EXAMINATION OUTLINE SUBMITTAL FOR THE

MONTICELLO RETAKE EXAMINATION - OCTOBER 2007

June 27, 2007

L-MT-07-051
10 CFR Part 55.40

Regional Administrator, Region III
US Nuclear Regulatory Commission
801 Warrenville Road
Lisle, Illinois 60532-4351
Attention: Dell McNeil

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

Examination Outline For the Initial Licensing Examination to Be Conducted the Week of October 1, 2007

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

In accordance with the requirements of 10 CFR 55.40(b) (4), a power reactor facility licensee must receive NRC approval of their proposed written examination and operating tests. Further, 10CFR55.40 (a) requires that examinations meet the requirements of Reference 1. Therefore, enclosed for your review is the proposed examination outline for the initial license examination for our operator license applicant.

In accordance with 10CFR 55.49, "Integrity of Examinations and Tests" and Reference 1, Section ES-201, Attachment 1, "Examination Security and Integrity Guidelines," the Nuclear Management Company, LLC requests that the enclosed materials be withheld from public disclosure until after the examination is complete.

The proposed examination outline was prepared per the guidelines of Reference 1, section ES-401. The proposed outline has been prepared to support development, by the NMC, of examination for one (1) Senior Reactor Operator (SRO) – Upgrade license candidate.

Enclosed are the following specific items for your review.

Form ES-201-2, Examination Outline Quality Checklist

Form QF-1071-01, NMC Master Security Agreement (copy)

Form ES-401-1, BWR Examination Outline

Form ES-401-3, Generic Knowledge and Abilities Outline (Tier 3)

Form ES-401-4, Record of Rejected K/As Form

JUN 28 2007

MNGP 2007 ILT SRO Retake NRC Written Exam Outline Random and Systematic Process / Audit Exam Methodology

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

Timothy J. O'Connor
Site Vice President, Monticello Nuclear Generating Plant
Nuclear Management Company, LLC

Enclosures

cc: Administrator, Region III, USNRC (w/o attachments)
Project Manager, Monticello, USNRC (w/o attachments)
Resident Inspector, Monticello, USNRC (w/o attachments)

ENCLOSURE 1

ES-201-2, EXAMINATION OUTLINE QUALITY CHECKLIST

1 page follows

Facility:		Date of Examination:		
Item	Task Description	Initials a	b*	c#
1. WRITTEN	a. Verify that the outline(s) fit(s) the appropriate model, in accordance with ES-401.			
	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.			
	c. Assess whether the outline over-emphasizes any systems, evolutions, or generic topics.			
	d. Assess whether the justifications for deselected or rejected K/A statements are appropriate.			
2. SIMULATOR	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.			
	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.			
	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.			6-11-07 N/A
3. W/T	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.			
	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			
	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.			6-11-07 N/A
4. GENERAL	a. Assess whether plant-specific priorities (including PRA and IPE insights) are covered in the appropriate exam sections.			
	b. Assess whether the 10 CFR 55.41/43 and 55.45 sampling is appropriate.			
	c. Ensure that K/A importance ratings (except for plant-specific priorities) are at least 2.5.			
	d. Check for duplication and overlap among exam sections. Written only	N/A	N/A	N/A 6-11-07
	e. Check the entire exam for balance of coverage.			
	f. Assess whether the exam fits the appropriate job level (RO or SRO)			

	Printed Name/Signature	Date
a. Author	Roman Becker	6-18-07
b. Facility Reviewer (*)	RONALD UHLIG	6-A-07
c. NRC Chief Examiner (#)	DEIL R. MCNEIL	6/28/07
d. NRC Supervisor	HIRONORI PETERSON	* 10/29/07

Note: # Independent NRC reviewer initial items in Column "c"; chief examiner concurrence required.

Item 4.d N/A as no operating test will be given

* out line reviewed with Chief Exam, in detail - on June 07 - forgot to sign the check list.

ENCLOSURE 2

QF-1071-01, NMC MASTER SECURITY AGREEMENT (copy)

2 pages follow

Nuclear Management Company
MASTER SECURITY AGREEMENT

The Master Security Agreement is used for those personnel having both knowledge of Exam Sensitive Material and unrestricted access to Primary and Secondary Containment.

1. **Pre-Examination (Review FP-T-SAT-71, Attachment 1 for pre-job briefing requirements)**

I acknowledge that I have acquired specialized knowledge about the 2007 SRO Retake examination(s) scheduled for the date(s) of Week of October 1, 2007 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 an Operations Training Supervisor. I understand that I am not to instruct, evaluate, or provide performance feedback to those individuals scheduled to be administered these examinations from this date until completion of examination administration. Acting as a simulator booth operator or communicator is acceptable if I do not select the training content or provide direct or indirect feedback to an examinee. Furthermore, I am aware of the physical security measures and requirements (as documented in NMC procedures) and understand that violation of the conditions of this agreement may result in cancellation of the examinations and/or an enforcement action against my facility or me. I will immediately report to facility managementthe Exam Project Manager 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 examinations administered during the date(s) of _____. 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 individuals who were administered these examinations.

	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
1.	John P. Earl	GSOT / Exam Project Manager	John P. Earl	5/8/2007			
2.	Roman P Becker Jr	Ops INST / Exam Developer		5-8-2007			
3.	Jenny Gjetsen	Admin		5/8/07			
4.	Kurt MARKLING	CRS / Exam Developer	Kurt Markling	5/9/07			
5.	RON UGLOW	SM / OPS. EXAM [illegible]		5/29/07			
6.	Bill Markham	Instructor		6/5/7			
7.	KENT BOOTH	NOS Assessor		6-18-07			

Nuclear Management Company
MASTER SECURITY AGREEMENT

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	PRINTED NAME	JOB TITLE / RESPONSIBILITY	SIGNATURE (1)	DATE	SIGNATURE (2)	DATE	NOTE
8.	Gregory Rask	Shift Manager	Gregory Rask	6/25/07			
9.	Tim Witschen	AOM		6/25/07			
10.	Ben Krull	CRS		6/25/07			
11.	Paul Albares	CRS		6/25/07			
12.	Shawn Halbert	Trng Mgr	Shawn L. Halbert	06-25-07			
13.							
14.							
14.1							

NOTES:

ENCLOSURE 3

ES-401-1, BWR EXAMINATION OUTLINE

5 pages follow

Facility: MNGP		Date of Exam: 10/05/2007																
Tier	Group	RO K/A Category Points											SRO-Only Points					
		K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 2	A 3	A 4	G *	Total	A 2		G *		Total
1. Emergency & Abnormal Plant Evolutions	1				N/A					N/A			20	4		3		7
	2												7	2		1		3
	Tier Totals												27	6		4		10
2. Plant Systems	1												26	3		2		5
	2												12	2		1		3
	Tier Totals												38	5		3		8
3. Generic Knowledge and Abilities Categories		1		2		3		4					10	1	2	3	4	7
														2	2	2	1	

Note:
1. Ensure that at least two topics from every K/A category are sampled within each tier of the RO and SRO-only outlines (i.e., except for one category in Tier 3 of the SRO-only outline, the "Tier Totals" in each K/A category shall not be less than two).
2. The point total for each group and tier in the proposed outline must match that specified in the table. The final point total for each group and tier may deviate by ±1 from that specified in the table based on NRC revisions. The final RO exam must total 75 points and the SRO-only exam must total 25 points.
3. Systems/evolutions within each group are identified on the associated outline; systems or evolutions that do not apply at the facility should be deleted and justified; operationally important, site-specific systems that are not included on the outline should be added. Refer to ES-401, Attachment 2, for guidance regarding the elimination of inappropriate K/A statements.
4. Select topics from as many systems and evolutions as possible; sample every system or evolution in the group before selecting a second topic for any system or evolution.
5. Absent a plant-specific priority, only those K/As having an importance rating (IR) of 2.5 or higher shall be selected. Use the RO and SRO ratings for the RO and SRO-only portions, respectively.
6. Select SRO topics for Tiers 1 and 2 from the shaded systems and K/A categories.
7.* The generic (G) K/As in Tiers 1 and 2 shall be selected from Section 2 of the K/A Catalog, but the topics must be relevant to the applicable evolution or system.
8. On the following pages, enter the K/A numbers, a brief description of each topic, the topics' importance ratings (IR) for the applicable license level, and the point totals (#) for each system and category. Enter the group and tier totals for each category in the table above. Use duplicate pages for RO and SRO-only exams.
9. For Tier 3, select topics from section 2 of the K/A catalog, and enter the K/A numbers, descriptions, IRs, and point totals (#) on Form ES-401-3. Limit SRO selections to K/As that are linked to 10 CFR 55.43.

ES-401	BWR Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 1 (RO (SRO))					Form ES-401-1	
E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	K/A Topic(s)	IR	#
295001 Partial or Complete Loss of Forced Core Flow Circulation / 1 & 4							
295003 Partial or Complete Loss of AC / 6							
295004 Partial or Total Loss of DC Pwr / 6							
295005 Main Turbine Generator Trip / 3							
295006 SCRAM / 1							
295016 Control Room Abandonment / 7					2.2.9 Knowledge of the process for determining if the proposed change / test or experiment increases the probability of occurrence or consequences of an accident during the change / test or experiment.	3.3	1
295018 Partial or Total Loss of CCW / 8							
295019 Partial or Total Loss of Inst. Air / 8					AA2.01 Instrument air system pressure	3.6	1
295021 Loss of Shutdown Cooling / 4							
295023 Refueling Acc / 8							
295024 High Drywell Pressure / 5					EA2.04 Suppression chamber pressure	3.9	1
295025 High Reactor Pressure / 3					2.3.4 Knowledge of radiation exposure limits and contamination control / including permissible levels in excess of those authorized.	3.1	1
295026 Suppression Pool High Water Temp. / 5							
295027 High Containment Temperature / 5					N/A MNGP	N/A	N/A
295028 High Drywell Temperature / 5							
295030 Low Suppression Pool Wtr Lvl / 5							
295031 Reactor Low Water Level / 2					EA2.04 Adequate core cooling	4.8	1
295037 SCRAM Condition Present and Power Above APRM Downscale or Unknown / 1					EA2.06 Reactor pressure	4.1	1
295038 High Off-site Release Rate / 9							
600000 Plant Fire On Site / 8					2.4.29 Knowledge of the emergency plan	4.0	1
K/A Category Totals:	0	0	0	0	Group Point Total:		7

ES-401	BWR Examination Outline Emergency and Abnormal Plant Evolutions - Tier 1/Group 2 (RO / (SRO))	Form ES-401-1

E/APE # / Name / Safety Function	K 1	K 2	K 3	A 1	K/A Topic(s)	IR	#
295002 Loss of Main Condenser Vac / 3							
295007 High Reactor Pressure / 3							
295008 High Reactor Water Level / 2							
295009 Low Reactor Water Level / 2							
295010 High Drywell Pressure / 5							
295011 High Containment Temp / 5					N/A MNGP	N/A	N/A
295012 High Drywell Temperature / 5							
295013 High Suppression Pool Temp. / 5							
295014 Inadvertent Reactivity Addition / 1					AA2.02 Reactor period	3.9	1
295015 Incomplete SCRAM / 1							
295017 High Off-site Release Rate / 9					AA2.05 Meteorological data	3.8	1
295020 Inadvertent Cont. Isolation / 5 & 7							
295022 Loss of CRD Pumps / 1							
295029 High Suppression Pool Wtr Lvl / 5							
295032 High Secondary Containment Area Temperature / 5							
295033 High Secondary Containment Area Radiation Levels / 9							
295034 Secondary Containment Ventilation High Radiation / 9							
295035 Secondary Containment High Differential Pressure / 5					2.4.11 Knowledge of abnormal condition procedures	3.6	1
295036 Secondary Containment High Sump/Area Water Level / 5							
500000 High CTMT Hydrogen Conc. / 5							
K/A Category Point Totals:	0	0	0	0	Group Point Total:		3

ES-401	BWR Examination Outline Plant Systems - Tier 2/Group 1 (RO / SRO)									Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 3	A 4	K/A Topic(s)	IR	#
203000 RHR/LPCI: Injection Mode												
205000 Shutdown Cooling												
206000 HPCI												
207000 Isolation (Emergency) Condenser										N/A MNGP	N/A	N/A
209001 LPCS												
209002 HPCS										N/A MNGP	N/A	N/A
211000 SLC												
212000 RPS										A2.16 Changing mode switch position	4.1	1
215003 IRM												
215004 Source Range Monitor										2.2.26 Knowledge of refueling administrative requirements.	3.7	1
215005 APRM / LPRM												
217000 RCIC												
218000 ADS												
223002 PCIS/Nuclear Steam Supply Shutoff												
239002 SRVs										A2.02 Leaky SRV	3.2	1
259002 Reactor Water Level Control												
261000 SGTS												
262001 AC Electrical Distribution												
262002 UPS (AC/DC)										A2.01 Under voltage	2.8	1
263000 DC Electrical Distribution												
264000 EDGs										2.4.22 Knowledge of the basis for prioritizing safety functions during abnormal/emergency operations.	4.0	1
300000 Instrument Air												
400000 Component Cooling Water												
K/A Category Point Totals:	0	0	0	0	0	0	0	0	0	Group Point Total		5

ES-401	BWR Examination Outline Plant Systems - Tier 2/Group 2 (RO (SRO))									Form ES-401-1		
System # / Name	K 1	K 2	K 3	K 4	K 5	K 6	A 1	A 3	A 4	K/A Topic(s)	IR	#
201001 CRD Hydraulic												
201002 RMCS										2.2.12 Knowledge of surveillance procedures	3.4	1
201003 Control Rod and Drive Mechanism												
201004 RSCS										N/A MNGP	N/A	N/A
201005 RCIS										N/A MNGP	N/A	N/A
201006 RWM												
202001 Recirculation												
202002 Recirculation Flow Control										A2.02 Loss of A.C	3.0	1
204000 RWCU												
214000 RPIS												
215001 Traversing In-core Probe												
215002 RBM												
216000 Nuclear Boiler Inst.												
219000 RHR/LPCI: Torus/Pool Cooling Mode												
223001 Primary CTMT and Aux.												
226001 RHR/LPCI: CTMT Spray Mode												
230000 RHR/LPCI: Torus/Pool Spray Mode												
233000 Fuel Pool Cooling/Cleanup												
234000 Fuel Handling Equipment												
239001 Main and Reheat Steam												
239003 MSIV Leakage Control										N/A MNGP	N/A	N/A
241000 Reactor/Turbine Pressure Regulator												
245000 Main Turbine Gen. / Aux.												
256000 Reactor Condensate												
259001 Reactor Feedwater										A2.07 Reactor water level control system malfunctions.	3.8	1
268000 Radwaste												
271000 Offgas												
272000 Radiation Monitoring												
286000 Fire Protection												
288000 Plant Ventilation												
290001 Secondary CTMT												
290003 Control Room HVAC												
290002 Reactor Vessel Internals												
K/A Category Point Totals:	0	0	0	0	0	0	0	0	0	Group Point Total		3

ENCLOSURE 4

ES-401-3, GENERIC KNOWLEDGE AND ABILITIES OUTLINE (TIER 3)

1 page follows

Facility: MNGP Date of Exam: 10/05/2007

Category	K/A #	Topic	RO		SRO-Only	
			IR	#	IR	#
1. Conduct of Operations	2.1.25	Ability to obtain and interpret station reference materials such as graphs / monographs / and tables which contain performance data			3.1	1
	2.1.33	Ability to recognize indications for system operating parameters which are entry-level conditions for technical specifications.			4.0	1
	Subtotal					2
2. Equipment Control	2.2.22	Knowledge of limiting conditions for operations and safety limits			4.1	1
	2.2.13	Knowledge of tagging and clearance procedures			3.8	1
	Subtotal					2
3. Radiation Control	2.3.2	Knowledge of facility ALARA program			2.9	1
	2.3.9	Knowledge of the process for performing a containment purge			3.4	1
	Subtotal					2
4. Emergency Procedures / Plan	2.4.6	Knowledge of symptom based EOP mitigation strategies			4.0	1
	Subtotal					1
Tier 3 Point Total						7

ENCLOSURE 5

ES-401-4, RECORD OF REJECTED K/As FORM

1 page follows

Tier / Group	Randomly Selected K/A	Reason for Rejection
1/1	600000	2.4.4 K/A has high IR for ROs, not suitable for SRO Only question. MNGP requires RO candidates to also know all entry conditions to abnormal and emergency procedures. Reselected 2.4.29.
1/2	295022	AA2.02 No suitable SRO Only question could be written. Loss of CRD pump with system status is RO level knowledge. Reselected 295017 AA2.05.
2/1	264000	2.3.4 K/A is a duplicate from 295025 Tier 1 / Group 1, additionally no suitable SRO Only question could be written. Reselected 2.4.22 (Approved by NRC Chief Examiner)
2/1	300000	A2.01 K/A not suitable for SRO Only question (Approved by NRC Chief Examiner). Additionally, K/A closely resembles K/A 295019 AA2.01 selection in Tier 1 / Group 1. Reselected 212000 A2.16.
2/2	202002	A2.08 only applies to BWR-5 & 6. Reselected A2.02
G	2.1.3	K/A not suitable for SRO Only written question (more suitable for walkthrough). Reselected 2.1.25
G	2.1.27	K/A not suitable for SRO Only question (Approved by NRC Chief Examiner). Reselected 2.1.33.
G	2.2.3	K/A only applies to multi-unit facilities. Reselected 2.2.13

ENCLOSURE 6

MNGP 2007 ILT SRO Retake NRC Written Exam Outline Random and Systematic Process / Audit Exam Methodology

1 page follows

MONTICELLO NUCLEAR GENERATING PLANT
2007 ILT NRC SRO RETAKE
WRITTEN EXAM OUTLINE RANDOM AND SYSTEMATIC PROCESS

The following describes the steps used to create a random and systematic selection process to develop the MNGP 2007 ILT NRC SRO retake written exam outline. A similar method was used for the original 2007 ILT NRC exam outline. This method was discussed and approved by the Chief NRC Examiner via telephone conversation on April 27th, 2007.

1. Place an N/A at each E/APE or System NOT applicable to the MNGP reactor design type on NRC Form ES-401-1.

2. For Tier1/Group1 through Tier2/Group2 a random selection method was used to select the E/APE or System to be covered. This method consisted of randomly selecting annotated poker chips.

3. For the E/APE or System selected in step 2 above, a systematic method was used to determine if the A2 or G category would be used. A philosophy of using a ratio of 2 A2/1 G was utilized. Poker chip selection determined the starting sequence.

4. With the E/APE or System selected and A2 or G determined, poker chips were again used to randomly select the specific K/A for the A2 or G category.

5. Lastly, the K/As for the generic portion of the exam were randomly selected through the use of annotated poker chips. Of the four generic categories it was randomly determined which category would only be sampled once. The specific K/As were then randomly selected for all four categories.

6. The Audit Exam selection will ensure that the questions maintain the same Tier/Group requirements as the NRC exam. In no case will the same K/A be used for an Audit question that was used for an NRC question for that same system. The guidelines of NUREG 1021 Section 401.C.1.f fourth bullet will be followed.