

# UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 2443 WARRENVILLE ROAD, SUITE 210 LISLE, IL 60532-4352

February 8, 2012

EA-11-241 EA-11-243

LICENSEE: Entergy Nuclear Operations, Inc.

FACILITY: Palisades Nuclear Power Plant

SUBJECT: SUMMARY OF THE JANUARY 11, 2012, REGULATORY

CONFERENCES

At the request of Entergy Nuclear Operations, Inc., two Regulatory Conferences were held on January 11, 2012, to discuss Entergy's views regarding a Preliminary White and a Preliminary Yellow finding. The Preliminary White finding was related to the August 9, 2011, failure of coupling #6 in Service Water pump 'P-7C' due to intergranular stress corrosion cracking. The details regarding the issue are contained in Inspection Report 05000255/2011016 (ML113330819). The Preliminary Yellow finding was related to the loss of the left train of direct current power on September 25, 2011. The details regarding the issue are contained in Inspection Report 05000255/2011014 (ML113330802).

During each of the conferences, the licensee's staff described Entergy's assessment of the significance of the findings and the corrective actions taken to resolve them, including the root cause evaluation of the findings. Entergy attributed the root cause of the loss of the DC bus to an organizational issue where senior Entergy management had not established a sufficiently sensitive culture of risk recognition and management, which resulted in Palisades' employees not recognizing the industrial safety and plant operational risks involved with the panel ED-11-2 breaker maintenance. In addition, Entergy attributed the root cause of the failure of the Service Water pump 'P-7C' coupling to be a design failure, in that, Entergy failed to recognize that the pump coupling procurement specification did not ensure all critical material testing requirements for use in the service water operating environment. The NRC is currently evaluating the information that was provided during the Regulatory Conferences and the final determination will be issued in a separate correspondence.

A partial list of attendees at each of the conferences is included in the Enclosure. Copies of the Entergy slides viewed at the meetings can be found in the NRC Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a>. The accession number for the slides presented during the regulatory conference for the loss of the left train of DC power is ML120100205 and the accession number for the slides presented for the failure of the Service Water pump is ML120100057.

## /RA/

John B. Giessner, Chief Branch 4 Division of Reactor Projects

Docket Nos. 50-255; 72-007 License Nos. DPR-20

Enclosure: As Stated

cc w/encl: Distribution via ListServ

#### **REGULATORY CONFERENCE**

#### **LOSS OF DIRECT CURRENT BUS (EA-11-243)**

#### **LIST OF ATTENDEES**

### **ENTERGY NUCLEAR OPERATIONS**

Alan Blind, Engineering Director
Brian Brogan, Senior Staff Engineer
Darrell Corbin, Assistant Operations Manager
Otto Gustafson, Licensing Manager
Dave Hamilton, General Manager Plant Operations
John McCann, Vice President, Nuclear Safety, EP and Licensing
Steve Mongeau, Senior Engineer
Tony Vitale, Site Vice President
Jeff Voskuil, Senior Engineer
Ed Weinkam, Senior Manager, Nuclear Safety and Licensing
Frank Yanik, PRA Engineer

Karl Fleming, Karl N. Fleming Consulting Services LLC Richard Massa, Applied Reliability Engineering, Inc. Robert Vecchio, Ph.D., P.E., Principal, Lucius Pitken Sontra Yim, Senior Engineer, Lucius Pitkin

#### **NUCLEAR REGULATORY COMMISSION**

Diana Betancourt, Reactor Engineer

Mahesh Chawla, Project Manager, NRR (via teleconference)

Donald Chung, Risk Analyst, NRR (via teleconference)

Jeff Circle, Senior Risk Analyst, NRR (via teleconference)

John Ellegood, Palisades Senior Resident Inspector

Ryan Eul, Enforcement Specialist, Office of Enforcement (via teleconference)

Fernando Ferrante, Ph.D., Risk Analyst, NRR

Jack Giessner, Chief, Reactor Projects Branch 4

Joseph Giitter, Director, Division of Risk Analysis, NRR (via teleconference)

Christopher Hunter, Risk Analyst, RES (via teleconference)

John Jandovitz, Lead, Service Water Special Inspection Team

Laura Kozak, Senior Reactor Analyst

Robert Krsek, Lead, DC Bus Special Inspection Team

Samson Lee, Deputy Director, Division of Risk Analysis, NRR (via teleconference)

Robert Lerch, Project Engineer

Patricia Lougheed, Senior Enforcement Specialist

Steven Orth, Enforcement Officer

David Passehl, Senior Reactor Analyst

Cynthia Pederson, Acting Regional Administrator

April Scarbeary, Resident Inspector

Swetha Shah, Reactor Engineer

Tom Taylor, Resident Inspector (via phone)

Jennifer Uhle, Acting Deputy Regional Administrator Nicholas Valos, Senior Reactor Analyst Stephen Vaughn, Reactor Operations Engineer, NRR (via teleconference) Sunil Weerakkody, Chief, PRA Operational Support Branch, NRR Steven West, Director, Division of Reactor Projects See-Meng Wong, Senior Risk Analyst, NRR (via teleconference)

#### **PUBLIC**

Kathryn Barnes, Don't Waste Michigan (via phone)
Corinne Carey, Don't Waste Michigan (via phone)
Ronald Gaston, Exelon Licensing Manager
Thomas Griffith, Exelon Licensing Engineer
Allan Haeger, Manager OIC Services, Certrec Corporation
Alice Hirt, Don't Waste Michigan (via phone)
Kevin Kamps, Beyond Nuclear and Don't Waste Michigan (via phone)
Amber Laderira
Dina Lamb (via phone)
Linda Lewison, Nuclear Energy Information Service
Mitchel Mathews, Exelon Licensing Engineer
Michael Mulligan (via phone)
Dillon Reed
Lindsey Smith (via phone)

#### **REGULATORY CONFERENCE**

#### **FAILURE OF SERVICE WATER PUMP P-7C (EA-11-241)**

#### **LIST OF ATTENDEES**

#### **ENTERGY NUCLEAR OPERATIONS**

Alan Blind, Engineering Director
Brian Brogan, Senior Staff Engineer
Darrell Corbin, Assistant Operations Manager
Otto Gustafson, Licensing Manager
Dave Hamilton, General Manager Plant Operations
John McCann, Vice President, Nuclear Safety, EP and Licensing
Steve Mongeau, Senior Engineer
Jeff Voskuil, Senior Engineer
Tony Vitale, Site Vice President
Ed Weinkam, Senior Manager, Nuclear Safety and Licensing
Frank Yanik, PRA Engineer

Karl Fleming, Karl N. Fleming Consulting Services LLC Richard Massa, Applied Reliability Engineering, Inc. Robert Vecchio, Ph.D., P.E., Principal, Lucius Pitken Sontra Yim, Senior Engineer, Lucius Pitkin

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Diana Betancourt, Reactor Engineer

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Donald Chung, Risk Analyst, NRR (via teleconference)

Jeff Circle, Senior Risk Analyst, NRR (via teleconference)

John Ellegood, Palisades Senior Resident Inspector

Ryan Eul, Enforcement Specialist, Office of Enforcement (via teleconference)

Fernando Ferrante, Ph.D., Risk Analyst, NRR

Jack Giessner, Chief, Reactor Projects Branch 4

Jared Heck, Regional Counsel

Christopher Hunter, Risk Analyst, RES (via teleconference)

John Jandovitz, Lead, Service Water Special Inspection Team

Laura Kozak, Senior Reactor Analyst

Robert Krsek, Lead, DC Bus Special Inspection Team

Samson Lee, Deputy Director, Division of Risk Analysis, NRR (via teleconference)

Robert Lerch, Project Engineer

Weibo Lin, International Assignee, NRR (via teleconference)

Patricia Lougheed, Senior Enforcement Specialist

Viktoria Mitlyng, Public Affairs Officer

Steven Orth, Enforcement Officer

David Passehl, Senior Reactor Analyst

Cynthia Pederson, Acting Regional Administrator

April Scarbeary, Resident Inspector

Swetha Shah, Reactor Engineer

Song-Hua Shen, Risk Analyst, RES (via teleconference)
Tom Taylor, Resident Inspector (via phone)
Jennifer Uhle, Acting Deputy Regional Administrator
Nicholas Valos, Senior Reactor Analyst
Stephen Vaughn, Reactor Operations Engineer, NRR (via teleconference)
Sunil Weerakkody, Chief, PRA Operational Support Branch, NRR
Steven West, Director, Division of Reactor Projects
See-Meng Wong, Senior Risk Analyst, NRR (via teleconference)
Antonios Zoulis Risk Analyst, NRR (via teleconference)

Robert Buell, Idaho National Laboratory (via phone) John Schroeder, Idaho National Laboratory (via phone)

#### **PUBLIC**

Kathryn Barnes, Don't Waste Michigan (via phone)
Corinne Carey, Don't Waste Michigan (via phone)
Kari Day, Michigan State Police (via phone)
Allan Haeger, Manager OIC Services, Certrec Corporation
Alice Hirt, Don't Waste Michigan (via phone)
Kevin Kamps, Beyond Nuclear and Don't Waste Michigan (via phone)
Dina Lamb (via phone)
Linda Lewison, Nuclear Energy Information Service
Michael Mulligan (via phone)
Dillon Reed
Lindsey Smith (via phone)
Audrey Walter, Michigan State Police (via phone

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## /RA/

John B. Giessner, Chief Branch 4 Division of Reactor Projects

Docket Nos. 50-255; 72-007 License Nos. DPR-20

Enclosure: As Stated

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| DOCUMENT NAME: G:\DRPIII\PALI\Palisades Reg Conference Meeting Summary.docx  Publicly Available Non-Publicly Available Sensitive To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy |               |          |  |  |  |  |  |
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| OFFICE  | RIII          | RIII     |  |  |  |  |  |
| NAME  | JGiessner:dtp | SOrth    |  |  |  |  |  |
| DATE  | 02/08/12      | 02/08/12 |  |  |  |  |  |

Letter to Entergy Nuclear Operations, Inc., from J. Giessner dated February 8, 2012.

SUMMARY OF THE JANUARY 11, 2012, REGULATORY SUBJECT:

CONFERENCES

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