

May 5, 2004

MEMORANDUM TO: Bruce A. Boger, Director
Division of Inspection Program Management (DIPM)
Office of Nuclear Reactor Regulation (NRR)

FROM: William D. Beckner, Chief/**RA**
Reactor Operations Branch (IROB)
Division of Inspection Program Management
Office of Nuclear Reactor Regulation

SUBJECT: FINAL REVISION 9 OF NUREG-1021, "OPERATOR LICENSING
EXAMINATION STANDARDS FOR POWER REACTORS"

The purpose of this memorandum is to forward final Revision 9 of NUREG-1021 for your review and approval. The revision has been prepared in accordance with Section C.3 of Operator Licensing Manual Chapter 110, "Control of Operator Licensing Guidance Documents."

The changes in Revision 9 were developed in cooperation with the industry during a series of public meetings with the Initial Operator Licensing Focus Group. The primary objectives were to: (1) improve efficiency by reducing the length of the reactor operator (RO) written examination without sacrificing validity or reliability; (2) clarify and simplify the design of the senior reactor operator (SRO) written examination; (3) better risk-inform both written examinations; (4) better balance the administrative and systems portions of the walk-through operating test; (5) clarify the grading criteria for the simulator operating test to improve objectivity; and (6) incorporate guidance that was previously promulgated on the Nuclear Regulatory Commission's (NRC's) operator licensing web page regarding the suppression of inappropriate knowledge and ability (K/A) statements and the conduct of peer checks. A preliminary draft of the revision was provided to the NRC regional offices for comment in December 2002, and the draft revision was issued for public comment and voluntary, trial use with a notice of availability published in the *Federal Register* (68 FR 5312) on February 3, 2003.

Since the comment period closed on December 31, 2003, the staff has reviewed the feedback from the NRC regional offices regarding the examinations conducted using the draft guidance and concluded that the proposed clarifications and enhancements are appropriate and effective. The staff is not aware of any unintended consequences as a result of the proposed changes: the average examination grades and pass-rates on the Draft Revision 9 examinations given, to date, are generally consistent with the Revision 8 results; as expected, a small number of applicants who would have failed the administrative category under Revision 8 ended up

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301-415-1056

passing the combined walk-through; conversely, but, again, as expected, a small number of SRO applicants who would have passed a Revision 8 written examination were unable to achieve the new 70 percent cut score on the SRO-only portion of the revised examination; and finally, as expected, the revised simulator grading criteria did not appear to have a negative impact on the operating test results.

The specific comments and recommendations submitted by the regions, individual NRC examiners, the Nuclear Energy Institute (NEI), facility licensees, and the public during the comment period are summarized in the first attachment. The comments are categorized according to the applicable sections in NUREG-1021, and every comment includes a brief resolution. The second attachment is a copy of final Revision 9 with all of the new and revised text identified with vertical bars in the margins and a brief description of the significant changes in the Executive Summary. A draft of the final revision was provided to the regional offices for comment in March 2004, and any remaining issues were discussed with the regional operator licensing branch chiefs during a recent counterparts' meeting. Those issues directly affecting the applicants or facility licensees were also reviewed with the industry's Initial Operator Licensing Focus Group during a public meeting held on April 7, 2004.

I have reviewed Revision 9 of NUREG-1021 and recommend that you approve it for publication. With regard to the backfit question, note that the Committee to Review Generic Requirements (CRGR) declined the opportunity to review final Revision 8 of NUREG-1021 after taking the position that facility participation in the examination development process should remain voluntary. I have concluded that the changes do not involve a generic backfit that would require review by the CRGR or the Office of the General Counsel (OGC). If you concur with this conclusion and the proposed changes, please sign the attached NRC Form 426, "Authorization to Publish a NUREG-Series Document Prepared by the NRC Staff," and return it to me. The staff will then implement the changes in accordance with the attached plan.

- Attachments:
1. Draft Revision 9 Comment Summary
 2. NUREG-1021, Revision 9, "Operator Licensing Examination Standards for Power Reactors"
 3. Implementation Plan for Revision 9 of NUREG-1021
 4. NRC Form 426 Authorization to Publish Revision 9 of NUREG-1021(ML042220318)
 5. NRC Form 335 Bibliographic Data Sheet For Revision 9 of NUREG-1021 (ML042220316)

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DRAFT REVISION 9 COMMENT SUMMARY

The following public comments were submitted in response to 68 FR 5312 dated February 3, 2003. Comments and recommendations made therein, as well as those provided by the NRC staff, are included in this summary.

Response No.	Source	Date	Accession Number
1	Nuclear Energy Institute (NEI)	12/19/2003	ML040060471
2*	Exelon Nuclear Generation	12/22/2003	ML040060484
3*	Progress Energy	12/23/2003	ML040060490
4	Tennessee Valley Authority (TVA)	12/4/2003	ML040080770
5*	Strategic Teaming and Resource Sharing	12/30/2003	ML040080774
6*	Nuclear Management Company	12/30/2003	ML040090256
7	Entergy	10/8/2003	ML040230539

* These responses endorsed the comments submitted on the industry's behalf by NEI.

ES-#	SOURCE	COMMENT/RECOMMENDATION	RESOLUTION
201	Region I	Attachment 4 (the assignment sheet) should be in a letter format so it can be sent to facility licensees.	A letter was added to C.2.i to approve applications and written exam administration; the assignment sheet was converted to a new form listing the approved applicants.
	Region I	Does NRC need to review audit exams if NRC is developing the license exam?	Yes. Form ES 201-2, Items 2.b and 3.a(3) have been edited to remove the "***" indicating that the operating test duplication is not applicable to NRC-prepared exams. Moreover, Section D.1.a of ES-301 has been similarly revised.
	NEI	Revise Form 201-3 to allow instructors with exam knowledge to operate the simulator as in D.2.b.	These items were added to the form as examples of acceptable activities.
	NEI	C.1.f should reference Form 401-6 vice 401-7.	Corrected.
	Staff	The corporate letter should include 2.390 boilerplate.	The boilerplate was added here and in ES-601.
	Staff	The chief examiner should have the option of randomly selecting the crew members.	Section C.3.j has been revised to allow changes up until 2 weeks before the exams begin.
202	Region I	Clarify need for Regions to audit 10 percent of the license applications on-site.	Added Section C.2.e to audit approximately 10 percent of the applications during the prep or exam week.

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	NEI	Define "senior management representative on site" as used in C.1.e.	Section C.1.f (formerly C.1.e) has been edited to note that it is equal to an authorized representative of the facility licensee, such as the plant manager or site vice-president.
	NEI, TVA	Remove all education and experience requirements and reference the National Academy for Nuclear Training guidelines as the single source.	No change; there is no regulatory requirement to maintain accreditation, and some facility licensees still reference the ANSI standards and Regulatory Guides in their licensing basis documents.
	Program Office	The chief reactor watch station is not equivalent to an RO and should not be counted as responsible nuclear power plant experience (RNPPE).	Section D.2.a (2) has been edited to remove the chief reactor watch from the list of equivalents.
	Region I, Program Office	Clarify whether every SRO limited to fuel handling (LSRO) has to move at least five fuel assemblies to qualify for a license.	Pursuant to 10 CFR 55.31(a)(5), Section D.3.a has been clarified to require 5 manipulations (e.g., fuel movements). Section D.1.h of ES-204 has also been revised to allow a license delay until the manipulations are complete.
	Staff	The NUREG should address electronic submittal of the license applications per the new rule change.	Section C.1.f has been edited to reference 10 CFR 55.5 and identify the acceptable means of submittal.
	Staff	NUREG-1021 needs to clarify what qualifies as a significant control manipulation.	Section C.2.b (3 rd paragraph) has been moved to C.1.c; power changes on the simulator must be 10 percent or greater, while those on the plant may be smaller but must have clearly observable feedback.
204	NEI, TVA	To qualify for the upgrade written waiver per D.1.j, an RO should be up-to-date in requal <i>up to the point of entry into the initial license program</i> and have held an active license for 1 year or more.	Section D.1.j (3) has been edited to clarify the requal requirement, but the active license must be within the past two years to satisfy the requirements of 10 CFR 55.47. The operator licensing program office may approve additional waivers referred by regions.
	Region II	Does an 80 percent on the RO exam qualify for a waiver if the overall SRO grade is <80 percent?	Section D.1.a was clarified to exclude such a waiver and to address waivers for SRO-instant applicants who pass everything but the SRO-only portion of the written and request an RO license.
	Staff	Waivers per D.1.a should be limited to 1 year from the date of original test (not the final denial).	Section D.1.a was revised to key the routine Regional waiver to the original exam date.

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	Region II	Section D.1.c needs to address medical requirements for license reinstatements.	Section D.1.c has been revised to accept medical data for up to 2 years for license reinstatements, with an NRC Form 398, Item 17 statement.
	Program Office	The generic fundamentals examination (GFE) waiver criteria need to be clarified if an applicant exceeds the 2-year shelf life.	Section D.1.k was added to authorize a routine waiver of the GFE for an applicant who passed a randomly-selected prior exam or one prepared by the facility per ES-205.
205	Region I	Change the GFE to 4 times per year and 50 questions.	Sections B, D, and Attachment 4 have been revised.
	Region I	Clarify the exam mailing instructions per ES-201, Attach 1, so they are not sent to home addresses.	A note that home addresses are not acceptable was added to Attachment 1.
	Region IV	Clarify the requirements for the two-year shelf life, including the allowance for licensees to give the "retake" GFE.	This was added to Section D.1.k of ES-204 as a standard Regional waiver.
	NEI, TVA Progress Energy	There is no demonstrated need to limit the GFE shelf life to 2 years; the Rev. 8 guidance is satisfactory.	Comment noted. This change is necessary to comply with the regulations as explained in the minutes from the public focus group meetings.
	Staff	Revise C.2.b to reflect the shift to annual notification letters.	Section C.2.b has been revised to adopt the annual notification letter and C.3.b has been added to require the regions to issue informal reminders.
	Staff	To improve efficiency, results letters should no longer be sent to facilities that do not participate in the GFE.	Section C.3.e, Attachment 1, and Attachment 3 have been revised to eliminate the additional letters and note that the exams will be available in the public electronic reading room and on the GFE web site.
	Staff	Provisions for industry reviews that were agreed to during public meetings with the Focus Group should be incorporated.	Section C.4 has been added to incorporate guidance regarding industry reviews.
301	Region I, Region III	Some of the topic examples need to be removed or better described to improve discrimination.	The topics are based on 55.45(a)(9) and (10) and are valid examples; RO applicants do not need to be tested on all four administrative topics.
	Region I	Incorporate the Region IV form for reviewing the operating test, similar to Form ES-401-9.	No change; an informal poll of the Regional operator licensing branch chiefs revealed little support for a new form.
	Region I	Define low power scenarios as in ES-601.	A footnote has been added to Sections D.4.b and D.5.c referencing NUREG-1449, which defines low power as 5 percent or less.

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	Region I	Clarify the policy for limiting the predictability of emergency plan test topics.	A sentence was added to Section D.3.d to caution against becoming predictable.
	Region II, NEI	Include all the quantitative job performance measure (JPM) requirements on Form 301-3 in language that matches the text.	Form ES-301-1, 2, and 3 have been edited to capture the requirements.
	Region III	Delete operating JPMs for SRO-upgrade applicants.	No change; this is a significant change that was not pilot tested or subject to public comment.
	Region III	Clarify that RO applicants' need to rotate between the lead and BOP positions.	Section D.5.a has been clarified.
	Region III	Add a "type code" column to Form 301-1 to match 301-2.	The form has been revised as recommended.
	Region IV	Consider allowing the use of administrative questions instead of JPMs.	No change; combining the administrative and systems walk-through sections increases the need for uniform testing media.
	Region IV	There is no need to put an upper limit on the number of alternate path JPMs.	No change; although the alternate path JPMs are generally better discriminators, removing the upper limit could lead to inconsistency.
	NEI, TVA	Add an all-inclusive list of forms to be sent to the NRC in each phase of the exam process.	Form ES-201-1 has been edited to better identify the required materials.
	NEI, TVA	Form 301-3, Item 2.b, should reference numbers instead of percentages; the SRO-upgrade limit should be 3 total with no more than 2 in one area.	Forms 301-1 and 301-2 have been revised to include specific test criteria, with Item 2.b of Form 301-3 referring to the other forms. Administrative repeats for SRO-upgrade and SRO-instant applicants should be the same (1).
	Program Office	The limits on JPM repetition should apply to the last two tests at the facility, repeats should be randomly selected, and one of the new tasks should be alternate path.	Form ES-301-1 and 2 have been edited to limit repeats from the last 2 exams, to select them randomly, and to require one new alternate path.
	NEI, TVA	Ten JPMs (6 simulator, 1-2 in the plant, and 2-3 admin) should be sufficient for RO applicants.	Comment noted. The NRC continues to believe that the larger sample is necessary to provide a reliable licensing decision.
	NEI, TVA	Clarify whether instant SROs need to be evaluated in the primary RO position and revise Form 301-5 to be usable for instant and upgrade SROs.	The NRC has decided, based on assuring public confidence, that new ROs and SROs need to be evaluated at the controls, so Section D.5.a has not been changed. Form 301-5 has been completely revised to make it more useable.

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	NEI, TVA	Clearly state the position rotation requirements for RO applicants.	Section D.5.a has been clarified so every RO has to rotate through the BOP position.
	NEI, TVA	Form 301-6 is unnecessary and should be eliminated.	Comment noted. The NRC staff believes that the form adds value because it facilitates the competency review. It has been revised to conform with Form 301-5.
	Staff	Clarify D.4 on avoiding the use of similar tasks on the simulator and walk-through.	The Section D.4 introductory paragraph has been clarified.
	Staff	Striking out the "not" in D.5.f increases the burden in filling out the D-2 forms; is that what we want?	Section D.5.f was revised to indicate that only key alarms and actions need to be documented on Form D-2.
302	Region I	Clarify policy on procedure readers during initial exams.	Section D.2.g of ES-302 and D.7 of Appendix E were clarified to prohibit the use of procedure readers.
	Staff	Delete "or follow-up questions" from D.2.f so applicants are not given the impression that they can correct their performance errors by answering the follow-up questions.	Section D.2.f has been edited as recommended.
303	Region I	We should not suggest that missing more than one critical task may not result in a simulator test failure.	Section D.2.b, third bullet, was edited to replace the "one or more" with "a" critical task, but this should have no effect on the grading.
	Region I, NEI	Better define "non-critical" error or provide examples.	Reference to "non-critical" errors was removed, as it gives the impression that they are unimportant; errors and critical errors both have a bearing on the applicants' competence and need to be considered in the grading process.
	Region II	Delete the note following SRO rating factor 1(c) and score it regardless of board operation.	Section D.2.b, first bullet, and Form ES-303-4 have been edited as requested.
	Region II, NEI	Adjust the rating factor weights so they add up to "1."	Form ES-303-3, RF 4(a) and Form ES-303-4, RF 3(a) have been adjusted from 0.33 to 0.34.
	Region II	Add a column to Form 303-1, pages 3(a) and (b), to show the weighting factor used.	The forms have been modified as recommended.
	Region II	Include behavioral anchors that describe the three competence levels.	No change; restoring the behavioral anchors will add confusion and promote inconsistency when the grading process is focused primarily on counting errors committed.

ES-#	SOURCE	COMMENT/RECOMMENDATION	RESOLUTION
	Region IV	Assess whether combining the administrative and systems walk-through has an unintended consequence of precluding a failure based solely on the inability to classify an emergency or make a protective action recommendation.	No change. This issue was discussed during the development of Revision 9 and the staff reached consensus that this was an acceptable outcome.
	Region IV	The revised grading process puts an added burden on examiners to document non-critical errors and coordinate comments with other examiners.	Comment noted. Section D.3.b of ES-303 has required examiners to briefly document errors that do not contribute to a failure since Rev. 8. The burden on examiners has not changed.
	Region IV	Add a blank on Forms 303-3 and 4 for the overall competency grade.	Both forms have been revised as recommended and the instructions in Section D.2.b have been edited.
	NEI, TVA, Progress Energy	The Rev. 8 grading process, with behavioral anchors, was less subjective and should be continued. Non-critical errors should not lead to a score of "1" unless they caused significant degradation in safety or mitigation strategy.	Comment noted. The NRC continues to believe that counting errors is more objective than matching behavioral anchors and that all errors that reflect on the applicant's competence should be used to justify a failing grade.
	NEI	Revision 9 does not adequately support analyzing all areas, such as technical specifications (TS); continue the guidance in Revision 8.	ES-301 has been revised to require at least 2 TS evaluations for every SRO applicant.
	Program Office	Every SRO applicant needs to be evaluated on at least two TS situations, and the TS rating factors need to be adjusted to reduce fragmentation and emphasize compliance.	Form 301-5 has been revised to require every SRO to perform at least 2 TS evaluations, and Form 303-1 and 4 have been revised to combine the first 2 rating factors for the TS competency and raise the weight of the compliance factor to 0.6.
	Program Office	The grading instructions need to address single non-critical errors in the absence of any positive performance.	Section D.3.o of ES-302 has been revised to require examiners to run additional scenarios to justify a passing or failing grade. A cautionary note has also been added to Section D.5.d of ES-301.
	Staff	Do the mandatory rating factor designations have any value? If so, the mandatory items do not need to have normalization weighting factors.	The mandatory rating factor designations do not appear to add value to the process and have been deleted.
	Staff	Form ES-301-1 contains Privacy Act information and should be annotated as such.	The top and bottom of all pages of Form ES-303-1 have been annotated.
401	Region I	Better explain how to construct an SRO-only exam outline; make the notes on Forms 401-1&2 more descriptive.	This comment was addressed in the Draft Rev. 9 and was further clarified in the final document.

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	Region I	References provided should not allow applicants to eliminate distractors on other questions.	Section D.2.g has been revised as recommended.
	Region I	Clarify policy regarding knowledge and ability (K/A) mismatches - can the Region keep a good question that does not match the randomly selected K/A?	Section E.2.d has been clarified to require mismatched questions to be replaced regardless of quality.
	Region I	Clarify guidance regarding computerized sample plans.	Section D.1.b has been clarified to preclude double sampling any system before all the systems in the group have been sampled once.
	Region II	Move the condensate system from group 1 to group 2 on the pressurized water reactor (PWR) outline.	The system has been moved.
	NEI	Restore the option to propose 10 site-specific priorities, with 7 on the RO and 3 on the SRO exams.	No change. This option was removed to improve consistency and limit potential for bias. Facilities can test priorities during the audit examination. Attachment 1 and Forms 401-1&2 have been revised to add site-specific systems and evolutions that are not on the generic outlines.
	NEI	Clarify D.2.f and Form 401-6, Item 6, to state no more than 75 percent from the bank, at least 10 percent new, and the rest new or modified.	Item 6 on Form 401-6 was edited to indicate that the remaining questions would be new or modified.
	NEI	Form 401-9 and E.2.d do not agree with regard to implausible distractors; use E.2.d on the form.	The instructions on Form 401-9 have been clarified to match the intent of Section E.2.d, which was also edited to clarify the distinction between unacceptable questions and others that still need to be repaired. Section D.2.b was edited to highlight the fact that all questions should be free of psychometric flaws.
	NEI	Explain the use of the “#” sign on Forms 401-1, 2, and 3.	Notes (7) and (8) on Forms 401-1 and 2 were clarified to explain the symbol.
	NEI	D.1.c, the outline notes, and Attachment 2, Item 3, are inconsistent and confusing with regard to SRO-only questions; change Attach 2 to agree with the body of ES-401.	Section D.1.c, Item 3 on Attachment 2, and Form 401-1&2 were edited to be more consistent and eliminate the “K” and “A” categories. Attachment 1 was edited to address the SRO exam.
	Staff	To reduce the risk to content validity from question deletions, shift 2 points from Tier 1 to Tier 2 on the SRO sample plan and require each K/A category to be sampled twice in each tier.	Forms 401-1&2 were revised by lowering the Tier 1 Groups by 1 point each and raising the Tier 2 Groups by 1 point each. The notes were revised to require 2 points per K/A category (except Tier 3).

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	Staff	Provide guidance to examiners on expectations regarding checks for question duplication from the last two licensing exams.	Form 401-6, Item 4, was revised to require a review of the sampling process if more than 4 RO and 2 SRO questions are repeated.
	Staff	What importance ratings should be used when developing the RO and SRO-only exams?	Section D.1.b and Forms 401-1&2 were clarified to use RO for RO and SRO for SRO.
	Unknown	Attachment 2, Item 2, should limit the SRO-only K/A selections to those that are linked to 10 CFR 55.43.	Attachment 2 has been edited as recommended.
402	Region III	Change the exam time limit back to 4 hours.	No change. The nominal time limits assist in proctor planning and minimize the need for extensions.
	Staff	Clarify guidance to minimize the chances that an applicant will select an inapplicable answer on a machine gradable form.	Section D.1.f was added instructing the proctor to line out the inapplicable column(s).
	Staff	Approve time extensions upon request, define "extenuating circumstances," or eliminate the need for extensions altogether.	This is a power test, so D.4.d was edited to allow the facility licensee to notify the NRC if an extension is necessary and when the examination is complete.
501	Region I	Upgrade SROs should not be allowed to take the 25 question exam as a matter of routine and the passing grade should be 70 percent.	No change. Taking the shorter exam, with a higher cut score, is voluntary; an exam with more questions provides more confidence and can justify the lower score, while the exam with fewer questions provides less confidence, thereby justifying a higher cut score; there is historical precedent for the change; the operator licensing program office does not desire to get involved in special reviews.
	Region III, Region IV	Require an 80 percent grade on the SRO-only questions for upgrade applicants that take the full exam.	No change. This was considered and rejected while developing draft Revision 9. An exam with more questions provides more confidence and can justify the lower passing score (70 percent) for the SRO portion of the exam.
	Staff	Section E.4.b requires upgrade applicants to be remediated if they score below 80 percent on the RO examination; instant SROs should be subject to the same guidance.	Section E.4 has been revised to apply this policy to all SRO applicants who pass overall but score below 80 percent on either part of the written exam.
	Region I	Clarify limits on reactivating an RO license while awaiting upgrade.	Section E.4.a was revised to include the clarifications that were previously posted on the web site (i.e., the applicant must be up-to-date in the RO requalification training and testing program per 10 CFR 55.59).

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	Region I	Clarify denial letters to cover three operating test sections.	Attachment 4 was revised to better reflect the multi-part written examinations and operating tests.
	NEI	Change C.2.c (2 nd and 3 rd para) from 5 percent to an actual number, preferably 5 on the RO exam and 2 on the SRO-only.	Section C.2.c has been revised to use numbers (4 and 2 in the first case, 7 and 2 in the second) rather than percentages.
	Staff	Clarify that SRO grades on the RO portion of the written exam should be entered on Forms 303-1, 401-7&8, and 501-2.	Sections D.2.e and g have been edited to record the SRO applicants' written grades on the RO, SRO-only, and overall examination.
	Staff	Incorporate thresholds for documenting security issues in the exam report.	Section E.3.a, fourth bullet, was revised to include examples of issues that would generally be documented in the examination report.
	Staff	When documenting exam quality, should the RO and SRO written exam thresholds be considered separately?	Yes. Section E.3.a has been revised to note that the RO and SRO written exams will be considered separately with respect to the 20 percent comment threshold.
	Staff	Attachment 5, the notification letter, should be revised so it does not tell the applicants that they passed and to cover medical holds.	Attachment 5 has been revised as recommended.
	Staff	Post-examination changes and deletions should be considered when evaluating written examination quality in the report. Moreover, licensees have sufficient experience in preparing examinations that it is not necessary to waive "unsatisfactory" comments in the examination report on other than the initial examination.	Sections C.2.c and E.3.a have been revised to ensure that post exam changes are also counted when evaluating exam quality. The last paragraph under the first bullet has been revised such that negative comments will only be waived during a facility's first submittal and to add some flexibility to the 20 percent threshold, with operator licensing program office concurrence.
502	Region I	Facility licensees should be expected to agree or disagree with applicant appeal comments.	Section C.2.a has been edited to note that facility licensees that prepare the examination may be asked to confirm the contested test items' validity.
	Program Office	The guidance needs to clarify how multiple written appeals and generic findings will affect each appellant's grade.	Section D.2.a was revised to address these situations.
601	NEI	Change C (2 nd para) to state that the licensee's exam structure will be used unless it does not comply with Part 55.	The NRC will consider preferentially using the facility licensee's exam process if it meets 10 CFR 55 and is not flawed; this should provide sufficient flexibility to omit the static examination if it is inappropriate for the circumstances.
	NEI	Update Form 601-1 to parallel Form 201-3.	Form 601-1 has been updated to parallel Form 201-3.

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605	Region I	Add previous guidance regarding license downgrade requests.	New Section C.4 has been added to provide guidance to the regions on how to process facility requests to permanently downgrade an SRO to an RO license.
	Region I	Add guidance regarding no-solo and other medical license restrictions.	Section C.3 has been expanded to more thoroughly address medical license restrictions and conditions. Moreover, the two no-solo conditions have been merged into a single condition that requires another operator to be present only when manipulating the controls; other activities may be performed when someone capable of summoning assistance is present.
	Region I	Does a newly-licensed operator have to take the annual operating test and biennial comprehensive written examination if they are given shortly after initial licensing?	Section C.1.b has been added to clarify that new operators would be expected to take tests and exams given one or more training cycles (nominally six weeks) after they enter the requalification program.
	Program Office	The LSRO license reactivation guidance issued as a frequently asked question (FAQ) on the web site should be added to the NUREG.	Section C.2.b has been added to incorporate the guidance from FAQ #8 under ES-605.
	Program Office	The FAQ guidance on requalification exam cycles should be added to the NUREG.	Section C.1.a has been added to incorporate the guidance in FAQ #12 under IP-71111.11.
701	NEI	Given the number of LSRO responsibilities and repetition limits, 10 JPMs, with 4 administrative, 4 systems, and 2 emergency/abnormal plant evolutions (E/APEs), should be sufficient for the operating test.	Agreed; the length of the operating test has been revised, but the distribution will be 3 administrative, 4 systems, and 3 E/APE tasks.
	NEI	The limited number of K/As available makes it impractical to generate a random outline using the 2 groups/tier structure. Keep the previous structure with combined health physics and GFE sections, or keep the tiers with no groups.	Forms 701-1 and 2 have been revised by combining the groups within Tiers 1 and 2.
	NEI	Make the written exam 35 points overall, with 5 in Tier 1, 20 in Tier 2, and 5 in Tier 3 [Note that these do not add up.]	Five questions is insufficient sampling for Tiers 1 and 3. Forms 701-1 and 2 were revised to require 40 questions overall, with 10 in Tiers 1 and 3, and 20 in Tier 2.
App. A	Staff	Clarify the discussion of level of knowledge and difficulty.	A new section (C.3.c) was added to clarify these concepts.
App. B	Staff	Add a caution regarding the use of double-distractor-set questions.	A caution has been added to Section C.2.a to ensure that the distractors are plausible.

ES-#	SOURCE	COMMENT/RECOMMENDATION	RESOLUTION
	Region I	Is it acceptable to reference the procedure number and title in the stem of the question?	Section C.1.c has been revised to indicate that it is acceptable for closed reference questions; use caution on open reference questions.
App. E	Staff	Caution applicants that written questions have only 4 choices even if the answer sheet has 5.	A caution was added to Item B.6.
	Staff	Inform applicants that asking the proctor to clarify confusing questions (including the definition of terms) will improve their chances of a successful appeal.	Instruction B.7 was revised to inform applicants that their questions are taken into consideration during grading and appeals.
	Staff	Revise B.4 to require facility licensees to provide access to a dictionary during the written exam.	Section C.1.e of ES-402 was revised to require a dictionary and Instruction B.7 was revised to note that a dictionary is available if needed.
	Entergy	Reconsider the policy restricting applicants from discussing JPMs if they have all completed them.	Item C.4 has been revised to prohibit discussions with other applicants who have not completed that portion of the operating test.
App. F	Staff	Add a definition of "low power."	A definition was added here, and a footnote was added to Section D.4.b of ES-301 referencing NUREG-1449, which defines it as 5 percent or less.