

**2010 MONTICELLO NUCLEAR GENERATING PLANT**

**INITIAL EXAMINATION**

**PROPOSED EXAM FILES**

ENCLOSURE WITHHELD FROM PUBLIC DISCLOSURE IN ACCORDANCE WITH  
NUREG-1021 UNTIL AFTER THE EXAMINATION IS COMPLETE.



Monticello Nuclear Generating Plant  
2807 W County Road 75  
Monticello, MN 55362

October 8, 2010

L-MT-10-063  
10 CFR 55.40  
NUREG-1021

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

Monticello Nuclear Generating Plant  
Docket 50-263  
Renewed Facility Operating License No. DPR-22

Monticello Nuclear Generating Plant (MNGP) Initial Operator Licensing Examination To  
Be Conducted The Weeks of December 6 and December 13, 2010

Reference 1: NUREG-1021, "Operator Licensing Examination Standards for Power  
Reactors," Revision 9, Supplement 1

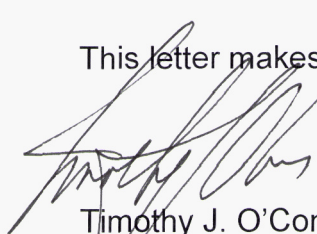
In accordance with the requirements of 10 CFR 55.40(b)(4), the Northern States Power Company, a Minnesota corporation (NSPM) requests NRC approval of the proposed written examination and operating tests. Further, 10 CFR 55.40(a), "Implementation," requires that examinations meet the requirements of Reference 1. Therefore, enclosed for review are the proposed examination materials for the initial license examinations for the Monticello Nuclear Generating Plant (MNGP) operator license applicants.

In accordance with 10 CFR 55.49, "Integrity of Examinations and Tests," and NUREG-1021, Section ES-201, Attachment 1, "Examination Security and Integrity Considerations," NSPM requests that the enclosed materials be withheld from public disclosure until after the examinations are complete.

The proposed examination materials were prepared per the guidelines of Reference 1, Sections ES-301, "Preparing Initial Operating Tests," and ES-401, "Preparing Initial Site-Specific Written Examinations". The proposed examination materials have been prepared by the Monticello facility for five (5) Reactor Operator (RO) license candidates and eleven (11) Senior Reactor Operator (SRO) – Instant license candidates.

Summary of Commitments

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



Timothy J. O'Connor  
Site Vice President, Monticello Nuclear Generating Plant  
Northern States Power Company - Minnesota

Enclosure

cc: Mr. Dell McNeil, Region III, USNRC (with enclosures)  
Project Manager, Monticello, USNRC (without enclosures)  
Resident Inspector, Monticello, USNRC (without enclosures)

**ENCLOSURE WITHHELD FROM PUBLIC DISCLOSURE IN ACCORDANCE WITH  
NUREG-1021 UNTIL AFTER THE EXAMINATION IS COMPLETE.**

**ENCLOSURE 1**

**MONTICELLO NUCLEAR GENERATION PLANT**

**INITIAL OPERATOR LICENSING EXAMINATION MATERIALS**

<b>Form Number</b>	<b>Title or Description</b>	<b>Number of Pages</b>
ES-301-3	Operating Exam Quality Checklist	1
ES-301-4	Simulator Scenario Quality Checklist	1
ES-401-6	Written Exam Quality Checklist	1
ES-301-6	Competencies Checklists	1
	Operational Job Performance Measures (JPMs)	137
	Administrative JPMs	79
	Simulator Scenarios	256
ES-401-7	RO Written Exam Cover Sheet	1
	RO Written Exam (Ready to Give)	79
	Provided References for RO Questions	8
ES-401-8	SRO Written Exam Cover Sheet	1
	SRO Written Exam (Ready to Give)	105
	Provided References for SRO Questions	50
	RO/SRO Written Exam Key with supportive references	331
ES-D-1	Scenario Outline (Scenarios 1-6) Changes Since 75 Day Submittal	6
QF-1071-01	Master Security Agreement Updated Since 75 Day Submittal	7
QF-1071-02	Limited Security Agreement Updated Since 75 Day Submittal	



Facility: Monticello		Date of Examination: 12/06/10		Operating Test Number: MNGP 2010		
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).			B	AI	sm
b.	There is no day-to-day repetition between this and other operating tests to be administered during this examination.			B	AI	sm
c.	The operating test shall not duplicate items from the applicants' audit test(s). (see Section D.1.a.)			B	AI	sm
d.	Overlap with the written examination and between different parts of the operating test is within acceptable limits.			B	AI	sm
e.	It appears that the operating test will differentiate between competent and less-than-competent applicants at the designated license level.			B	AI	sm
2. Walk-Through Criteria				--	--	--
a.	Each JPM includes the following, as applicable: <ul style="list-style-type: none"> <li>• initial conditions</li> <li>• initiating cues</li> <li>• references and tools, including associated procedures</li> <li>• reasonable and validated time limits (average time allowed for completion) and specific designation if deemed to be time-critical by the facility licensee</li> <li>• operationally important specific performance criteria that include:                         <ul style="list-style-type: none"> <li>- detailed expected actions with exact criteria and nomenclature</li> <li>- system response and other examiner cues</li> <li>- statements describing important observations to be made by the applicant</li> <li>- criteria for successful completion of the task</li> <li>- identification of critical steps and their associated performance standards</li> <li>- restrictions on the sequence of steps, if applicable</li> </ul> </li> </ul>			B	AI	sm
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.			B	AI	sm
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.				B	AI	sm
		Printed Name / Signature		Date		
a.	Author	ROMAN BECKER / <i>[Signature]</i>		9-30-10		
b.	Facility Reviewer(*)	KEVIN AUGEN / <i>[Signature]</i>		9/30/10		
c.	NRC Chief Examiner (#)	Dell R. McNeil / <i>[Signature]</i>		11/28/2010		
d.	NRC Supervisor	Hironori Peterson / <i>[Signature]</i>		11/30/10 11/8/2010		
NOTE: * The facility signature is not applicable for NRC-developed tests. # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.						



Facility: Monticello    Date of Exam: 12/06/10    Scenario Numbers: 1/2/3/4/5/6 (SPARE)    Operating Test No: MNGP 2010					
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.	B	D	DM	
2.	The scenarios consist mostly of related events.	B	D	DM	
3.	Each event description consists of <ul style="list-style-type: none"> <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>	B	D	DM	
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.	B	D	DM	
5.	The events are valid with regard to physics and thermodynamics.	B	D	DM	
6.	Sequencing and timing of events is reasonable, and allows the examination team to obtain complete evaluation results commensurate with the scenario objectives.	B	D	DM	
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.	B	D	DM	
8.	The simulator modeling is not altered.	B	D	DM	
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.	B	D	DM	
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.	B	D	DM	
11.	All individual operator competencies can be evaluated, as verified using Form ES-301-6 (submit the form along with the simulator scenarios).	B	D	DM	
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).	B	D	DM	
13.	The level of difficulty is appropriate to support licensing decisions for each crew position.	B	D	DM	
<b>Target Quantitative Attributes (Per Scenario; See Section D.5.d)</b>		Actual Attributes		-- -- --	
1.	Total malfunctions (5-8)	6 / 5 / 7 / 6 / 5 / 2	B	D	DM
2.	Malfunctions after EOP entry (1-2)	1 / 2 / 2 / 2 / 1 / 0	B	D	DM
3.	Abnormal events (2-4)	4 / 4 / 2 / 3 / 3 / 1	B	D	DM
4.	Major transients (1-2)	1 / 1 / 1 / 1 / 1 / 0	B	D	DM
5.	EOPs entered/requiring substantive actions (1-2)	2 / 2 / 1 / 2 / 2 / 0	B	D	DM
6.	EOP contingencies requiring substantive actions (0-2)	2 / 1 / 1 / 1 / 1 / 0	B	D	DM
7.	Critical tasks (2-3)	2 / 3 / 2 / 2 / 2 / 1	B	D	DM



Facility: Monticello		Date of Exam: 12/06/10		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.	B	D	DM			
2. a. NRC K/As are referenced for all questions. b. Facility learning objectives are referenced as available.	B	D	DM			
3. SRO questions are appropriate in accordance with Section D.2.d of ES-401	B	D	DM			
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).			DM			
5. Question duplication from the license screening/audit exam was controlled as indicated below (check the item that applies) and appears appropriate: <input type="checkbox"/> the audit exam was systematically and randomly developed; or <input type="checkbox"/> the audit exam was completed before the license exam was started; or <input type="checkbox"/> the examinations were developed independently; or <input checked="" type="checkbox"/> the licensee certifies that there is no duplication; or <input type="checkbox"/> other (explain)	B	D	DM			
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	B	D	DM
	40 / 9	0 / 0	35 / 16			
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		B	D	DM
	33 / 36	42 / 64				
8. References/handouts provided do not give away answers or aid in the elimination of distractors.	B	D	DM			
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.	B	D	DM			
10. Question psychometric quality and format meet the guidelines in ES Appendix B.	B	D	DM			
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.	B	D	DM			
a. Author	Printed Name / Signature <i>Roman Becker / [Signature]</i>			Date <i>9-30-10</i>		
b. Facility Reviewer (*)	<i>KEVIN HANSEN / [Signature]</i>			<i>9/30/10</i>		
c. NRC Chief Examiner (#)	<i>Deil R. McNeil / [Signature]</i>			<i>11/18/2010</i>		
d. NRC Regional Supervisor	<i>Hironori Petrosin / [Signature]</i>			<i>11/30/10</i>		
<i>M&amp;B for</i>						
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.						