

**Mark J. Ajluni, P.E.**  
Nuclear Licensing Director

**Southern Nuclear  
Operating Company, Inc.**  
40 Inverness Center Parkway  
Post Office Box 1295  
Birmingham, Alabama 35201  
  
Tel 205.992.7673  
Fax 205.992.7885

September 24, 2010



Docket Nos.: 50-321 50-348 50-424  
50-366 50-364 50-425

NL-10-1803

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2  
Joseph M. Farley Nuclear Plant – Units 1 and 2  
Vogtle Electric Generating Plant – Units 1 and 2  
Notification Letter Required by North American Electric Reliability Corporation

Ladies and Gentlemen:

By Order dated March 19, 2009<sup>1</sup>, the Federal Energy Regulatory Commission (FERC) clarified that the balance of plant (BOP) equipment within a nuclear power plant that is not regulated by the Nuclear Regulatory Commission (NRC) is subject to compliance with the FERC approved Critical Infrastructure Protection Reliability Standards (CIP Standards). Order 706-B assures that there is no “gap” in the regulatory process and authority shared between the FERC and the NRC with regard to protection against cyber security attacks. At the time Order 706-B was issued, the NRC cyber security regulations 10 CFR 73.54, “Protection of digital computer and communication systems and networks” (NRC Rule) had not been issued. As the scoping criteria of the NRC Rule was not yet effective, it was reasonable for the NRC and FERC to consider the potential for a regulatory gap to exist. As finally issued, however, the NRC Rule scoping criteria clearly eliminates the potential for such a gap to exist.

By letter dated August 27, 2010, the North American Electric Reliability Corporation (NERC) required licensees of nuclear power plants (NPPs) to: (1) provide the NRC a notification letter identifying all BOP systems, structures, and components (SSCs) considered important to safety; and (2) submit a revised cyber security plan to the NRC for its review and approval. The NERC letter further stated that if the NRC determines that these BOP SSCs are not within the scope of its jurisdiction, these BOP SSCs will remain subject to compliance with the applicable CIP Reliability Standards, as identified in the FERC-approved NPP implementation plan.

---

<sup>1</sup> *Mandatory Reliability Standards for Critical Infrastructure Protection, order on clarification*, Order No. 706-B, 126 FERC ¶ 61,229 (2009)

The NRC Rule requires that licensees protect digital computer and communication systems, and networks associated with:

1. Safety-related and important-to-safety functions;
2. Security functions;
3. Emergency preparedness functions, including offsite communications; and
4. Support systems and equipment which, if compromised, would adversely impact safety, security, or emergency preparedness functions.

Section 2.1 of the proposed Southern Nuclear Operating Company (SNC) Cyber Security Plan (CSP) submitted to the NRC by letter NL-10-1291, dated July 16, 2010, modified Criterion 4 above to provide additional clarification regarding the scope of "support systems" as follows:

- 4. Support systems and equipment which, if compromised, would adversely impact safety, security, or emergency preparedness functions. These systems include, in part, all non-safety related balance of plant equipment, which if compromised, could result in a reactor scram or actuation of a safety-related system and therefore, impact reactivity.*

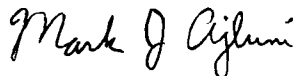
Based on the above clarification, compliance with the proposed SNC CSP submitted to the NRC by letter dated July 16, 2010, provides high assurance that a potential cyber attack on BOP systems would not: (1) impact public health and safety associated with operation of the facility; or (2) impact reliable operation of the Bulk-Electric System. Further, it is expected that the NRC will conduct inspection activities associated with implementation of the NRC Rule, including scoping of BOP systems that could result in a reactor scram or safety system actuation, to assure critical systems are identified and protected as described in the SNC Cyber Security Plan. As a result, inadvertent omission of BOP systems that, if compromised, could result in a reactor scram or safety system actuation and potentially impact grid reliability, would be subject to enforcement action by the NRC. NRC inspection and enforcement activities provide further assurance that a regulatory gap with regard to cyber security does not exist. The SNC CSP submitted by letter dated July 16, 2010, addresses the full scope of SSCs, including those associated with the BOP, that could result in a reactor scram or safety system actuation. Accordingly, a revision to the proposed SNC CSP is not required.

As stated above, the August 27, 2010, NERC letter requires NPP operators to provide the NRC a list of BOP SSCs considered important to safety in this notification letter. Based on the above, SNC does not consider these systems "important to safety" under Criterion 1 of the NRC Rule described above, but instead, considers these BOP systems to be "support systems" that if compromised, could adversely impact safety, security, or emergency preparedness under Criterion 4 of the NRC Rule.

SNC's response to the NERC Bright Line Survey included a list of BOP support systems for each plant that are considered to be regulated by the NRC and these lists are provided in Enclosures 1, 2, and 3, for Hatch, Farley, and Vogtle, respectively. It should be noted that these lists are representative of systems within the scope of NERC concern and are not intended to represent the complete set of BOP systems within the scope of the NRC Rule. A complete list of BOP support systems that are in the scope of the NRC Rule is available for inspection for each plant.

This letter contains no NRC commitments. If you have any questions, please contact Jack Stringfellow at (205) 992-7037.

Respectfully submitted,



M. J. Ajluni  
Nuclear Licensing Director

MJA/TWS/lac

- Enclosures:
1. Edwin I. Hatch Nuclear Plant List of BOP Support Systems Identified in NERC Bright Line Survey Response
  2. Joseph M. Farley Nuclear Plant List of BOP Support Systems Identified in NERC Bright Line Survey Response
  3. Vogtle Electric Generating Plant List of BOP Support Systems Identified in NERC Bright Line Survey Response

cc: Southern Nuclear Operating Company  
Mr. J. T. Gasser, Executive Vice President  
Mr. J. R. Johnson, Vice President – Farley  
Mr. D. R. Madison, Vice President – Hatch  
Mr. T. E. Tynan, Vice President – Vogtle  
Ms. P. M. Marino, Vice President – Engineering  
RType: CFA04.054; CHA02.004; CVC7000

U. S. Nuclear Regulatory Commission

Mr. L. A. Reyes, Regional Administrator  
Mr. R. E. Martin, NRR Project Manager – Farley, Hatch and Vogtle  
Mr. P. G. Boyle, NRR Project Manager  
Mr. E. L. Crowe, Senior Resident Inspector – Farley  
Mr. E. D. Morris, Senior Resident Inspector – Hatch  
Mr. M. Cain, Senior Resident Inspector – Vogtle

North American Electric Reliability Corporation

Mr. Jim Hughes – Senior Auditor

**Edwin I. Hatch Nuclear Plant – Units 1 and 2  
Joseph M. Farley Nuclear Plant – Units 1 and 2  
Vogtle Electric Generating Plant – Units 1 and 2  
Notification Letter Required by North American Electric  
Reliability Corporation**

**Enclosure 1**

**Edwin I. Hatch Nuclear Plant List of BOP Support Systems  
Identified in NERC Bright Line Survey Response**

# Hatch Bright Line Survey Response

Attachment III

Edwin I. Hatch Nuclear Plant

<b>NERC Survey System List</b>	<b>Impact Reactivity – Subject to 10 CFR 73.54</b>
<b>Water Systems</b>	
• Heater/Drain System	Yes
• Condensate / Feedwater System	Yes
• Water Cleanup System, Chemical Treatment	Yes
• Circulating Water / Cooling Towers	Yes
• Non-Safety Cooling Water	Yes
• Feedwater Lube Oil System	Yes
<b>Steam Systems</b>	
• Extraction Steam	Yes
• Gland Steam / Seal Steam	Yes
• Main Steam	Yes
<b>Generator /Turbine</b>	
• Generator Exciter and Control Systems	Yes
• Generator and Support System	Yes
• Electro-hydraulic System – (Excluding Fast Acting Solenoid Valve)	Yes
• Hydrogen System	Yes
• Isophase Bus Duct Cooling	Yes
• Lube Oil System	Yes
• Hydrogen Seal Oil System	Yes
• Stator Cooling Water	Yes
<b>Miscellaneous</b>	
• Air Removal System (Pressurized Water Reactor)	Yes
• Service Air System	Yes
• Instrument Air System	Yes
• Offgas System / Steam Jet Air Ejector (SJAЕ)	Yes
• Drywell Nitrogen System	Yes
<b>Power</b>	
• Switchyard	Yes – As delineated in the NUC-001 Nuclear Plant Interface Requirements (NPIR)
• Non-Safety Related Power Distribution (AC/DC)	Yes

**Edwin I. Hatch Nuclear Plant – Units 1 and 2  
Joseph M. Farley Nuclear Plant – Units 1 and 2  
Vogtle Electric Generating Plant – Units 1 and 2  
Notification Letter Required by North American Electric  
Reliability Corporation**

**Enclosure 2**

**Joseph M. Farley Nuclear Plant List of BOP Support Systems  
Identified in NERC Bright Line Survey Response**

# Farley Bright Line Survey Response

Attachment III

Joseph M. Farley Nuclear Plant

NERC Survey System List	Impact Reactivity – Subject to 10 CFR 73.54
<b>Water Systems</b>	
• Heater/Drain System	Yes
• Condensate / Feedwater System	Yes
• Circulating Water	Yes
• Non-Safety Cooling Water	Yes
• Feedwater Lube Oil System	Yes
<b>Steam Systems</b>	
• Extraction Steam	Yes
• Gland Steam	Yes
• Main Steam	Yes
<b>Generator</b>	
• Generator Exciter and Control Systems	Yes
• Generator and Support System	Yes
• Electro-hydraulic System – (Excluding Fast Acting Solenoid Valve)	Yes
• Hydrogen System	Yes
• Isophase Bus Duct Cooling	Yes
• Lube Oil System	Yes
<b>Miscellaneous</b>	
• Air Removal System (Pressurized Water Reactor)	Yes
• Service Air System	Yes
• Instrument Air System	Yes
<b>Power</b>	
• Switchyard	Yes – As delineated in the NUC-001 Nuclear Plant Interface Requirements (NPIR)
• Non-Safety Related Power Distribution (AC/DC)	Yes

**Edwin I. Hatch Nuclear Plant – Units 1 and 2  
Joseph M. Farley Nuclear Plant – Units 1 and 2  
Vogtle Electric Generating Plant – Units 1 and 2  
Notification Letter Required by North American Electric  
Reliability Corporation**

**Enclosure 3**

**Vogtle Electric Generating Plant List of BOP Support Systems  
Identified in NERC Bright Line Survey Response**



# Vogtle Bright Line Survey Response

Attachment III

Alvin W. Vogtle Nuclear Plant

NERC Survey System List	Impact Reactivity – Subject to 10 CFR 73.54
<b>Water Systems</b>	
• Heater/Drain System	Yes
• Condensate / Feedwater System	Yes
• Circulating Water	Yes
• Non-Safety Cooling Water	Yes
• Feedwater Lube Oil System	Yes
<b>Steam Systems</b>	
• Extraction Steam	Yes
• Gland Steam	Yes
• Main Steam	Yes
<b>Generator</b>	
• Generator Exciter and Control Systems	Yes
• Generator and Support System	Yes
• Electro-hydraulic System – (Excluding Fast Acting Solenoid Valve)	Yes
• Hydrogen System	Yes
• Isophase Bus Duct Cooling	Yes
• Lube Oil System	Yes
<b>Miscellaneous</b>	
• Air Removal System (Pressurized Water Reactor)	Yes
• Service Air System	Yes
• Instrument Air System	Yes
<b>Power</b>	
• Switchyard	Yes – As delineated in the NUC-001 Nuclear Plant Interface Requirements (NPIR)
• Non-Safety Related Power Distribution (AC/DC)	Yes