

April 19, 2016

MEMORANDUM TO: John McKirgan, Acting Chief  
Licensing Branch 4 (LB4)  
Division of New Reactor Licensing  
Office of New Reactors

FROM: Jordan Hoellman, Project Manager */RA/*  
Licensing Branch 4 (LB4)  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: SUMMARY OF A PUBLIC TELECONFERENCE ON DECEMBER 17,  
2015, WITH MEMBERS OF THE AP1000 DESIGN CENTER TO  
DISCUSS THE AP1000 DESIGN CENTER'S COMBINED LICENSE  
ISSUES

The U.S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public teleconference with Duke Energy Florida (DEF) and members of the AP1000 design center on December 17, 2015. The purpose of the teleconference meeting was to discuss AP1000 combined license (COL) issues associated with the safety review for the Levy Nuclear Plant (LNP) Units 1 and 2 COL application.

The meeting notice can be found in the Agencywide Documents Access and Management System (ADAMS) under Accession Number ML15322A075. The meeting notice is also posted on the NRC's public website. Enclosures 1 and 2 are the meeting agenda and attendance list for the meeting, respectively. The other documents referenced during the discussion can be found at the ADAMS Accession Numbers given below:

- Clarification topics of Levy COL application for December 17, 2015 teleconference – ML15351A085
- DEF response to request for additional information (RAI) Letter No. 130 – ML15308A383

CONTACT: Jordan Hoellman, NRO/DNRL  
(301) 415-5481

Summary of Meeting:

On December 17, 2015, the NRC staff conducted a public teleconference with representatives from DEF and members of the AP1000 design center to discuss issues to support the safety review for the LNP Units 1 and 2 COL application. Specifically, the meeting discussed the use of sealant around main steam line (MSL) and main feed water line (MFWL) penetrations in the shield building.

There was no discussion in the open portion of the meeting due to the proprietary nature of the topic. At the end of the open portion of the meeting, there was an opportunity for the public to provide comments and ask questions. There were no questions from members of the public in this meeting.

In the closed portion of the meeting, DEF and the NRC staff discussed the use of sealants around the MSL and MFWL penetrations in the AP1000 shield building, including the functional requirements and environmental qualifications of the sealant. DEF, through their vendor, Westinghouse Electric Company (WEC), stated that functional requirements of sealants are included in the AP1000 Design Control Document (DCD), but not the sealant in particular. DEF and WEC noted that the sealant is a construction and design detail and, therefore, not part of the Levy departure or part of the certified design. DEF informed the staff that the sealant material will meet all of the functional requirements as stated in the DCD, and the detailed design will demonstrate the qualifications of the sealant material used. DEF also noted that the sealant is not credited in the main control room (MCR) dose calculations, and MCR dose calculations are not affected. The NRC staff noted that DEF should revise their RAI responses to provide these clarifications.

The staff noted that the local temperature seen by the sealant and concrete in penetration areas should be estimated to ensure that the shield building concrete meets the code requirements and that the sealant material is qualified for appropriate temperatures. The NRC staff stated that DEF should evaluate any safety concerns if sealant is not credited around high energy line penetrations, including its effect on piping analysis and concrete temperatures during normal operation and analyze if any of the penetrations require departures from the DCD. WEC stated that analyses demonstrating that the sealant met DCD functional requirements were available for NRC inspection. This included showing that sealant would not heat up above manufacturer's limits and that use of sealant would not result in heating shield building concrete above DCD allowable limits.

Docket Nos.:	052-018	052-029	052-040
	052-019	052-030	052-041

Enclosures:  
As stated

cc w/encls: See next page

Summary of Meeting:

On December 17, 2015, the NRC staff conducted a public teleconference with representatives from DEF and members of the AP1000 design center to discuss issues to support the safety review for the LNP Units 1 and 2 COL application. Specifically, the meeting discussed the use of sealant around main steam line (MSL) and main feed water line (MFWL) penetrations in the shield building.

There was no discussion in the open portion of the meeting due to the proprietary nature of the topic. At the end of the open portion of the meeting, there was an opportunity for the public to provide comments and ask questions. There were no questions from members of the public in this meeting.

In the closed portion of the meeting, DEF and the NRC staff discussed the use of sealants around the MSL and MFWL penetrations in the AP1000 shield building, including the functional requirements and environmental qualifications of the sealant. DEF, through their vendor, Westinghouse Electric Company (WEC), stated that functional requirements of sealants are included in the AP1000 Design Control Document (DCD), but not the sealant in particular. DEF and WEC noted that the sealant is a construction and design detail and, therefore, not part of the Levy departure or part of the certified design. DEF informed the staff that the sealant material will meet all of the functional requirements as stated in the DCD, and the detailed design will demonstrate the qualifications of the sealant material used. DEF also noted that the sealant is not credited in the main control room (MCR) dose calculations, and MCR dose calculations are not affected. The NRC staff noted that DEF should revise their RAI responses to provide these clarifications.

The staff noted that the local temperature seen by the sealant and concrete in penetration areas should be estimated to ensure that the shield building concrete meets the code requirements and that the sealant material is qualified for appropriate temperatures. The NRC staff stated that DEF should evaluate any safety concerns if sealant is not credited around high energy line penetrations, including its effect on piping analysis and concrete temperatures during normal operation and analyze if any of the penetrations require departures from the DCD. WEC stated that analyses demonstrating that the sealant met DCD functional requirements were available for NRC inspection. This included showing that sealant would not heat up above manufacturer's limits and that use of sealant would not result in heating shield building concrete above DCD allowable limits.

Docket Nos.: 052-018                      052-029                      052-040  
                    052-019                      052-030                      052-041

Enclosures:  
As stated

cc w/encls: See next page

ADAMS Accession No.: ML16013A374

NRC-001

OFFICE	PM: DNRL/LB4	LA: DNRL/LB4	PM: DNRL/LB4	PM: DNRL/LB4
NAME	JHoellman (c)	RButler	DHabib (c)	JHoellman (s)
DATE	4/18/16	4/17/16	4/19/16	4/19/16

**OFFICIAL RECORD COPY**

SUBJECT: SUMMARY OF A PUBLIC TELECONFERENCE ON DECEMBER 17, 2015, WITH MEMBERS OF THE AP1000 DESIGN CENTER TO DISCUSS THE AP1000 DESIGN CENTER'S COMBINED LICENSE ISSUES DATED APRIL 19, 2016

DISTRIBUTION:

PUBLIC

DHabib

JMcKirgan

JHoellman

PPatel

RidsOgcMailCenter

TGalletta

BBavol

RReyes

RRoche

NRO\_DNRL\_LB4

BGleaves

BHughes

RLaVera

AKock

CPatel

MComar

MMitchell

ATsirigotis

PKallan

GMakar

**AGENDA FOR PUBLIC MEETING**

**U.S. NUCLEAR REGULATORY COMMISSION (NRC)**

**Thursday, December 17, 2015**

**2:00 p.m. – 3:30 p.m.**

**PURPOSE:** To discuss AP1000 combined license (COL) issues associated with the safety review for Duke Energy Florida's (DEF) Levy Nuclear Plant (LNP), Units 1 and 2 COL application.

**OPEN**

<u>Time</u>	<u>Topic</u>	<u>Led By</u>
2:00 p.m.	Opening Remarks	NRC
2:05 p.m.	<b>Open Portion</b> Discussion on use of sealant around main steam line (MSL) and main feed water line (MFWL) shield building penetrations	NRC/DEF/WEC
2:10 p.m.	Opportunity for Public Comment	PUBLIC
2:15 p.m.	<b>Closed Portion</b> Discussion on use of sealant around MSL and MFWL shield building penetrations	NRC/DEF/WEC
3:20 p.m.	Closing remarks	NRC/DEF
3:30 p.m.	Meeting Adjourns	

**PUBLIC MEETING  
 UNITED STATES NUCLEAR REGULATORY COMMISSION  
 Public Meeting Teleconference with AP1000 Design Center**

**Thursday, December 17, 2015  
 2:00 p.m. – 3:30 p.m.**

**List of Attendees**

Purpose: To discuss AP1000 combined license review issues

Name	Organization
<b>Representing the Nuclear Regulatory Commission</b>	
Don Habib	NRO/DNRL/LB4
Lawrence Burkhart	
Peter Hearn	
Jordan Hoellman	
Devendra Pimpale	
Ronald LaVera	NRO/DSEA/RPAC
Matthew Mitchell	NRO/DEIA/MCB
Pravin Patel	NRO/DEIA/SEB
Robert Roche	NRO/DEIA/SEB
Gregory Makar	NRO/DEIA/MCB
Andrea Kock	NRO/DSEA
Alexander Tsirigotis	NRO/DEIA/MEB
<b>Representing Industry</b>	
Bob Kitchen	Duke Energy (Duke)
Kelvin Montague	Duke
Jim Thornton	Duke
Andy Pfister	Westinghouse Electric Company (WEC)
Aaron Wilmot	WEC
Jesse Klingersmith	WEC
Jen Meneely	WEC
<b>Representing Public</b>	
--	--

COL - Duke Energy - Lee Mailing List

(Revised 01/07/2016)

cc:

Mr. Christopher M. Fallon  
VP, Nuclear Development  
Progress Energy Florida, Inc.  
P.O. Box 1006 - ECO9D  
Charlotte, NC 28202

Dhiala M. Jamil  
Group Executive and Chief Nuclear Officer  
Duke Energy Carolinas, LLC  
P.O. Box 1006 - EC03XM  
526 South Church St.  
Charlotte, NC 28201-1006

Bob Kitchen  
Duke Energy/Nuclear Development  
PO Box 1006  
Charlotte, NC 28201-1006

Ms. Ruth Thomas  
Environmentalists Inc.  
354 Woodland Dr  
Columbus, NC 28722

Mr. James Thornton  
Duke Energy / Nuclear Development  
ECO9D / P.O. Box 1006  
Charlotte, NC 28201-1006

## COL - Duke Energy - Lee Mailing List

### Email

APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
christopher.fallon@duke-energy.com (Christopher M. Fallon)  
collinlj@westinghouse.com (Leslie Collins)  
CumminWE@Westinghouse.com (Edward W. Cummins)  
cwaltman@roe.com (C. Waltman)  
david.lewis@pillsburylaw.com (David Lewis)  
delongra@westinghouse.com (Rich DeLong)  
ed.burns@earthlink.net (Ed Burns)  
fbelser@regstaff.sc.gov  
gary@jonespartners.net (Gary Jones)  
gsoult@regstaff.sc.gov (Gene G. Soult)  
james.thornton@duke-energy.com (James Thornton)  
jflitter@regstaff.sc.gov  
john.oneill@pillsburylaw.com (John O'Neill)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
majames@regstaff.sc.gov (Anthony James)  
media@nei.org (Scott Peterson)  
MSF@nei.org (Marvin Fertel)  
murawski@newsobserver.com (John Murawski)  
nirsnet@nirs.org (Michael Mariotte)  
Nuclaw@mindspring.com (Robert Temple)  
patriciaL.campbell@ge.com (Patricia L. Campbell)  
Paul@beyondnuclear.org (Paul Gunter)  
pbessette@morganlewis.com (Paul Bessette)  
RJB@NEI.org (Russell Bell)  
robert.kitchen@pgnmail.com (Robert H. Kitchen)  
russpa@westinghouse.com (Paul Russ)  
sabinski@suddenlink.net (Steve A. Bennett)  
sara@cleanenergy.org (Sara Barczak)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
shudson@regstaff.sc.gov (Shannon Hudson)  
stephan.moen@ge.com (Stephan Moen)  
Tansel.Selekler@nuclear.energy.gov (Tansel Seleklek)  
TomClements329@cs.com (Tom Clements)  
Vanessa.quinn@dhs.gov (Vanessa Quinn)  
Wanda.K.Marshall@dom.com (Wanda K. Marshall)  
weave1dw@westinghouse.com (Doug Weaver)



COL - Duke Energy - Levy County Mailing List

Revised (08/24/2015)

cc:

Mr. Christopher M. Fallon  
VP, Nuclear Development  
Progress Energy Florida, Inc.  
P.O. Box 1006 - ECO9D  
Charlotte, NC 28202

## COL - Duke Energy - Levy County Mailing List

### Email

APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
Bill.Jacobs@gdsassociates.com (Bill Jacobs)  
billn@fcan.org (Bill Newton)  
brian.mccabe@pgnmail.com (Brian McCabe)  
christopher.fallon@duke-energy.com (Christopher M. Fallon)  
collinlj@westinghouse.com (Leslie Collins)  
CumminWE@Westinghouse.com (Edward W. Cummins)  
david.lewis@pillsburylaw.com (David Lewis)  
david.waters@pgnmail.com (Dave Waters)  
delongra@westinghouse.com (Rich DeLong)  
ed.burns@earthlink.net (Ed Burns)  
eddie.grant@excelservices.com (Eddie Grant)  
gary@jonespartners.net (Gary Jones)  
gsoult@regstaff.sc.gov (Gene G. Soult)  
joe.w.donahue@pgnmail.com (Joe Donahue)  
john.elnitsky@pgnmail.com (John Elnitsky)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
levynuke@ecologyparty.org (Cara Campbell)  
majames@regstaff.sc.gov (Anthony James)  
marvlewis@juno.com (M. Lewis)  
maryo@nirs.org (Mary Olson)  
media@nei.org (Scott Peterson)  
Mike.Halpin@dep.state.fl.us (Mike Halpin)  
MSF@nei.org (Marvin Fertel)  
nirsnet@nirs.org (Michael Mariotte)  
Nuclaw@mindspring.com (Robert Temple)  
patriciaL.campbell@ge.com (Patricia L. Campbell)  
Paul@beyondnuclear.org (Paul Gunter)  
pbessette@morganlewis.com (Paul Bessette)  
RJB@NEI.org (Russell Bell)  
robert.kitchen@pgnmail.com (Robert H. Kitchen)  
ronald\_m\_bright@bellsouth.net (Ronald Bright)  
russpa@westinghouse.com (Paul Russ)  
sabinski@suddenlink.net (Steve A. Bennett)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
stephan.moen@ge.com (Stephan Moen)  
Tansel.Selekler@nuclear.energy.gov (Tansel Selekler)  
twinkletoesdms@aol.com (Robert and Deborah Smith)

COL - Duke Energy - Levy County Mailing List

Vanessa.quinn@dhs.gov (Vanessa Quinn)  
weave1dw@westinghouse.com (Doug Weaver)

COL - Turkey Point Mailing List  
cc:

(Revised 12/29/2015)

Mr. Steve Franzone  
Florida Power & Light Company  
Turkey Point Nuclear Plant  
700 Universe Blvd.  
Juno Beach, FL 33408

Mr. William Maher  
Florida Power & Light Company  
Turkey Point Nuclear Plant  
700 Universe Blvd.  
Juno Beach, FL 33408

Mano K. Nazar  
President and Chief Nuclear Officer  
Nuclear Division  
Florida Power & Light Company  
Mail Stop NNP/JB  
700 Universe Blvd  
Juno Beach, FL 33408-0420

Thomas Saporito  
P.O. Box 8413  
Jupiter, FL 33468-8413

## COL - Turkey Point Mailing List

### Email

alliance4cleanfl@aol.com (Bob Krasowski)  
APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
Bill.Jacobs@gdsassociates.com (Bill Jacobs)  
billn@fcan.org (Bill Newton)  
bwtamia@bellsouth.net (Barry White)  
collinlj@westinghouse.com (Leslie Collins)  
CumminWE@Westinghouse.com (Edward W. Cummins)  
cwaltman@roe.com (C. Waltman)  
david.lewis@pillsburylaw.com (David Lewis)  
delongra@westinghouse.com (Rich DeLong)  
ed.burns@earthlink.net (Ed Burns)  
George.Madden@fpl.com (George Madden)  
jerald.head@ge.com (Jerald G. Head)  
john.elnitsky@pgnmail.com (John Elnitsky)  
john.oneill@pillsburylaw.com (John O'Neill)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
Kalson-Vince@MonroeCounty-FL.Gov (Vince Kalson)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
magolds@emory.edu (Mindy Goldstein)  
marvlewis@juno.com (M. Lewis)  
MCCRAS@miamidade.gov (Sean McCrackine)  
media@nei.org (Scott Peterson)  
michael.lepre@pillsburylaw.com (Michael Lepre)  
Mike.Halpin@dep.state.fl.us (Mike Halpin)  
MSF@nei.org (Marvin Fertel)  
nirsnet@nirs.org (Michael Mariotte)  
Nuclaw@mindspring.com (Robert Temple)  
patriciaL.campbell@ge.com (Patricia L. Campbell)  
Paul.Jacobs@fpl.com (Paul Jacobs)  
Paul@beyondnuclear.org (Paul Gunter)  
pbessette@morganlewis.com (Paul Bessette)  
Raymond.Burski@fpl.com (Raymond Burski)  
Richard.Orthen@fpl.com (Richard Orthen)  
RJB@NEI.org (Russell Bell)  
russpa@westinghouse.com (Paul Russ)  
sabinski@suddenlink.net (Steve A. Bennett)  
sara@cleanenergy.org (Sara Barczak)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
stephan.moen@ge.com (Stephan Moen)  
Steve.Franzone@fpl.com (Steve Franzone)  
steven.hamrick@fpl.com (Steven Hamrick)

COL - Turkey Point Mailing List

toner-irene@monroecounty-fl.gov (Irene Toner)  
Vanessa.quinn@dhs.gov (Vanessa Quinn)  
Wanda.K.Marshall@dom.com (Wanda K. Marshall)  
weave1dw@westinghouse.com (Doug Weaver)  
William.Blair@FPL.com (William Blair)  
william.maher@fpl.com (William Maher)