

| Facility: Prairie Island Nuclear Generating Plant Date of Examination: 05/14-22/12 Operating Test Number: 2012301 | | | |
|--|-------------|-------------|----|
| 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., 10 CFR 55.45, operational importance, safety function distribution). | MGB | RAB | DM |
| b. There is no day-to-day repetition between this and other operating tests to be administered during this examination. | MGB | RAB | DM |
| c. The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.) | JZ | RAB | DM |
| d. Overlap with the written examination and between different parts of the operating test is within acceptable limits. | MGB | RAB | DM |
| e. It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level. | MGB | RAB | DM |
| 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 | MGB | RAB | DM |
| 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. | MGB | RAB | DM |
| 3. Simulator Criteria | | | |
| The associated simulator operating tests (scenario sets) have been reviewed in accordance with Form ES-301-4 and a copy is attached. | MGB | RAB | DM |
| Printed Name / Signature | | Date | |
| a. Author | D. Reeser | 5/8/12 | |
| b. NRC Reviewer | M. Bielby | 4/10/2012 | |
| c. NRC Chief Examiner (#) | R. Baker | 5-8-12/5812 | |
| d. NRC Supervisor | D. Oliver | 4/10/2012 | |
| | D. McNeil | 5/8/2012 | |
| | C. Phillips | 4/11/12 | |
| NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. | | | |

Facility: PINGP U1/U2 Date of Exam: 05/14-22/2012

Scenario Numbers: 1 / 2 / 3 / s

Operating Test No.: 2012301

| 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. | MB | MB | MB |
| 2. | The scenarios consist mostly of related events. | MB | MB | MB |
| 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) | MB | MB | MB |
| 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. | MB | MB | MB |
| 5. | The events are valid with regard to physics and thermodynamics. | MB | MB | MB |
| 6. | Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives. | MB | MB | MB |
| 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. | N/A | N/A | N/A |
| 8. | The simulator modeling is not altered. | MB | MB | MB |
| 9. | The scenarios have been validated. Pursuant to 10 CFR 55.46(d), any open simulator performance deficiencies or deviations from the referenced plant have been evaluated to ensure that functional fidelity is maintained while running the planned scenarios. | MB | MB | MB |
| 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. | MB | MB | MB |
| 11. | All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios). | MB | MB | MB |
| 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). | MB | MB | MB |
| 13. | The level of difficulty is appropriate to support licensing decisions for each crew position. | MB | MB | MB |
| Target Quantitative Attributes (Per Scenario; See Section D.5.d) | | Actual Attributes | | |
| 1. | Total malfunctions (5-8) | 5 / 7 / 7 / 4 | MB | MB |
| 2. | Malfunctions after EOP entry (1-2) | 1 / 3 / 2 / 2 | MB | MB |
| 3. | Abnormal events (2-4) | 3 / 2 / 3 / 1 | MB | MB |
| 4. | Major transients (1-2) | 1 / 1 / 1 / 1 | MB | MB |
| 5. | EOPs entered/requiring substantive actions (1-2) | 1 / 2 / 1 / 1 | MB | MB |
| 6. | EOP contingencies requiring substantive actions (0-2) | 1 / 2 / 1 / 1 | MB | MB |
| 7. | Critical tasks (2-3) | 2 / 6 / 2 / 3 | MB | MB |

| Facility: Prairie Island Nuclear Generating Plant | | Date of Exam: May 14, 2012 | | Exam Level: RO <input checked="" type="checkbox"/> SRO <input checked="" type="checkbox"/> | | |
|---|--------|----------------------------|---------|--|----|----|
| Item Description | | | | Initial | | |
| | | | | a | b* | c* |
| 1. Questions and answers are technically accurate and applicable to the facility. | | | | MEB | NO | sm |
| 2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available. | | | | MEB | NO | sm |
| 3. SRO questions are appropriate in accordance with Section D.2.d of ES-401 | | | | MEB | NO | sm |
| 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). | | | | | | sm |
| 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 <input checked="" type="checkbox"/> the examinations were developed independently, or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication, or ___ other (explain) | | | | MEB | NO | sm |
| 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 | MEB | NO | sm |
| | 17 / 2 | 4 / 2 | 54 / 21 | | | |
| 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 | | MEB | NO | sm |
| | 29 / 3 | 45 / 22 | | | | |
| 8. References/handouts provided do not give away answers or aid in the elimination of distractors. | | | | MEB | NO | sm |
| 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. | | | | MEB | NO | sm |
| 10. Question psychometric quality and format meet the guidelines in ES Appendix B. | | | | MEB | NO | sm |
| 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. | | | | MEB | NO | sm |
| Printed Name / Signature a. Author M. Bielby / <i>M. Bielby</i> b. NRC Reviewer (*) R. Baker / <i>R. Baker</i> D. Oliver / <i>D. Oliver</i> c. NRC Chief Examiner (#) D. McNeil / <i>D. McNeil</i> d. NRC Regional Supervisor C. Phillips / <i>C. Phillips</i> | | | | Date 04/10/2012 5-8-2012 04/11/2012 5/8/2012 4/11/12 | | |

| Facility: <u>PINGP Units 1 and 2</u> | | Date of Examination: <u>May 14 - 25, 2012</u> | | |
|---|--|--|-----|----|
| Item | Task Description | Initials | | |
| | | a | b* | c# |
| 1. W R I T E N | a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401. | MGB | Reg | DM |
| | b. Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all K/A categories are appropriately sampled. | MGB | Reg | DM |
| | c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics. | MGB | Reg | DM |
| | d. Assess whether the justifications for deselected or rejected K/A statements are appropriate. | MGB | Reg | DM |
| 2. S I M U L A T O R | a. Using Form ES-301-5, verify that the proposed scenario sets cover the required number of normal evolutions, instrument and component failures, technical specifications, and major transients. | MGB | Reg | DM |
| | b. Assess whether there are enough scenario sets (and spares) to test the projected number and mix of applicants in accordance with the expected crew composition and rotation schedule without compromising exam integrity, and ensure that each applicant can be tested using at least one new or significantly modified scenario, that no scenarios are duplicated from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days. | MGB | Reg | DM |
| | c. To the extent possible, assess whether the outline(s) conform(s) with the qualitative and quantitative criteria specified on Form ES-301-4 and described in Appendix D. | MGB | Reg | DM |
| 3. W / | a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2: (1) the outline(s) contain(s) the required number of control room and in-plant tasks distributed among the safety functions as specified on the form (2) task repetition from the last two NRC examinations is within the limits specified on the form (3) no tasks are duplicated from the applicants' audit test(s) (4) the number of new or modified tasks meets or exceeds the minimums specified on the form (5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form. | MGB | Reg | DM |
| | b. Verify that the administrative outline meets the criteria specified on Form ES-301-1: (1) the tasks are distributed among the topics as specified on the form (2) at least one task is new or significantly modified (3) no more than one task is repeated from the last two NRC licensing examinations | MGB | Reg | DM |
| | c. Determine if there are enough different outlines to test the projected number and mix of applicants and ensure that no items are duplicated on subsequent days. | MGB | Reg | DM |
| 4. G E N E R A L | a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections. | MGB | Reg | DM |
| | b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate. | MGB | Reg | DM |
| | c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5. | MGB | Reg | DM |
| | d. Check for duplication and overlap among exam sections. | MGB | Reg | DM |
| | e. Check the entire exam for balance of coverage. | MGB | Reg | DM |
| | f. Assess whether the exam fits the appropriate job level (RO or SRO). | MGB | Reg | DM |
| a. Author <u>M. Bielby/R. Baker/D. Oliver / Michael E. Bullock</u> b. Facility Reviewer (*) <u>Ronald D. Baker / R. D. Baker / David J. Oliver / David J. Oliver</u> c. NRC Chief Examiner (#) <u>Don McNeil / Don McNeil</u> d. NRC Supervisor <u>Raymond Keith Walton / Raymond Keith Walton (for H. Peterson)</u> | | Date <u>9/13/11</u> <u>9/13/11</u> <u>9/13/11</u> <u>9/13/2011</u> | | |
| Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required. * Not applicable for NRC-prepared examination outlines | | | | |