

Supplement 1 Comment / Recommendation Summary

<u>No.</u>	<u>Source</u>	<u>Date</u>	<u>Accession Number</u>
Submitted in response to the original Supplement (65 FR 15020; March 20, 2000):			
1 / 2 (letter / email)	Duke Power Company (DPC)	June 19, 2000	ML003725764
3	Virginia Power (VP)	June 12, 2000	ML003727207
Submitted in response to the extended comment period / Addendum (65 FR 44080; July 17, 2000):			
1 / 2 (email / letter)	Duke Power Company	October 31, 2000	ML003767449
3	Anonymous	September 11, 2000	ML003767446
4	Anonymous	September 1, 2000	ML003767437
5	John Cork@Entergy (ANO)	September 11, 2000	ML003767439
6	Tennessee Valley Authority (TVA)	October 12, 2000	ML003767440
7	Nuclear Energy Institute (NEI)	October 30, 2000	ML003767444
8	David Willoughby@Entergy (Pilgrim)	November 1, 2000	ML003767436
9	PECO Nuclear	October 31, 2000	ML003767754
10	Commonwealth Edison	October 31, 2000	ML003768179

<u>ES Section</u>	<u>Source</u>	<u>Comment/Recommendation</u>	<u>Resolution</u>
General	NEI	Use of the random and systematic approach to developing written exam outlines should remain voluntary.	Per 10 CFR 55.40, facility licensees already have a choice whether or not to write their own exams. The NRC believes that all volunteers should follow the same guidance. Moreover, the NRC's position that a systematic process be used to select K/As for the written exam has not changed since Information Notice 98-28, "Development of Systematic Sample Plan for Operator Licensing Examinations," dated July 31, 1998, discussed the issue.
201	DPC, NEI, PECO	Treatment of the INPO bank items as part of the facility bank is too restrictive. The facility should be allowed to count them as new items if there is no basis for applicants to predict their use.	The staff is concerned that this could eventually result in exams that consist solely of bank questions, which is unacceptable. However, because the random selection of written exam topics during the trial exams has increased the scope and number of new questions, the NRC has decided to increase the limit on the use of bank questions from 50 to 75 percent of the exam, with the remaining 25 questions being made up of 15 significantly modified and 10 new questions. This change should provide a reduction in burden over time, while ensuring that every exam contains some new and modified items.
	TVA	The evaluation of Item 1.b (i.e., Assess whether the outline was systematically and randomly prepared in accordance with Section D.1 of ES-401 and whether all knowledge and ability categories are appropriately sampled) on Form ES-201-2, "Examination Outline Quality Checklist," is still subjective.	The NRC acknowledges that some aspects of the exam development process are unavoidably subjective in nature.
	Entergy	Either remove Item 1.c (i.e., Assess whether the outline over-emphasizes any systems, evolutions, or generic topics) from Form ES-201-2, "Examination Outline Quality Checklist," or provide instructions on what actions to take (e.g., contact the chief examiner or make changes unilaterally) if over-emphasis is detected.	Some of the Revision 8 text that was removed from ES-401 as part of the draft supplement has been restored. Section D.1.e indicates that over-sampled topics should be adjusted by systematically and randomly selecting other topics and documenting the reason for the changes.

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201	Entergy	Delete Item 1.d (i.e., Assess whether the repetition from previous examination outlines is excessive) from Form 201-2, "Examination Outline Quality Checklist," since the outline is random, any repetition from previous outlines would be random and acceptable.	This is a valid comment in light of the random topic selection process. The item has been replaced with an assessment of whether the justifications for deselected or rejected K/A statements are appropriate.
	Staff	Review and clarify Attachment 1, "Examination Security and Integrity Guidelines," to be consistent with the answers to FAQs 20 and 21 regarding use of local area networks (LANs) and passwords and to incorporate lessons learned from a previous exam security incident.	Attachment 1 has been revised to clarify the guidance regarding the use of LANs, password protected files, and the treatment of NRC-prepared examinations.
	Staff	Clarify who must do the independent review if the exam is written by the NRC chief examiner (C.3.e and f)?	The guidance has been clarified to require an independent review by another examiner if the chief examiner prepared either the written or the operating test and to provide the regions with more flexibility regarding reviews in general. Conforming changes have also been made in Section E.2 of ES-303 and ES-401.
202	Staff	Review and revise the eligibility criteria to make them consistent with RG 1.8, Rev. 3. (e.g., responsible power plant experience (RPPE) for upgrade SROs; list of Navy watches that qualify as RPPE should agree with accreditation criteria and are not all equivalent to RO experience; active for experience is not the same as active for license proficiency).	Section D of ES-202 has been reviewed and revised to make the language more consistent with RG 1.8, Revision 3, and to clarify that maintaining a minimally active license per 55.53(e) is not sufficient to qualify as experience. The background has also been revised consistent with Regulatory Issue Summary (RIS) 2001-01.
	TVA	Do not change the on-the-job training guideline in Section D.1.b(1) from 13 weeks to 3 months.	The 3-month guideline is consistent with the applicable industry standard (ANSI/ANS 3.1-1993).
	TVA	The military positions listed in Section D.2.a(2) are equivalent to an SRO, not an RO.	This is a valid observation. However, the intent is to include positions that are equal or superior to a licensed RO, and ES-202 has been revised to make this clear.
	Staff	Can the NRC Regional Offices allow an applicant to take the licensing examination while awaiting the NRC contract physician's approval of the medical certification?	Although this was not addressed in the proposed supplement, the NRC staff considers this a minor change that places no additional burden on licensees. Section C.2 of ES-202 has been revised accordingly, with the understanding that the license will be withheld until the applicant's medical condition is determined to be acceptable.
205	Staff	The pending initiation of a generic fundamentals examination (GFE) web site makes it unnecessary to send a copy of the exam to facilities that had no applicants take it. The fact that the GFE question bank is accessible on the web site has also prompted the Institute of Nuclear Power Operations to stop maintaining their GFE question catalogs.	Although these changes were not included in the proposed supplement, they are considered minor in nature and have been implemented as suggested (refer to Section D and Attachment 3 of ES-205).
301	TVA, PECO	The changes to Form ES-301-5, "Transient and Event Checklist," will make scenarios longer. However, PECO sees this change as a benefit.	From the NRC's perspective, allowing exam developers to mix and match four instrument and component malfunctions (instead of requiring two of each) increases flexibility and addresses the concern that malfunctioning digital I&C systems provide little opportunity for examiners to evaluate the applicants' competence. The potential for longer scenarios is an acceptable trade-off.

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301	PECO	The administrative topics are adequately covered on the written exam and should be eliminated from the operating test.	Comments noted. The recommended changes are beyond the scope of this revision. Both comments will be considered during future revisions of NUREG-1021.
	PECO	The guidance recommends JPMs to test the administrative topics, but the examples are oriented toward questions.	
	Staff	Add a statement that failure to train the applicants on a particular test item is not an acceptable basis for deselecting the test item. This policy is already in place in ES-401 and should apply to the operating test as well.	This policy has always been assumed to be generically applicable to both the written exam and the operating test. Section D.1.c has been revised accordingly.
302	Staff	Should shift technical advisors (STAs) be briefed on the content of the simulator scenarios as surrogates are?	Yes. The guidance has been clarified to brief STAs in the same manner as surrogates. Informing the STA of the scenario contents will minimize the opportunity for individual unknown and/or random variances from occurring, possibly having cascading effects on the performance of other crew members being evaluated and inadvertently altering the validity of the scenarios.
	Staff	ES-402 indicates that the facility licensee will provide the necessary copies of the written exam, but ES-302 does not provide similar guidance for the operating test. The operating test packages can be very bulky and difficult for the NRC to transport to the facility.	Although this item was not included in the proposed supplement, it is not considered a significant change. Section C.1.c of ES-302 has been revised to indicate that facility licensees will provide copies as arranged with the NRC chief examiner.
	Staff	During a recent appeal, the staff reversed a proposed license denial because the examiner had stopped the applicant when he started implementing the wrong procedure. The guidance in NUREG-1021 needs to be clarified so examiners are better able to handle such situations.	This issue was discussed with the industry during a recent focus group meeting. Section D.2.f of ES-302 now provides instructions how to deal with an applicant who makes a wrong turn and/or exceeds twice the estimated completion time for a JPM. A conforming change has been made to the grading instructions in ES-303.
303	DPC (June)	Categories A and B of the operating test should be combined when making pass-fail decisions. The passing score should be greater than 80% of the combined 15 JPMs.	Comment noted for consideration during future revisions of NUREG-1021. Such a change is beyond the scope of this revision.
401	DPC, PECO	It will be difficult to implement the requirement for 10 of the SRO-only questions to be in the generic section of the written. PECO says this is unnecessary and does not enhance exam validity. Does "even distribution" apply to (E)A2 and G or between tiers of the outline?	The criteria in question were added to the draft supplement in an effort to enhance consistency. However, the staff has now concluded that they may be unnecessarily restrictive. The guidance for distributing the SRO-only items among the three tiers of the exam has been eliminated. The guidance remains as it was in final Revision 8 of ES-401.
	Entergy (ANO)	The requirement that 10 of the 17 Tier 3 K/As be SRO-only has inadvertently raised the minimum number of SRO questions to 28.	
	Entergy	The guidance in Section D.1.c regarding distribution of the SRO-only K/As would be more appropriate in the section on developing questions. In our experience, we did not determine which K/As would be used for SRO-only questions during the outline development stage.	

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401	NEI, PECO	<p>Sections D.1.c and D.2.d add new restrictions on SRO questions that limit the areas from which questions can be drawn, leading to predictability. Many licensees do not have separate learning objectives for ROs and SROs. Combined with the desire for higher cognitive level questions this makes it difficult to find appropriate questions.</p> <p>10 CFR 55.43 does not say "SRO only." The proposed additional restrictions are not an effective way to achieve the desired goal and should be deleted.</p>	
	Anonymous (4), PECO	Category "AA2" K/As should also be acceptable for use as SRO-only items in Tiers 1 and 2.	
	Anonymous (4), PECO	Sections D.1.c and D.2.d are confusing and contradictory. One limits the SRO-only questions to K/As with a link to 10 CFR 55.43 and the other allows inclusion of 10 CFR 55.41 items.	The NRC staff reviewed the cited sections and confirmed that the wording is different, but it does not appear to be contradictory.
	DPC (June)	The NRC's K/A catalog requires all SRO-only questions to be written to K/As that reference 10 CFR 55.43. However, there are many tasks that SROs must perform that are not included within the restrictive limits of either System A2 or EAPE EA2 areas.	As noted on the NRC's operator licensing web site, when the NRC revised the K/A catalogs (NUREGs-1122 and -1123) to incorporate cross-references to specific items in 10 CFR 55, the primary purpose was to establish at least one regulatory connection for every K/A. The fact that a particular K/A does not reference 10 CFR 55.41 or 55.43 does not, in and of itself, disqualify the K/A from testing on the RO or SRO written examination if the facility licensee has a learning objective for the item. This clarification has been incorporated in Section D.1.c of ES-401.
	DPC (June)	The changes have the potential to cause the SRO exam to exceed 60% higher cognitive level questions and to increase the number of questions that have to be developed for a set of exams. The changes imply (but do not explicitly require) that the 25 SRO-only questions be written at a higher level of knowledge. There is no reason why the SRO exam should not include more higher cognitive level questions than the RO exam. The range for the SRO could be raised or the RO range could be lowered, but be careful not to increase the number of questions that must be prepared above 125.	The proposed changes are not intended to increase the cognitive level of the SRO exam (this has been clarified in Section D.2.d of ES-401) or to increase the number of questions that must be prepared. The goal is simply to emphasize that the SRO exam must discriminate at the SRO level. The 25 SRO questions should not simply be different RO questions but should be based on K/As and learning objectives that you would only expect an SRO to master.
	Anonymous (3), PECO	Form ES-401-9, Column 2 (the 1-5 difficulty rating) should be deleted or criteria developed to define what is "too easy" or "too hard."	<p>The NRC acknowledges that the difficulty rating depends upon the background and experience of the reviewer; however, this is not an argument for deleting the rating scale.</p> <p>The reviewer must know the target audience, i.e., the applicants being tested. This means that, based upon the reviewer's knowledge of the applicants' past performance on similar test items, the reviewer brings an informed judgement to setting the difficulty level of the item.</p>

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401	TVA	Section D.1.b will require TVA to submit a list of deselected K/As. This will necessitate use of the vendor's program and place a high priority on the Exam Bank Action Plan.	ES-401 allows licensees to reject inappropriate K/As (with a brief explanation) after they are randomly selected or to screen the entire K/A catalog before making any selections. This is considered necessary for the NRC staff to monitor adherence to the random topic selection process, which enabled the NRC to eliminate the limits on question repetition. It is not clear why submitting a list of deselected K/As will necessitate using the vendor's program.
	TVA	Section D.1.c requires only SRO objectives, which will require modification of the vendor's program to facilitate sample plan development.	Comment noted.
	TVA, Staff	Section D.2.c changes the time limit on the written examination back to 4 hours.	This section indicates that the exam should be designed so that applicants can complete and review it within four hours. However, internal comments related to the granting of time extensions has prompted the staff to increase the actual time limit to six hours, with possible extensions under extenuating circumstances. This change was discussed with the industry during the February 2001 public meeting.
	TVA	Section D.2.f will require TVA to submit the entire exam bank in order to verify compliance with the limits on bank use.	Comment noted. Per Attachment 2 of ES-201, the facility licensee's exam bank is one of the reference materials that facility licensees may be asked to submit for the NRC to prepare for the examination. As noted in Section E.2.c of ES-401, NRC examiners are not expected to verify every item on every exam.
	TVA	Section E.2.d (i.e., making post-exam editorial enhancements) can not be verified until after the exam or on the next submittal.	Comment noted. The NRC expects licensees to make such corrections, but may not necessarily verify that they have been implemented. In practice, most licensees are implementing editorial enhancements at the time they are identified.
	TVA	Section E.4 will require TVA to remove coworkers and not use on-shift operators for validation.	Comment noted. The NRC takes examination security and integrity very seriously. Consequently, we discourage, but do not prohibit, the use of coworkers to validate the examination. The position in the supplement reflects a relaxation from the original position in Revision 8.
	VP (June)	Method 3 in Section D.1.b should be deleted because the licensee is not required to submit an outline when the NRC develops the outline.	Concur. The ES has been revised accordingly.
	NEI, PECO, ComEd	Section C.1.f and Form ES-401-7 identify only three methods to control the content of the audit exam. Other methods, such as using independent exam teams, should also be acceptable.	The NRC concurs that the use of independent exam teams would be another acceptable method to control overlap between the audit and licensing exams. The ES text and form have been revised accordingly.
	Entergy	The guidance in Section D.1.c, as well as all other quantitative requirements should be reflected in the appropriate checklist (e.g., Form ES-401-7 should require the author to enter the number of SRO-only questions by Tier).	As noted above, the NRC has decided not to include the subject criteria in the final supplement. However, the NRC will continue its efforts to capture all of the significant criteria on a quality checklist.

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401	DPC (June)	Revisions 1 and 2 of the K/A catalogs combined the system-generic and EAPE-generic K/As with the plant-wide generic K/As. Consequently, when you use a random method to select topics for Tiers 1 and 2 and end up with a K/A that does not apply to the system or EAPE, you have to exercise judgment, explain why it does not work, and select another K/A. This is a huge workload. It would be more efficient to return to the old process with separate system and EAPE-generic K/A lists.	Comment noted. It should be possible to screen out many of the generic K/As that have no bearing on any systems or EAPEs before randomly selecting from among the remaining generic K/As. Section D.1.b of ES-401 includes provisions for screening out inappropriate K/As before or during the outline development process. The facility licensee should make separate arrangements with its NRC regional office if it desires to prescreen the K/As. The NRC does not currently plan to revise the K/A Catalogs.
	PECO	The guidance in Section D.1.b should allow randomly selected generic K/As for Tier 2 to be rejected if they are not focused on system-specific knowledge.	This is consistent with the notes at the bottom of the first page of the examination outlines (Forms ES-401-1, 2, 3, and 4). The ES text has been revised accordingly.
	PECO	The type of documentation to be maintained for rejected K/As is not clear. Consider developing a table for documenting rejected K/As, reasons, and replacements.	Although we believe the guidance is clear, the inclusion of a table is a good idea. ES-401 has been revised accordingly (Form ES-401-10 will be used to record rejected K/As).
	PECO	Do all large, comprehensive exams count as audit exams or only the one the utility designates as the audit exam?	With regard to limiting overlap and maintaining exam integrity, every exam or quiz developed after starting work on the licensing exam should be subject to the same restrictions as the final audit exam. Section C.1.f of ES-401 has been clarified accordingly.
	Staff	Note 3 on the exam outlines (Forms ES-401-1, 2, 3, and 4; avoid selecting more than 2 or 3 topics from a given system) is inconsistent with the random selection of topics for the exam. Similar language was deleted from the text.	As noted in a related comment under ES-201, the inconsistency has been corrected by restoring guidance to the text. Outline developers should check to make sure that the random selection process does not over-emphasize topics in the absence of a specific reason for doing so. Over-sampling is a valid reason for randomly selecting a different topic.
	Staff	Since Form ES-401-6 no longer requires licensees to indicate which questions were used on a previous NRC exam (i.e., those that are considered NRC validated), how do we determine which questions get the limited review?	This is a valid concern. Since it is a benefit to facility licensees to limit the NRC review of previously validated questions, this item has been restored to Form ES-401-6, with a note that failure to provide the information will require the NRC to conduct a detailed review of every question.
	Staff	ES-401 should allow the NRC regional office some flexibility to deviate (e.g., ±1) from the specified point total for each tier and group on the exam outline during the review process.	Concur. This minor change should save resources by making it easier to find replacements for unacceptable questions. The ES has been revised accordingly.
	Staff	Clarify that multiple correct answers and no correct answers are unacceptable flaws that have to be fixed.	Concur. Section E.2.d of ES-401 has been revised accordingly.
403	TVA	It is not clear how licensees will document Section D.1.d (correct questions before putting them in the exam bank) to the NRC or how the NRC will verify.	The NRC expects licensees to correct flawed items so they are not reused, but no documentation is considered necessary at this time. Although the NRC staff does not plan to verify that the items have been corrected, it would likely ask for an explanation if it determined that a licensee had reused items having known flaws.
	NEI, PECO	The requirement on Form ES-403-1 to make a clean copy of the answer sheet should be added to the facility licensee's list of responsibilities in Section C.1.a.	This requirement is already reflected in the grading instructions (Section D.2.a). The NRC does not believe it is necessary to add it to the facility licensee's responsibilities.

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501	OIG	Briefly describe in the "scope" section of the exam report those security items and activities that were inspected. The "findings" section should provide more details regarding the salient security observations and findings or state that no findings were identified.	This guidance was incorporated as part of the Addendum that was issued in July 2000.
	OIG	Consider the need to further clarify the types of issues to be discussed in the exam reports to ensure consistency and maintain program quality.	The exam report documentation requirements in Section E.3 of ES-501 were significantly revised as part of the draft Supplement. The staff considered whether additional enhancements are necessary, and clarified the guidance to ensure that the exam report addresses all the facility licensee's comments regarding both the written exam and the operating tests, even in the absence of a specific recommendation.
	Staff	A simulator fidelity report should only be required if the exam reveals deficiencies that are not already documented by the facility licensee.	Concur. Section E.3 of ES-501 has been revised accordingly.
	Staff	ES-501 needs to clarify what documents will be entered in the NRC's Agencywide Documents Access and Management System (ADAMS) and which ones are to be made public.	Section E.4.d of ES-501 has been revised to indicate that all documents with the exception of those containing applicant names or grades should be placed in the NRC's Public Electronic Reading Room. Section F.2 of ES-501 has been clarified to indicate that the paper documents are official records that do not have to be entered in ADAMS and to caution that they should not be made public.
502	TVA	Section C.2.b requires licensees to retrieve and correct banked questions that are later determined to be invalid. Why regulate this action? How will the NRC verify compliance?	The NRC staff spends a significant amount of time, for which facility licensees are billed, resolving applicant appeals. It does not make sense to reuse a flawed question that had to be thrown off an earlier exam during an appeal. That is why ES-502 encourages licensees to discard or correct flawed items. Although the NRC does not plan to verify that the items have been corrected, it may ask for an explanation if it determined that a licensee had reused items having known flaws.
	Staff	During a recent written examination appeal, the number of questions that required answer key changes or deletion exceeded the number that would have prompted the NRC regional office to make a comment in the examination report pursuant to Section C.2.c of ES-501. Since this occurred after the exam report had been issued, ES-502 should be revised to encourage regional follow-up with the facility licensee.	Although this issue was not addressed in the proposed supplement, the change is considered minor and consistent with the NRC's existing position in ES-501. Therefore, Section D.2.c of ES-502 has been revised accordingly.
	Staff	Consider whether the target completion time for appeals should be extended.	With facility licensees preparing most of the exams, the NRC Regional Offices often have little of the reference material that might be needed to resolve the appeals. Although this was not included in the proposed Supplement, this is not considered a major change or burden on licensees. Consequently, it appears appropriate to extend the time from 60 to 75 days.

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ES-605	Staff	An NRC Regional Office passed along a question from a facility licensee regarding the definition of a permanent disability and the associated reporting requirements.	On reviewing the facility's question and the Region's answer, it became apparent that the discussion of temporary disabilities in Section C.3.a needed to be clarified to accommodate disabilities for which compensatory measures other than removal from shift would provide a sufficient remedy. Although this was not included in the proposed Supplement, this is a minor change that actually decreases the burden on licensees. Consequently, the clarification has been incorporated without undergoing comment.
App. C	Staff	As a lesson learned from a recent appeal, Appendix C, "Job Performance Measure Guidelines," should be clarified to ensure that all required operator actions preceding the start point of a task are completed unless the action is purposely omitted as part of an alternate path JPM.	Although this was not included in the proposed Supplement, this is not considered a major change or burden on licensees. Consequently, the recommended clarification has been incorporated in Section B.1 of Appendix C.
App. D	TVA	The guidance regarding scenario run time in Section C.2.h is not realistic. Scenarios have not been 60-90 minutes since the inception of the pilot process.	Comment noted. Historically, the planned run time has almost always been shorter than the actual time it takes the examinees to complete the evolutions.
App. E	TVA	The time for the written exam conflicts with the guidance in ES-401. Is it 4 or 5 hours?	The four-hour time noted in ES-401 is for design and validation purposes. As noted earlier, the NRC staff has decided to extend the time permitted to take the exam (Item B.3 in Appendix E) from five to six hours, with possible extensions under extenuating circumstances.
	Staff	Part A is numbered incorrectly (no 3).	The numbering error has been corrected.
App. F	TVA	The significance of the "Designate[d] Nuclear Control Room Operator" is not clear.	Comment noted. This definition is simply repeated from Revision 3 of Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants," which was issued in May 2000.
	TVA	Responsible nuclear power plant experience or the reduction from two years to one year of credit may affect instant SRO candidates.	This definition was changed to conform with Revision 3 of Regulatory Guide 1.8, which was issued in May 2000. The reduction in credit is consistent with the 1-year reduction in the SRO guideline for responsible power plant experience.