

## NRR-PMDAPEm Resource

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**From:** Thorpe, April  
**Sent:** Thursday, June 14, 2012 8:54 AM  
**To:** NRR-PMDA-ECapture Resource  
**Cc:** Saba, Farideh  
**Subject:** FW: ADD to ADAMS: BNP 14 Day EDG CT Follow-up Information  
**Attachments:** BNP 14 Day EDG CT Follow-up Info.pdf

Good Day:

The attached email is a non-sensitive publically available item.

Upon adding please forward the ADAMS Accession No. to reference.

Thanking you in advance,

**April B. Thorpe**, Contract Secretary  
Office of Nuclear Reactor Regulation  
Division of Operating Reactor Licensing  
Plant Licensing Branches LPL2-1 & LPL2-2  
Phone: 301-415-2024 Fax: 301-415-1222  
[April.Thorpe@nrc.gov](mailto:April.Thorpe@nrc.gov)

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**From:** Saba, Farideh  
**Sent:** Thursday, June 14, 2012 8:52 AM  
**To:** Thorpe, April  
**Subject:** ADD to ADAMS: BNP 14 Day EDG CT Follow-up Information

April,

Please add the attached document to ADAMS for Brunswick Units 1 and 2 as a non-sensitive, publicly available document with normal release. Keywords, completion time, emergency diesel generator, 14-day AOT.

Thank you,

Farideh

Farideh E. Saba, P.E.  
Senior Project Manager  
NRC/ADRO/NRR/DORL  
301-415-1447  
Mail Stop O-8G9A  
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**From:** Turkal, Mark [<mailto:mark.turkal@pgnmail.com>]  
**Sent:** Thursday, June 14, 2012 8:10 AM  
**To:** Saba, Farideh  
**Cc:** Little, Anthony; Rishel, Robert; Grzeck, Lee; Ballard, Philip  
**Subject:** BNP 14 Day EDG CT Follow-up Information

Farideh,

We promised to provide some follow-up information during the 6/7/12 pre-application meeting for our 14-day EDG completion time LAR. The attached file contains the requested information.

Mark

**Hearing Identifier:** NRR\_PMDA  
**Email Number:** 390

**Mail Envelope Properties** (0A64B42AAA8FD4418CE1EB5240A6FED18A3A77450D)

**Subject:** FW: ADD to ADAMS: BNP 14 Day EDG CT Follow-up Information  
**Sent Date:** 6/14/2012 8:53:31 AM  
**Received Date:** 6/14/2012 8:53:33 AM  
**From:** Thorpe, April

**Created By:** April.Thorpe@nrc.gov

**Recipients:**

"Saba, Farideh" <Farideh.Saba@nrc.gov>

Tracking Status: None

"NRR-PMDA-ECapture Resource" <NRR-PMDA-ECapture.Resource@nrc.gov>

Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

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MESSAGE	1534	6/14/2012 8:53:33 AM
BNP 14 Day EDG CT Follow-up Info.pdf		71850

**Options**

**Priority:** Standard

**Return Notification:** No

**Reply Requested:** No

**Sensitivity:** Normal

**Expiration Date:**

**Recipients Received:**

**EDG Reliability:**

BSEP utilizes the alternate AC source operation approach. BSEP is subject to a minimum station blackout coping (SBO) capability of four hours with a diesel generator (DG) Reliability Target of 0.975.

This information is provided in the license amendment request (LAR) Enclosure 1, "Description and Evaluation of Proposed Change."

**Human Reliability Analysis (HRA) Critical Actions:**

Operator actions for alignment of the SUPP-DG are:

- Open breakers to electrically disconnect balance-of-plant (BOP) and emergency bus (E-bus) equipment.
- Close the BOP bus breaker to the supplemental DG (SUPP-DG) (i.e., not the SUPP-DG output breaker).
- Start the SUPP-DG.
- Close the SUPP-DG output breaker.
- Energize the E-bus from the BOP bus.

During events such as high winds and flooding, the model conservatively assumes that the outside environmental conditions are too hazardous and the operator cannot fulfill the actions at the SUPP-DG structure. This fails not only the action, but the SUPP-DG as well. This is a conservative assumption since the operator will make an attempt as soon as they feel the conditions are safe enough to reach the structure.

Operator actions taken outside of the main control room in implementing the Alternate Safe Shutdown (ASSD) procedures for control room abandonment include:

- Stripping battery loads and aligning the chargers to the alternate supply.
- Cool down using the Safety Relied Valves (SRVs) as necessary
- Align Reactor Core Isolation Cooling (RCIC) for injection utilizing the Condensate Storage Tank (CST)
- Secure and restart the DG's

This information is provided in the LAR Enclosure 4, "Evaluation of Risk Impact Including Treatment of Uncertainties."

**PRA Peer Reviews:**

Internal Events Peer Reviewers (June 2010):

Thomas Morgan, Maracor Software & Engineering, Inc.

Heather Addis, Exelon Nuclear

David Edenfield, Southern Nuclear

Hiep Huynh, Constellation Nuclear

Glen Seeman, GE-Hitachi

NRC Meeting, TS 3.8.1 Diesel Generator Completion Time Extension, June 7, 2012  
Supplemental Information

Paul Sicard, Entergy  
James Young, GE-Hitachi

Fire Peer Reviewers (December 2011):

Dennis Henneke, GEH  
Jonathan Li, GEH  
Rashid Abbas, SAIC  
Virgel Furr, TVA  
Justin Howe, Scientech  
Robert White, ERIN Engineering, Representing Exelon

High Winds / External Flooding Peer Reviewers (January 2012):

Diane Jones, Maracor Software & Engineering, Inc.  
Jeff Leary, Maracor Software & Engineering, Inc.  
M. K. Ravindra, MK Ravindra Consulting

This information is NOT provided in the LAR.