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## **Examination Preparation Checklist**

Form ES-201-1

| Facility: _     | HOPE CREEK Date of Examinati  | ion: <u>8/19-13/2</u>           |
|-----------------|---|---------------------------------|
| Developed       | l by: Written - Facility □ NRC 🂢 // Operating - Facility □ NRC 💢  |                                 |
| Target<br>Date* | Task Description (Reference)  | Chief<br>Examiner's<br>Initials |
| -180            | Examination administration date confirmed (C.1.a; C.2.a and b)  | TF                              |
| -120            | NRC examiners and facility contact assigned (C.1.d; C.2.e)  | TF                              |
| -120            | 3. Facility contact briefed on security and other requirements (C.2.c)  | TF                              |
| -120            | Corporate notification letter sent (C.2.d)  | TF                              |
| [-90]           | [5. Reference material due (C.1.e; C.3.c; Attachment 2)]  | TF                              |
| {-75}           | 6. Integrated examination outline(s) due, including Forms ES-201-2, ES-201-3, ES-301-1, ES-301-2, ES-301-5, ES-D-1's, ES-401-1/2, ES-401-3, and ES-401-4, as applicable (C.1.e and f; C.3.d)  | NA                              |
| {-70}           | Examination outline(s) reviewed by NRC and feedback provided to facility licensee (C.2.h; C.3.e)}   | NA                              |
| {-45}           | 8. Proposed examinations (including written, walk-through JPMs, and scenarios, as applicable), supporting documentation (including Forms ES-301-3, ES-301-4, ES-301-5, ES-301-6, and ES-401-6, and any Form ES-201-3 updates), and reference materials due (C.1.e, f, g and h; C.3.d) | NA                              |
| -30             | Preliminary license applications (NRC Form 398's) due (C.1.I; C.2.g; ES-202)  | TF                              |
| -14             | 10. Final license applications due and Form ES-201-4 prepared (C.1.l; C.2.i; ES-202)  | TF                              |
| -14             | 11. Examination approved by NRC supervisor for facility licensee review (C.2.h; C.3.f)  | TF                              |
| -14             | 12. Examinations reviewed with facility licensee (C.1.j; C.2.f and h; C.3.g)  | TF                              |
| -7              | 13. Written examinations and operating tests approved by NRC supervisor (C.2.i; C.3.h)  | TF                              |
| -7              | <ol> <li>Final applications reviewed; 1 or 2 (if &gt;10) applications audited to confirm<br/>qualifications / eligibility; and examination approval and waiver letters sent<br/>(C.2.i; Attachment 4; ES-202, C.2.e; ES-204)</li> </ol>   | TF                              |
| -7              | 15. Proctoring/written exam administration guidelines reviewed with facility licensee (C.3.k)   | TF                              |
| -7              | Approved scenarios, job performance measures, and questions distributed to NRC examiners (C.3.i)  | TF                              |

[Applies only] (Does not apply) to examinations prepared by the NRC.

<sup>\*</sup> Target dates are generally based on facility-prepared examinations and are keyed to the examination date identified in the corporate notification letter. They are for planning purposes and may be adjusted on a case-by-case basis in coordination with the facility licensee.

| Facility:                  | Hope Creek Date of Examination: 8/19/20  | 013 – 8 | /23/13             |           |
|----------------------------|--|---------|--------------------|-----------|
| Item                       | Task Description   |         | Initial            | 5         |
| item                       | rask Description   | a       | b*                 | c#        |
| 1.<br>W                    | a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.   | G       | N/A                | TF        |
| R<br>I                     | <ul> <li>Assess whether the outline was systematically and randomly prepared in accordance with<br/>Section D.1 of ES-401 and whether all K/A categories are appropriately sampled.</li> </ul>   | a       | N/A                | TF        |
| T                          | c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.  | 9       | N/A                | TF        |
| E<br>N                     | d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.  | a       | N/A                | TF        |
| 2.<br>S                    | <ul> <li>Using Form ES-301-5, verify that the proposed scenario sets cover the required number<br/>of normal evolutions, instrument and component failures, technical specifications,<br/>and major transients.</li> </ul>   | G       | N/A                | TF        |
| I<br>M<br>U<br>L<br>A<br>T | b. Assess whether there are enough scenario sets (and spares) to test the projected number<br>and mix of applicants in accordance with the expected crew composition and rotation schedule<br>without compromising exam integrity, and ensure that each applicant can be tested using<br>at least one new or significantly modified scenario, that no scenarios are duplicated<br>from the applicants' audit test(s), and that scenarios will not be repeated on subsequent days.  | a       | N/A                | TF        |
| O<br>R                     | <ul> <li>To the extent possible, assess whether the outline(s) conform(s) with the qualitative<br/>and quantitative criteria specified on Form ES-301-4 and described in Appendix D.</li> </ul>  | a       | N/A                | TF        |
| 3.<br>W<br>/<br>T          | <ul> <li>a. Verify that the systems walk-through outline meets the criteria specified on Form ES-301-2:</li> <li>(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</li> <li>(2) task repetition from the last two NRC examinations is within the limits specified on the form</li> <li>(3) no tasks are duplicated from the applicants' audit test(s)</li> <li>(4) the number of new or modified tasks meets or exceeds the minimums specified on the form</li> <li>(5) the number of alternate path, low-power, emergency, and RCA tasks meet the criteria on the form.</li> </ul> | a       | N/A                | TF        |
|                            | <ul> <li>b. Verify that the administrative outline meets the criteria specified on Form ES-301-1:</li> <li>(1) the tasks are distributed among the topics as specified on the form</li> <li>(2) at least one task is new or significantly modified</li> <li>(3) no more than one task is repeated from the last two NRC licensing examinations</li> </ul>  | a       | N/A                | TF        |
|                            | <ul> <li>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.</li> </ul>  | a       | N/A                | IF        |
| 4.                         | <ul> <li>Assess whether plant-specific priorities (including PRA and IPE insights) are covered<br/>in the appropriate exam sections.</li> </ul>  | a       | N/A                | TF        |
| G<br>E                     | b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.   | a       | N/A                | TE        |
| N<br>E                     | c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.   | a       | N/A                | TF        |
| R                          | d. Check for duplication and overlap among exam sections.  | a       | N/A                | TF        |
| A<br>L                     | e. Check the entire exam for balance of coverage.  | a       | N/A                | TF        |
|                            | f. Assess whether the exam fits the appropriate job level (RO or SRO).   | h       | N/A                | T         |
| c. NRC                     | Printed Name/Signature  ty Reviewer (*)  Chief Examiner (#)  Supervisor  Printed Name/Signature  N/A  TODD FISH Supervisor   |         | पुडी<br>युड़<br>या | (3<br>/(3 |
| Note:                      | # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence re * Not applicable for NRC-prepared examination outlines   | quired. |                    |           |

# 2013 - ILOTENRIC/AUDIT EXAMS

ES-201

**Examination Security Agreement** 

Form ES-201-3

#### 1. <u>Pre-Examination</u>

JULY

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of Avolution of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

#### 2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of [506] 2013. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

| PRINTED NAME         | JOB TITLE / RESPONSIBILITY | SIGNATURE (1)  | DATE           | SIGNATURE (2)  | DATE NOTE                                    |
|----------------------|----------------------------|--|----------------|--|--|
| 1. 578080 020015     | EXAM AUTHOR                | H. D.  | 11-13-12       | 42   | 8-22-13                                      |
| 2. ARCHIE E FAULKWER |                            | O. L. S. T. H.   |                | F D Gra Aggirde  | FAMULARY VIA EMM 9/3/13                      |
| 3. Thomas Kretian    | EXAM ASTHON                |  | - 11/13/12 F   | The Talk Intelled  |  |
|                      |                            |  |                |  | <u> 4fict 15</u>                             |
| 4. DAVID M. REIN     | SIMULARE COORDINATION      | The state of the s | <u> 5/3//3</u> | Milli  | 0128113                                      |
| 5. CLIFF BOXER III   | NCO                        | Cuscus   | 5/20/13        | cyncol   | 9/3/15                                       |
| 6. Acc Kaskey        | NLO                        | ASIM.  | 5/20/13_       | 2111   | <u>413/13</u>                                |
| 7. CRAIG MINARILY    | <u> </u>                   | KA Word  | 5/2013         | - Think  | 9/3/13                                       |
| 8. LAURA MYERS       | CRS                        | Midney   | 5.20.13        | Ven-   | 7/3/13                                       |
| 9. JANUN BYNTER      | CRS                        | 100  | 5.24.13        | 1613   | 7/10/17                                      |
| 10. DENNIS BURKS     |                            | andle  | 5/24/13 0      | Del l  | 9/10/14                                      |
| 11. JOHN CROCE       | NCO                        | 1. brou  | 5-24-13        | 1. Mr.   | 9 (10/13                                     |
| 12. K.P. BRESLEN     | SHAFT MANAGER              | Marie Wolin  | 5-24-18-16     | metterelin   | 7-5-13                                       |
| 13. S. Loper         | NCO                        | Som  | 6-10-13        | A la for weather   | FRA GIR ZMML 9/10/13                         |
| 14. RT HANNA         | SRO                        | 920  |                |  | A VIA 8-MPIL 7/1/13                          |
| 15. J. SOUTHERTON    | SRO                        | 201  | 6/10/13        | 2012   | 8/3//-                                       |
| NOTES:               |                            |  | 2              | $\frac{1}{2}$  | 4/1/12                                       |
| 16. D. LLARDIN       | Neo                        | ZA   | 6-24-13        | of the san Harol   | win e-mail 9/11/13                           |
| 17. RYPH KERLY       | NCO                        | - 11   | 6.25.13        | Le De For Kell   | T MA E-MAIL 9/10/13 ETTE UITE E-MAIL 9/10/13 |
| 18. M. Ovellette     | No                         | PN-  |                | NO FOR OSULL   | ETT 012 2 1/10/13                            |
| 10.                  | ,                          | My   | ce-26-13       | The state of the s |  |

**Examination Security Agreement** 

ES-201

Form ES-201-3

#### 1. <u>Pre-Examination</u>

I acknowledge that I have acquired specialized knowledge about the NRC licensing examinations scheduled for the week(s) of <u>July & August 2013</u>, as of the date of my signature. I agree that I will not knowingly divulge any information about these examinations to any persons who have not been authorized by the NRC chief examiner. I understand that I am not to instruct, evaluate, or provide performance feedback to those applicants scheduled to be administered these licensing examinations from this date until completion of examination administration, except as specifically noted below and authorized by the NRC (e.g., acting as a simulator booth operator or communicator is acceptable if the individual does not select the training content or provide direct or indirect feedback). Furthermore, I am aware of the physical security measures and requirements (as documented in the facility licensee's procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against me or the facility licensee. I will immediately report to facility management or the NRC chief examiner any indications or suggestions that examination security may have been compromised.

#### 2. Post-Examination

To the best of my knowledge, I did not divulge to any unauthorized persons any information concerning the NRC licensing examinations administered during the week(s) of <u>July and August 2013</u>. From the date that I entered into this security agreement until the completion of examination administration, I did not instruct, evaluate, or provide performance feedback to those applicants who were administered these licensing examinations, except as specifically noted below and authorized by the NRC.

| PRINTED NAME                | JOB TITLE / RESPONSIBILITY    | SIGNATURE (1)  | DATE SIGNATURE (2) DATE NOTE                  |
|-----------------------------|-------------------------------|----------------|---|
| 1. Philip Balch             | Corporate training Specialist | Mll Bala       | 7-1-13 Millan 9.2813                          |
| 2. Tom FOWLER               | operations Training Manger-He | James toule    | 7-1-13 8-29-13                                |
| 3. MHRK. C. KOLH NA         | R. O.                         | 1 Dan          | 072213 / 2 010 E-WAL FOR ROMAN 9/10/13        |
| 4. Vincent A. Acevedo       | c & C                         | Volel-         | 7/22/13 AL low VIT EMPIL FOR PEGUEDO 9/10/13  |
| 5. Pete Baccile             | NCO                           | pt K           | 8/2/13 Pot 13 8/2/13                          |
| 6. CHRIS B. GORNOR          | <u> </u>                      | 12:62          | 8E/13 606/13                                  |
| 7. S. Meyers                | Training                      | DRS.           | 8/11/13 9/2/13                                |
| 8. J. L. ANDERSON           | TRAINING INSTR.               | Anderson       | 8/19/13 Alxiderson 8/23/13                    |
| 9. STUD HAMLE               | TRANING INSTRUCTURE           | 2000           | 8/19/13 4/23/13,                              |
| 10. By Cheria               | BIN CHERN                     | BCL            | 8/19/13 B ( 8/29/13                           |
| 11. Bodec Beyl              | TRAINING                      | selec          | 8/10/13 8/2/2 8/4/13                          |
| 12. JAMES KEDLEY            | Sim Inst                      | 020            | 8/2/13 9 8/28/13                              |
| 13. Gary Schmelz            | Sim Instructor                | Bary Bay       | 8/20/13 A S.J3 15                             |
| 14. MARK MORAN              | NCO ADJUNCT INST              | 368            | 8/2:/13 > 9/3/13                              |
| 15. NATHAN & TILLMES        | IT Consultant                 | Mito E TES     | 8/22/13 -2005 125 8/24/13                     |
| NOTES<br>16 Annema Telabura | IT Consultant                 | and Man Lasner | 3/22/13 annetheretable 3/26/13                |
| 17 Thomas Austr             | 5M                            | -no            | 8/22/13 the lan fun ocesser un E-mone 9/10/13 |
| 18 JL ANDERSON              | TRAINING INSTR                | If And erson   | 8/27/13 Anderson 8/29/13                      |
| 19. TIM CATALAND            | TLOT LOAD INSTR.              | Galalais       | 8/27/13 yCatalan 8/28/13                      |

|          |   |      |          | $\overline{}$ |
|----------|---|------|----------|---------------|
| Facility | ty: Hope Creek Date of Examination: 8/19/13 Operating Test Number: 1  |      |          |               |
|          |   |      | Initials | s             |
|          | 1. General Criteria   | а    | b*       | с#            |
| а.       | 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).   | a    | N/A      | TF            |
| b.       | There is no day-to-day repetition between this and other operating tests to be administered during this examination.  | a    | N/A      | TP            |
| c.       | The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)   | a    | N/A      | TF            |
| d.       | Overlap with the written examination and between different parts of the operating test is within acceptable limits.   | h    | N/A      | TF            |
| e.       | It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.   | a    | N/A      | TF            |
|          | 2. Walk-Through Criteria  |      |          |               |
| a.       | Each JPM includes the following, as applicable:   | a    | N/A      | TF            |
|          | <ul> <li>reasonable and validated time limits (average time allowed for completion) and specific<br/>designation if deemed to be time-critical by the facility licensee</li> </ul>  |      |          |               |
|          | <ul> <li>operationally important specific performance criteria that include:</li> <li>detailed expected actions with exact criteria and nomenclature</li> <li>system response and other examiner cues</li> </ul>  |      |          |               |
|          | <ul> <li>system response and other examiner coes</li> <li>statements describing important observations to be made by the applicant</li> <li>criteria for successful completion of the task</li> </ul>   |      |          |               |
|          | <ul> <li>identification of critical steps and their associated performance standards</li> <li>restrictions on the sequence of steps, if applicable</li> </ul>   |      |          |               |
| 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. | a    | N/A      | TF            |
|          | 3. Simulator Criteria   |      |          |               |
|          | associated simulator operating tests (scenario sets) have been reviewed in accordance with ES-301-4 and a copy is attached.   | a    | N/A      | TF            |
| FOIL     |   |      | ate      |               |
| a. A     | Printed Name / Signature  Author  CHRISTOPHER HEURORT  (12/1  | 13   | ale<br>  |               |
| b. F     | Facility Reviewer(*) N/A  | N/A  |          |               |
|          | NRC Chief Examiner (#) Todo FISH / Sodd Juh 8/12  | -/13 |          |               |
|          | NRC Supervisor Donald Flackson / 2018 8/1/  | 4/13 | _        |               |
| NOTE     | The facility signature is not applicable for NRC-developed tests.  # Independent NRC swippy in itial items in Column "o", which examines concurrence required.  |      |          |               |

| Facilty | ty: Hope Creek Date of Exam: 8/19/13 Scenar   | io Numbers: 1/     | 2/3 Operating Test N | o.: 1    | <del></del> |    |  |  |  |  |
|---------|---|--------------------|----------------------|----------|-------------|----|--|--|--|--|
|         | QUALITATIVE ATTRIBUTES  |                    |                      |          | Initials    |    |  |  |  |  |
|         |   |                    |                      | а        | b*          | c# |  |  |  |  |
| 1.      | The initial conditions are realistic, in that some equipment an of service, but it does not cue the operators into expected ev  |                    | tion may be out      | a        | N/A         | F  |  |  |  |  |
| 2.      | a   | N/A                | 15                   |          |             |    |  |  |  |  |
| 3.      | <ul> <li>Each event description consists of</li> <li>the point in the scenario when it is to be initiated</li> <li>the malfunction(s) that are entered to initiate the event</li> <li>the symptoms/cues that will be visible to the crew</li> <li>the expected operator actions (by shift position)</li> <li>the event termination point (if applicable)</li> </ul> |                    |                      |          |             |    |  |  |  |  |
| 4.      | No more than one non-mechanistic failure (e.g., pipe break) without a credible preceding incident such as a seismic even  |                    | nto the scenario     | a        | N/A         | 78 |  |  |  |  |
| 5.      | The events are valid with regard to physics and thermodynam   | nics.              |                      | a        | N/A         | TE |  |  |  |  |
| 6.      | Sequencing and timing of events is reasonable, and allows the complete evaluation results commensurate with the scenario  |                    | eam to obtain        | a        | N/A         | TF |  |  |  |  |
| 7.      | If time compression techniques are used, the scenario summa<br>Operators have sufficient time to carry out expected activities<br>Cues are given.   |                    |                      | a        | N/A         | TF |  |  |  |  |
| 8.      | The simulator modeling is not altered.  |                    |                      | a        | N/A         | 75 |  |  |  |  |
| 9.      | The scenarios have been validated. Pursuant to 10 CFR 55.4 performance deficiencies or deviations from the referenced p to ensure that functional fidelity is maintained while running t  | lant have been     | evaluated            | a        | N/A         | F  |  |  |  |  |
| 10.     | Every operator will be evaluated using at least one new or signal other scenarios have been altered in accordance with Sec  |                    |                      | a        | N/A         | F  |  |  |  |  |
| 11.     | All individual operator competencies can be evaluated, as ve (submit the form along with the simulator scenarios).  | erified using Forr | m ES-301-6           | a        | N/A         | Œ  |  |  |  |  |
| 12.     | Each applicant will be significantly involved in the minimum r specified on Form ES-301-5 (submit the form with the simula  | number of transion | ents and events      | a        | N/A         | TF |  |  |  |  |
| 13.     | The level of difficulty is appropriate to support licensing decis   | ions for each cre  | ew position.         | a        | N/A         | 7  |  |  |  |  |
|         | Target Quantitative Attributes (Per Scenario; See Section   | D.5.d)             | Actual Attributes    |          |             |    |  |  |  |  |
| 1.      | Total malfunctions (5–8)  |                    | 7/ 7/8               | a        | N/A         | TK |  |  |  |  |
| 2.      | Malfunctions after EOP entry (1–2)  |                    | 3/ 2/2               | 0        | N/A         | 18 |  |  |  |  |
| 3.      | Abnormal events (2–4)   |                    | 4/ 3 /4              | a        | N/A         | TE |  |  |  |  |
| 4.      | Major transients (1–2)  |                    | 1/ 1 /1              | <u>C</u> | N/A         | 18 |  |  |  |  |
| 5.      | EOPs entered/requiring substantive actions (1–2)  |                    | 1/ 1 /1              | a        | N/A         | 15 |  |  |  |  |
| 6.      | EOP contingencies requiring substantive actions (0-2)   |                    | 0/ 1 /0              | a        | N/A         | 18 |  |  |  |  |
| 7.      | Critical tasks (2–3)  |                    | 2/ 3 /3              | 0        | N/A         | 15 |  |  |  |  |

| Facility: H | Hope Cree | ek          |             | Di          | ate of I    | Exam:        | 8/19/13     | 3           |             | Opera       | ating To    | est No.     | : 1         |             |   |   |   |
|-------------|-----------|-------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|---|---|
| Α           | Е         |             |             | Jan-1911    |             |              |             | Sc          | enari       | os          |             |             |             |             |   |   |   |
| P<br>P      | V<br>E    |             | 1           |             |             | 2            |             |             | 3           |             |             | N/A         | -           | T           |   |   |   |
| L           | N         |             | REV         |             |             | CRE\<br>DSIT |             |             | CREV        |             |             | CREV        |             | O<br>T<br>A | 1 |   |   |
| C<br>A<br>N | T<br>Y    | S<br>R<br>O | A<br>T<br>C | B<br>O<br>P | S<br>R<br>O | A<br>T<br>C  | В<br>О<br>Р | S<br>R<br>O | A<br>T<br>C | В<br>О<br>Р | S<br>R<br>O | A<br>T<br>C | В<br>О<br>Р | L           |   |   |   |
| T           | P<br>E    |             | _           |             | _           |              |             | _           | _           |             |             |             |             |             | R | 1 | U |
|             | RX        |             |             | 0           |             | 1            |             |             |             |             |             |             |             |             | 1 | 1 | 0 |
|             | NOR       |             |             | 1           |             | 0            |             |             |             |             |             |             |             |             | 1 | 1 | 1 |
| RO-1        | I/C       |             |             | 3           |             | 4            |             |             |             |             |             |             |             |             | 4 | 4 | 2 |
|             | MAJ       |             |             | 2           |             | 1            |             |             |             |             |             |             |             |             | 2 | 2 | 1 |
|             | TS        |             |             | 0           |             | 0            |             |             |             |             |             |             |             |             | 0 | 2 | 2 |
|             | RX        |             |             | 0           |             | 1            |             |             |             |             |             |             |             |             | 1 | 1 | 0 |
| RO-2        | NOR       | _           |             | 1           |             | 0            |             |             |             |             |             |             |             |             | 1 | 1 | 1 |
| RU-2        | I/C       |             |             | 3           |             | 4            |             |             |             |             |             |             | ļ           |             | 4 | 4 | 2 |
|             | MAJ       |             |             | 2           |             | 1            |             |             |             |             |             |             |             |             | 2 | 2 | 1 |
|             | TS        |             | <u></u>     | 0           |             | 0            |             |             |             |             | <u> </u>    |             |             |             | 0 | 2 | 2 |
|             | RX        |             |             | 0           |             | 1            |             |             |             |             |             |             | <u> </u>    | <u> </u>    | 1 | 1 | 0 |
| DO 0        | NOR       |             |             | 1           |             | 0            |             |             |             |             |             |             |             |             | 1 | 1 | 1 |
| RO-3        | I/C       |             | <u> </u>    | 3           |             | 4            |             |             |             |             |             |             |             |             | 4 | 4 | 2 |
|             | MAJ<br>TS |             |             | 0           |             | 0            |             |             |             |             |             |             |             |             | 0 | 2 | 2 |
| <u> </u>    | RX        |             | 1           | 0           | -           | -            | 0           |             |             |             |             |             |             | -           | 1 | 1 | 0 |
|             | NOR       |             | 0           |             |             | -            | 1           |             |             |             |             |             | l           |             | 1 | 1 | 1 |
| SRO-I 1     | I/C       |             | 4           |             |             | -            | 3           |             |             |             |             |             |             |             | 4 | 4 | 2 |
|             | MAJ       |             | 2           |             |             |              | 1           |             |             |             |             |             |             |             | 2 | 2 | 1 |
|             | TS        |             | 0           |             |             |              | 0           |             |             |             |             |             |             |             | 0 | 2 | 2 |

#### Instructions:

- 1. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an Instant SRO additionally serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
- 2. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- 3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

| Facility: H | lope Cre | ek          |             | Di  | ate of E | xam           | 8/19/1      | 3 C         | peratir     | ng Test     | No.:        | 1           |             |             |                |   |   |
|-------------|----------|-------------|-------------|-----|----------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|---|---|
| Α           | E        |             |             |     |          |               |             | Sc          | enari       | os          |             |             |             |             |                |   |   |
| P<br>P      | V<br>E   |             | 1           |     |          | 2             |             |             | 3           |             |             | N/A         |             | Т           | _              |   |   |
| L<br>L      | N<br>T   |             | REW         |     |          | CRE\<br>OSITI |             |             | CREV        |             |             | CREV        |             | O<br>T<br>A | '              |   |   |
| CAN         | T<br>Y   | S<br>R<br>O | A<br>T<br>C | ВОР | S R O    | A<br>T<br>C   | B<br>O<br>P | S<br>R<br>O | A<br>T<br>C | B<br>O<br>P | S<br>R<br>O | A<br>T<br>C | B<br>O<br>P | L           | M<br>U<br>M(*) |   | U |
| T           | P<br>E   |             |             |     |          |               |             |             |             |             |             |             |             |             |                | , |   |
|             | RX       |             | 1           |     |          |               | 0           |             |             |             |             |             |             | 1           | 1              | 1 | 0 |
|             | NOR      |             | 0           |     |          |               | 1           |             |             |             |             |             |             | 1           | 1              | 1 | 1 |
| SRO-I 2     | I/C      |             | 4           |     |          |               | 3           |             |             |             |             |             |             | 7           | 4              | 4 | 2 |
|             | MAJ      |             | 2           |     |          |               | 1           |             |             |             |             |             |             | 3           | 2              | 2 | 1 |
|             | TS       |             | 0           |     |          |               | 0           |             |             |             |             |             |             | 0           | 0              | 2 | 2 |
|             | RX       |             | 1           |     |          |               | 0           |             |             |             |             |             |             | 1           | 1              | 1 | 0 |
|             | NOR      |             | 0           |     |          |               | 1           |             |             |             |             |             |             | 1           | 1              | 1 | 1 |
| SRO-I 3     | I/C      |             | 4           |     |          |               | 3           |             |             |             |             |             |             | 7           | 4              | 4 | 2 |
|             | MAJ      |             | 2           |     |          |               | 1           |             |             |             |             |             |             | 3           | 2              | 2 | 1 |
|             | TS       |             | 0           |     |          |               | 0           |             |             |             |             |             |             | 0           | 0              | 2 | 2 |
|             | RX       | 1           |             |     |          |               |             |             | 1           |             |             |             |             | 2           | 1              | 1 | 0 |
|             | NOR      | 1           |             |     |          |               |             |             | 0           |             |             |             |             | 1           | 1              | 1 | 1 |
| SRO-U 1     | I/C      | 7           |             |     |          |               |             |             | 2           |             |             |             |             | 9           | 4              | 4 | 2 |
|             | MAJ      | 2           |             |     |          |               |             |             | 1           |             |             |             |             | 3           | 2              | 2 | 1 |
|             | TS       | 2           |             |     |          |               |             |             | 0           |             |             |             |             | 2           | 0              | 2 | 2 |

#### Instructions:

- 3. Check the applicant level and enter the operating test number and Form ES-D-1 event numbers for each event type; TS are not applicable for RO applicants. ROs must serve in both the "at-the-controls (ATC)" and "balance-of-plant (BOP)" positions; Instant SROs must serve in both the SRO and the ATC positions, including at least two instrument or component (I/C) malfunctions and one major transient, in the ATC position. If an Instant SRO additionally serves in the BOP position, one I/C malfunction can be credited toward the two I/C malfunctions required for the ATC position.
- 4. Reactivity manipulations may be conducted under normal or *controlled* abnormal conditions (refer to Section D.5.d) but must be significant per Section C.2.a of Appendix D. (\*) Reactivity and normal evolutions may be replaced with additional instrument or component malfunctions on a 1-for-1 basis.
- 3. Whenever practical, both instrument and component malfunctions should be included; only those that require verifiable actions that provide insight to the applicant's competence count toward the minimum requirements specified for the applicant's license level in the right-hand columns.

| Facility: Hope Creek Dat                    | e of  | Exar | ninat     | tion:    | 8/19/                               | 13        | Oper               | ati                        | ng T | est N             | 10.:             | 1                          |  |  |  |  |
|---|---|------|-----------|----------|-------------------------------------|-----------|--------------------|----------------------------|------|-------------------|------------------|----------------------------|--|--|--|--|
|   |   |      |           |          |                                     |           | \PPLI              | IC/                        | ANT  | S                 |                  |                            |  |  |  |  |
|   | (SRO) RO  SRO-I X SRO-U X   |      |           | R(<br>SF | (ATC)<br>RO X<br>SRO-I X<br>SRO-U □ |           |                    | (BOP)  RO X  SRO-I   SRO-U |      |                   |                  | RO [<br>SRO-I [<br>SRO-U [ |  |  |  |  |
| Competencies                                | SCENARIO  |      |           | sc       | ENA                                 | RIO       |                    | SCENARIO                   |      |                   |                  | SCENARIO                   |  |  |  |  |
| •   | 1   | 2    | 3         |          | 1                                   | 2         | 3                  |                            | 1    | 2                 | 3                | Ц                          |  |  |  |  |
| Interpret/Diagnose<br>Events and Conditions | 2-8   | 3-9  | 2-<br>10  |          | 3,4,5<br>,8                         | 2,4-<br>8 | 2,4,<br>6,8,<br>10 |                            | 1-8  | 1,3-<br>6,8-<br>9 | 3-<br>7,9-<br>10 |                            |  |  |  |  |
| Comply With and Use Procedures (1)          | 2-5   | 3-9  | 2-<br>10  |          | 3,4,5<br>,8                         | 2,4-<br>8 | 2,4,<br>6,8,<br>10 |                            | 1-8  | 1,3-<br>6,8-<br>9 | 3-<br>7,9-<br>10 | -                          |  |  |  |  |
| Operate Control<br>Boards (2)               | N/A   | N/A  | N/A       |          | 3,4,5<br>,8                         | 2,4-<br>8 | 2,4,<br>6,8,<br>10 |                            | 1-8  | 1,3-<br>6,8-<br>9 | 3-<br>7,9-<br>10 |                            |  |  |  |  |
| Communicate and Interact                    | 1-8   | 1-9  | 1-<br>10  |          | 3,4,5<br>6,7,8                      | 2-9       | 2-<br>10           |                            | 1-8  | 1-9               | 2-<br>10         |                            |  |  |  |  |
| Demonstrate<br>Supervisory Ability (3)      | 1-8   | 1-9  | 1-<br>10  |          | N/A                                 | N/A       | N/A                |                            | N/A  | N/A               | N/A              |                            |  |  |  |  |
| Comply With and Use Tech. Specs. (3)        | 2,3   | 3,4  | 2,4,<br>5 |          | N/A                                 | N/A       | N/A                |                            | N/A  | N/A               | N/A              |                            |  |  |  |  |
| (2) Optional for an SRO-                    | Notes:  1) Includes Technical Specification compliance for an RO. 2) Optional for an SRO-U. |      |           |          |                                     |           |                    |                            |      |                   |                  |                            |  |  |  |  |

### Instructions:

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

| Facility:  | Hope Creek  | Date of Exam: 8/19/13  | Exam Level:                        | ro <b>X</b>    | S    | ко 🗌 |    |         |                |  |  |  |
|--|---|--|------------------------------------|----------------|------|------|----|---------|----------------|--|--|--|
|  |   |  |                                    |                |      |      |    | Initial |                |  |  |  |
|  |   | Item Description   |                                    |                |      | -    | а  | b*      | c <sup>#</sup> |  |  |  |
| 1.   | Questions and ar  | nswers are technically accurate and app  | licable to the fa                  | acility.       |      |      | Ca | N/A     | TF             |  |  |  |
| 2.   | a. NRC<br>b. Facili   |  | a                                  | N/A            | TF   |      |    |         |                |  |  |  |
| 3.   | SRO questions a   |  | N/A                                | N/A            | N/A  |      |    |         |                |  |  |  |
| 4.   | The sampling pro<br>were repeated fro   | estions<br>ffice).   | <u>۲</u>                           |                | TF   |      |    |         |                |  |  |  |
| 5.   | were repeated from the last 2 NRC licensing exams, consult the NRR OL program office).  Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: |  |                                    |                |      |      |    |         |                |  |  |  |
| 6.   | Bank use meets  | limits (no more than 75 percent  | Bank                               | Modif          | ied  | New  | 1  | N/A     |                |  |  |  |
|  | from the bank, at   | least 10 percent new, and the rest; enter the actual RO / SRO-only   | 51                                 | 6              |      | 18   | a  |         | TF             |  |  |  |
| 7.   |   | 60 percent of the questions on the RO  | Memory                             |                |      | C/A  | h  | N/A     | 1              |  |  |  |
|  | the SRO exam m<br>selected K/As su  | at the comprehension/ analysis level;<br>nay exceed 60 percent if the randomly<br>pport the higher cognitive levels; enter<br>SRO question distribution(s) at right. | 31                                 |                |      | 44   | h  |         | (1             |  |  |  |
| 8.   |   | louts provided do not give away answers ination of distractors.  | 8                                  |                |      |      | a  | N/A     | TF             |  |  |  |
| 9.   | Question content<br>examination outli<br>deviations are jus   | t conforms with specific K/A statements ine and is appropriate for the tier to whic stiffed.   | in the previous<br>h they are assi | ly approigned; | oved |      | a  | N/A     | TF             |  |  |  |
| 10.  | Question psycho   | metric quality and format meet the guide   | elines in ES Ap                    | pendix         | В.   |      | a  | N/A     | TF             |  |  |  |
| 11.  |   | ns the required number of one-point, mu<br>t and agrees with the value on the cove   |                                    | ems;           |      |      | ĥ  | N/A     | TF             |  |  |  |
| a. Author b. Facility Reviewer (*) c. NRC Chief Examiner (#) d. NRC Regional Supervisor  Printed Name / Signature  CHRISTOPHER NEWFORT  N/A  TODD FISH  CONTROL OF SIGNATURE  Donald F. Jackson / W. C. N. C |   |  |                                    |                |      |      |    |         |                |  |  |  |
| Note:  |   | iewer's initials/signature are not applicat<br>NRC reviewer initial items in Column "c";   |                                    |                |      |      |    |         |                |  |  |  |

| Facility:  | Hope Creek   | Date of Exam: 8/19/13   | Exam Level:       | ro [     |       | sro <b>X</b> |     |         |                |  |
|--|--|---|-------------------|----------|-------|--------------|-----|---------|----------------|--|
|  |  |   |                   |          |       |              |     | Initial |                |  |
|  |  | Item Description  |                   |          |       |              | а   | b*      | c <sup>#</sup> |  |
| 1.   | Questions and a  | nswers are technically accurate and app   | licable to the fa | acility. |       |              | Cu  | N/A     | TF             |  |
| 2.   |  | K/As are referenced for all questions.<br>lity learning objectives are referenced as  | available.        |          |       |              | C   | N/A     | 14             |  |
| 3.   | SRO questions a  | are appropriate in accordance with Section  | on D.2.d of ES-   | -401     |       |              | a   | N/A     | TF             |  |
| 4.   | The sampling pro<br>were repeated fr   |   | Cu                |          | TF    |              |     |         |                |  |
| 5.   | Question duplica as indicated belo the audit ex the audit ex X the examina the licensee other (expla | 2   | N/A               | TF       |       |              |     |         |                |  |
| 6.   |  | limits (no more than 75 percent   | Bank              | Mod      | ified | New          | 1 a | N/A     |                |  |
|  |  | t least 10 percent new, and the rest<br>); enter the actual RO / SRO-only<br>ltion(s) at right.   | 15                | 3        | 3     | 7            |     |         | TF             |  |
| 7.   |  | 60 percent of the questions on the RO   | Memory            | ,        |       | C/A          | a   | N/A     | 10             |  |
|  | the SRO exam n<br>selected K/As su   | n at the comprehension/ analysis level;<br>may exceed 60 percent if the randomly<br>upport the higher cognitive levels; enter<br>SRO question distribution(s) at right. | 4                 |          |       | 21           |     |         | 71             |  |
| 8.   |  | douts provided do not give away answers ination of distractors.   | 3                 |          |       |              | Ch  | N/A     | 75             |  |
| 9.   |  | at conforms with specific K/A statements i<br>line and is appropriate for the tier to which<br>stified.   |                   |          | roved |              | a   | N/A     | 14             |  |
| 10.  | Question psycho  | ometric quality and format meet the guide   | elines in ES Ap   | pendix   | εВ.   |              | Cr  | N/A     | TF             |  |
| 11.  |  | ins the required number of one-point, mu<br>ct and agrees with the value on the cover   |                   | ems;     |       |              | a   | N/A     | R              |  |
| a. Author b. Facility Reviewer (*) c. NRC Chief Examiner (#) d. NRC Regional Supervisor  Printed Name / Signature  C. NRISTOPHEZ HENDOET  I NA  TODD F(SH June 19)  Denald Lackson / WILF 19 |  |   |                   |          |       |              |     |         |                |  |
| Note:  |  | viewer's initials/signature are not applicate NRC reviewer initial items in Column "c";   |                   |          |       |              |     |         |                |  |

| Facility: HoPξ LRધら Date of Exam: 8・27・13 Exam Level: ROX SROX  |          |           |        |
|---|----------|-----------|--------|
|   | Initials |           |        |
| Item Description  | а        | b         | С      |
| Clean answer sheets copied before grading   | 50       | 1AA       | TF     |
| Answer key changes and question deletions justified and documented  | sø       | 1/4       | TF     |
| Applicants' scores checked for addition errors     (reviewers spot check > 25% of examinations)   | 55       | 18        | TF     |
| 4. Grading for all borderline cases (80 ±2% overall and 70 or 80, as applicable, ±4% on the SRO-only) reviewed in detail  | SD       | 114       | TF     |
| All other failing examinations checked to ensure that grades are justified  | ۵۵       | 1/2       | TF     |
| Performance on missed questions checked for training deficiencies and wording problems; evaluate validity of questions missed by half or more of the applicants | ده       | 1993      | TF     |
| Printed Name/Signature  | Date     |           |        |
| a. Grader STEVE DENNIS / Atem Denni   | 8-29-13  |           |        |
| b. Facility Reviewer(*) Thomas Fowler / Thomas Foule  | 1        | 9-3-11-8- | 9-3-13 |
| c. NRC Chief Examiner (*) Topo FISH Jodd Just   | 9/9/1013 |           |        |
| d. NRC Supervisor (*) Donald E. Jad'son/Will # 9/14/2013  |          |           |        |
| (*) The facility reviewer's signature is not applicable for examinations graded by the NRC; two independent NRC reviews are required.                           |          |           |        |