

Waivers and Operator Licensing Program Feedback

2011 Exam Writers' Conference
Ken Schaaf and Dan Bacon

Please silence all cell phones
and pagers





Objectives

- Discuss waiver requirements associated with the RO and SRO application process.
- Discuss Operator Licensing Program Feedback submitted in 2010 and 2011.



Waivers

- At least 26 non-routine waiver requests have been submitted to NRR for the waiver or deferral of experience, education or time on shift requirements over the past two years.
- As stated in NUREG-1262 (Answers to Questions at Public Meetings Regarding Implementation of Title 10, Code of Federal Regulations, Part 55 on Operators' Licenses (Question # 113)), a person should meet the experience guidelines before entering the license training program.



Eligibility References

- RG 1.8 Rev. 3 (Qualification and Training of Personnel for Nuclear Power Plants) endorses ANSI/ANS-3.1-1993 (Selection, Qualification and Training of Personnel for Nuclear Power Plants). [RG 1.8](#)
- NANT guidance is provided in ACAD 10-001 “Guidance for Initial Training and Qualification of Licensed Operators.”
- NUREG-1021 ES-202 “Preparing and Reviewing Operator License Applications”. [NUREG 1021](#)



Eligibility References(continued)

- NUREG-1021 ES-202 “Preparing and Reviewing Operator License Applications”.
- NUREG-1021 ES-204 “Processing Waivers Requested By Reactor Operator and Senior Reactor Operator Applicants”.



Waivers

- The Regional Office can only approve Routine Waivers listed in ES-204 Section D.1. All others must be submitted to the NRR operator licensing program office at HQ.
- Eligibility determination should be completed early in the process (preferably prior to starting license class) and waiver or deferral requests should be submitted promptly.



Waivers

- Failure to submit waiver requests early could result in long license deferrals or even a denial after significant resources have been expended on training an individual.



Routine Waivers

NUREG 1021

204 D.1.a

- If an applicant failed only one portion of the site-specific initial licensing examination:
 - The written exam overall
 - The SRO-only section of the written
 - The simulator operating test
 - The walk- thru overall
 - The administrative portion of the walk-through
- The region **may** waive those examination areas that were passed.



Routine Waivers

- This is only applicable for the first retake examination and only if it takes place within 1 year of the date on which the original examination was completed.



Routine Waivers

204 D.1.b

- The region may waive training requirements specified in the FSAR when the FSAR authorizes waiver of those specific requirements and the applicant otherwise meets NRC requirements.
- An example would be a waiver of some training requirements for applicants previously licensed at a comparable facility.



Routine Waivers

204 D.1.c

- The medical data in support of NRC Form 396 are normally good for 6 months from the date of the medical examination for a person applying for an RO or SRO instant license.
- For re-applications the regional office may grant waivers extending the 6-month period provided that the date of the original medical examination is within 24 months of the anticipated licensing date and Item 17, “Comments” of NRC Form 398 certifies that the applicant has not developed any physical or mental conditions that would be reportable under 10 CFR 55.25.



Routine Waivers

- For SRO upgrade and renewal applicants, the medical examination documented on NRC Form 396 is good for 2 years from the date of the medical examination.
- Waivers/exceptions and license conditions/restrictions that might be requested if an applicant does not meet the medical standards in the applicable version of ANSI/ANS 3.4, “Medical Certification and Monitoring of Personnel Requiring Operator Licenses for Nuclear Power Plants,” will be coordinated with the NRC contract physician as discussed in ES-202.



Routine Waivers

204 D.1.d

- Substitutions allowed by Regulatory Guide (RG) 1.8, Revision 3, are not considered to be waivers and, therefore do not require approval.
- For example, substitution of related technical training for up to 1 year of experience for an SRO, is not a waiver. However, training for the examination that is being applied for may not be counted as related technical training.



Routine Waivers

204 D.1.e

- If the facility certifies that an applicant has successfully completed a training program accredited by INPO using an acceptable simulation facility, the region may waive the requirement for 10 startups on an operating reactor, which is typically required by NRC approved cold license training programs.



Routine Waivers

204 D.1.f

- For applicants unable to meet the requirements for 6 weeks on shift at greater than 20% power (due to extended shutdowns or other extraordinary circumstances) the region may waive this requirement upon application if the following criteria are satisfied:



Routine Waivers

- (1) Facility training objectives for the desired licensed position have been developed using a properly validated job task analysis (JTA).
- (2) The facility licensee's training program is based on a systems approach to training (SAT) using 5 elements defined in 10 CFR 55.4.
- (3) The facility can accomplish the required training objectives for plant operation at greater than 20% power using a plant-referenced or NRC-approved simulation facility.



Routine Waivers

204 D.1.g

- If an operator was previously licensed at a facility and reapplies for a license at the same facility and the same or lower license level, the regional office may, pursuant to 10 CFR 55.47, waive the requirement for the applicant to pass a written examination (including the generic fundamentals examination (GFE)) and an operating test if it finds that the applicant meets the following criteria:



Routine Waivers

- (1) previously discharged his or her responsibilities competently and safely and is capable of continuing to do so.
- (2) terminated participation in the facility licensee's requalification program less than 2 years (24 months) before the date of the license application.
- (3) successfully completed "Additional Training," pursuant to 10 CFR 55.59(b), and a facility-prepared written examination and operating test, which ensure that the applicant is up-to-date in the licensed operator requalification training program (including GFE topics).



Routine Waivers

- (4) will successfully complete at least 40 hours of shift functions under the direction of an operator or senior operator, as appropriate, and in the position to which the applicant will be assigned (see 10 CFR 55.53(f)) before being assigned to licensed duties.
- (5) complies with the requirements of 10 CFR 55.31.
(Applications)



Routine Waivers

204 D.1.h

- If an applicant is unable to perform the five significant control manipulations required by 10 CFR 55.31(a)(5), the regional office may process the application, administer the examination, and issue a conditional license that is only valid with the reactor in cold shutdown and refueling (or simply delay licensing the applicant until the facility licensee certifies that the required manipulations have been completed; refer to Section D.3.c of ES-501).
- The regional office will not remove the license condition until the facility licensee supplies the required evidence that the applicant has successfully completed the control manipulations (refer to ES-501).



Routine Waivers

204 D.1.i

- The region may authorize a facility licensee to defer completion of the following specific experience and training guidelines until after the licensing examination is passed:
- (1) up to 6 months of the 3 years of (responsible nuclear) power plant experience for an RO (or an SRO), but not to exceed 2 months of the year of onsite experience for an RO and 1 month of the 6 for an SRO.
- (2) up to 2 months of the year actively performing duties as a licensed RO at the facility for which an SRO upgrade license is sought.
- (3) up to 1 month of the 3 spent as an extra RO or SRO on-shift in training.



Routine Waivers

204 D.1.j

- If an individual is currently licensed as an RO at a facility and applies for an SRO license at the same facility, the regional office may waive the requirement for the applicant to take the RO portion of the SRO written examination if the applicant satisfies the following requirements:



Routine Waivers

- (1) Pursuant to 10 CFR 55.47(a)(1), which requires extensive actual operating experience within the previous 2 years, the applicant must have maintained an active license for at least 12 of the 24 months preceding the date of application. This would also satisfy the SRO upgrade eligibility criteria in Section D.2.a(2) of ES-202 and the similar guidelines established by the National Academy for Nuclear Training.



Routine Waivers

- (2) Pursuant to 10 CFR 55.47(a)(2), the applicant must have discharged his or her responsibilities competently and safely and be capable of continuing to do so. As in 10 CFR 55.57, the NRC will consider the applicant's past performance and certification by the facility licensee when making this determination.



Routine Waivers

- (3) Pursuant to 10 CFR 55.47(a)(3), the applicant must have learned the operating procedures for and be qualified to safely and competently operate the facility. This requirement would be satisfied if the applicant passed his or her most recent requalification examination and was up-to-date in the facility licensee's requalification training program at the time that he or she entered the upgrade training program.



Routine Waivers

204 D.1.k

- If an applicant passed the GFE more than 24 months before the date of license application, the regional office may waive the requirement to pass another GFE if the applicant meets any one of the following criteria (as explained in Item 17 on NRC Form 398):



Routine Waivers

- (1) The applicant terminated an RO or SRO license at a comparable (boiling- or pressurized-water) facility less than 24 months before the date of application and was up-to-date in the requalification program at the time of license termination.



Routine Waivers

- (2) Within the 24 months preceding the date of application, the applicant completed self-study or classroom instruction, as deemed necessary by the facility licensee, and passed a prior GFE that was randomly selected from among those contained on the NRC's GFE Web page and administered, under controlled conditions, by the facility licensee.



Routine Waivers

- (3) Within the 24 months preceding the date of application, the applicant completed self-study or classroom instruction, as deemed necessary by the facility licensee, and passed a GFE prepared by the facility licensee in accordance with Section D of ES-205 and administered under controlled conditions.

Operator Licensing Program Feedback

FAQs



401.35 and 401.52

- Updated to reflect clarifications and enhancements incorporated by NUGEG-1122/1123 Rev2, Supp. 1.

401.35

- **Certain "newer" K/As have a 10 CFR 55 reference given in parenthesis to show a tie between the CFR and NUREG-1122(3). We were told that questions did not meet the criteria of SRO only (those 25 questions only on the SRO written) if the K/A reference included both 55.41 and 55.43. It is our understanding that questions need be written at SRO knowledge level in these situations. We do not think that this dual CFR reference should be interpreted to eliminate the K/A from being selected for an SRO question.**



401.35 Answer

- The policy regarding the 25 SRO-only questions on the written examination is stated in Section D.2.d of ES-401. The fact that a K/A is linked to both 55.41 and 55.43 does not mean that the K/A cannot be used to develop an SRO-only question. Questions related to 55.41 topics may be appropriate SRO-level questions if they evaluate knowledge and abilities at a level that is unique to the SRO job position as determined by the facility licensee's learning objectives.



401.35 Answer

- Although your observation is valid, please note that NUREG-1021 contains provisions for facility licensees to add, substitute, or delete specific K/As on a case-by-case basis and to use K/As having importance ratings below 2.5 if it is justified based on plant-specific learning objectives.



401.35 Answer

- When the NRC revised 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 55.41 or 55.43 does not, in and of itself, disqualify the K/A from testing on the RO or SRO written examination.



401.52

- **Are technical specification (TS) action statements that require action "within one hour" addressed by NUREG-1123, K/A 2.2.39? We have received different interpretations from different examiners. We believe that they are NOT since action could be taken at the end of sixty minutes and still be within compliance.**



401.52 Answer

- Although the "within one hour" TS action statements and K/A 2.2.39 were not identically worded, the TS action statements and the K/A 2.2.39 wording was equivalent in their intent and meaning. It is agreed that action might not be taken or initiated until 60 minutes have elapsed. However, should that be the case, the requisite action or actions must also be completed by the end of 60 minutes.



401.52 Answer

- In other words, the knowledge required for the operators to properly complete the required system action statements is the same no matter if completed in 59 or 60 minutes. Therefore, the wording difference has been rectified by revising K/A 2.2.39 in NUREG - 1122 and NUREG-1123 to read “less than or equal to one hour.” Related clarification for valid testing of TS K/As and K/As without a related facility learning objective can be found in the responses to Questions #11 and #12 for ES-401.

Gen. 49-51

- Added to provide additional guidance on NRC Form 396, “Certification of Medical Examination by Facility Licensee.”
- See the web page for details. [FAQs](#)



202.20

- **The National Academy for Nuclear Training's (NANT) "Guidelines for Initial Training and Qualification of Licensed Operators" -- ACAD 10-001 -- were revised in February 2010. The revision updated and changed the experience and education eligibility guidance for the selection of reactor operators (ROs) and senior reactor operators (SROs) at existing nuclear power plants in Section 2.0, Figures 2-1 and 2-3.**



202.20

- NUREG-1021, “Operator Licensing Examination Standards for Power Reactors,” in ES-202 states that “the guidelines for education and experience promulgated by the National Academy for Nuclear Training (NANT) – *including* [emphasis added] those that were in effect in *1987 and those that were issued in January 2000* [emphasis added] -- *outline acceptable methods for implementing the Commission’s regulations in this area.*” Given this NUREG-1021 guidance, does the NRC also consider ACAD 10-001 an acceptable methodology for eligibility determinations at existing nuclear power plants?



202.20 Answer

- The short answer to the question is that the NRC considers the eligibility guidelines for education and experience at existing nuclear power plants promulgated by the NANT *including* those that were issued in *February 2010 -- ACAD 10-001 -- as acceptable methods for meeting* 10 CFR 55.31(a)(4) with the exception of the Direct SRO for SRO-Certified Instructor eligibility criteria listed in Figure 2-4 (which is no different than the previously stated exception to ACAD 00-003 -- see bulleted clarification below).



202.20 Answer

- Notwithstanding the fact that NUREG-1021 references ACAD 00-003 issued in January 2000, NUREG-1021 also states that “when a facility licensee certifies, pursuant to 10 CFR 55.31(a)(4), that an applicant has successfully completed a Commission-approved, SAT-based training program, it means that the applicant meets or exceeds the minimum education and experience [eligibility] guidelines *currently [emphasis added] outlined by the NANT*” for *existing nuclear* power plants.



202.20 Answer

- Thus, as stated in the public meeting summary for the November 2009 public meeting with the Institute of Nuclear Power Operations (INPO) regarding ACAD 10-001, the NRC “staff continued to support INPO’s initiative, including the addition of a ‘direct RO’ flow-path to Figure 2-1.”



202.20 Answer

- For example, an RO applicant per revised ACAD 10-001, Figure 2-1, “Reactor Operator Eligibility,” can receive Academic Equivalence credit for up to 18 months of Power Plant Experience if the RO applicant has a “bachelor of science degree or equivalent in engineering, engineering technology or related sciences.”



202.20 Answer

- That said, it is important to note the following with respect to use of ACAD 10-001 for meeting 10 CFR 55.31:
- As stated in ACAD 10-001, ACAD 10-001 “supersedes ACAD 09-001 [and] Until January 1, 2011, either document may be used as the basis for initial licensed operator training and qualification.” In other words, the facility licensee should not selectively use or combine the requirements from the two documents for meeting 10 CFR 55.31.



202.20 Answer

- As stated in NUREG-1021, ES-202, and the directions for NRC Form 398, “Personal Qualification Statement -- Licensee,” “certified instructors seeking an SRO license [still] must complete item 15” of NRC Form 398 to document the details of their experience.



202.20 Answer

- As stated in Regulatory Issue Summary 01-001, “Eligibility of Operator License Applicants,” “when a facility licensee's licensed operator training program description or licensing basis documents contain education and experience requirements that are more restrictive than either Revision 3 of RG 1.8 or the current NANT guidelines, the most restrictive requirements will continue to apply pending the initiation of action by the licensee to amend these requirements; [and] any required TS changes would be considered administrative in nature.”



605.3

- Question 605.3 was revised to clarify notification requirements concerning temporary suspension of licenses.
- **Notification of administrative suspension of licenses due to medical reasons.**



605.3 Answer

- In accordance with Section C.3.a of ES-605, the facility licensee does not need to notify the NRC if the medical condition is temporary and the operator is administratively prevented from performing licensed duties or otherwise restricted, as appropriate, during the period of his or her temporary disability. However, if the operator's temporary medical condition also precludes the operator from maintaining currency with all of the facility's 10CFR55.59 requalification program requirements i.e., the operator's participation in all or part of the requalification training program is suspended, the facility shall notify the NRC as described in ES-605 C.1.c and C.3. unless the missed requalification training can be made up within the time limits specified in the facility's Commission approved 10 CFR55.59 Requalification Training Program.



605.12

- **Can a shift (watch) that begins for an operator or senior operator at 1800 of the final day of the calendar quarter be counted for meeting the minimum shifts required by 10 CFR 55.53(e) for maintaining active license status even though the shift is completed at 0600 on the first day of the succeeding quarter?**



605.12 Answer

- 10 CFR 55.53 (e) requires “to maintain active status” that every licensee “actively perform the functions of an operator or senior operator on a *minimum [emphasis added] of seven 8-hour or five 12-hour shifts per calendar quarter.*” There is no allowance provided in 10 CFR 55 or NUREG-1021 that permits counting a shift that will *not be completed in the current calendar* quarter for meeting 10 CFR 55.53(e) as long as it is *started in the current calendar quarter.* Thus, given the example provided in the question, **the operator’s license would not be considered “active” as of 2400 on the last day of the calendar quarter** since the operator/senior operator had not performed “the functions of an operator or senior operator on a *minimum [emphasis added] five 12-hour shifts*” in the current calendar quarter.



Gen. 52

- **I've noticed that the 1996 version of ANSI/ANS-3.4, section 3.3, states that a physician may temporarily restrict an individual's duties as a licensed operator for a period as long as 30 days, without formal NRC notification. Does this imply a requirement to report temporary conditions lasting longer than 30 days to the NRC if a facility has committed to use the 1996 standard?**



Gen. 52 Answer

- Please refer to Question Gen.20 above for a discussion of “permanent disability.”
- The only related regulatory requirement, as stated in 10 CFR 55.25, is to report permanent physical or mental conditions within 30 days of learning of the diagnosis. As discussed in Question Gen.20, there is no strict time limit on when a condition must be considered permanent, and it is largely left to the licensee physician’s judgment as to whether the operator will be capable of meeting the applicable medical standards in the foreseeable future.



Gen. 52 Answer

- The NRC expects the facility licensee to administratively restrict the operator's activities, as appropriate, during the term of the temporary condition. However, the NRC does not require formal notification for temporary conditions that exceed 30 days.



Gen. 52 Answer

- The NRC only requires notification, within 30 days, when a developed physical or mental condition is determined to be permanent and causes a licensee to fail to meet the applicable ANSI/ANS-3.4 requirements/standards or could adversely affect performance of assigned operator job duties or cause operational errors endangering public health and safety. The provision for reporting temporary duty restrictions as stated in section 3.3 of ANSI/ANS-3.4, 1996, is more restrictive and is not required to comply with the regulations.



605.13

- **The “no-solo” restriction described in ES-605, C.3.c is not explicit for an SRO supervising core alterations. Is there a difference in requirements for “no-solo” SROs and LSROs when supervising core alterations?**



605.13 Answer

- 10 CFR 50.54m (2)(iv) requires an SRO or LSRO to be present to directly supervise any alterations of the core (including fuel loading or transfer) and to be assigned no other duties while supervising the alterations. ES-605, C.3.c describes an LSRO with a no-solo license restriction as requiring another individual capable of summoning assistance in view while the restricted LSRO is performing licensed duties (e.g. directly supervising core alterations). A no-solo SRO is required to have a licensed operator in view when the restricted SRO is performing control manipulations, however there is no explicit guidance on what type of restriction is required for a no-solo SRO supervising core alterations.



605.13 Answer

- The requirement for a no-solo SRO performing control manipulations is intended to be more restrictive than for a no-solo LSRO or SRO who is directly supervising core alterations. It is expected that if an LSRO or SRO becomes incapacitated while supervising core alterations, the individuals performing the evolution will be able to safely stop the fuel movement and call for assistance. A requirement to have an additional licensed operator in view of a no-solo SRO when supervising core alterations would likely negate the reason to have the restricted SRO present in the first place. While supervising core alterations, a no-solo SRO is expected to adhere to the same restriction imposed on a no-solo LSRO and thereby ensure that another individual is in view who is capable of summoning assistance if needed.



605.13 Answer

- It is important to realize that this clarification is intended to provide guidance that is consistent with current industry practices. No additional restrictions or changes to the methods currently being implemented are being established. However, for the purposes of clarification, the typical wording on all future SRO and LSRO licenses will be changed to read as the following:



605.13 Answer

SRO No-Solo:

- “Another licensed operator must be in view when you are performing control manipulations, and another senior operator must be present on-site at all other times while you are performing SRO licensed duties or someone capable of summoning assistance must be present in the control room at all other times while you are performing RO licensed duties. Another individual capable of summoning assistance must be in view when you are directly supervising core alterations.”



605.13 Answer

LSRO No-Solo:

- “Another individual capable of summoning assistance must be in view when you are directly supervising core alterations.”



605.13 Answer

- No revisions or corrections will be made to current SRO and LSRO licenses. The new wording will be applied to new licenses as they are issued and to current licenses as they are renewed during the normal 6-year cycle. Currently licensed SROs with no-solo restrictions should understand that when directly supervising core alterations, their licenses require them to have an individual capable of summoning assistance in view at all times.



Any Questions?