

FACILITY INITIAL EXAMINATION SUBMITTAL CHECKLISTS

FOR THE POINT BEACH INITIAL EXAMINATION - NOVEMBER 2005



September 23, 2005

NRC 2005-0102

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

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

Initial Operator License Examination

Reference: NRC to NMC Letter dated July 13, 2005

In accordance with the requirements listed in the referenced letter, Nuclear Management Company, LLC (NMC) is submitting the initial license examination for the Point Beach Nuclear Plant. This submittal is made in accordance with the provisions of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9. The initial license examination is scheduled for November 7-18, 2005. The following materials are enclosed:

- One (1) Form ES 301-3, Operating Exam Quality Checklist
- Four (4) Forms ES-301-4, Simulator Scenario Quality Checklist
- One (1) Form ES-301-6, Competencies Checklist
- Eleven (11) Operational Job Performance Measures (JPMs)
- Six (6) Administrative JPMs
- Four (4) Forms ES-D-2 Required Operator Actions (one for each scenario)
- One (1) ES 401-6, Written Exam Quality Checklist
- Six (6) Forms ES-401-7, RO Written Exam Cover Sheets; one (1) RO Written Exam (ready to give with handouts), and one (1) RO Written Exam Key with supporting procedures
- Seven (7) Form ES-401-8, SRO Written Exam Cover Sheets and one (1) SRO Written Exam (ready to give with handouts) plus one (1) SRO Written Exam Key with supporting procedures

ENCLOSURE TO BE WITHHELD FROM PUBLIC DISCLOSURE UNTIL EXAMINATIONS ARE COMPLETE

SEP 26 2005

Pursuant to the provisions of NUREG-1021, Revision 9, these materials shall be withheld from public disclosure until after the examinations are complete.

Please contact Paul Smith at 920/755-6416 if you have any questions regarding this submittal.

A handwritten signature in black ink, appearing to read "Dennis L. Koehl". The signature is fluid and cursive, with the first name "Dennis" and last name "Koehl" clearly distinguishable.

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

Enclosure

ENCLOSURE

**POINT BEACH NUCLEAR PLANT UNITS 1 AND 2
INITIAL LICENSE EXAMINATION**

Facility: PBNP

Date of Examination: 11/7/2005 – 11/18/2005

Operating Test Number: 2005301

| 1. GENERAL CRITERIA | | Initials | | |
|--|---|------------|----|----|
| | | a | b* | c# |
| a. | The operating test conforms with the previously approved outline; changes are consistent with sampling requirements (e.g., 10CFR55.45, operational importance, safety function distribution). | Rw1 | T | RW |
| b. | There is no day-to-day repetition between this and other operating tests to be administered during this examination. | Rw1 | T | RW |
| c. | The operating test shall not duplicate items from the applicants' audit test(s) (see Section D.1.a). | Rw1 | T | RW |
| d. | Overlap with the written examination and between different parts of the operating test is within acceptable limits. | Rw1 | T | RW |
| e. | It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level. | Rw1 | T | RW |
| 2. WALK-THROUGH CRITERIA | | — | — | — |
| a. | Each JPM includes the following, as applicable: <ul style="list-style-type: none"> • initial conditions • initiating cues • references and tools, including associated procedures • reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time critical by the facility licensee • operationally important specific performance criteria that include: <ul style="list-style-type: none"> - detailed expected actions with exact criteria and nomenclature - system response and other examiner cues - statements describing important observations to be made by the applicant - criteria for successful completion of the task - identification of critical steps and their associated performance standards - restrictions on the sequence of steps, if applicable | Rw1 | T | RW |
| b. | Ensure that any changes from the previously approved systems and administrative walk-through outlines (Forms ES-301-1 and 2) have not caused the test to deviate from any of the acceptance criteria (e.g., item distribution, bank use, repetition from the last 2 NRC examinations) specified on those forms and Form ES-201-2. | Rw1 | T | RW |
| 3. SIMULATOR CRITERIA | | — | — | — |
| a. | The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached. | Rw1 | T | RW |
| | Printed Name / Signature | Date | | |
| a. | Author Russell Joplin / <i>Russell Joplin</i> | 9/25/2005 | | |
| b. | Facility Reviewer (*) Thomas Larson / <i>Thomas Larson</i> | 9/25/05 | | |
| c. | NRC Chief Examiner (#) Raymond K Walton / <i>Raymond K Walton</i> | 10/25/2005 | | |
| d. | NRC Supervisor # Hironori Peterson / <i>Hironori Peterson</i> | 11/1/05 | | |
| NOTE: * The facility signature is not applicable for NRC-developed tests. | | | | |
| # Independent NRC reviewer initial items in Column "c;" chief examiner concurrence required. | | | | |

| Facility: PBNP | | Date of Exam: 11/7/05 – 11/18/05 | | Scenario Numbers: 1 | | Operating Test No: 2005301 | | | | |
|--|--|----------------------------------|--|---------------------|--|----------------------------|-------------------|----------------|----|----|
| QUALITATIVE ATTRIBUTES | | | | | | | Initials | | | |
| | | | | | | | a | b* | c# | |
| 1. | The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events. | | | | | | R _W | TL | RW | |
| 2. | The scenarios consist mostly of related events. | | | | | | R _W | TL | RW | |
| 3. | Each event description consists of <ul style="list-style-type: none"> • the point in the scenario when it is to be initiated • the malfunction(s) that are entered to initiate the event • the symptoms/cues that will be visible to the crew • the expected operator actions (by shift position) • the event termination point (if applicable) | | | | | | R _W | TL | RW | |
| 4. | No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event. | | | | | | R _W | TL | RW | |
| 5. | The events are valid with regard to physics and thermodynamics. | | | | | | R _W | TL | RW | |
| 6. | Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objective. | | | | | | R _W | TL | RW | |
| 7. | If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given. | | | | | | R _W | TL | RW | |
| 8. | The simulator modeling is not altered. | | | | | | R _W | TL | RW | |
| 9. | The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios. | | | | | | R _W | TL | RW | |
| 10. | Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301. | | | | | | R _W | TL | RW | |
| 11. | All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios). | | | | | | R _W | TL | RW | |
| 12. | Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios). | | | | | | R _W | TL | RW | |
| 13. | The level of difficulty is appropriate to support licensing decisions for each position. | | | | | | R _W | TL | RW | |
| TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d) | | | | | | | Actual Attributes | | | |
| 1. | Total malfunctions (5-8) | | | | | | 5 / / | R _W | TL | RW |
| 2. | Malfunctions after EOP entry (1-2) | | | | | | 1 / / | R _W | TL | RW |
| 3. | Abnormal transients (2-4) | | | | | | 3 / / | R _W | TL | RW |
| 4. | Major transients (1-2) | | | | | | 1 / / | R _W | TL | RW |
| 5. | EOPs entered/requiring substantive actions (1-2) | | | | | | 1 / / | R _W | TL | RW |
| 6. | EOP contingencies requiring substantive actions (0-2) | | | | | | 0 / / | R _W | TL | RW |
| 7. | Critical tasks (2-3) | | | | | | 2 / / | R _W | TL | RW |

| Facility: PBNP | | Date of Exam: 11/7/05 – 11/18/05 | | Scenario Numbers: 2 | | Operating Test No: 2005301 | | | | |
|--|--|----------------------------------|----|---------------------|----|----------------------------|----------|----|----|----|
| QUALITATIVE ATTRIBUTES | | | | | | | Initials | | | |
| | | | | | | | a | b* | c# | |
| 1. | The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events. | Ry | TJ | RW | | | | | | |
| 2. | The scenarios consist mostly of related events. | Ry | TJ | RW | | | | | | |
| 3. | Each event description consists of <ul style="list-style-type: none"> the point in the scenario when it is to be initiated the malfunction(s) that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) | Ry | TJ | RW | | | | | | |
| 4. | No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event. | Ry | TJ | RW | | | | | | |
| 5. | The events are valid with regard to physics and thermodynamics. | Ry | TJ | RW | | | | | | |
| 6. | Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objective. | Ry | TJ | RW | | | | | | |
| 7. | If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given. | Ry | TJ | RW | | | | | | |
| 8. | The simulator modeling is not altered. | Ry | TJ | RW | | | | | | |
| 9. | The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios. | Ry | TJ | RW | | | | | | |
| 10. | Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301. | Ry | TJ | RW | | | | | | |
| 11. | All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios). | Ry | TJ | RW | | | | | | |
| 12. | Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios). | Ry | TJ | RW | | | | | | |
| 13. | The level of difficulty is appropriate to support licensing decisions for each position. | Ry | TJ | RW | | | | | | |
| TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d) | | | | | | Actual Attributes | | -- | -- | -- |
| 1. | Total malfunctions (5-8) | 6 / / | | Ry | TJ | RW | | | | |
| 2. | Malfunctions after EOP entry (1-2) | 2 / / | | Ry | TJ | RW | | | | |
| 3. | Abnormal transients (2-4) | 3 / / | | Ry | TJ | RW | | | | |
| 4. | Major transients (1-2) | 1 / / | | Ry | TJ | RW | | | | |
| 5. | EOPs entered/requiring substantive actions (1-2) | 1 / / | | Ry | TJ | RW | | | | |
| 6. | EOP contingencies requiring substantive actions (0-2) | 0 / / | | Ry | TJ | RW | | | | |
| 7. | Critical tasks (2-3) | 4 / / | | Ry | TJ | RW | | | | |

Facility: PBNP Date of Exam: 11/7/05 – 11/18/05 Scenario Numbers: 3 Operating Test No: 2005301

| QUALITATIVE ATTRIBUTES | | Initials | | | |
|---|--|-------------------|----------------|-----------------|-----------------|
| | | a | b* | c# | |
| 1. | The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events. | R _M | T _L | R _{NW} | |
| 2. | The scenarios consist mostly of related events. | R _M | T _L | R _{NW} | |
| 3. | Each event description consists of <ul style="list-style-type: none"> • the point in the scenario when it is to be initiated • the malfunction(s) that are entered to initiate the event • the symptoms/cues that will be visible to the crew • the expected operator actions (by shift position) • the event termination point (if applicable) | R _U | T _L | R _{NW} | |
| 4. | No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event. | L _M | T _L | R _{NW} | |
| 5. | The events are valid with regard to physics and thermodynamics. | R _M | T _L | R _{NW} | |
| 6. | Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objective. | R _M | T _L | R _{NW} | |
| 7. | If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given. | R _M | T _L | R _{NW} | |
| 8. | The simulator modeling is not altered. | R _M | T _L | R _{NW} | |
| 9. | The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios. | R _M | T _L | R _{NW} | |
| 10. | Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301. | R _M | T _L | R _{NW} | |
| 11. | All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios). | R _M | T _L | R _{NW} | |
| 12. | Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios). | R _M | T _L | R _{NW} | |
| 13. | The level of difficulty is appropriate to support licensing decisions for each position. | R _M | T _L | R _{NW} | |
| TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d) | | Actual Attributes | -- | -- | -- |
| 1. | Total malfunctions (5-8) | 5 / / | R _M | T _L | R _{NW} |
| 2. | Malfunctions after EOP entry (1-2) | 2 / / | R _M | T _L | R _{NW} |
| 3. | Abnormal transients (2-4) | 2 / / | R _M | T _L | R _{NW} |
| 4. | Major transients (1-2) | 1 / / | R _M | T _L | R _{NW} |
| 5. | EOPs entered/requiring substantive actions (1-2) | 1 / / | R _M | T _L | R _{NW} |
| 6. | EOP contingencies requiring substantive actions (0-2) | 1 / / | R _M | T _L | R _{NW} |
| 7. | Critical tasks (2-3) | 2 / / | R _M | T _L | R _{NW} |

| Facility: PBNP | | Date of Exam: 11/7/05 – 11/18/05 | | Scenario Numbers: 4 | | Operating Test No: 2005301 | | | |
|--|--|----------------------------------|----------------|---------------------|----------------|----------------------------|-------------------|----|----|
| QUALITATIVE ATTRIBUTES | | | | | | | Initials | | |
| | | | | | | | a | b* | c# |
| 1. | The initial conditions are realistic, in that some equipment and/or instrumentation may be out of service, but it does not cue the operators into expected events. | R _{ny} | T _L | R _W | | | | | |
| 2. | The scenarios consist mostly of related events. | R _{ny} | T _L | R _W | | | | | |
| 3. | Each event description consists of <ul style="list-style-type: none"> the point in the scenario when it is to be initiated the malfunction(s) that are entered to initiate the event the symptoms/cues that will be visible to the crew the expected operator actions (by shift position) the event termination point (if applicable) | R _{ny} | T _L | R _W | | | | | |
| 4. | No more than one non-mechanistic failure (e.g., pipe break) is incorporated into the scenario without a credible preceding incident such as a seismic event. | R _{ny} | T _L | R _W | | | | | |
| 5. | The events are valid with regard to physics and thermodynamics. | R _{ny} | T _L | R _W | | | | | |
| 6. | Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objective. | R _{ny} | T _L | R _W | | | | | |
| 7. | If time compression techniques are used, the scenario summary clearly so indicates. Operators have sufficient time to carry out expected activities without undue time constraints. Cues are given. | R _{ny} | T _L | R _W | | | | | |
| 8. | The simulator modeling is not altered. | R _{ny} | T _L | R _W | | | | | |
| 9. | The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios. | R _{ny} | T _L | R _W | | | | | |
| 10. | Every operator will be evaluated using at least one new or significantly modified scenario. All other scenarios have been altered in accordance with Section D.5 of ES-301. | R _{ny} | T _L | R _W | | | | | |
| 11. | All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios). | R _{ny} | T _L | R _W | | | | | |
| 12. | Each applicant will be significantly involved in the minimum number of transients and events specified on Form ES-301-5 (submit the form with the simulator scenarios). | R _{ny} | T _L | R _W | | | | | |
| 13. | The level of difficulty is appropriate to support licensing decisions for each position. | R _{ny} | T _L | R _W | | | | | |
| TARGET QUANTITATIVE ATTRIBUTES (PER SCENARIO; SEE SECTION D.5.d) | | | | | | | Actual Attributes | | |
| 1. | Total malfunctions (5-8) | 6 / / | | R _{ny} | T _L | R _W | | | |
| 2. | Malfunctions after EOP entry (1-2) | 3 / / | | R _{ny} | T _L | R _W | | | |
| 3. | Abnormal transients (2-4) | 2 / / | | R _{ny} | T _L | R _W | | | |
| 4. | Major transients (1-2) | 1 / / | | R _{ny} | T _L | R _W | | | |
| 5. | EOPs entered/requiring substantive actions (1-2) | 1 / / | | R _{ny} | T _L | R _W | | | |
| 6. | EOP contingencies requiring substantive actions (0-2) | 1 / / | | R _{ny} | T _L | R _W | | | |
| 7. | Critical tasks (2-3) | 2 / / | | R _{ny} | T _L | R _W | | | |

| Facility: PBNP Date of Examination: 11/7/2005 ~ 11/18/2005 Operating Test No.: 2005301 | | | | | | | | | | | | |
|--|----------|-----|-----------|----|----------|-----------|-----------|-----|----------|-----------|-----------|----------|
| Competencies | SRO | | | | RO | | | | BOP | | | |
| | SCENARIO | | | | SCENARIO | | | | SCENARIO | | | |
| | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Interpret/Diagnose Events and Conditions | 1-4 | 2-6 | 2-6 | NA | 134 5 | 124 56 | 2-6 | 2-4 | 2-4 | 1-7 | 3-5 | 124 5 |
| Comply With and Use Procedures (1) | 1-4 | 1-5 | 124 56 | NA | 134 | 124 5 | 124 56 | 2-4 | 1-4 | 123 57 | 124 56 | 124 5 |
| Operate Control Boards (2) | NA | NA | NA | NA | 134 5 | 125 6 | 145 6 | 2-4 | 1-4 | 135 67 | 124 5 | 124 5 |
| Communicate and Interact | 1-4 | 1-7 | 1-6 | NA | 134 5 | 124 56 | 124 56 | 2-4 | 1-4 | 1-7 | 1-6 | 124 5 |
| Demonstrate Supervisory Ability (3) | 1-4 | 1-7 | 124 56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Comply With and Use Tech. Specs. (3) | 12 | 23 | 23 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

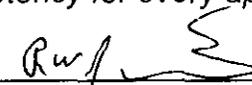
Notes:

(1) Includes Technical Specification compliance for an RO.
 (2) Optional for an SRO-U
 (3) Only applicable to SROs.

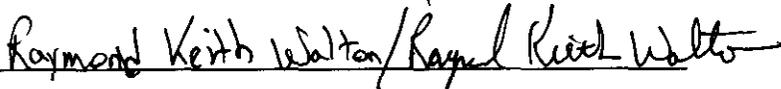
Instructions:

Check the applicant's license type and enter one or more event numbers that will allow the examiners to evaluate every applicable competency for every applicant.

Author:

Russell Joplin / 

NRC Reviewer:



| Facility: PBNP | | Date of Exam: 11/07/05 | | Exam Level: RO <input checked="" type="checkbox"/> SRO <input checked="" type="checkbox"/> | | |
|---|----------------------|------------------------|-------|--|----|----|
| Item Description | Initial | | | a | b* | c* |
| | a | b* | c* | | | |
| 1. Questions and answers are technically accurate and applicable to the facility. | RW1 | TL | RW | | | |
| 2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available. | RW1 | TL | RW | | | |
| 3. SRO questions are appropriate in accordance with Section D.2.d of ES-401 | RW1 | TL | RW | | | |
| 4. The sampling process was random and systematic (If more than 4 RO or 2 SRO questions were repeated from the last 2 NRC licensing exams, consult the NRR OL program office). | RW1 | TL | RW | | | |
| 5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: ___ the audit exam was systematically and randomly developed; or ___ the audit exam was completed before the license exam was started; or ___ the examinations were developed independently; or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or ___ other (explain) | RW1 | TL | RW | | | |
| 6. Bank use meets limits (no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified); enter the actual RO / SRO-only question distribution(s) at right. | Bank | Modified | New | RW1 | TL | RW |
| | 20/5 | 9 / 2 | 46/18 | | | |
| 7. Between 50 and 60 percent of the questions on the RO exam are written at the comprehension/ analysis level; the SRO exam may exceed 60 percent if the randomly selected K/As support the higher cognitive levels; enter the actual RO / SRO question distribution(s) at right. | Memory | C/A | | RW1 | TL | RW |
| | 34 / 8 | 41 / 17 | | | | |
| 8. References/handouts provided do not give away answers or aid in the elimination of distractors. | RW1 | TL | RW | | | |
| 9. Question content conforms with specific K/A statements in the previously approved examination outline and is appropriate for the tier to which they are assigned; deviations are justified. | RW1 | TL | RW | | | |
| 10. Question psychometric quality and format meet the guidelines in ES Appendix B. | RW1 | TL | RW | | | |
| 11. The exam contains the required number of one-point, multiple choice items: the total is correct and agrees with the value on the cover sheet. | RW1 | TL | RW | | | |
| Printed Name / Signature | | Date | | | | |
| a. Author | Russell Joplin / | RW1 | | 9/25/2005 | | |
| b. Facility Reviewer (*) | Thomas Larson / | | | 9/25/05 | | |
| c. NRC Chief Examiner (#) | Raymond K. Highton / | | | 10/25/05 | | |
| d. NRC Regional Supervisor | Harold Johnson / | | | 11/1/05 | | |
| Note: * The facility reviewer's initials/signature are not applicable for NRC-developed examinations. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. | | | | | | |