UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Appeal Board

In the Matter of

Cleveland Electric Illuminating Co., et al
(Perry Nuclear Power Plant, Units 1 and 2)

Docket Nos. 50-440-OL
50-441-OL

Sunflower Alliance Inc., et al Response to Applicant's Motion for Directed Certification

Sunflower Alliance Inc., et al intends by this filing to respond to Applicant's Motion for Directed Certification and urges that the Atomic Safety and Licensing Appeal Board deny Applicant's Motion.[1] The history of this matter is sufficiently set out in the Licensing Board's order and need not be repeated here. Also see OCRE's response to Applicant's Motion for Directed Certification.

I. Applicant's Have Not Met The Standard For Directed Certification.

Applicant's have wholly failed to comply with their burden to establish that this instance is a case for directed certification. The Licensing Board's action in admitting a new contention dealing with hydrogen control is not a situation where directed certification applies. The Appeal Board has neither the time nor the ability to review all the interlocatory procedural orders that licensing boards issue during the course of a year. Public Service Co. of Indiana, Inc. (Marble Head Nuclear Generating Station, Units 1 and 2), 5 NRC 727, 768 (1977).

[1] Counsel for Sunflower Alliance wishes to respond to the Board's Order dated April 2, 1982. Initially, Counsel was advised that a letter requesting a brief extension of time was sufficient. Obviously, Counsel erred. No intent to subvert the rules of this Board was intended. Secondly, the letter was sent prior to Counsel's receiving notification of the membership of the Appeal Board Panel. Counsel had no intention of causing offense to any member of the Panel and apologizes.

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Further, strict standards have been established to be followed by parties seeking directed certification. There must be some showing that either the public interest will suffer or that some unusual delay or expense will be encountered. Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), 1 NRC 478, 483, ALAB-271, (1975). At no point in Applicant's Motion is there any reference to how the public interest will suffer by the admitting of Contention 8. Applicant's interest is not necessarily the public interest. Nor does Applicant address the question of delay. Rather, the entire Motion is an attack on the Licensing Board and the manner in which the Licensing Board is carrying out its duties. Applicant's disagreement with the Licensing Board is not sufficient to justify directed certification.

Recently, the Appeal Board has consistently followed the following standard in ruling on Motions for Directed Certification:

> ...almost without exception in recent times we have undertaken discretionary interlocutory review only where the ruling below either (1) threatened the party adversely affected by it with immediate and serious irreparable impact which, as a practical matter could not be alleviated by a later appeal or (2) affected the basic structure of the proceeding in a pervasive or unusual manner. Puget Sound Power and Light Co.(Skagit Nuclear Power Project, Units 1 and 2), 10 NRC 693, 694, ALAB-572 (1979). Also see Public Service Electric & Gas Co. (Salem Nuclear Generating Station, Unit 1), ALAB-588 (1980)

Applicant has wholly failed to meet these tests. The obvious disagreement between the Licensing Board and Applicant does not meet the criteria established by the Appeal Board for directed certification. Hence, the Appeal Board may deny the Motion without further consideration.

II. Douglas Point

Applicant's entire case is based on the decision known as Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), 8 AEC 79 (1974). Applicant's argue that Douglas Point read in conjunction with the proposed rule in 45 F.R. 82211 (1981) " Interim

Requirements Related to Hydrogen Control" prohibit the Licensing Board from hearing Sunflower's Contention. This is simply not the law.

First, the Commission did not expressly prohibit Licensing Board's from hearing contentions on hydrogen control in 45 F.R. 62281 (1981). There is nothing in the proposed rule which suggests this. The underlying theme in Douglas Point is that if the Commission expressly forbids a licensing board from hearing a contention the licensing board must obey. Thus, Douglas Point is not controlling in this instance. The Commission knows full well that there are pending licensing proceedings. The Commission knows full well that hydrogen control is an important concern. Had the Commission intended that licensing boards refrain from the issue of hydrogen control, presumably it would have said so.

Second, the contention is not an attack on 10 CFR 50.44 because this regulation is not applicable to Mark III containments. That is, the Licensing Board below is not precluded from the issue by the only regulation currently in effect.

Finally, let us look at the contention:

> Applicant has not demonstrated that the manual operation of two recombiners in each of the Perry units is adequate to assure that large amounts of hydrogen can be safely accomodated without a rupture of the containment and a release of substantial quantities of radioactivity into the environment.

The contention asks the question whether Applicant's current plan for the installation of two recombiners is adequate to accomodate large amounts of hydrogen. The proposed rule deals with an entirely different concern. The rule may require the installation of hydrogen control systems adequate to accomodate an amount of hydrogen equivalent to that generated from the reaction of 75% of the fuel cladding with water without the loss of containment integrity. The proposed rule deals with containment integrity which properly is a generic issue. The admitted contention deals with

the adequacy of two recombiners per unit. This is not a generic issue. The contention deals in specifics and deals with issues specific to the Perry plant. Thus, the characteristics of the Perry plant and its four recombiners are at issue not the issue of containment integrity.

Regardless of the method of hydrogen generation, the contention aks whether the recombiners will work. NUREG/CR-1561 discusses the ability of recombiners to operate efficiently:

> ...recombiners are meant to handle low H_2 concentrations, such as those resulting from the radiolytic decomposition of water. For metal-water reactions, they are inadequate... pg 12.
>
> ...recombiners are used in off-gas systems in BWR's; there have been explosions in these systems... pg 49.
>
> ...at H_2 concentrations above 4%, the recombiners become an ignition source... pg 215

Regulatory Guide 1.7 at page 1.7-4 states:

> ...H_2 recombiners have limited flow rate of 100 - 150 cfm; thus an inordinately large number would be needed...(note: Perry has two recombiners/ unit, with flow rate of 100 cfm.)

NRC Staff states at 46 F.R. 62282:

> ...control methods that do not involve burning provide protection for a wider spectrum of accidents than do those that involve burning. Recombiners involve a controlled burn...

General Electric Co. in connection with its presentation included in SECY-80-107A admits that recombiners are impractical for significant H_2 rates.

Sunflower urges that Douglas Point is simply inapplicable. The Licensing Board is not on a frolic of its own. The rule set forth in Douglas Point is inapplicable because the Commission itself has not closed off Licensing Boards. Finally, the contention as admitted has nothing to do with the subject matter of the proposed rule.

Applicant also relies upon Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), ALAB-655, 14 NRC 799 (1981) and South Carolina Electric & Gas Co.(Virgil G. Summer Nuclear Station, Unit 1), ALAB-663, 14 NRC_____, slip op. (1981). Summer, op cit., is

not applicable. In Summer, the Licensing Board ignored an order issued to it from its superior, the Appeal Board. In the case at bar, the Licensing Board is not violating an express order directed to it by the Appeal Board or the Commission. The Rancho Seco decision is not applicable either because of its exclusive reliance on Douglas Point which itself is not applicable. The issue of the efficiency of recombiners is not involved in the proposed rule making. For these reasons, Sunflower Alliance urges that Douglas Point, regardless of whether it is good law, simply is not applicable.

III. TMI- 11 NRC 674, CLI-80-16

Applicant ignores the fact that this contention has been expressly authorized by the Commission itself in the TMI-Restart case, cited above. Hydrogen control can be litigated under 10 CFR Part 100. (Obviously, under these circumstances, Douglas Point and Rancho Seco lose all semblence of authority). 10 CFR 100.10, among other things, permits licensing boards to consider the following factors:

> ...(a) characteristics of reactor design and proposed operation including:...(2) the extent to which generally accepted engineering standards are applied to the design of the reactor; (3) the extent to which the reactor incorporates unique or unusual features having a significant bearing on the probability or consequences of accidental releases of radioactive materials; (4) the safety features that are to be engineered into the facility and those barriers that must be breached as a result of an accident before a release of radioactive material to the environment can occur.

The contention as framed clearly falls into the 10 CFR Part 100 guidelines. The contention is whether the two recombiners per unit can cope with hydrogen. Clearly, these are design and engineering considerations because if the two recombiners per unit can't cope with the hydrogen then there is a significant engineering defect that could and will result in a release of radioactive materials into the environment.

The Licensing Board clearly acted within its authority under Part 100 and within the authority granted to it by the Commission. Applicant disagrees. This entire proceeding is premised on this disagreement. Naturally, the Applicant has the right to disagree with the Licensing Board. But, the Applicant does not have the right to bring this disagreement to the attention of the Appeal Board at this time.

IV. Late Filed Contentions

Applicant's argument concerning late filing is without merit. As Applicant admits, the Licensing Board granted Sunflower the right to renew its hydrogen contention at a later time at the prehearing conference. Secondly, the issue of good cause is one for the Licensing Board as the Appeal Board has ruled time and time again. Public Service Co of Indiana Inc. (Marblehead Nuclear Generating Station, Units 1 & 2), 5 NRC 767, 768 (1977). The Licensing Board has plenary authority over questions of lte filed contentions. Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-389 (1977)

V. Credibility Issue

It is quite clear that to litigate hydrogen mitigation, Sunflower must set forth a credible accident scenario under 10 CFR Part 100. Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit No. 1), 11 NRC 674 (1980). Also see Duke Power Co. (William B. McGuire Nuclear Station, Units 1 & 2), ALAB-669, slip op. at 18.

Perry uses a Mark III containment. Its design pressure is 15 psi. Each containment structure has a volume of 1,400,00 cubic feet. A BWR has about twice as much zirconium cladding as a PWR, so there is a greater potential for large amounts of H_2 to be produced. The metal-water reaction itself releases heat, thus further aggravating the accident.(temperature increase of 1000 degrees C possible, NUREG/CR-1561, pg. 37). Hydrogen production from a metal-water reaction occurs at an exponential rate. Large amounts of H_2 can be produced within minutes of core overheating.

With these facts in mind and keeping in mind the manual operation of the recombiners, Sunflower believes that it has set forth a credible accident sequence. Credible has not been defined. The Appeal Board did review in great detail a sequence of events in McGuire, op cit. The issue of "credible" must of necessity be determined on a case by case basis. The Licensing Board believed that Sunflower had met this test. The Appeal Board ought not tamper with the Licensing Board determination absent some compelling reason. Applicant has not provided us with that reason.

For these reasons, Sunflower urges that the Motion for Directed Certification be denied.

Respectfully submitted,

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Proof of Service

The undersigned certifies that a copy of the foregoing brief has been sent to all persons listed on the attached service list on this 15 day of April, 1982.

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