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| Facility: <u>Byron Nuclear Station</u> | Date of Examination: <u>10/28/19</u> |
| Examination Level: RO <input checked="" type="checkbox"/> SRO <input type="checkbox"/> | Operating Test Number: <u>2019-302</u> |

| Administrative Topic (see Note) | Type Code* | Describe activity to be performed |
|---------------------------------|------------|---|
| Conduct of Operations | R, D | Perform Shutdown Margin Calculations (2010 ILE) K/A: G2.1.37 |
| Conduct of Operations | | |
| Equipment Control | R, N | Establish Clearance Boundary for the 0A FP Pump K/A: G2.2.15 |
| Radiation Control | S, D | Change RM-11 Setpoints in Preparation for a Unit 1 Containment Release (2016 ILE) K/A: 2.3.5 |
| Emergency Plan | S, N | Respond to a Diesel Generator FOST Room Fire Alarm K/A: G2.4.25 |

NOTE: All items (five total) are required for SROs. RO applicants require only four items unless they are retaking only the administrative topics (which would require all five items).

* Type Codes and Criteria: (C)ontrol room, (S)imulator, or Class(R)oom
 (D)irect from bank (≤ 3 for ROs; ≤ 4 for SROs and RO retakes)
 (N)ew or (M)odified from bank (≥ 1)
 (P)revious 2 exams (≤ 1, randomly selected)

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| Administrative Topic (see Note) | Type Code* | Describe activity to be performed |
|---------------------------------|------------|--|
| Conduct of Operations | R, M | Evaluate License Holder's Status (2017 ILE) K/A: G2.1.5 |
| Conduct of Operations | R, M | Review Completed Shutdown Margin Calculations (2010 ILE) K/A: G2.1.37 |
| Equipment Control | R, N | Complete a Plant Barrier Impairment Permit K/A: G2.2.21 |
| Radiation Control | R, D | Review RWP for Dosimetry Setting and Protective Clothing Requirements (2012 Cert) K/A: G2.3.7 |
| Emergency Plan | R, N | Perform Follow-up PARs for a General Emergency K/A: G2.4.44 |

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|---|--|-----------------|
| Exam Level: RO <input checked="" type="checkbox"/> SRO-I <input type="checkbox"/> SRO-U <input type="checkbox"/> | Operating Test Number: <u>2019-302</u> | |
| Control Room Systems:* 8 for RO, 7 for SRO-I, and 2 or 3 for SRO-U | | |
| System/JPM Title | Type Code* | Safety Function |
| a. Perform partial 1BOSR 1.4.2-1 Moveable Control Assemblies Qtly Surv (control banks only) (Alt Path – two control rods fully drop, requiring Rx Trip) | A, M, S | 1 |
| b. Isolate SI Accumulators per 1BCA-1.1, Step 26 (Alt Path - two discharge valves fail to close requiring venting) | A, E, N, S | 2 |
| c. Establish and Secure Normal and RH Letdown Flow | D, L, S | 3 |
| d. Synch Main Generator per 1BGP 100-3 Step 27 (requires raising turbine speed per BOP EH-13) | N, S | 4s |
| e. Start RCFCs in Low Speed (Alt Path - SX Valves not Open) | A, D, EN, S | 5 |
| f. Unload DG that is Paralleled to the SAT | D, EN, S | 6 |
| g. Perform calorimetric using PPC (requiring gain adjustments) | D, S | 7 |
| h. Start Standby CW Pump per BOP CW-1 (Alt Path - Discharge Valve Fails to Open, requires tripping pump) | A, P, M, S | 8 |
| In-Plant Systems:* 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U | | |
| i. Perform Manual Makeup to U2 CC Surge Tank per BOP CC-17 | N, R | 8 |
| j. Locally Operate the _AF005A-D at the RSP | D, E | 4s |
| k. Manually Operate _MS018A (S/G PORV) per BOP MS-6 due to S/G Overpressure | E, N | 4p |
| * All RO and SRO-I control room (and in-plant) systems must be different and serve different safety functions, all five SRO-U systems must serve different safety functions, and in-plant systems and functions may overlap those tested in the control room. | | |
| * Type Codes | Criteria for RO /SRO-I/SRO-U | |

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| (A)lternate path | 4-6/4-6 /2-3 |
| (C)ontrol room | |
| (D)irect from bank | $\leq 9/\leq 8/\leq 4$ |
| (E)mergency or abnormal in-plant | $\geq 1/\geq 1/\geq 1$ |
| (E)ngineered safety feature | $\geq 1/\geq 1/\geq 1$ (control room system) |
| (L)ow-Power/Shutdown | $\geq 1/\geq 1/\geq 1$ |
| (N)ew or (M)odified from bank including 1(A) | $\geq 2/\geq 2/\geq 1$ |
| (P)revious 2 exams | $\leq 3/\leq 3/\leq 2$ (randomly selected) |
| (R)CA | $\geq 1/\geq 1/\geq 1$ |
| (S)imulator | |

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| b. Isolate SI Accumulators per 1BCA-1.1, Step 26 (Alt Path - two discharge valves fail to close requiring venting) | A, E, N, S | 2 |
| c. Establish and Secure Normal and RH Letdown Flow | D, L, S | 3 |
| d. | | |
| e. Start RCFCs in Low Speed (Alt Path - SX Valves not Open) | A, D, EN, S | 5 |
| f. Unload DG that is Paralleled to the SAT | D, EN, S | 6 |
| g. Respond to Power Range Channel N4_ Failure by Bypassing Associated Bistables | N, S | 7 |
| h. Start Standby CW Pump per BOP CW-1 (Alt Path - Discharge Valve Fails to Open, requires tripping pump) | A, M, P, S | 8 |
| In-Plant Systems:* 3 for RO, 3 for SRO-I, and 3 or 2 for SRO-U | | |
| i. Perform Manual Makeup to U2 CC Surge Tank per BOP CC-17 | N, R | 8 |
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| (R)CA | $\geq 1/\geq 1/\geq 1$ |
| (S)imulator | |