

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONOFFICE OF NUCLEAR REACTOR REGULATION  
Harold R. Denton, Director

In the Matter of

UNION ELECTRIC COMPANY  
(Callaway Plant, Unit 1)

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Docket No. 50-483  
(10 CFR 2.206)DIRECTOR'S DECISION UNDER 10 CFR 2.206

## I

By letter to the Commissioners dated September 28, 1984, Michele Varricchio and Billie Garde of the Government Accountability Project (GAP), on behalf of the Concerned Citizens About Callaway and others (hereinafter referred to as the Petitioners) requested that immediate action be taken with respect to the Callaway Plant. Specifically, the Petitioners identified 48 allegations related to the adequacy of construction of the Callaway facility, and requested that in view of these allegations, the Callaway low-power license "be suspended until such time that each of the specific allegations...is investigated and that appropriate reinspection is performed to determine the extent of the problem raised by each allegation." The Petitioners brought their request pursuant to 10 CFR 2.206, and in accord with the Commission's usual practice, the Petitioners' letter was referred to the staff for consideration under that regulation. See Lorion v. NRC, 712 F.2d 1472, 1474 (D.C. Cir. 1983), rev'd on other grounds sub nom. Florida Power and Light Co. v. Lorion, 53 U.S.L.W. 4360 (U.S. 1985).

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The NRC received the Petitioners' request only a few days before the Commission's scheduled meeting on authorization of a full-power license for Callaway Unit 1. The staff reviewed the Petitioners' allegations, many of which were lacking in specificity, and after conducting a preliminary screening and assessment of the allegations, informed the Commission that the concerns raised by the Petition did not appear to warrant immediate action by the Commission to either suspend the Callaway low-power license or stay issuance of a full-power license. Accordingly, a full-power license was issued to the Callaway facility on October 18, 1984. In a letter dated November 7, 1984, the immediate relief requested by the Petitioners was denied. At that time, the staff determined that there was sufficient evidence to conclude that the requested immediate relief was not warranted. The staff's determination was based in part on the fact that several of the allegations raised by Petitioners had been previously reviewed and resolved, and that other allegations concerned areas where it had been determined that the necessary requirements were met. In addition, several allegations were quite broad and since previous NRC and licensee inspections, evaluations and reviews had not identified problems in those areas, granting the immediate relief did not appear to be warranted. Nonetheless, the staff continued to review the Petitioners' request. The licensee was asked to review the allegations, and with the exception of allegation 42, prepare a written response to each. <sup>1/</sup> The licensee subsequently responded by letter dated December 7, 1984.

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<sup>1/</sup> Since allegation 42 was essentially a request to the NRC seeking information pertaining to drug and alcohol use, gambling and prostitution at the Callaway site, the staff determined that it was unnecessary for the licensee to respond. Nonetheless, the licensee responded to the allegation.

Initially, the Petitioners were informed that in the absence of more specific information supporting the petition, it would be difficult to assess the need for additional action at Callaway. See Letter to Billie Garde, Director, Citizens Clinic, GAP, from Edson G. Case, Acting Director, NRR (Nov. 7, 1984). The staff renewed its offer to meet with those former workers whose allegations formed the basis for the petition.<sup>2/</sup> See also Letter to Billie Garde, Director, Citizens Clinic, GAP, from Frank J. Miraglia, Deputy Director, Division of Licensing, NRR (Nov. 21, 1984). However, after meeting with GAP representatives, the NRC staff determined that in view of the considerable staff resources already expended on investigating the allegations, and the conditions proposed by GAP under which allegers would be made available to NRC, the best course of action for timely resolution of the petition would be for the NRC to complete its evaluation based on available information. See Letter to Billie Garde from James Keppler (Jan. 11, 1985).

The results of Region III's examination are contained in Inspection Report 50-483/84-45 (Jan. 22, 1985). Based upon this review, the results of previous inspections, and the licensee's conduct of an extensive preoperating testing program, the staff has determined that the Callaway Plant

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<sup>2/</sup> The Region III staff first learned in May 1984 (prior to submittal of the petition) of the existence of allegations concerning the construction of the Callaway plant. Two former plant workers were interviewed by Region III in June 1984, and the allegations they raised were investigated and resolved, as documented in Inspection Report No. 50-483/84-30. Region III became aware of other worker allegations at Callaway, and made repeated attempts to obtain more specific information from the Government Accountability Project. See Letter to Billie Garde, GAP, from James Keppler, Region III Administrator (Sept. 27, 1984).

was built in substantial conformance with applicable regulatory requirements, and that the systems in the facility would, if called upon, perform their intended safety functions. Accordingly, for the reasons in this decision, the Petitioners' request is denied.

II

In considering a request under 10 CFR 2.206 or, for that matter, any allegation of substandard workmanship or improper practices involving a nuclear power reactor, the NRC staff is mindful of the Commission's overriding regulatory responsibilities to assure adequate protection of the public health and safety in the use of radioactive material and the operation of nuclear power facilities. See Power Reactor Development Co. v. International Union of Electrical Radio and Machine Workers, 367 U.S. 396, 406 (1961). Consistent with these responsibilities, a reactor operating license will only be issued by the Commission if it can be found that there is reasonable assurance that power operation presents no undue risk to the health and safety of the public. See 10 CFR 50.57. When assessing the significance of allegations, the staff makes an initial determination whether an allegation, if true, is relevant to safe operation of the facility. Allegations deemed not relevant to safe operation of the facility and allegations determined to be frivolous, or too vague or general in nature to provide sufficient information for the staff to investigate, receive no further consideration. Allegations raising a safety concern are pursued further. See NRC Statement of Policy: Handling of Late Allegations, 50 Fed. Reg. 11030 (March 19, 1985).

The Petitioners' allegations which raised a safety concern were pursued further, even though issuance of the Callaway full power license had not been stayed. The staff has now fully reviewed and evaluated each of the 48 allegations identified by the Petitioners and has concluded, as documented in Inspection Report 50-483/84-45, that the allegations either: 1) could not be substantiated; 2) did not pertain to issues of nuclear safety; or 3) had been previously addressed by the NRC and resolved to the NRC's satisfaction.<sup>3/</sup> Thus, the staff has concluded, as it did when it recommended to the Commission that the Callaway plant be granted a full power license, that the Callaway plant has operated and may continue to operate without endangering the public health and safety.<sup>4/</sup> Since the staff's conclusions with respect to each of

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3/ These allegations can be characterized as follows:

Welding: allegations 1-12, 46  
Interference with the quality control program: allegations 13-17  
Electrical cabling: allegations 18-23  
Concrete placement: allegations 24-27  
Drainage in the auxiliary building: allegation 28  
Pipe hangers: allegation 29  
Construction drawing deficiencies: allegations 30-32  
Undocumented rework: allegation 33  
Reliability of the onsite laboratory: allegation 34  
Failure to wear personnel dosimetry: allegation 35  
Onsite morale/labor management practices: allegations 36-39  
Waste/cost overruns: allegations 40-41, 43-45  
Drug and alcohol use, gambling, prostitution: allegation 42  
Sabotage: allegation 47  
Improper NRC practices: allegation 48

4/ The issue of granting Callaway an operating license was adjudicated before both the licensing and appeal boards. The issue of quality assurance, including the adequacy of welding and concrete placement raised in the present petition, was fully litigated, resulting in the determination that there was no general breakdown in quality assurance and that there was reasonable assurance the Callaway plant could be operated safely. See Union Electric Co. (Callaway Plant, Unit 1), LBP-82-109, 16 NRC 1826 (1982), aff'd, ALAB-740, 18 NRC 343 (1983).

the allegations are contained in the January 22nd inspection report, a detailed examination of each allegation is not warranted here. The following discussion amplifies some of the issues that are addressed in the January 22nd inspection report and provides additional perspective on the matters raised by the Petitioners and the staff's resolution of those issues.

A. Welding Allegations

As is evident from a review of Inspection Report 50-483/84-45, certain alleged welding deficiencies were not further evaluated by the staff once it was determined that the system, component or structure involved in that aspect of the allegation was not required to remain functional to assure required safety functions.<sup>5/</sup> For example, one allegation related to the approval of welds on the condenser in the turbine building without inspection. However, the Standardized Nuclear Unit Power Plant System Final Safety Analysis Report, Section 10.4.1.1.1, Safety Design Bases (which is applicable to Callaway Unit 1), states that, "the main condenser serves no safety function and has no safety design basis." Thus, in the absence of a safety function, it was not necessary for the staff to pursue this particular allegation further.

Two allegations raise issues concerning welder qualification worthy of emphasis in this decision. Allegation 10 alleges that a technique used to pass welder applicants "was accomplished by allowing applicants to take the test as many

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<sup>5/</sup> See Inspection Report 50-483/84-45 at 4-5.

times as was necessary. If an applicant failed, the test was not considered a test, but merely practice." The Petitioners then draw on the apparent existence of an underqualified and inexperienced welder work force as explanation for the "shoddy work" which necessitated rework at later phases of construction. See Allegation 11, Petition at 4-5.

Under the applicable codes, the number of times a welder-applicant takes a certification test has no significance, unless the employer specifies a more stringent requirement. At Callaway, contractor procedures controlling welder certification and qualification did not limit the number of times a welder-applicant could take a certification test. Therefore, it was acceptable under the applicable codes and the contractor's procedures for welders to repeat tests. See Inspection Report 50-483/84-45 at 6, ¶5.

In considering allegation 11, the staff has made no judgment as to whether the original work regarding pipe hanger and support welds in the control building were "shoddy" as Petitioners allege. However, it should be noted that during construction distinctively marked temporary pipehangers, which were installed to facilitate pipe installation, were subsequently replaced with permanent pipehangers. Those temporary pipehangers may account for the perception of "shoddy" workmanship Petitioners allege. In any event, NRC inspection indicates that no temporary pipehangers remain on safety-related systems in the lower elevations of the control building, and that the pipehangers presently in the control building are properly installed.

See Inspection Report 50-483/84-45 at 7, ¶2.

B. Implications of Extensive Rework for Quality of Plant

Allegation 12 points out construction problems associated with repair and rework of welds, including the allegation that "[weld] rework weakens the metal because of the required reheating." As noted in the inspection report, applicable American Welding Society and American Society of Mechanical Engineer codes permit rewelding and repairs. See Inspection Report 50-483/84-45 at 7, ¶ 3. The staff evaluation found no indication of deficient welds or support members. Moreover, rewelding of carbon steel, when done correctly, does not significantly affect material strength.

C. Electrical Cabling Allegations

The Petitioners allege that certain spliced cables (high voltage cables) were both submerged at the Callaway facility without proper drainage and installed without required fire proofing. See Allegations 22-23, Petition at 6. As stated in the inspection report, a review of electrical drawings and cable installation records indicates that these particular cables were not spliced and consequently, submersion in water would not undermine the cable's integrity. Since the cable was not spliced, fireproofing is not necessary. See also Inspection Report 50-483/84-45 at 11-12. The staff relied upon electrical drawings and cable installation records in evaluating the allegation since the cables in duct banks are not accessible for visual inspection. Previous inspections at Callaway have given the staff confidence that the quality records and drawings accurately document plant as-built conditions.

D. Waste and Cost Overrun Allegations

The petitioners raise a series of allegations which in essence allege that the licensee has mismanaged construction of the Callaway facility such that excessive cost overruns have occurred. See Allegations 40-41, 43-45, Petition at 9-10. As Petitioners themselves acknowledge, these "waste and cost overrun" allegations were included because the Petition was to be forwarded to the Missouri Public Service Commission. See Petition at 11. Issues of waste and excessive cost do not normally fall within the scope of the NRC's regulatory responsibilities, except to the extent these concerns may affect safe operation of a facility. While Petitioners point to possible wasteful practices and cost overruns, the Petitioners have provided no information which would link those overruns to the possibility of deficient construction which could lead to unsafe operation of the Callaway facility. The staff is not aware of any such information. In the absence of such a nexus, there is no basis for the staff to pursue these allegations further.

E. Alcohol and Drug Allegations

Petitioners allege that illegal drugs, alcohol, gambling and prostitution could be found on the Callaway job site. See Allegation 42, Petition at 9. In support of this allegation, Petitioners point to a February 1984 incident where quality control inspectors were fired for alleged drug use at the Callaway site. Id.

Regardless of any intrinsic moral or legal reprehensibility of gambling and prostitution, it is not clear that these activities, if they indeed occurred at the Callaway jobsite, would have affected safe construction of the facility, and the Petitioners have provided no information which would so indicate an adverse effect. Accordingly, the staff has not pursued this aspect of the allegation further. However, drug and alcohol use, if present at the Callaway worksite, could affect safe construction and subsequent operation of the facility. See Commonwealth Edison Co. (Dresden Nuclear Power Station, Zion Nuclear Plant), DD-83-8, 17 NRC 1183, 1185 (1983).

The licensee was also aware of the significance of drug and alcohol use onsite. In June 1982, the licensee's prime construction contractor, Daniel International Corporation, placed drug awareness signs around the site and in the plant. Daniel International also initiated a program which utilized dogs trained to detect the presence of drugs at the site. The dogs were used in July and December 1982, and on a full-time basis from March 1983 through February 1984. During this period the dogs performed approximately five searches per week. In 1982 Daniel International revised the company safety manual, which is provided to employees, to include information on alcohol and drug abuse. Additionally, the licensee established the Union Electric Company's alcohol and drug abuse program at the site in January 1984.

Upon identification of drug and alcohol use onsite in February 1984, the licensee took action to remedy the situation. As a first step, seven workers were fired. The licensee and Daniel International conducted an extensive investigation of the incident and conducted a sampling reverification of the work done by the fired workers. Based on this review, the licensee determined that the work done by the fired workers was acceptable.

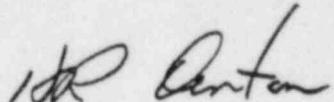
It is important to note that, with one exception, the workers involved in this incident were reviewing inspection packages documenting previous work and that they were not conducting inspections in the field. While that individual had previously done field inspections a few years prior to the identification of drug and alcohol use onsite, the licensee also performed a sampling review of those activities and found that individual's work to be acceptable. The NRC staff has reviewed the results of the licensee's sampling verification and has concluded that the job performance of the fired workers had no significant safety impact.

In connection with allegation 42, the Petitioners requested that the staff provide information to them concerning drug-related terminations and related developments at the Callaway facility. A questionnaire was attached to the Petition for this purpose. Petitions filed under 10 CFR 2.206 provide members of the public with a means of bringing safety problems concerning nuclear facilities to the Commission's attention. Section 2.206 petitions are not information gathering devices for members of the public. See Southern

California Edison Co. (San Onofre Nuclear Generating Station, Unit 1), Denial of Request for Hearing and Request for Stay, at 10 n. 8 (Commission order dated Feb. 19, 1985); Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2), DD-83-11, 18 NRC 293, 295 (1983). Thus, the staff has not provided the information requested by the Petitioners.

III

On the basis of the results contained in Inspection Report 50-483/84-45, and as described in this decision, suspension of the Callaway Plant's license is not warranted. Accordingly, the Petitioners' request is denied. A copy of this decision will be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c).



Harold R. Denton, Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 17th day of May 1985