



April 17, 2007

NRC 2007-0021  
CAL 3-04-01  
Revision 1

Regional Administrator  
Region III  
U. S. Nuclear Regulatory Commission  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

Point Beach Nuclear Plant, Units 1 and 2  
Dockets 50-266 and 50-301  
Renewed License Nos. DPR-24 and DPR-27

Point Beach Nuclear Plant  
Engineering Self-Assessment Plan

References: 1) Letter from NMC to NRC dated February 10, 2006 (ML060440285)  
2) Letter from NRC to NMC dated April 14, 2006 (ML061070061)

This letter submits the Nuclear Management Company, LLC (NMC) plan to perform an independent assessment of Engineering. Reference 2 requires this assessment to be completed by August 1, 2007.

The onsite portion of the assessment is scheduled to commence on May 14, 2007, and will last approximately two weeks. A debrief at the end of the assessment will be conducted with the Point Beach Nuclear Plant (PBNP) staff. The final assessment report will be submitted to the NRC by August 1, 2007. Action plans, if required, will be provided to the NRC within 45 days of site approval of the assessment report.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

Dennis L. Koehl  
Site Vice-President, Point Beach Nuclear Plant  
Nuclear Management Company, LLC

Enclosure

cc: USNRC Document Control Desk  
NRR Project Manager, Point Beach Nuclear Plant, USNRC  
Resident Inspector, Point Beach Nuclear Plant, USNRC

# ENCLOSURE

## ENGINEERING INDEPENDENT ASSESSMENT PLAN SUMMARY

### **Assessment Tracking Number**

SARA 00904688-04

### **Assessment Objectives**

1. Evaluate fundamentals of engineering standards.
2. Evaluate engineering equipment reliability standards.
3. Evaluate engineering configuration management standards.
4. Evaluate engineering corrective actions standards.
5. Evaluate engineering operating experience standards.

### **Assessment Purpose**

The purpose of the assessment is to provide an independent and comprehensive evaluation of engineering effectiveness at Point Beach Nuclear Plant (PBNP). The assessment will be performed in accordance with NMC procedure FP-PA-SA-01, "Focused Self-Assessment Planning, Conduct and Reporting." Corrective actions will be written to address issues identified during the assessment. The assessment will evaluate the rigor, criticality and overall quality of PBNP Engineering. The assessment report will provide an overall concluding statement on engineering effectiveness.

### **Assessment Scope**

The assessment will review PBNP Engineering department performance as it relates to Operational Excellence.

The assessment will review products developed by PBNP Engineering to identify evidence of improvement. Examples of products to be reviewed include, but are not limited to, calculations, apparent cause evaluations, operability recommendations and modifications. The assessment team, however, will limit its review to products completed within the past year.

## **Narrative Discussion of Assessment Objectives**

### **1. Evaluate fundamentals of engineering standards.**

The fundamentals of engineering are the essential knowledge, skills, behaviors, and practices personnel need to apply to conduct their work properly. The assessment team will:

- Determine if engineering management has established high expectations and standards for performance.
- Evaluate the quality of engineering products, including evaluations that support technical decisions, and design information.
- Evaluate the current status of the training and development of engineering personnel.
- Evaluate how well the equipment monitoring/testing program is being implemented, whether the equipment monitoring/testing program is keeping up with industry improvements, and if operating experience is being used to support safe and reliable equipment operation.
- Evaluate how well engineering personnel monitor and evaluate equipment and system performance, anticipate issues that could affect long-term plant performance, and develop strategies to address these issues.

### **2. Evaluate engineering equipment reliability standards.**

The team will evaluate Engineering on:

- Prevention of equipment failures and long-term equipment reliability.
- Intolerance for failures of equipment important to safety and reliability of the equipment.
- Implementation of both preventive and predictive maintenance.
- Avoiding unanticipated or repeat failures of equipment important for safety and reliability.
- Management of equipment and resources to maintain long-term equipment reliability.

### **3. Evaluate engineering configuration management standards.**

The team will determine if Engineering is:

- Maintaining margins consistent with design requirements.
- Maintaining operational configuration control and design change processes.
- Maintaining margins consistent with design requirements by understanding system and component margins, considering the system and component margins in decision-making, and managing systems and components consistent with design and licensing basis requirements.
- Conducting plant activities in a manner that maintains configuration control and operating and design margins.
- Using processes to maintain consistency of plant configuration, design and licensing bases.
- Processes are clearly defined and properly implemented.
- Effectively analyzing, controlling, and implementing changes.

### **4. Evaluate engineering corrective actions standards.**

The team will determine if Engineering is consistent and deliberate in the approach to problem reporting, analysis, action planning, and resolution to improve performance.

### **5. Evaluate engineering operating experience standards.**

The team will determine if Engineering is using internal and industry operating experience information to prevent events and improve equipment, worker, station, and industry performance.

### **Independent Assessment Team**

- Alex Zarechnak, MPR Associates (Team Lead)
- Dick Skillman, Skillman Technical Resources
- Andy Zielonka, St. Lucie/Turkey Point Project Engineering Manager
- Richard Cliche, Seabrook Mechanical Systems Design Engineering Supervisor
- Rudy Gil, Florida Power and Light Component Support and Inspections Manager

### **Schedule**

May 4, 2007	Provide selected information to assessment team to begin off-site preparations.
May 4 -11, 2007	Off-site (in office) review in preparation for onsite assessment.
May 14, 2007	Assessment team will assemble at the plant for assessment pre-job briefing and training.
May 14 -24, 2007	Conduct onsite assessment and provide site management preliminary results prior to leaving site.
July 15, 2007	Draft assessment report provided to site.
July 31, 2007	Site approval (PARB).
August 1, 2007	Final assessment report will be provided to the NRC.

Action plans, if required, will be provided to the NRC within 45 days of site approval (PARB) of the assessment report.

### **Assessment Methods**

The independent assessment team will use procedure FP-PA-SA-01, "Focused Self-Assessment Planning, Conduct and Reporting," as guidance in conducting this assessment.

The assessment methodology may include, but is not limited to, a combination of the following: Observing activities, interviewing personnel, reviewing documents, evaluating or performing trend analysis, reviewing procedures, instructions, and programs, reviewing performance indicators.

These inputs will be assessed with respect to internal and industry standards.

## **Assessment Team Experience and Qualifications**

### **Alex Zarechnak (Team Lead) MPR Associates**

#### **Experience**

Mr. Zarechnak has 37 years experience working in the nuclear and fossil power field with MPR Associates. Since 1999, he has been a Principal Officer of the company, with responsibility for directing company activities. He has participated in a wide variety of technical projects and has had responsibility for detailed engineering evaluations as well as management and coordination of multi-disciplinary projects, including plant restart readiness reviews, vibration, structural and thermal hydraulic analysis, systems design reviews and upgrades. Mr. Zarechnak has also consulted on an international level on advanced nuclear power plant designs and has assessed foreign reactor vessel annealing technology for potential domestic use. He is the author of numerous industry publications.

#### **Education**

- University of Maryland, MA in Physics
- Princeton University, BA in Physics

### **Dick Skillman Skillman Technical Resources**

#### **Experience**

Mr. Skillman has 32 years experience in the commercial nuclear power industry in positions with both an NSSS vendor and at the plant level. While employed by GPU Nuclear Corporation, he was assigned as Director of Plant Engineering, Configuration Control Director and Technical Functions Site Director. As such, he directed engineering activities at TMI-1 and managed the defueling of TMI-2. SRO certification at TMI-1 and former SRO/RO holder.

As a consultant, Mr. Skillman has performed numerous engineering reviews and assessments at plants where events have resulted in the plants entering Columns III and IV of the action matrix. He also has served on the nuclear review boards for several plants. Mr. Skillman is a Registered Professional Engineer in Pennsylvania and Virginia.

#### **Education**

United States Merchant Marine Academy, BS in Marine Engineering

**Andy Zielonka**  
**Project Engineering Manager, St. Lucie/Turkey Point**

Experience

Mr. Zielonka has 25 years of experience in construction, startup, and operation of nuclear power plants. Prior work includes assignment as a mechanical engineering supervisor during construction of St. Lucie Unit 2 and subsequently as a supervisor in the site engineering department to support operation of both units. Mr. Zielonka worked as an engineering manager and technical department supervisor at Turkey Point Units 3 and 4 and holds an SRO certification on those units.

Mr. Zielonka is currently the Project Engineering Manager for the dry fuel storage project for St. Lucie and Turkey Point Plants.

Education

University of Massachusetts, BS in Mechanical Engineering

**Mr. Richard Cliche**  
**Mechanical Systems Design Engineering Supervisor, Seabrook Station**

Experience

Mr. Cliche has 36 years of experience in engineering and licensing. He also served as a nuclear plant mechanical operator in the Navy. Engineering assignments include; mechanical systems design engineering supervisor, engineering "Fix-It-Now" team supervisor, systems design engineering supervisor, senior engineer of plant design engineering, senior engineer - construction management. During his time with Stone & Webster, Mr. Cliche served as the support engineer for the operational services division and the project nuclear group.

Mr. Cliche is a Registered Professional Engineer in New Hampshire and is also a member of the American Society of Mechanical Engineers (ASME).

Education

New Hampshire College, MBA  
University of Lowell, BS in Mechanical Engineering

**Mr. Rudy Gil**

**Component Support and Inspections Manager, Florida Power and Light**

Experience

Mr. Gil has 28 years of diversified nuclear plant engineering experience in the areas of design/design basis, licensing regulations, system engineering, plant operations and maintenance, root cause evaluations, outage support, self-assessments, configuration management, procurement engineering and project management, NDE and regulatory interface. Mr. Gil has held positions as plant safety review committee assistant chair, member of the corporate nuclear review board and is currently qualified as Emergency Control Officer. Mr. Gil has both site (Turkey Point and St. Lucie) and corporate experience.

Mr. Gil is a Registered Professional Engineer in Florida.

Education

University of Miami, BS in Civil Engineering