**Dominion Nuclear Connecticut, Inc.**
5000 Dominion Boulevard, Glen Allen, Virginia 23060
Web Address: www.dom.com

April 4, 2007

United States Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Serial No. 07-0127
NSS&L/DF R0
Docket No. 50-336
License No. DPR-65

**DOMINION NUCLEAR CONNECTICUT, INC.**
**MILLSTONE POWER STATION UNIT 2**
**STARTUP TEST ACTIVITY REDUCTION SUMMARY REPORT**

Millstone Power Station Unit 2 (MPS2) Cycle 18 startup from refueling (fall 2006) successfully utilized the Startup Test Activity Reduction (STAR) Program in accordance with Westinghouse Topical Report WCAP-16011-P-A, Rev. 0. This was the first application of the STAR program at MPS2. The NRC staff reviewed and approved the use of Topical Report WCAP-16011-P, "Startup Test Activity Reduction Program" (TAC No. MB8724), in NRC safety evaluation report (SER) dated January 14, 2005. Conditions and limitations specified in the NRC SER require licensees using STAR to submit a summary report following the first application of STAR. Dominion Nuclear Connecticut, Inc. (DNC) hereby submits the summary report as enclosures to this letter.

As Enclosure 1 contains information proprietary to Westinghouse Electric Company LLC and AREVA NP, Inc., it is requested that the information which is proprietary be withheld from public disclosure in accordance with 10 CFR Section 2.390. Accordingly, affidavits, signed by the owners of the information, are included and set forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

If you have questions or require additional information, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,

Gerald T. Bischof
Vice President – Nuclear Engineering

IE26

Enclosures: (4)

Enclosure 1. (Proprietary) Millstone Unit 2 Cycle 18 Summary Report to NRC on First Application of Startup Test Activity Reduction (STAR) Program

Enclosure 2. (Non-Proprietary) Millstone Unit 2 Cycle 18 Summary Report to NRC on First Application of Startup Test Activity Reduction (STAR) Program

Enclosure 3. Westinghouse authorization letter, CAW-07-2229, accompanying affidavit, Proprietary Information Notice, and Copyright Notice.

Enclosure 4. AREVA NP memo FAB07-079 and accompanying affidavit

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission (w/o Encl. 1)
Region I
475 Allendale Road
King of Prussia, Pennsylvania 19406-1415

Mr. S. M. Schneider (w/o Encl. 1)
NRC Senior Resident Inspector
Millstone Power Station

Mr. V. Nerses (w/o Encl. 1)
NRC Senior Project Manager – Power Station
U. S. Nuclear Regulatory Commission
One White Flint North
11555 Rockville Pike
Mail Stop 8C2
Rockville, Maryland 20852-2738

Serial No. 07-0127
Docket No. 50-336

**ENCLOSURE 2**

# MILLSTONE UNIT 2 CYCLE 18 SUMMARY REPORT TO NRC ON FIRST APPLICATION OF STARTUP TEST ACTIVITY REDUCTION (STAR) PROGRAM

**(NON-PROPRIETARY)**

**DOMINION NUCLEAR CONNECTICUT, INC.**
**MILLSTONE POWER STATION UNIT 2**

# Millstone Unit 2 Cycle 18

# Summary Report to NRC on First Application of

# Startup Test Activity

# Reduction (STAR) Program

## November 2006

Background

The Millstone Unit 2 Cycle 18 startup from refueling successfully utilized the Startup Test Activity Reduction (STAR) Program in accordance with Westinghouse Topical Report, WCAP-16011-P-A, Rev. 0. This was the first application of the STAR Program at Millstone Unit 2.

The Westinghouse topical report for the STAR Program was reviewed and approved by the NRC in January 2005 [1]. The conditions and limitations of the NRC safety evaluation for the STAR Program topical report [1] requires that "each licensee using STAR to submit a summary report following the first application, either successful or not, of STAR to its plant. The report should (a) identify the core design method used, (b) compare the measured and calculated values and the differences between these values to the corresponding core design method uncertainties and (c) show compliance with the STAR applicability requirements. If the application of STAR is unsuccessful, identify the reasons why the STAR application failed."

This summary report provides the NRC with the required information per the conditions and limitations specified in the conditions and limitations of the NRC safety evaluation for the STAR topical report.

Core Design Method Used

The core design method used for Millstone 2 Cycle 18 reload core is the AREVA SAV95 nuclear code system [2]. The NRC approved the SAV95 methodology in October 1996 [3]. SAV95 consists of the CASMO and PRISM nuclear design codes.

Cycle 18 STAR Program Test Results (Compare the Measured and Calculated Values...)

Application of the STAR Program for Cycle 18 allowed the elimination of Control Element Assembly (CEA) worth measurements from the low power physics-testing program. The elimination of this measurement is acceptable per the STAR Program since the Cycle 18 core design was demonstrated to be [ ]$^{w(a,c)}$, and the STAR Applicability Requirements have been satisfied and documented. The CEA worth measurement was the only test removed from Cycle 18 low power physics-testing program due to use of the STAR program.

Table 1 lists the results from the Cycle 18 STAR Program Tests. As can be seen from Table 1, all STAR Program test criteria were met. Therefore, the STAR Program was successfully implemented for the Millstone 2, Cycle 18 reload core.

Table 2 provides a comparison between the measured and calculated values. As can be seen from Table 2, the differences were all within the core design method uncertainties reported in the SAV95 topical report [2].

| Table 1 – Millstone 2 Cycle 18 STAR Program Test Results | | | |
|---|---|---|---|
| **STAR Program Test** | **Measured Value** | **Test Criteria** | **Test Criteria Met?** |
| CEA Drop Time (maximum) | 2.30 sec. | < 2.75 sec. | YES |
| CEA Drop Characteristics (All CEAs) | Reed switch voltage vs. time trace characteristics that indicate CEA slowing in the dashpot | CEA slowing in the dashpot evident on reed switch vs. time trace | YES |
| Absolute value of Predicted to Measured difference in HZP, ARO Critical Boron Concentration (ppm) | 27 ppm | ≤ [ ]$^{A}$ | YES |
| Incore Flux symmetry (maximum difference) (30% power) | 5.34% | ± 10% in symmetric incore locations | YES |
| Incore Power Distribution (40-80% power) | • Maximum RPD difference was +0.054<br>• Assembly average RMS radial was 0.009 | • ± 0.1 RPD for each measured location<br>• Assembly average RMS radial < 0.05 | YES |
| Absolute value of Predicted to Measured difference in ITC at HFP (pcm/°F) | 0.642 pcm/°F | [ ]$^{A}$ | YES |
| MTC Surveillance at HFP (pcm/°F) | -5.775 pcm/°F | More negative than +4 pcm/°F (TS limit) | YES |
| Incore Power Distribution > 90% power | • Maximum RPD difference was +0.054<br>• Assembly average RMS radial was 0.009<br>• RMS core average axial was 0.017 | • ± 0.1 RPD for each measured location<br>• Assembly average RMS radial < [ ]$^{A}$<br>• RMS core average axial < [ ]$^{A}$ | YES |
| Absolute value of Predicted to Measured difference in HFP-HZP ARO Critical Boron Concentration (ppm) | 9 ppm | ≤ [ ]$^{A}$ | YES |

$^{A}$ – **AREVA Proprietary**
$^{w(a,c)}$ **–Westinghouse Proprietary Class 2**

| Table 2 – Comparison of Measured and Calculated Values | | | | |
|---|---|---|---|---|
| **Parameter** | **Measured Values** | **Calculated Values** | **Difference** | **SAV95 Topical Uncertainty** |
| ARO HZP Critical Boron Concentration | 1588 ppm | 1615 ppm | -27 ppm | Maximum absolute difference ≤ [ ]$^{A}$ |
| Total HZP Control Bank Worths* | Not Measured | 8446 pcm | N/A | Maximum absolute difference ≤ [ ]$^{A}$ |
| ARO HZP Isothermal Temperature Coefficient | 1.57 pcm/°F | 1.09 pcm/°F | +0.48 pcm/°F | Maximum absolute difference of ≤ [ ]$^{A}$ |
| HFP Critical Boron Concentration | 1118 ppm | 1136 ppm | -18 ppm | Maximum absolute difference ≤ [ ]$^{A}$ |
| Assembly Average Power Distributions | 0.009 | 0.000 | 0.009 | Maximum RMS difference ≤ [ ]$^{A}$ |
| Core Average Axial Power Differences | 0.017 | 0.000 | 0.017 | Maximum RMS difference ≤ [ ]$^{A}$ |

* - Total HZP Control Bank Worths and Individual Control Bank Worths were not measured as allowed by the STAR Program.

Compliance with STAR Applicability Requirements

STAR Applicability Requirements are conditions that must be satisfied to use the STAR Program. The STAR Applicability Requirements are provided in Table 3-4 of Reference 1 and provide compensatory measures that ensure the core can be operated as designed when used in conjunction with the proposed tests. The STAR Applicability Requirements involve the following areas:

- Core Design
- Fabrication
- Refueling
- Startup Testing
- CEA Lifetime

Conformance with the STAR Applicability Requirements is documented in accordance with plant processes and procedures. Demonstration of compliance with each of the STAR applicability requirements is described below.

Core Design Applicability Requirements

The STAR topical report [1] lists four applicability requirements that must be met for the Core Design area. The STAR core design applicability requirements were met as follows for Cycle 18:

1. The first core design applicability requirement is:

   [

   ]$^{w(a,c)}$.

   This core design applicability requirement is met by using [
   ]$^{w(a,c)}$ in the AREVA topical report [2] on the SAV95 code system, which was approved by the NRC in October 1996[3]. SAV95 consists of the CASMO and PRISM nuclear core design computer codes. These codes have previously been used to design and operate Millstone Unit 2 Cycles 14, 15, 16 and 17.

The SAV95 topical [2], [

]$^{A}$ to be used for this core design applicability requirement:

[

•

]$^{A}$.

The benchmarking of SAV95 (CASMO/PRISM) was accomplished by [

]$^{A}$.

Conclusion: The NRC approved AREVA SAV95 topical [2] has [

]$^{w(a,c)}$

2. The second core design applicability requirement is:

[

]$^{w(a,c)}$.

AREVA, the supplier of the safety analyses for Millstone 2 Cycle 18, has confirmed in writing that the above [

]$^{w(a,c)}$.

Conclusion: The SAV95 [

]$^{w(a,c)}$.

3. The third core design applicability requirement is:

[

•

]$^{w(a,c)}$.

Based on review of the [

]$^{w(a,c)}$, acceptance criteria were developed for each of the above parameters based on the STAR topical [1]. Described below are the Cycle 18 values and the corresponding acceptance criteria based on the [ ]$^{w(a,c)}$, to comply with each of the above design applicability requirements:

[

•

•

]$^{w(a,c)}$.

In addition, to meeting all the quantitative criteria above, the Millstone Unit 2 Cycle 18 core design is quite similar to previous fuel cycles. The same vendor (AREVA) and core design methods (SAV95) have been used since Cycle 14. The fuel design, fuel enrichments, batch size, cycle length, burnable poison ($Gd_2O_3$), CEA design ($B_4C$ with Ag-In-Cd tips) and low leakage fuel management are all quite similar to previous cycles.

Conclusion: The Cycle 18 core design is sufficiently similar to those used to benchmark the predictions such that the [
]$^{w(a,c)}$ remain valid.

4. The fourth core design applicability requirement is (in part):

[

]$^{w(a,c)}$

The ITC was measured at HZP and the HZP MTC surveillance was performed during the Cycle 18 low power physics testing. Thus, no additional action is required [
]$^{w(a,c)}$ the MTC parameter per the STAR topical report. However, the CEA worths were not measured during Cycle 18 low power physics testing, and therefore this fourth core design applicability requirement must be demonstrated for CEA worths.

The STAR topical provides two methods that may be used to [

]$^{w(a,c)}$.

[

]$^{w(a,c)}$.

The results for Cycle 18 showed that the [

]$^{w(a,c)}$.

Conclusion: [

]$^{w(a,c)}$.

Fabrication Applicability Requirements

The STAR topical report [1] lists two applicability requirements that must be met for the Fabrication area. The STAR fabrication applicability requirements were met as follows for Cycle 18:

1. The first fabrication applicability requirement is:

[

]$^{w(a,c)}$.

The Dominion generated Final Fuel Management Plan [5] contains the detailed design information for the Cycle 18 core, including: [

]$^{w(a,c)}$. The fuel supplier, AREVA, translated the information from the Dominion Final Fuel Management Plan into a [ ]$^{A}$. The AREVA [ ]$^{A}$ provided the detailed Cycle 18 core design information to AREVA fuel manufacturing for construction of the new fuel assemblies.

Dominion personnel performed a review of the AREVA Cycle 18 [ ]$^{A}$ for Millstone 2 Cycle 18 to verify that [

]$^{w(a,c)}$

had been properly translated from the Dominion Cycle 18 Final Fuel Management Plan to the AREVA [ ]$^{A}$. The review concluded that the Dominion Cycle 18 Final Fuel

Management Plan had been properly translated by AREVA into the [ ]$^{A}$ to be used by the AREVA manufacturing facility.

The AREVA drawing for the fuel assembly upper end fitting specifies the [ ]$^{w(a,c)}$. The AREVA drawing for the fuel assembly specifies the [ ]$^{w(a,c)}$. This ensures that the [ ]$^{w(a,c)}$. This check, [ ]$^{w(a,c)}$ is not of particular importance to the Millstone 2 Cycle 18 fuel design, since the Millstone 2 Cycle 18 fresh fuel assemblies are rotationally symmetric.

Additionally, selected [ ]$^{w(a,c)}$ with the Dominion Cycle 18 Final Fuel Management Plan.

The AREVA product specifications for the fuel pellets and burnable absorber fuel pellets require that: [ ]$^{A}$. Dominion personnel performed a review of the AREVA reported sample results for the fuel pellets and burnable absorber fuel pellets for the new fuel assemblies used in the Cycle 18 core. The review of the AREVA sample results demonstrated that the U-235 and gadolinia enrichments were in within the tolerances of the product specifications and in accordance with the core design requirements specified in the Cycle 18 Final Fuel Management Plan and the AREVA Cycle 18 [ ]$^{A}$.

Additionally, Dominion personnel performed a detailed review of the AREVA manufacturing records for the new fuel assemblies used in the Cycle 18 core. [ ]$^{A}$. The following reviews were performed for each of the 68 new fuel assemblies:

- The [ ]$^{A}$. [ ]$^{w(a,c)}$ as specified by the Cycle 18 [ ]$^{A}$.
- For each burnable absorber (gadolinia) fuel rod in the fuel assembly, the [ ]$^{A}$ were [ ]$^{w(a,c)}$ is shown on the fuel rod record file.

- Dominion personnel performed a review of the Cycle 18 [ ]$^{A}$ fuel assembly manufacturing records for each of the 68 Cycle 18 new fuel assemblies to ensure that the [ ]$^{w(a,c)}$. The [ ]$^{A}$ records were [ ]$^{w(a,c)}$ with the Cycle 18 [ ]$^{A}$, and were therefore [ ]$^{w(a,c)}$ with the Dominion Cycle 18 Final Fuel Management Plan.

All of the above checks of the AREVA [ ]$^{A}$ were completed with no deficiencies identified.

Conclusion: Dominion personnel verified that the 68 new fuel assemblies inserted into the Cycle 18 core were [

]$^{w(a,c)}$.

2. The second fabrication applicability requirement is:

[

]$^{w(a,c)}$

No new CEAs were inserted in the Cycle 18 core. All 73 CEAs in the Cycle 18 core were previously measured in low power physics testing programs for earlier Millstone 2 cores.

Conclusion: Not applicable. No new CEAs were inserted in the Cycle 18 core.

Refueling Applicability Requirements

The STAR topical report [1] lists two applicability requirements that must be met for the refueling area. The STAR refueling applicability requirements were met as follows for Cycle 18:

1. The first refueling applicability requirement is:

   [

   ]$^{w(a,c)}$.

   Conclusion: [

   ]$^{w(a,c)}$.

2. The second refueling applicability requirement is:

   [

   •

•

]$^{w(a,c)}$

Conclusion: [

]$^{w(a,c)}$.

Startup Testing Applicability Requirement

The STAR topical report [1] lists one applicability requirement that must be met for the startup testing area:

[

• ]$^{w(a,c)}$

The STAR startup testing applicability requirement was met as follows for Cycle 18:

As can be seen from Table 2 above, the [

]$^{w(a,c)}$.

Although the STAR startup testing applicability requirement [

]$^{w(a,c)}$, the SAV95 topical report [2] [

]$^{A}$. For Cycle 18, [

]$^{w(a,c)}$ and is consistent with the

[ ]$^{A}$.

Conclusion: [

]$^{A}$.

CEA Lifetime Applicability Requirement

The STAR topical report [1] lists one applicability requirement that must be met for CEA lifetime considerations:

[

*3.*

]$^{w(a,c)}$

The STAR CEA lifetime applicability requirement was met as follows for Cycle 18:

[

]$^{w(a,c)}$.

---

[

]$^{w(a,c)}$

[

]$^{w(a,c)}$.

---

[

]$^{w(a,c)}$

[

]$^{w(a,c)}$.

Conclusion: Dominion has implemented for Millstone 2 a [

]$^{w(a,c)}$.

References

1. WCAP-16011-P-A, Rev. 0, "Startup Test Activity Reduction Program," February 2005.
2. Siemens Report EMF-96-029(P), "Reactor Analysis System for PWRs," May 1996.
3. NRC SER for Siemens Topical Report EMF-96-029(P), 10/29/96, T.E. Collins (NRC) to H.D. Curet (Siemens).
4. AREVA letter FAB06-202, "Millstone 2, Cycle 18 Startup Test Activity Reductions," 3/17/06, R.D. Kliewer (AREVA) to H.H. Barker (Dominion)
5. Final Fuel Management Plan for Millstone Unit 2 Cycle 18 Reload MIB-9, Revision 1, January 2006

**ENCLOSURE 3**

**WESTINGHOUSE AUTHORIZATION LETTER, CAW-07-2229, ACCOMPANYING AFFIDAVIT, PROPRIETARY INFORMATION NOTICE, AND COPYRIGHT NOTICE**

**DOMINION NUCLEAR CONNECTICUT, INC.**
**MILLSTONE POWER STATION UNIT 2**

Westinghouse

Westinghouse Electric Company
Nuclear Services
P.O. Box 355
Pittsburgh, Pennsylvania 15230-0355
USA

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Direct tel: (412) 374-4643
Direct fax: (412) 374-4011
e-mail: greshaja@westinghouse.com

Our ref: CAW-07-2229

February 14, 2007

APPLICATION FOR WITHHOLDING PROPRIETARY
INFORMATION FROM PUBLIC DISCLOSURE

Subject: NF-NEU-07-5 P-Attachment, "Millstone Unit 2 Cycle 18 Summary Report to NRC on First Application of Startup Test Activity Reduction (STAR) Program" (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-07-2229 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.390 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Dominion Generation.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-07-2229 and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Very truly yours,

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures

cc: Jon Thompson/NRR

CAW-07-2229

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Sworn to and subscribed before me
this 14th day of February, 2007

Sharon L. Markle

Notary Public

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Sharon L. Markle, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires Jan. 29, 2011
Member, Pennsylvania Association of Notaries

(1) I am Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.

(2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.390 of the Commission's regulations and in conjunction with the Westinghouse application for withholding accompanying this Affidavit.

(3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.

(4) Pursuant to the provisions of paragraph (b)(4) of Section 2.390 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.

(i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

(b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

(c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.

(d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

(e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.

(f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

(b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.

(c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

(d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

(e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.

(f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

(iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.390, it is to be received in confidence by the Commission.

(iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

(v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in NF-NEU-07-5 P-Attachment, "Millstone Unit 2 Cycle 18 Summary Report to NRC on First Application of Startup Test Activity Reduction (STAR) Program" (Proprietary) being transmitted by Dominion Generation letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted by Westinghouse for use by Millstone Unit 2 is in response to conditions and limitations of an NRC safety evaluation.

This information is part of that which will enable Westinghouse to:

(a) Support Dominion's use of the STAR Program at Millstone Unit 2.

Further this information has substantial commercial value as follows:

(a) Westinghouse can use this information to further enhance their licensing position with their competitors.

(b) Assist customers to obtain license changes.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar analyses and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.

## Proprietary Information Notice

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.390 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.390(b)(1).

## Copyright Notice

The reports transmitted herewith each bear a Westinghouse copyright notice. The NRC is permitted to make the number of copies of the information contained in these reports which are necessary for its internal use in connection with generic and plant-specific reviews and approvals as well as the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or regulation subject to the requirements of 10 CFR 2.390 regarding restrictions on public disclosure to the extent such information has been identified as proprietary by Westinghouse, copyright protection notwithstanding. With respect to the non-proprietary versions of these reports, the NRC is permitted to make the number of copies beyond those necessary for its internal use which are necessary in order to have one copy available for public viewing in the appropriate docket files in the public document room in Washington, DC and in local public document rooms as may be required by NRC regulations if the number of copies submitted is insufficient for this purpose. Copies made by the NRC must include the copyright notice in all instances and the proprietary notice if the original was identified as proprietary.

**ENCLOSURE 4**

**AREVA NP MEMO AND ACCOMPANYING AFFIDAVIT**

**DOMINION NUCLEAR CONNECTICUT, INC.**
**MILLSTONE POWER STATION UNIT 2**

AREVA

February 19, 2007
FAB07-79

Mr. Rick Sterner
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385

**Subject: Affidavit regarding Millstone Unit 2 STAR Summary Report**

Reference 1: CORRES-OUT-AREVA 20070009, Revision 0 Addendum 0, "Request for AREVA Review and Affidavit re Millstone Unit 2 STAR Summary Report (AREVA Proprietary Version and Non-Proprietary Version)" by R. W. Sterner, dated 02/12/2007.

Dear Mr. Sterner,

This letter transmits the enclosed AREVA affidavit for the AREVA NP Proprietary data in the Millstone Unit 2 STAR Summary Report. This is being sent in response to reference 1.

If you have any questions or comments, feel free to call at (434) 832-2686, or you can e-mail me at Glen.Thomas@areva.com.

Sincerely,

G. A. Thomas
Project Manager

Without enclosure

cc: J. R. Guerci
D. M. Bucheit
J. R. Harrell
L. O. Hill
H. H. Barker

AREVA NP INC.
An AREVA and Siemens company

3315 Old Forest Road, P.O. Box 10935, Lynchburg, VA 24506-0935
Tel.: (434) 832-3000 - Fax: (434) 832-3840

# AFFIDAVIT

COMMONWEALTH OF VIRGINIA )
) ss.
CITY OF LYNCHBURG )

1. My name is Gayle F. Elliott. I am Manager, Product Licensing, for AREVA NP Inc. and as such I am authorized to execute this Affidavit.

2. I am familiar with the criteria applied by AREVA NP to determine whether certain AREVA NP information is proprietary. I am familiar with the policies established by AREVA NP to ensure the proper application of these criteria.

3. I am familiar with the AREVA NP information contained in the report *Millstone Unit 2 Cycle 18 Summary Report to NRC on First Application of Startup Test Activity Reduction (STAR) Program,* dated November 2006, and referred to herein as "Document." Information contained in this Document has been classified by AREVA NP as proprietary in accordance with the policies established by AREVA NP for the control and protection of proprietary and confidential information.

4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by AREVA NP and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.

5. This Document has been made available to the U.S. Nuclear Regulatory Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information."

6. The following criteria are customarily applied by AREVA NP to determine whether information should be classified as proprietary:

(a) The information reveals details of AREVA NP's research and development plans and programs or their results.

(b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.

(c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA NP.

(d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA NP in product optimization or marketability.

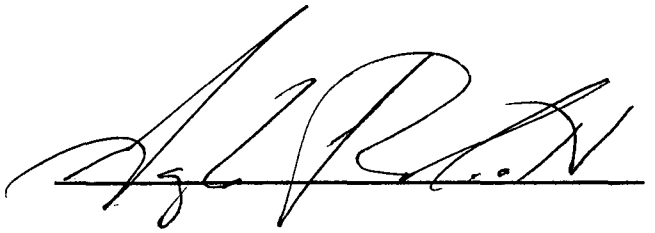
(e) The information is vital to a competitive advantage held by AREVA NP, would be helpful to competitors to AREVA NP, and would likely cause substantial harm to the competitive position of AREVA NP.

The information in the Document is considered proprietary for the reasons set forth in paragraphs 6(b) and 6(c) above.

7. In accordance with AREVA NP's policies governing the protection and control of information, proprietary information contained in this Document have been made available, on a limited basis, to others outside AREVA NP only as required and under suitable agreement providing for nondisclosure and limited use of the information.

8. AREVA NP policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.



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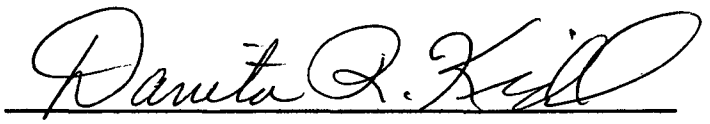

Danita R. Kidd
NOTARY PUBLIC, STATE OF VIRGINIA
MY COMMISSION EXPIRES: 12/31/08