

From: Nitin Patel
To: Joseph_Hegner@dom.com; Tony_Banks@dom.com
Date: Thu, Jun 8, 2006 9:35 AM
Subject: Telecon summary dated 6/7/2006--North Anna ESP Application Revision 06

Attached is the teleconferences summary.

Regards,

Nitin Patel
Project Manager
Division of New Reactor Licensing
Tel:(301) 415-3201
email:nxp1@nrc.gov

CC: Grecheck@dom.com; Marvin_Smith@dom.com

Mail Envelope Properties (448827B5.721 : 3 : 9256)

Subject: Telecon summary dated 6/7/2006--North Anna ESP Application
 Revision 06
Creation Date Thu, Jun 8, 2006 9:35 AM
From: Nitin Patel

Created By: NXP1@nrc.gov

Recipients	Action	Date & Time
dom.com	Transferred	06/08/06 9:36 AM
Grecheck CC (Grecheck@dom.com)		
Joseph_Hegner (Joseph_Hegner@dom.com)		
Marvin_Smith CC (Marvin_Smith@dom.com)		
Tony_Banks (Tony_Banks@dom.com)		

Post Office	Delivered	Route
		dom.com

Files	Size	Date & Time
MESSAGE	604	Thursday, June 8, 2006 9:35 AM
Telecon summary dated 06072006 ML0615801741.pdf		529365
		Thursday, June 8, 2006 9:30 AM

Options

Auto Delete:	No
Expiration Date:	None
Notify Recipients:	Yes
Priority:	Standard
ReplyRequested:	No
Return Notification:	None

Concealed Subject:	No
Security:	Standard

To Be Delivered:	Immediate
Status Tracking:	Delivered & Opened

June 7, 2006

APPLICANT: Dominion Nuclear North Anna LLC

FACILITY: North Anna Early Site Permit

SUBJECT: SUMMARY OF TELEPHONE CONFERENCES WITH DOMINION NUCLEAR
NORTH ANNA LLC REGARDING THE NORTH ANNA EARLY SITE PERMIT
REVIEW (TAC NOS. MC1127 AND MC1128)

On June 2 and 5, 2006, the U.S. Nuclear Regulatory Commission (NRC) staff conducted teleconferences with Dominion Nuclear North Anna, LLC (Dominion) to discuss Revision 6 of the ESP application. Enclosure 1 is a list of participants in the teleconferences. The purposes of the teleconferences were to discuss apparent discrepancies and clarify statements in the application and to identify additional information needed to complete the review (see Enclosure 2).

Dominion agreed to explain/resolve the discrepancies and provide the additional information needs.

/RA/

Nitin Patel, Project Manager
ESBWR/ABWR Projects Branch
Division of New Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No.: 52-008

Enclosure: As stated

cc w/encls: See next page

APPLICANT: Dominion Nuclear North Anna LLC

June 7, 2006

FACILITY: North Anna Early Site Permit

SUBJECT: SUMMARY OF TELEPHONE CONFERENCES WITH DOMINION NUCLEAR NORTH ANNA LLC REGARDING THE NORTH ANNA EARLY SITE PERMIT REVIEW (TAC NOS. MC1127 AND MC1128)

On June 2 and 5, 2006, the U.S. Nuclear Regulatory Commission (NRC) staff conducted teleconferences with Dominion Nuclear North Anna, LLC (Dominion) to discuss Revision 6 of the ESP application. Enclosure 1 is a list of participants in the teleconferences. The purposes of the teleconferences were to discuss apparent discrepancies and clarify statements in the application and to identify additional information needed to complete the review (see Enclosure 2).

Dominion agreed to explain/resolve the discrepancies and provide the additional information needs.

/RA/

Nitin Patel, Project Manager
ESBWR/ABWR Projects Branch
Division of New Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No.: 52-008

Enclosure: As stated

cc w/encls: See next page

*See previous concurrence
ADAMS ACCESSION NO. ML061580174

OFFICE	PM:NESB	BC: NEPB*	(A) BC:NESB
NAME	NPatel	CNolan	ACubbage
DATE	06/07/06	06/07/06	06/07/06

OFFICIAL RECORD COPY

Distribution for Teleconference Summary dated June 7, 2006

Hard Copy

NESB R/F

ACubbage

NPatel

GWunder

E-mail

PUBLIC

DMatthews/FGillespie

NESB Group

OGC

ACRS/ACNW

TMensah

MAshley

J. Jolicoeur, EDO

BMusico

KCampe

PPrescott

RHarvey

JLee

GBagchi

CMunson

AKugler

JCushing

RHarvey

MWeisman

MMasnik

MParkhurst (PNL)

NORTH ANNA EARLY SITE PERMIT
SERVICE LIST

Mr. David A. Christian
Senior Vice President and Chief Nuclear
Officer
Dominion Resources Services, Inc.
Innsbrook Technical Center
5000 Dominion Blvd.
Glen Allen, VA 23060-6711

Ms. Lillian M. Cuoco, Esq.
Senior Counsel
Dominion Resources Services, Inc.
Rope Ferry Road
Building 475, 5th Floor
Waterford, CT 06385

Mr. C. Lee Lintecum
County Administrator
Louisa County
P.O. Box 160
Louisa, Virginia 23093

Mr. David R. Lewis
Pillsbury Winthrop Shaw Pittman
2300 N Street, N.W.
Washington, D.C. 20037

Dr. W. T. Lough
Virginia State Corporation Commission
Division of Energy Regulation
P. O. Box 1197
Richmond, Virginia 23209

Office of the Attorney General
Commonwealth of Virginia
900 East Main Street
Richmond, Virginia 23219

Senior Resident Inspector
North Anna Power Station
U. S. Nuclear Regulatory Commission
1024 Haley Drive
Mineral, Virginia 23117

Mr. Robert B. Strobe, M.D., M.P.H.
State Health Commissioner
Office of the Commissioner
Virginia Department of Health
P. O. Box 2448
Richmond, Virginia 23218

Mr. David Lochbaum
Union of Concerned Scientists
1707 H Street, NW
Suite 600
Washington, DC 20006-3919

Mr. Paul Gunter
Director of the Reactor Watchdog Project
Nuclear Information & Resource Service
1424 16th Street, NW, Suite 404
Washington, DC 20036

Mr. Adrian Heymer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Russell Bell
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. James Riccio
Greenpeace
702 H Street, NW, Suite 300
Washington, DC 20001

Ms. Patricia Campbell
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Mr. Gary Wright, Manager
Division of Nuclear Safety
Illinois Emergency Management Agency
1035 Outer Park Drive
Springfield, IL 62704

Mr. Glenn H. Archinoff
AECL Technologies
481 North Frederick Avenue
Suite 405
Gaithersburg, MD. 20877

Mr. Ed Wallace, General Manager
Projects
PBMR Pty LTD
PO Box 9396
Centurion 0046
Republic of South Africa

Mr. Brendan Hoffman
Research Associate on Nuclear Energy
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

NORTH ANNA EARLY SITE PERMIT
SERVICE LIST

Mr. Paul Leventhal
Nuclear Control Institute
1000 Connecticut Avenue, NW
Suite 410
Washington, DC 20036

Mr. Charles Brinkman
Westinghouse Electric Co.
Washington Operations
12300 Twinbrook Pkwy., Suite 330
Rockville, MD 20852

Mr. Marvin Fertel
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Dr. Glenn R. George
Co-Head, Energy Capital Markets
Nomura Securities International, Inc.
2 World Financial Center, Bldg. B, 21st
Floor
New York, NY 10281-1198

Mr. Arthur R. Woods
Enercon Services, Inc.
500 TownPark Lane
Kennesaw, GA 30144

Ms. Vanessa E. Quinn, Chief
Radiological Emergency Preparedness
Branch
Nuclear and Chemical Preparedness and
Protection Division
Department of Homeland Security
1800 South Bell Street, Room 837
Crystal City-Arlington, VA 22202-3546

Mr. Michael M. Cline, State Coordinator
Virginia Department of Emergency
Management
10501 Trade Court
Richmond, Virginia 23236-3713

Mr. Jim Debiec
Director - Power Production
Old Dominion Electric Cooperative
4201 Dominion Blvd
Glen Allen, VA 23060

Mr. Thomas Mundy
Director, Project Development
Exelon Generation
200 Exelon Way, KSA3-N
Kennett Square, PA 19348

Ms. Joanne Tetrault
Librarian
Louisa County Public Library
881 Davis Highway
Mineral, VA 23117

Ms. Abhaya Thiele
406 Key West Drive
Charlottesville, VA 22911

Mr. J. Randall Wheeler
Spotsylvania County Administrator
P.O. Box 99
Spotsylvania Courthouse
Spotsylvania, VA 22553

Mr. William C. Rolfe
Assistant County Administrator
P.O. Box 111
Orange, VA 22690

Ms. Sandra Sloan
Areva NP, Inc.
3315 Old Forest Road
P.O. Box 10935
Lynchburg, VA 24506-0935

Ms. Kathryn Sutton, Esq.
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Mr. Robert E. Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

Mr. Dick Clark
President, Oakridge Civic Assn.
2212 Founders Bridge Rd.
Midlothian, VA 23113

Mr. Harry Ruth
For the Friends of Lake Anna
C/O 230 Heather Drive
Bumpass, VA 23024

NORTH ANNA EARLY SITE PERMIT
SERVICE LIST

Internal e-mail

SCollins
MDapas
RBlough
MGamberoni
BHollan
WTravers
LPlisco
VMcCree
CCasto
JCaldwell
GGrant
CPederson
MSatorius
BMalet
TGwynn
DChamberlain
AHowell

External E-mail

tom.miller@hq.doe.gov or
tom.miller@nuclear.energy.gov
Eugene_Grecheck@dom.com
Jack_Davis@dom.com
Marvin_Smith@dom.com
Joseph_Hegner@dom.com
Tony_Banks@dom.com
Lillian_Cuoco@dom.com
David_Sommers@dom.com
Vicki_Hull@dom.com
Margaret_Bennett@dom.com
david.lewis@pillsburylaw.com
gzinke@entergy.com
sandra.sloan@areva.com
mwetterhahn@winston.com
whorin@winston.com
gcesare@enercon.com
louis.quintana@ge.com
steven.hucik@ge.com
david.hinds@ge.com
chris.maslak@ge.com
james1beard@ge.com
eddie.grant@exeloncorp.com

LIST OF PARTICIPANTS
TELECONFERENCES WITH DOMINION

JUNE 2, 2006

Participant	Affiliation
Nitin Patel Jean-Claude Dehmel	U.S. Nuclear Regulatory Commission (NRC) NRC
Greg Stoetzel	Pacific NorthWest National Laboratory (PNNL)
Tony Banks	Dominion Nuclear North Anna, LLC
Rich Baker Ken Jha Becky Carr	Bechtel Bechtel Bechtel

JUNE 5, 2006

Participant	Affiliation
Nitin Patel Jean-Claude Dehmel Jack Cushing	U.S. Nuclear Regulatory Commission (NRC) NRC NRC
Greg Stoetzel	Pacific NorthWest National Laboratory (PNNL)
Tony Banks Marvin Smith Joe Hagner	Dominion Nuclear North Anna, LLC Dominion Nuclear North Anna, LLC Dominion Nuclear North Anna, LLC
Rich Baker Ken Jha	Bechtel Bechtel

TELECONFERENCES SUMMARY DATED 6/02/2006 AND 6/05/2006
NORTH ANNA EARLY SITE PERMIT APPLICATION
(dated April 13, 2006, Rev. 6)

The staff has reviewed revision 06 of the ESP application and it has discovered apparent discrepancies in the application. It is our understanding that ER Table 3.1-1 indicates various reactor designs that were used to develop the bounding site specific plant parameter envelope (PPE) values contained in ER Table 3.1-9. The values in ER Table 3.1-1 are generic values and not site specific values. Therefore, the site specific values in ER Table 3.1-9 differ from the values in ER Table 3.1-1. Likewise, ER Tables 3.1-7 and 3.1-8 provide radionuclide activity values for various designs whereas, ER Tables 5.4-6 and 5.4-7 provide bounding values for radionuclide activity.

Based on the above observations, the staff is requesting that Dominion provide responses to the following questions:

1. Clarify the purpose of the ER Tables 3.1-1, 3.1-9, 5.4-6 and 5.4-7 in ER section 3.1.3 and 3.1.6. Make consistent changes to the corresponding tables in the SSAR.
2. The reference of ER Table 3.1-1 in ER Table 3.1-9 should be removed due to differences between the site specific and generic PPE values.
3. The footnote in ER Tables 5.4-6 and 5.4-7 is misleading. Please clarify the footnote to indicate that the radionuclide values in ER Tables 5.4-6 and 5.4-7 are the bounding values for the application.
4. The staff has identified the following discrepancies in SSAR tables 1.3-1, 1.3-2, 1.3-7, 1.3-8, 1.9-1, and ER tables 3.1-1, 3.1-2, 3.1-7, 3.1-8, 3.1-9, 5.4-6 and 5.4-7, and the bounding notes of various tables:
 - a. SSAR Table 1.3-1 (Item 10) indicates that the source term is based on "Bounding Notes" or "Bound Notes" 1, 3, 4, 5 and 13 out of SSAR Table 1.3-2. SSAR Table 1.3-2 indicates that notes 1, 3, 4 and 5 reflect the designs of the AP1000, ABWR/ESBWR, PBMR, and the ACR-700, while note 13 cites the ABWR, AP1000, and ACR-700 as the basis, but it excludes the PBMR design. However, ER Table 3.1-2 redefines note 13 as being comprised of the ABWR, AP1000, ACR-700, and the ESBWR designs.
 - b. SSAR Table 1.3-7 indicates that its footnotes refer to the ACR-700, ABWR, and AP1000 designs. However, ER Table 3.1-7 indicates that the basis for the source term is different as it refers to the ACR-700, ESBWR with a 25% margin, ABWR, and the AP1000 designs.
 - c. ER Table 3.1-9 indicates that the basis of the liquid effluent source term is ER Table 3.1-1 (Item 10) and ER Table 5.4-6. However, the source term in ER Table 5.4-6 has been maximized and is higher than that given in SSAR Table 1.3-7 and ER Table 3.1-7 supporting the use of the PPE concept.

- d. There are inconsistent values of liquid effluent source term radioactivity levels (by radionuclides and as totals) among SSAR and ER Tables 1.3-7, 3.1-7, 5.4-6, with some radionuclides being excluded, e.g., Zn-69m, Br-83, Ru-105, Ba-139, and La-142 from SSAR Table 1.3-7. Also, some total activity levels cited in SSAR Table 1.3-7 and ER Table 3.1-7 seem to be inconsistent with those given in Tables 1.3-1 and 3.1-1.
- e. ER Table 3.1-1 provides a link to the various reactor designs from which the bounding values in ER Table 3.1-9 are derived. ER Table 3.1-9 contains the site specific bounding values (or PPE values) that the reactor design selected at the COL stage must be fit within. Please explain this discrepancy or clarify the titles of ER Table 3.1-1 and ER Table 3.1-9 to remove the confusion.

The above examples are based on using ER Table 5.4-6 for liquid effluents, similar discrepancies were also noted using ER Table 5.4-7 for gaseous effluents. Dominion should review the application for inconsistencies/discrepancies elsewhere in the application and provide the corrected information in revision 07 of the application.

5. Provide a conversion for liquid and gaseous effluents releases (from Ci/yr to $\mu\text{Ci/ml}$) that meets the requirements of 10 CFR Part 20, Appendix B, Table 2, Columns 1 and 2 (e.g., refer to ESBWR DCD Revision 1, Tier 2, Table 12.2-17 and 12.2-19b). The derivation of effluent concentrations ($\mu\text{Ci/ml}$) should be based on the source terms (Ci/yr) presented in ER Tables 5.4-6 and 5.4-7 using North Anna specific data. Dominion should include this information in the SSAR.