

8-15-80

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
SOUTHERN CALIFORNIA EDISON COMPANY, )  
ET AL. )  
(San Onofre Nuclear Generating )  
Units 2 and 3) )

Docket Nos. 50-361 01  
50-362 01

NRC STAFF MOTION FOR  
SUMMARY DISPOSITION ON CONTENTION 1(a) (Dewatering Well Cavities)

L. Dow Davis, IV  
Counsel for NRC Staff

Lawrence J. Chandler  
Counsel for NRC Staff



For the following reasons, the NRC Staff also moves the granting of Summary Disposition on Intervenors' Contention 1(a)<sup>4/</sup> regarding on dewatering cavities.<sup>5/</sup>

## II. Applicable Law

The Commission's rules provide that a moving party is entitled to summary disposition if it can be shown that there are no material issues of fact to be adjudicated at the hearing and that he is entitled to judgment as a matter of law. 10 C.F.R. §2.749. That section states:

### Summary Disposition on Pleadings

§2.749 Authority of presiding officer to dispose of certain issues on the pleadings.

(a) Any party to a proceeding may, at least forty five (45) days before the time fixed for the hearing, move, with or without supporting affidavits, for a decision by the presiding officer in that party's favor as to all or any part of the matters involved in the proceeding.... [by demonstrating that]...there is no genuine issue to be heard.

Under the Commission's regulations, the "applicant or the proponent of an order has the burden of proof" of an issue. 10 C.F.R. § 2.732. Both the Commission, whose rule governing summary disposition contained in 10 C.F.R.

<sup>4/</sup> This pleading is considered by the Staff to be a submission in support of Applicants' Motion for Summary Disposition on the same subject within the provisions of the stipulation of Counsel attached to the Licensing Board's Memorandum and Order on Prehearing Conference of July 17, 1980 dated August 6, 1980.

<sup>5/</sup> One Licensing Board has indicated that a motion for summary disposition may be improper where the OL SER is not yet issued. Duke Power Company (William B. McGuire Nuclear Station, Units 1 and 2), LBP-77-20, NRC 680, 681 (March 18, 1977).

§ 2.749 is analagous to the summary judgment provisions of the Federal Rules of Civil Procedure,<sup>6/</sup> and the Supreme Court have held that it is the party seeking summary judgment (or disposition) which has the burden of showing the absence of a genuine issue as to any material fact in contest in the disputed proceeding. Cleveland Electric Illuminating Company, (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 753 (November 8, 1977); Adickes v. Kress & Company, 398 U.S. 144, 157 (1970); J. Moore, Federal Practice, Vol. 6, § 56.15 [3] (2d ed. 1966). To meet this burden, the movant must eliminate any real doubt as to the existence of any genuine issue of material fact. Poller v. Columbia Broadcasting Company, Inc., 368 U.S. 464 (1962); Sartor v. Arkansas Natural Gas Corporation, 321 U.S. 620, 627 (1954). The record and affidavits supporting and opposing the motion must be viewed in the light most favorable to the party opposing the motion. See Public Service Company of New Hampshire (Seabrook Station, Units 1 and 2), LBP-74-36, 7 AEC 877 (1974) and cases cited therein at 878-79. The opposing party need not show that he would prevail on the issues but only that there are genuine issues to be tried. American Manufacturers Mutual Insurance Co. v. American Broadcasting - Paramount Theaters, Inc., 388 F. 2d 272, 280 (2d Cir. 1967); accord Virginia Electric Power Co. (North Anna Nuclear Power Station, Units 1 & 2), ALAB-584, 11 NRC 451, 453 (March 24, 1980).

<sup>6/</sup> Alabama Power Company (Joseph M. Farley Nuclear Plant, Units 1 and 2), ALAB-182, 7 AEC 210, 217 (1974).

Affidavits setting forth the material facts about which there are no genuine issues to be heard may accompany the motion to dispose of issues in the pleadings, and the affidavits may be supplemented or opposed by depositions, answers to interrogatories of further affidavits. 10 C.F.R. §2.749(b).

While it is not necessary to present evidence in order to defeat a motion for summary disposition since the motion itself and accompanying affidavits must discharge the movant's burden (and no defense to an insufficient showing by movant is required), the rule clearly states that the party opposing the summary disposition motion may not rest upon mere allegations or denials in his answer but rather must provide by affidavit, deposition or answers to interrogatories, specific facts showing there is a genuine issue of fact in controversy. 10 C.F.R. §2.749(b); Perry, supra, at 754; accord, Virginia Electric Power Company (North Anna Nuclear Power Station, Units 1 & 2), ALAB-584, 11 NRC 451, 453 (March 24, 1980).

In this regard, a Licensing Board has said that:

In order to defeat a motion for summary disposition the Intervenor must establish (or the Board perceive from the record) that there does exist a genuine issue of material fact with respect to each contention so attacked. At this stage, mere allegations in the pleadings are not sufficient to establish the existence of an issue of material fact. 10 CFR §2.749(b); See Orvis v. Brickman, 95 F.Supp. 605 (USDC, D.C. 1951), aff'd, 196 F.2d 762 (D.C. Cir. 1952); see also 6 Moore §56.15[3].

To defeat summary disposition an opposing party must present facts in the proper form; conclusions of law will not suffice. The opposing party's facts must be material, substantial, not fanciful, or merely suspicious.

One cannot avoid summary disposition "on the mere hope that at trial he will be able to discredit movant's evidence; he must, at the hearing, be able to point out to the court something indicating the existence of a triable issue of material fact". 6 Moore's Federal Practice §50.15[4]. One cannot "go to trial on the vague supposition that something may turn up." 6 Moore's Federal Practice §56.15[3]. See Radio City Music Hall v. U.S. 136 F.2d 715 (2nd Cir. 1943). In Orvis v. Brickman, 95 F.Supp. 605 (D.C.D.C. 1951), the Court, in granting the defendant's motion for summary judgment under the Federal Rules said:

All the plaintiff has in this case is the hope that on cross-examination ...the defendants ...will contradict their respective affidavits. This is purely speculative and to permit trial on such basis would nulify the 77 purpose of Rule 56....

Moreover, the rule itself provides that "all material facts set forth in the statement required to be served by the moving party will be deemed to be admitted unless controverted by the statement required to be served by the opposing party." 10 C.F.R. § 2.749(a).

Summary disposition is desirable in administrative hearings because it makes possible the prompt disposition of a case on its merits without a formal hearing by permitting a party to pierce his opponent's pleadings by presenting material evidence in affidavit form which establishes that no factual dispute exists.<sup>8/</sup> The Staff submits that such a procedure for conserving hearing time by culling out baseless allegations is particularly appropriate in the instant case since, as will be shown

77 Gulf States Utilities Company, (River Bend Station, Units 1 and 2), LBP-75-10, 1 NRC 246, 248 (March 20, 1975) (Footnotes omitted).

8/ Gellhorn and Robinson, Summary Judgment in Administrative Adjudication, 84 Harvard L.Rev. 612 (1971).

below by affidavits, there is no factual basis for the Intervenor's contention number 1(a). Moreover, Intervenor's July 28, 1978 answers to interrogatories propounded by Southern California Edison at 12-13 (which have not been updated) do not provide a factual basis for opposing the motions for summary disposition. For these reasons, the Staff believes that Intervenor's contention 1a should be dismissed as a matter of law.

### III. Discussion

#### A. The Applicants' Affidavit

In support of their Motion for Summary Disposition on Intervenor's contention regarding dewatering well cavities, Applicants submitted the sworn affidavits of five witnesses<sup>9/</sup> to show that no material fact remains to be litigated as to the safety significance of certain voids created beneath the site of the San Onofre Nuclear Generating Station, Units 2 and 3 (SONGS 2 and 3), during the dewatering process.

Applicants maintain that excavations and borings show that the subsurface cavities discovered at the site did not exist prior to the installation of the dewatering system, whose purpose was to facilitate construction of foundation below the water table. Hersh at 5,7. An additional study showed that the voids did not occur naturally but rather were created during the process of dewatering. McNeil Affidavit at 5. After filling wells 4, 5 and 8 with sand as was the customary decommissioning practice, settling occurred

<sup>9/</sup> Affidavits of Lucien Hersh, John A. Barneich, Robert L. McNeill, Jay L. Smith and Kenneth P. Baskin concerning dewatering were attached to the Applicants' June 6, 1980 Motion.

at well 6, indicating the existence of a potential subsurface cavity. Hersh at 8. Following this discovery, a program of exploratory drilling was conducted and all cavities filled with either sand, gravel, concrete, pressure grout and/or a combination of such materials. Hersh at 13-26.

In order to demonstrate that the filled dewatering cavities presented no undue hazard to the ability of seismic category I structures to withstand the design basis earthquake (now known as the safe shutdown earthquake),<sup>10/</sup> Applicants conducted dynamic analyses as to the effects of the most significant cavities by evaluating how the filled cavities in their most unstable configuration could effect the soil supporting adjacent structures and thereby influence structural behavior. Barneich at 10. Using an assumption that the cavity at well 8 was 25 times larger than its known size and a pore pressure ratio which was stated to be conserative, the results of the analysis of the stability of well 8 was extrapolated to wells 6 and 7, thus covering all three wells which were found to be of controlling significance due to their size and proximity to the seismic category I structures. Barneich at 8, 13. The results of the static and dynamic analyses of the possible effects of the cavities were found to result in a maximum reduction in soil stiffness for any structure of 8%, well within the 30% variation used in the design of the structures, and a calculated maximum settlement of less than one-tenth of an inch, well within the maximum settlement of the original design which was estimated to be less than 1/2 inch. Barneich at 14-15; McNeil at 13. Based on these analyses, Applicants concluded that all

<sup>10/</sup> See Part V of Appendix A to 10 C.F.R. Part 100.

cavities at the site had been detected and accurately evaluated and that they would have no detrimental effect on the operation of SONGS 2 and 3, since they had been adequately demobilized by backfilling with sand, gravel, and/or grout. Barneich at 18; McNeil at 15, 16.

B. The Staff Affidavits

The attached affidavits submitted by the Staff's experts<sup>11/</sup> support the conclusion that the Applicants have adequately investigated the site for voids and cavities and that existing voids and cavities have been adequately filled. Moreover, analyses done by the Staff support the conclusion that even if it is conservatively assumed that the fill materials were assumed to fail in the worst possible manner, the voids would pose no significant hazard to the seismic category I structures on site.

The affidavit of John T. Greeves, Staff geotechnical engineering reviewer for the SONGS 2 and 3, shows that exploratory drilling, mechanical measurements and geophysical surveys conducted at the site in accordance with Reg Guide 1.132 and the investigation of the twelve dewatering wells at or adjoining the site<sup>12/</sup> were performed to define the location and extent of each and every cavity at the site. Greeves at 2. Sand, grout and concrete

<sup>11/</sup> Affidavits of J. Greeves (Attachment 1) and of R. Lipinski (Attachment 2). We would note, however, that contrary to Applicants' assertions (e.g., Motion at 11, 16, 17, Statement of Facts at 3, Affidavit of Hersh at 10), the NRC Staff has not previously approved or authorized any activity with respect to natural treatment of the dewatering cavities or the adequacy thereof.

<sup>12/</sup> Two wells are located offsite. Greeves at 3.

were used to fill the cavities in accordance with standard practice. Greeves at 3. In addition, analyses were performed on dewatering wells 6, 7 and 8, the only cavities of sufficient size and proximity to the SONGS 2 and 3 to have an effect on them. Greeves at 2. An analysis done on well 8 and extrapolated to wells 6 and 7 shows that the generation and dissipation of excess pore pressure (the potential reduction in stiffness and support characteristics of the filled cavity) showed a maximum reduction in overall soil stiffness of only 4 to 5% (Greeves at 5), a reduction which was thought by the Staff to be small when compared with the 30% variation the plants' seismic category I buildings were designed for.

However, in addition to seismic category I buildings, the Applicants' investigation of the dewatering well cavity situation revealed that dewatering well cavity 8, assumed to be some 25 feet in width and underlying an electrical cable tunnel of safety significance, had the potential to affect plant safety. Greeves at 6. The affidavit of Romuald Lipinski, the Staff expert on structural engineering and the SONGS 2 and 3 reviewer for design and analysis of seismic category I structures, revealed that the Applicants had performed an analysis which assumed a combination of the three components of seismic response, assumption of a box-type beam response for the tunnel for flexural conditions, and seismic loading calculated at 1.5 times the peak response of the applicable response spectrum. Lipinski at 4. Although the results of the analysis appeared to be conservative in that the study assumed that the tunnel would be completely unsupported in the area of the

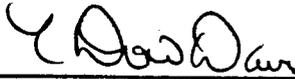
cavity and the study appears to indicate that there will be no safety degradation of the tunnel due to the cavities, questions remained since the analysis did not use the SRSS method. In addition, the Staff believed that stresses in the discontinuity of the tunnel might be higher when an abrupt change in conformity of the cross section of the tunnel might produce "stress risers" which could become a critical section of the tunnel's structural analysis. Lipinski at 5. Accordingly, the Applicants were asked by the Staff for additional information in the form of a confirmatory analysis designed to verify that their previous analysis submitted for review is conservative. Lipinski at 6. As noted in the Lipinski Affidavit, the results of the additional analysis submitted by the Applicants confirmed the Applicants' earlier conclusion that dewatering well cavity number 8 would have no adverse effect on the electrical cable tunnel or any other seismic Class I structure. Lipinski at 6-7.

#### IV. Conclusion

For the foregoing reasons, the NRC Staff believes that there is a reasonable assurance that the SONGS 2 and 3 seismic category I buildings will not be adversely affected by dewatering cavities and that no genuine issues of material fact remain to be litigated as to this issue, such that summary disposition should be granted as a matter of law. For that reason, summary

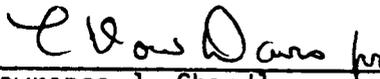
disposition should be granted on Intervenors' contention 1(a) concerning dewatering well cavities and the matter dismissed.

Respectfully submitted,



---

L. Dow Davis, IV  
Counsel for NRC Staff



---

Lawrence J. Chandler  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 15<sup>th</sup> day of August, 1980.