Progress Energy

Cornelius J. Gannon
Vice President
Brunswick Nuclear Plant
Progress Energy Carolinas, Inc.

JUN 20 2005

SERIAL: BSEP 05-0049
TSC-2004-04

10 CFR 50.90

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

Subject: Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Docket Nos. 50-525 and 50-324/License Nos. DPR-71 and DPR-62
Request for License Amendments Regarding Suppression Chamber-to-Drywell Vacuum Breaker Surveillance Testing

Ladies and Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., (PEC) is requesting a revision to the Technical Specifications (TSs) for the Brunswick Steam Electric Plant, Unit Nos. 1 and 2. The proposed change would revise the TS Surveillance Requirements for the frequency of functionally testing the suppression chamber-to-drywell vacuum breakers. The proposed change would result in functional testing of the vacuum breakers every 92 days, within 12 hours after steam discharge from the safety/relief valves to the suppression chamber, and within 12 hours after any operation that causes one of the vacuum breakers to open. An evaluation of the proposed license amendments is provided in Enclosure 1.

PEC has evaluated the proposed change in accordance with 10 CFR 50.91(a)(1), using the criteria in 10 CFR 50.92(c), and determined that this change involves no significant hazards considerations.

PEC is providing, in accordance with 10 CFR 50.91(b), a copy of the proposed license amendments to the designated representative for the State of North Carolina.

In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, PEC requests that the proposed license amendments, once approved by the NRC, be issued with an effective date of 60 days following approval.

No regulatory commitments are contained in this letter. Please refer any questions regarding this submittal to Mr. Edward T. O'Neil, Manager - Support Services, at (910) 457-3512.

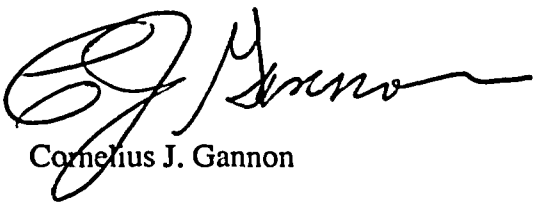
A001

P.O. Box 10429
Southport, NC 28461

T> 910.457.3698
F> 910.457.2803

I declare, under penalty of perjury, that the foregoing is true and correct. Executed on June 20, 2005.

Sincerely,



Cornelius J. Gannon

WRM/wrm

Enclosures:

1. Evaluation of License Amendments Request
2. Marked-up Technical Specification Page - Unit 1
3. Typed Technical Specification Page - Unit 1
4. Typed Technical Specification Page - Unit 2
5. Marked-up Technical Specification Bases Page - Unit 1 (For Information Only)
6. List of Regulatory Commitments

cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Dr. William D. Travers, Regional Administrator
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303-8931

U. S. Nuclear Regulatory Commission
ATTN: Mr. Eugene M. DiPaolo, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461-8869

U. S. Nuclear Regulatory Commission **(Electronic Copy Only)**
ATTN: Ms. Brenda L. Mozafari (Mail Stop OWFN 8G9)
11555 Rockville Pike
Rockville, MD 20852-2738

Ms. Jo A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

Ms. Beverly O. Hall, Section Chief
Radiation Protection Section, Division of Environmental Health
North Carolina Department of Environment and Natural Resources
3825 Barrett Drive
Raleigh, NC 27609-7221

Evaluation of License Amendments Request

Subject: Request for License Amendments Regarding Suppression Chamber-to-Drywell Vacuum Breaker Surveillance Testing

1.0 Description

This letter is a request by Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), to amend Operating Licenses DPR-71 and DPR-62 for the Brunswick Steam Electric Plant (BSEP), Unit Nos. 1 and 2.

The proposed changes would revise the frequency for functional testing of each suppression chamber-to-drywell vacuum breaker as specified in Surveillance Requirement (SR) 3.6.1.6.2 of Technical Specification (TS) 3.6.1.6, "Suppression Chamber-to-Drywell Vacuum Breakers."

2.0 Proposed Change

The proposed change revises SR 3.6.1.6.2 to require performance of functional testing of each vacuum breaker every 92 days, within 12 hours after any discharge of steam to the suppression chamber from the safety/relief valves (SRVs), and within 12 hours following an operation that causes any of the vacuum breakers to open.

The following changes are proposed.

Proposed Technical Specification Change Suppression Chamber-to Drywell Vacuum Breaker Surveillance Testing		
Specification	**Existing Requirement**	**Proposed Requirement**
TS 3.6.1.6, "Suppression Chamber-to-Drywell Vacuum Breakers"		
SR 3.6.1.6.2	Perform a functional test of each required vacuum breaker. **FREQUENCY:** 31 days AND	Perform a functional test of each required vacuum breaker. **FREQUENCY:** 92 days AND

Proposed Technical Specification Change Suppression Chamber-to Drywell Vacuum Breaker Surveillance Testing		
Specification	**Existing Requirement**	**Proposed Requirement**
	Within 12 hours after any discharge of steam to the suppression chamber from any source.	Within 12 hours after any discharge of steam to the suppression chamber from the SRVs AND Within 12 hours following an operation that causes any of the vacuum breakers to open.

For convenience, Enclosure 2 contains a marked-up version of the Unit 1 TSs showing the proposed changes. Since the TS Section 3.6.1.6.2 for Unit 1 and Unit 2 are identical, only the mark-ups for Unit 1 are provided. Enclosures 3 and 4 provide typed versions of the Unit 1 and Unit 2 TSs, respectively. These typed TS pages are to be used for issuance of the proposed amendments.

PEC will make supporting changes to the TS Bases in accordance with TS 5.5.10, "Technical Specifications (TS) Bases Control Program." Enclosure 5 provides marked-up TS Bases pages for Unit 1. These pages are being submitted for information only and do not require issuance by the NRC.

3.0 Background

The suppression chamber-to-drywell vacuum breakers function to relieve a negative pressure differential between the drywell and suppression chamber in the event of a loss-of-coolant accident (LOCA) in the drywell. Details of the primary containment functional design are discussed in Section 6.2.1 of the Updated Final Safety Analysis Report (UFSAR) for BSEP, Units 1 and 2. A description of the suppression chamber-to-drywell vacuum breakers is provided in Section 6.2.1.1.3.3.1 of the UFSAR.

A failure of a vacuum breaker to re-close occurred at BSEP, Unit 2 in July 2004. A faulty test actuator was a contributing cause to the failure of the vacuum breaker to close during surveillance testing. This event was reported in Licensee Event Report 2-2004-002 (i.e., ADAMS Accession Number ML042790475). There are at least three other recorded cases at U.S. nuclear power plants since 1986 (i.e., Hatch Plant in 1986, Quad Cities Plant in 1987, and the Fermi Plant in 1992) where a suppression chamber-to-drywell vacuum breaker has failed to re-close during testing. These failures were due to test actuator problems.

The actuating device used to test the vacuum breakers is susceptible to failure in a manner that can cause the vacuum breakers to fail open, which would render the suppression chamber inoperable due to the creation of a suppression chamber steam bypass pathway. Therefore, PEC is proposing a change to the test frequency for these vacuum breakers during power operation.

The NRC has previously accepted alternative surveillance test frequencies for stroke testing the suppression chamber-to-drywell vacuum breakers consistent with the quarterly test frequency period typically specified by ASME Code requirements, for the stroke testing of these vacuum breakers. In one example, the Technical Specification Surveillance Requirement 3.6.1.6.2 for the Browns Ferry Unit 2 facility requires the performance of suppression chamber-to-drywell vacuum breaker functional tests in accordance with the Inservice Testing (IST) Program.

In another example, by letter dated January 4, 1994, the NRC issued Amendment No. 96 for the Fermi-2 facility to revise this test frequency from once per 31 days to once per cold shutdown if not performed within the previous 92 days. Currently, the Fermi-2 Surveillance Requirement 3.6.1.8.2 requires performance of a vacuum breaker functional test prior to entering MODE 2 or 3 from MODE 4 if not performed in the previous 92 days and within 12 hours after steam discharge from the SRVs to the suppression chamber.

In a third example, Technical Specification 4.6.a for the Vermont Yankee facility requires operability testing of the suppression chamber-to-drywell vacuum breakers in accordance with Specification 4.6.E, which in turn requires operability testing for valves to be performed in accordance with the American Society of Mechanical Engineers (ASME) Code, Section XI.

4.0 Regulatory Analysis

Vacuum Breaker Functions:

The function of the suppression chamber-to-drywell vacuum breakers is to protect the containment drywell from excessive negative pressure. If a LOCA were to occur, most of the non-condensible gases in the drywell would be blown into the suppression chamber as the drywell becomes pressurized with steam. After the blow down, a vacuum would occur in the drywell as the steam condensed. A negative pressure could also occur due to inadvertent drywell spray actuation during normal operation. If the drywell vacuum were not relieved, the drywell could buckle (i.e., implode). The design negative pressure for the containment is 2.0 psid. With 8 of the 10 suppression chamber-to-drywell vacuum breakers operable for the purpose of opening, the capability for non-condensible gases in the suppression chamber to pass back into the drywell is assured to restore pressure in the

drywell. The degree of redundancy provided through the use of multiple vacuum breakers provides a high level of assurance that the drywell is protected from buckling.

In the event of a LOCA, the suppression chamber-to-drywell vacuum breakers must be closed for the suppression pool to provide its steam quenching function. If a suppression chamber-to-drywell vacuum breaker was not closed, a drywell bypass pathway to the suppression pool would exist, resulting in the potential for primary containment overpressurization due to the bypass leakage if a LOCA were to occur. The maximum allowable amount of bypass leakage area is equivalent to a 24-inch pipe for a large break LOCA, and equivalent to a 6-inch pipe for a small break LOCA. TS 3.6.1.6, ACTION B.1 requires that all open suppression chamber-to-drywell vacuum breakers be closed or a plant shutdown begun within 4 hours.

Another function of the suppression chamber-to-drywell vacuum breakers is to minimize the elevation of the water column in the containment vent system during normal operation. If the drywell pressure is less than the suppression chamber pressure, there will be an increase in the height of the vent system downcomer water leg. The suppression chamber-to-drywell vacuum breakers limit the height of the water column in the vent system to ensure that vent clearing loads are not exceeded during a LOCA.

Vacuum Breaker Design:

The suppression chamber-to-drywell vacuum breakers are located in the suppression chamber air space attached to the drywell vent system. The vacuum breakers are a swing-check device, with a 20-inch flapper or "pallet" which self-actuates to open under a differential pressure of 0.5 psi. Magnetic latches are provided to prevent chattering and vibration.

Each vacuum breaker is equipped with a pneumatically powered stroke test actuator which enables control room personnel to remotely stroke the vacuum breaker as a demonstration of operability. Redundant, proximity-type limit switches are provided to indicate when the pallet is in the fully closed position. Another mechanical limit switch is provided to indicate when the pallet is in the fully open position. The test actuators are not classified as safety-related devices and have not been tested under LOCA conditions.

As previously stated, a failure of a vacuum breaker to re-close occurred at BSEP, Unit 2 in July 2004. A faulty test actuator was a contributing cause to the failure of the vacuum breaker to close during surveillance testing. This event was reported in Licensee Event Report 2-2004-002 (i.e., ADAMS Accession Number ML042790475). There are at least three other recorded cases since 1986 (i.e., the Hatch Plant in 1986, the Quad Cities Plant in 1987, and the Fermi Plant in 1992) where a suppression chamber-to-drywell vacuum breaker has failed to re-close during testing. These failures were due to test actuator problems.

The actuating device used to test the vacuum breakers is susceptible to failure in a manner that can cause the vacuum breakers to fail open, which would render the suppression chamber inoperable due to the creation of a suppression chamber steam bypass pathway. During normal operation, the drywell and suppression chamber atmosphere is inerted with nitrogen to maintain low containment oxygen levels. Repair of a suppression chamber-to-drywell vacuum breaker requires that the drywell and suppression chamber be de-inerted to permit entry. Therefore, in order to reduce the potential for an unplanned plant shutdown due to a stuck open vacuum breaker, PEC is proposing a change to the test frequency for these vacuum breakers during power operation.

Discussion of the Surveillance Frequency:

A monthly surveillance frequency has been specified for the suppression chamber-to-drywell vacuum breakers since the earliest suppression chamber-equipped facilities were licensed. The NRC has historically maintained that the suppression chamber-to-drywell vacuum breaker stroke test frequency should be a monthly interval, based on the importance of the safety function, inaccessibility, and the harsh environment (i.e., the suppression chamber air space) in which the vacuum breakers are located.

The inservice testing requirements of the ASME Section XI Code have historically specified a three-month test frequency for stroke testing vacuum breakers. Although the Brunswick Technical Specifications currently require testing of the vacuum breakers once per 31 days, these vacuum breakers must also be tested quarterly in order to comply with the IST requirements of the ASME Code, Section XI and 10 CFR 50.55a(g). The 92-day surveillance frequency being proposed for Brunswick Units 1 and 2 is consistent with the quarterly test frequency period specified in ASME Section XI Code requirements, for testing vacuum breakers.

As discussed above, the NRC has previously determined that vacuum breaker testing on a quarterly frequency or greater continues to ensure an acceptable level of quality and safety, based on these vacuum breakers being passive devices, the degree of redundancy provided through the use of multiple vacuum breakers (i.e., thus ensuring the drywell is protected from buckling), and that historically no vacuum breakers have failed to open during testing (i.e., due to problems with the vacuum breaker itself).

Additional Changes:

Brunswick Surveillance Requirement 3.6.1.6.2 is being revised to incorporate the most recent conditions pertaining to vacuum breaker functional testing as contained in Revision 3 of NUREG-1433, *Standard Technical Specifications, General Electric Plants, BWR/4*, Surveillance Requirement 3.6.1.8.2 in NUREG-1433, which corresponds to Brunswick Surveillance Requirement 3.6.1.6.2. Rather than requiring vacuum breaker

functional testing within 12 hours after any discharge of steam to the suppression chamber, from any source, Surveillance Requirement 3.6.1.6.2 is being revised to incorporate the NUREG-1433 requirements for functional testing within 12 hours following an operation that causes any of the vacuum breakers to open. This change eliminates unnecessary vacuum breaker cycling after routine evolutions such as High Pressure Coolant Injection (HPCI) or Reactor Core Isolation Cooling (RCIC) System testing if no vacuum breakers are opened. In addition, the NUREG-1433 requirements for functional testing of the vacuum breakers within 12 hours after any steam discharge to the suppression chamber from the SRVs is also being incorporated, since an SRV discharge is the most likely plant equipment operation to result in opening of a suppression chamber-to-drywell vacuum breaker.

5.0 Regulatory Safety Analysis

5.1 No Significant Hazards Consideration

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

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

   Response: No

   The proposed change revises Surveillance Requirement 3.6.1.6.2 to require performance of functional testing of each suppression chamber-to-drywell vacuum breaker every 92 days, within 12 hours after any discharge of steam to the suppression chamber from the safety/relief valves, and within 12 hours following an operation that causes any of the vacuum breakers to open.

   The proposed change does not involve physical changes to any plant structure, system, or component. The suppression chamber-to-drywell vacuum breakers only provide an accident mitigation function. As such, the probability of occurrence for a previously analyzed accident is not impacted by the change to the surveillance frequency for these components. The consequences of a previously analyzed accident are dependent on the initial conditions assumed for the analysis, the behavior of the fuel during the analyzed accident, the availability and successful functioning of the equipment assumed to operate in response to the analyzed event, and the setpoints at which these actions are initiated. No physical change to suppression chamber-to-drywell vacuum breakers is being made as a result of the proposed change, nor does the change alter the manner in which the vacuum breakers operate. As a result, no new failure modes of the suppression chamber-to-

drywell vacuum breakers are being introduced. The proposed quarterly surveillance frequency for the suppression chamber-to-drywell vacuum breakers is consistent with the American Society of Mechanical Engineers (ASME) Code frequency for testing these valves, will avoid unnecessary cycling and wear of the vacuum breakers, and will improve the reliability of the vacuum breakers. Based on this evaluation, there is no significant increase in the consequences of a previously analyzed event.

Therefore, the proposed change to the surveillance frequency for the suppression chamber-to-drywell vacuum breakers does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed change to the surveillance frequency for the suppression chamber-to-drywell vacuum breakers does not involve any physical alteration of plant systems, structures, or components. No new or different equipment is being installed. No installed equipment is being operated in a different manner. There is no alteration to the parameters within which the plant is normally operated or in the setpoints that initiate protective or mitigative actions. As a result no new failure modes are being introduced. Therefore, the proposed change to the surveillance frequency for the suppression chamber-to-drywell vacuum breakers does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No

The proposed change revises Surveillance Requirement 3.6.1.6.2 to require performance of functional testing of each vacuum breaker every 92 days, within 12 hours after any discharge of steam to the suppression chamber from the safety/relief valves, and within 12 hours following an operation that causes any of the vacuum breakers to open. The operability and functional characteristics of the suppression chamber-to-drywell vacuum breakers remains unchanged. The margin of safety is established through the design of the plant structures, systems, and components, through the parameters within which the plant is operated, through the establishment of the setpoints for the actuation of equipment relied upon to respond to an event, and through margins contained within the safety analyses. The proposed change to the surveillance frequency for the suppression chamber-to-drywell vacuum breakers does not impact the condition or performance of

structures, systems, setpoints, and components relied upon for accident mitigation. As previously noted, the proposed quarterly surveillance frequency for the suppression chamber-to-drywell vacuum breakers is consistent with the ASME Code frequency for testing these vacuum breakers, will avoid unnecessary cycling and wear of the vacuum breakers, and will improve the reliability of the vacuum breakers. The proposed change does not impact any safety analysis assumptions or results. Therefore, the proposed change does not result in a significant reduction in the margin of safety.

Based on the above, PEC concludes that the proposed amendment 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

The BSEP design was reviewed for construction under the "General Design Criteria for Nuclear Power Plant Construction" issued for comment by the Atomic Energy Commission in July 1967 and is committed to meet the intent of the General Design Criteria (GDC), published in the Federal Register on May 21, 1971 as Appendix A to 10 CFR Part 50. Title 10 of the Code of Federal Regulations (10 CFR) establishes the fundamental regulatory requirements with respect to containment design. Specifically, GDC 16, "Containment design," states that reactor containment and associated systems shall be provided to establish an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment and to assure that the containment design conditions important to safety are not exceeded for as long as postulated accident conditions require.

In order to satisfy, in part, the requirements of GDC 16, Section 6.2.1.1.C, "Pressure-Suppression Type BWR Containments," of NUREG-0800, "Standard Review Plan," specifies that vacuum relief devices be provided to protect the containment against loss of integrity from negative pressure transients or post-accident atmosphere cooldown. The required function of the suppression chamber-to-drywell vacuum breakers is to ensure that a loss of drywell integrity will not result from negative pressure transients or post-accident atmosphere cooldown. This design function is not affected by the proposed change to the surveillance frequency for these vacuum breakers.

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 to the health and safety of the public.

6.0 Environmental Considerations

10 CFR 51.22(c)(9) identifies certain licensing and regulatory actions, which are eligible for categorical exclusion from the requirement to perform an environmental assessment. A proposed amendment to an operating license for a facility does not require an environmental assessment if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant hazards consideration; (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite; or (3) result in a significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendments meet 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 amendments.

BSEP 05-0049
Enclosure 2

Marked-up Technical Specification Page - Unit 1

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.1.6.1	----------NOTE---------- Not required to be met for vacuum breakers that are open during Surveillances. ----------	
	Verify each vacuum breaker is closed.	14 days AND Within 6 hours after any discharge of steam to the suppression chamber from any source
3.6.1.6.2	Perform a functional test of each required vacuum breaker.	~~31~~ 92 days AND Within 12 hours after any discharge of steam to the suppression chamber from the SRVs ~~any source~~
SR 3.6.1.6.3	Verify the full open setpoint of each required vacuum breaker is ≤ 0.5 psid.	24 months

AND
Within 12 hours following an operation that causes any of the vacuum breakers to open.

Typed Technical Specification Page - Unit 1

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.1.6.1	----------NOTE---------- Not required to be met for vacuum breakers that are open during Surveillances. ----------	
	Verify each vacuum breaker is closed.	14 days AND Within 6 hours after any discharge of steam to the suppression chamber from any source
3.6.1.6.2	Perform a functional test of each required vacuum breaker.	92 days AND Within 12 hours after any discharge of steam to the suppression chamber from the SRVs AND Within 12 hours following an operation that causes any of the vacuum breakers to open.
SR 3.6.1.6.3	Verify the full open setpoint of each required vacuum breaker is ≤ 0.5 psid.	24 months

Typed Technical Specification Page - Unit 2

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
SR 3.6.1.6.1	----------NOTE---------- Not required to be met for vacuum breakers that are open during Surveillances. ----------	
	Verify each vacuum breaker is closed.	14 days AND Within 6 hours after any discharge of steam to the suppression chamber from any source
SR 3.6.1.6.2	Perform a functional test of each required vacuum breaker.	92 days AND Within 12 hours after any discharge of steam to the suppression chamber from the SRVs AND Within 12 hours following an operation that causes any of the vacuum breakers to open.
SR 3.6.1.6.3	Verify the full open setpoint of each required vacuum breaker is ≤ 0.5 psid.	24 months

BSEP 05-0049
Enclosure 5

Marked-up Technical Specification Bases Page - Unit 1
(For Information Only)

BASES

SURVEILLANCE REQUIREMENTS

SR 3.6.1.6.1 (continued)

and drywell is maintained > 0.5 times the initial differential pressure for 1 hour without nitrogen makeup. The 14 day Frequency is based on engineering judgment, is considered adequate in view of other indications of vacuum breaker status available to operations personnel and procedural controls to ensure the drywell is normally maintained at a higher pressure than the suppression chamber, and has been shown to be acceptable through operating experience. This verification is also required within 6 hours after any discharge of steam to the suppression chamber from any source.

A Note is added to this SR which allows suppression chamber-to-drywell vacuum breakers opened in conjunction with the performance of a Surveillance to not be considered as failing this SR. These periods of opening vacuum breakers are controlled by plant procedures and do not represent inoperable vacuum breakers.

SR 3.6.1.6.2

Each required vacuum breaker must be cycled to ensure that it opens adequately to perform its design function and returns to the fully closed position. This is accomplished by verifying each required vacuum breaker operates through at least one complete cycle of full travel. This SR ensures that the safety analysis assumptions are valid. The 31 day Frequency of this SR was developed, based on Inservice Testing Program requirements to perform valve testing at least once every 92 days. A 31 day Frequency was chosen to provide additional assurance that the vacuum breakers are OPERABLE, since they are located in a harsh environment (the suppression chamber airspace). In addition, this functional test is required within 12 hours after a discharge of steam to the suppression chamber from any source.

92

SR 3.6.1.6.3

Verification of the vacuum breaker opening setpoint is necessary to ensure that the safety analysis assumption regarding vacuum breaker full open differential pressure of 0.5 psid is valid. The 24 month Frequency is based on the need to perform this Surveillance under the conditions that

(continued)

the SRVs and within 12 hours after an operation that causes any of the vacuum breakers to open.

List of Regulatory Commitments

The following table identifies those actions committed to by Carolina Power & Light Company, now doing business as Progress Energy Carolinas, Inc., in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to the Manager - Support Services at the Brunswick Steam Electric Plant.

Commitment	Schedule
1. None.	N/A