

PROPOSED RULES

MISC. REG. GUIDE



ARKANSAS POWER & LIGHT COMPANY  
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011-01

Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject: Draft Regulatory Guide 1.8  
Second Proposed Revision 2  
"Personnel Qualification and Training"  
(File: 0523)

Gentlemen:

Arkansas Power & Light Company (AP&L) appreciates the opportunity to submit the attached comments on the second proposed Revision 2 of USNRC Regulatory Guide 1.8.

Very truly yours,

*David C. Trimble*

David C. Trimble  
Manager, Licensing

DCT:nak

Attachment



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MEMBER MIDDLE SOUTH UTILITIES SYSTEM

Comments of Arkansas Power & Light Company  
USNRC Regulatory Guide 1.8  
Second Proposed Revision 2

Part B (Discussion)

1. Page 6, Section 2.2.2.a - The time limits for completion of written examinations are arbitrary and unnecessary. Simulator training measures an operator's real time response to control room situations while such response cannot be correlated to the speed with which he takes a written examination.
2. Page 6, Section 2.2.2.e - Notification of facility management by the NRC of examination results should include a copy of the actual as-taken examination (including the individual's answers) to help management identify deficiencies in training.
3. Page 7, Section 2.2.4 - The onsite "Independent Safety Engineering Group" should be no larger than five people (including the chairman) and should be made up of personnel with reasonable experience in operations, maintenance, radiochemistry and radiological protection, and instrumentation and controls. Personnel with extensive experience, but no college degree, should not be excluded, but the majority should have a BS degree in engineering or one of the sciences.
4. Page 8, Section 2.2.5 - The date (January 1, 1981) by which shift technical advisors (STA) will be required to meet the guidelines of this section is unrealistic. Until the Commission determines what qualifies as a "college-level" course it will be impossible to determine what completed training is applicable and what further subjects need to be addressed. Consideration should be given to experienced SRO personnel with specific training in plant transients, mitigation of core damage, fluid mechanics, and thermodynamics to serve as STA in lieu of engineers. The main concern is safety of operation, and such a person will provide the mature judgement based on experience during transients more so than engineer with limited experience.
5. Page 9, Section 2.2.8 - The NRC study on accreditation of training institutions should be completed before specifying a particular number of required accredited training hours, since the study could determine that existing training programs are adequate.

Part C (Regulatory Position)

1. Page 11, Section 1.2.1 - Restricting the use of temporary personnel as replacements to periods not to exceed 1 month is unnecessarily restrictive and arbitrary.
2. Page 11, Section 1.2.2 - The last sentence of this section should be deleted since the "general employee training" may take longer than some of the tasks performed by temporary contracted services.

3. Page 12, Section 1.3 - The NRC should determine requirements for accreditation before specifying a particular number of hours of accredited education. It may be determined that existing training programs satisfy accreditation requirements, thus dispensing with the need for a new curricula. The definition of "college-level" is essentially the key issue in the discussion of operations personnel qualifications. There are many avenues through which necessary training can be obtained which should be evaluated on a case-by-case basis to determine their adequacy, rather than summarily categorized as "non-accredited" and disregarded.
4. Page 12, Section 1.4.a - This requirement should be relaxed to allow a graduate engineer with 2 years nuclear plant experience to take a senior operator examination without having to serve a year as a licensed operator.
5. Page 13, Section 1.4.b - The second sentence in this paragraph should be changed to read "applicants should be certified by the level of corporate management which is directly responsible for plant operations (for example, the Vice-President for Operations), on the recommendation of a qualified designee." Corporate management, while ultimately responsible for the qualifications of operations personnel cannot be expected to have first-hand knowledge of each potential license applicant. Therefore, it is prudent to consider the recommendations of people who, through greater familiarity with the potential applicant(s), can effectively evaluate qualifications.
6. Page 13, Section 1.4.c - Specific technical educational requirements that are directly related to reactor operations should be identified, rather than a number of semester hours. "Semester hours of... subjects..." does nothing to dictate a balance of education, nor does it present any justification for the number of hours specified (60). As noted previously, the definition of "college level" is a key issue.
7. Page 14, Section 2.1 - Exceptions to required qualifications should be evaluated on a case-by-case basis to ensure that valuable experience is not wasted simply because a quota (i.e., 5%) has been filled. Such exceptions are not intended to indicate a lower standard of competency. Hence, a 5 percent limit on exception is arbitrary, unnecessary and counterproductive. This limit could, and probably will, result in a shortage of qualified personnel. Similarly, exclusion of the shift supervisor position from any exception to standards, especially with regard to the requirement for a BS degree, is likely to result in a shortage of shift supervisors.
8. Page 15, Section 2.2.3.2 - Power reactor health physics certification is not now and should not become a requirement for the Radiation Protection Manager.
9. Page 15, Section 2.3.1 - A Bachelor of Science degree for the shift supervisor is unnecessary. Specific technical educational requirements directly related to reactor operations should be identified and additional training in leadership, management, and communication

skills should be specified. This training could be incorporated into an overall operating personnel development program that integrates training and experience to assure a competent supervisor. To require a BS degree invites use of personnel with limited experience and increased personnel turnover due to demands for college graduate personnel.

The discussion in Appendix A on this position states that the instruction be completed at or be conducted by an accredited college or university. This is neither necessary or practical. The course content should be reviewed and approved by such an instruction with practical operation of a nuclear power plant in mind and not a BS degree. Properly trained instructors could conduct the training on site.

Implementation of the program of increased education requirements within a five year period for all senior reactor operators is totally unrealistic and would most certainly decrease the safety of operation by a considerable degree.

10. Page 16, Section 2.3.2 - The wording of this paragraph should be changed to be consistent with that of Section 1.4.b as discussed in comment 5 above.
11. Page 17, Section 2.6 - For operations training on simulators, ANS Standard 3.1 should be used, except that the term "similar unit" should be more strictly defined as units of the same generation from the same vendor, rather than the broader categories of PWR, BWR, and HTGR. Also, the requirement that instructors who teach systems, integrated responses, and transients have senior operator license is superfluous, especially if the curriculum has been approve to a higher management level.
12. Page 20, Section 3.2.2 - In-plant drills should not be required if an exact simulator is available for a particular unit.

#### Part D (Implementation)

The requirement to submit a plan for qualification of staff personnel by May 1981 is totally unrealistic since no definitive plan can be formulated until the criteria which will be defined by this guide are finalized. As stated on page 20 of the second proposed Revision 2 of this guide, such finalization will be accomplished no earlier than May 1, 1981.

#### Appendix A (Education Requirements For Shift Supervisor)

Proposed regulatory position 2.3.1 (Alternative 5) quantifies the required technical courses by total number of hours, rather than by hours per subject. There is no statement which would dictate, or even indicate, what course distribution would provide the most comprehensive education for a reactor operator. Furthermore, it is not immediately evident what value a shift supervisor is likely to derive from courses in political science, sociology, and economics. In-house management training programs would be more effective in helping the shift supervisor deal with the people he is responsible for.