA_WB_FSAR_Figure_2.5_11.pdf	1,689,538
003_TVA_WB_FSAR_Figure_2.5_71.pdf	2,263,087
004_TVA_WB_FSAR_Figure_2.5_222.pdf	909,429
005_TVA_WB_FSAR_Figure_2.5_281_1.pdf	2,155,627
006_TVA_WB_FSAR_Figure_2.5_281_2.pdf	2,117,562
007_TVA_WB_FSAR_Figure_2.5_549_1.pdf	3,600,807
008_TVA_WB_FSAR_Figure_2.5_549_2.pdf	3,989,180
009_TVA_WB_FSAR_Figure_2.5_549_3.pdf	2,863,719
010_TVA_WB_FSAR_Figure_2.5_549_4.pdf	2,809,599
011_TVA_WB_FSAR_Figure_2.5_550.pdf	1,803,985
012_TVA_WB_FSAR_Figure_2.5_551.pdf	1,996,869
013_TVA_WB_FSAR_Figure_2.5_554_1.pdf	3,081,060
014_TVA_WB_FSAR_Figure_2.5_554_2.pdf	1,996,707
015_TVA_WB_FSAR_Figure_2.5_555.pdf	1,993,312
016_TVA_WB_FSAR_Figure_2.5_556.pdf	2,998,087
017_TVA_WB_FSAR_Figure_2.5_571_1.pdf	844,484
018_TVA_WB_FSAR_Figure_2.5_571_2.pdf	3,128,329
019_TVA_WB_FSAR_Figure_2.5_571_3.pdf	3,284,555
020_TVA_WB_FSAR_Figure_2.5_571_4.pdf	2,142,316
021_TVA_WB_FSAR_Figure_2.5_572.pdf	2,196,945

ENCLOSURE 3
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 - List of Files on *Security-Related OSM*

File Name	File Size - Bytes
022_TVA_WB_FSAR_Figure_2.5_573.pdf	2,013,286
023_TVA_WB_FSAR_Figure_2.5_576_1.pdf	3,238,525
024_TVA_WB_FSAR_Figure_2.5_576_2.pdf	2,151,750
025_TVA_WB_FSAR_Figure_2.5_577.pdf	2,207,622
026_TVA_WB_FSAR_Figure_2.5_578.pdf	2,080,032
027_TVA_WB_FSAR_Figure_2.5_579.pdf	2,308,985
028_TVA_WB_FSAR_Figure_2.5_583.pdf	2,487,346
029_TVA_WB_FSAR_Figure_2.5_588.pdf	2,528,515
030_TVA_WB_FSAR_Figure_2.5_589.pdf	2,480,438
031_TVA_WB_FSAR_Figure_2.5_594.pdf	13,054,127
032_TVA_WB_FSAR_Figure_2.5_595.pdf	2,323,267
033_TVA_WB_FSAR_Figure_2.5_596.pdf	5,732,107
034_TVA_WB_FSAR_Figure_2.5_597.pdf	1,287,336
035_TVA_WB_FSAR_Figure_2.5_602.pdf	5,549,537
036_TVA_WB_FSAR_Figure_2.5_603.pdf	4,830,835
037_TVA_WB_FSAR_Figure_2.5_604.pdf	6,392,279
038_TVA_WB_FSAR_Figure_2.5_605.pdf	20,823,108
Total	131,112,035
TVA_WBN-2_Oversized_FSAR_Table	
001_TVA_WB_FSAR_Table_6.2.4-1.pdf	1,215,565
Total	1,215,565

ENCLOSURE 4

**WBN Unit 2 FSAR A106
“List Of Files And File Sizes
On The Publicly Available OSM (OSM #2)”**

ENCLOSURE 4
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 List of Files on *Publicly Available OSM*

File Name	File Size - Bytes
TVA_WBN-2_FSAR_Files	
001_TVA_WB_FSAR_TOC.pdf	371,367
002_TVA_WB_FSAR_LRP.pdf	85,233
<i>003_TVA_WB_FSAR_Section_1.pdf</i>	<i>837,201</i>
<i>004_TVA_WB_FSAR_Section_2_A.pdf</i>	<i>10,130,725</i>
<i>005_TVA_WB_FSAR_Section_2_B_Part_1_of_2.pdf</i>	<i>34,358,971</i>
<i>005_TVA_WB_FSAR_Section_2_B_Part_2_of_2.pdf</i>	<i>43,314,029</i>
006_TVA_WB_FSAR_Section_2_C.pdf	2,107,326
007_TVA_WB_FSAR_Section_2_D.pdf	31,323,879
<i>008_TVA_WB_FSAR_Section_2_E.pdf</i>	<i>45,933,102</i>
<i>009_TVA_WB_FSAR_Section_3_A.pdf</i>	<i>2,331,747</i>
<i>010_TVA_WB_FSAR_Section_3_B.pdf</i>	<i>5,661,334</i>
<i>011_TVA_WB_FSAR_Section_3_C.pdf</i>	<i>25,183,703</i>
<i>012_TVA_WB_FSAR_Section_3_D.pdf</i>	<i>11,495,874</i>
013_TVA_WB_FSAR_Section_4.pdf	12,554,946
014_TVA_WB_FSAR_Section_5.pdf	9,921,700
<i>015_TVA_WB_FSAR_Section_6_A.pdf</i>	<i>23,167,226</i>
016_TVA_WB_FSAR_Section_6_B.pdf	8,063,345
017_TVA_WB_FSAR_Section_7.pdf	14,020,663
<i>018_TVA_WB_FSAR_Section_8.pdf</i>	<i>26,768,644</i>
<i>019_TVA_WB_FSAR_Section_9_A.pdf</i>	<i>24,277,271</i>
<i>020_TVA_WB_FSAR_Section_9_B.pdf</i>	<i>15,270,857</i>
021_TVA_WB_FSAR_Section_10.pdf	14,163,281
022_TVA_WB_FSAR_Section_11.pdf	3,964,879
<i>023_TVA_WB_FSAR_Section_12.pdf</i>	<i>1,725,763</i>
024_TVA_WB_FSAR_Section_13.pdf	3,239,951
025_TVA_WB_FSAR_Section_14.pdf	1,169,887

ENCLOSURE 4
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 List of Files on *Publicly Available OSM*

File Name	File Size - Bytes
026_TVA_WB_FSAR_Section_15.pdf	46,593,712
027_TVA_WB_FSAR_Section_16.pdf	148,050
028_TVA_WB_FSAR_Section_17.pdf	144,934
Total	418,329,600
TVA_WBN-2_Oversized_FSAR_Figures	
001_TVA_WB_FSAR_Figure_2.5_3.pdf	1,757,743
002_TVA_WB_FSAR_Figure_2.5_11.pdf	1,689,538
003_TVA_WB_FSAR_Figure_2.5_71.pdf	2,263,087
004_TVA_WB_FSAR_Figure_2.5_222.pdf	909,429
005_TVA_WB_FSAR_Figure_2.5_281_1.pdf	2,155,627
006_TVA_WB_FSAR_Figure_2.5_281_2.pdf	2,117,562
007_TVA_WB_FSAR_Figure_2.5_549_1.pdf	3,600,807
008_TVA_WB_FSAR_Figure_2.5_549_2.pdf	3,989,180
009_TVA_WB_FSAR_Figure_2.5_549_3.pdf	2,863,719
010_TVA_WB_FSAR_Figure_2.5_549_4.pdf	2,809,599
011_TVA_WB_FSAR_Figure_2.5_550.pdf	1,803,985
012_TVA_WB_FSAR_Figure_2.5_551.pdf	1,996,869
013_TVA_WB_FSAR_Figure_2.5_554_1.pdf	3,081,060
014_TVA_WB_FSAR_Figure_2.5_554_2.pdf	1,996,707
015_TVA_WB_FSAR_Figure_2.5_555.pdf	1,993,312
016_TVA_WB_FSAR_Figure_2.5_556.pdf	2,998,087
017_TVA_WB_FSAR_Figure_2.5_571_1.pdf	844,484
018_TVA_WB_FSAR_Figure_2.5_571_2.pdf	3,128,329
019_TVA_WB_FSAR_Figure_2.5_571_3.pdf	3,284,555
020_TVA_WB_FSAR_Figure_2.5_571_4.pdf	2,142,316
021_TVA_WB_FSAR_Figure_2.5_572.pdf	2,196,945

ENCLOSURE 4
TVA Watts Bar Nuclear Plant Unit 2
FSAR Amendment 106 List of Files on *Publicly Available OSM*

File Name	File Size - Bytes
022_TVA_WB_FSAR_Figure_2.5_573.pdf	2,013,286
023_TVA_WB_FSAR_Figure_2.5_576_1.pdf	3,238,525
024_TVA_WB_FSAR_Figure_2.5_576_2.pdf	2,151,750
025_TVA_WB_FSAR_Figure_2.5_577.pdf	2,207,622
026_TVA_WB_FSAR_Figure_2.5_578.pdf	2,080,032
027_TVA_WB_FSAR_Figure_2.5_579.pdf	2,308,985
028_TVA_WB_FSAR_Figure_2.5_583.pdf	2,487,346
029_TVA_WB_FSAR_Figure_2.5_588.pdf	2,528,515
030_TVA_WB_FSAR_Figure_2.5_589.pdf	2,480,438
031_TVA_WB_FSAR_Figure_2.5_594.pdf	13,054,127
032_TVA_WB_FSAR_Figure_2.5_595.pdf	2,323,267
033_TVA_WB_FSAR_Figure_2.5_596.pdf	5,732,107
034_TVA_WB_FSAR_Figure_2.5_597.pdf	1,287,336
035_TVA_WB_FSAR_Figure_2.5_602.pdf	5,549,537
036_TVA_WB_FSAR_Figure_2.5_603.pdf	4,830,835
037_TVA_WB_FSAR_Figure_2.5_604.pdf	6,392,279
038_TVA_WB_FSAR_Figure_2.5_605.pdf	20,823,108
Total	131,112,035
TVA_WBN-2_Oversized_FSAR_Table	
001_TVA_WB_FSAR_Table_6.2.4-1.pdf	1,215,565
Total	1,215,565