# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL. Docket No. 50-440 OL 50-441 OL

(Perry Nuclear Power Plant, Units 1 and 2)

# NRC STAFF RESPONSE TO SUNFLOWER ALLIANCE MOTION SEEKING ADMISSION OF LATE CONTENTION ON SHIFT ROTATION

#### I. INTRODUCTION

On September 10, 1982, Sunflower Alliance, Inc., et al.

("Sunflower") served "Sunflower Alliance et al. Motion to Submit an Additional Contention" ("Sunflower's Motion"), seeking leave to further amend its intervention petition to add a contention on the subject of shift rotation of workers at the Perry Nuclear Power Plant ("Perry"). Sunflower did not state its contention separately, but the Staff assumes it is found somewhere within the following three paragraphs of

Sunflower's motion:

Recent studies, documented in <u>Science News</u>, July 31, 1982 at 69 (attached), indicate that unnatural shift rotations may increase the likelihood of errors made by workers. Experiments show that workers adapt more easily to a forward shift rotation and to less frequent shift rotations.

Sunflower Alliance is concerned that PNPP workers, particularly control room operators, may be forced to work unnatural shift rotations. This may lead to human error in the operation and maintenance of the plant. Human error is known to be a problem which can degrade the safety of nuclear power plants. The Applicants' FSAR does not detail the shift rotations required by

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workers. However, such information should be readily available through discovery. Therefore, Sunflower Alliance contends that Applicants should design shift rotation schedules in conformance with circadian principles, as identified in the <u>Science News</u> article.

As discussed further below, the Staff opposes the admission of a contention on shift rotation schedules as being beyond Commission regulatory requirements, lacking basis and particular nexus to the Perry plant, and impermissibly late under 10 CFR Section 2.714(a).

### II. DISCUSSION

# A. Sunflower's Contention is Impermissibly Late

The Licensing Board should dismiss Sunflower's contention based on its untimeliness. The Staff believes a balancing of the factors in Section 10 CFR 2.714(a) weighs heavily against admission at this stage of the proceeding.

Although this Licensing Board has noted that new information appearing in recent publications, such as <u>Science News</u>, may constitute good cause for otherwise untimely contentions, Memorandum and Order, July 12, 1982, slip op. at 4, this is not the case here. As discussed by Applicants, the possibility of applying circadian principles to shift work schedules has appeared in The New York Times and two popular magazines over the last four years. Applicants' Answer to "Sunflower Alliance <u>Et Al</u>. Motion to Submit an Additional Contention", September 24, 1982, at 3. Therefore, use of the July 31, 1982 <u>Science News</u> to excuse this late contention is a weak basis for a finding of "good cause" under 10 CFR Section 2.714(a).

Second, as discussed more fully in Part II.B below, Sunflower's interest in the matter of shift rotation is not based upon any asserted deficiency in the Applicants' plans for operating the Perry facility.

Any interest it may have in this generic question may be protected by filing a petition for rulemaking. 10 CFR Section 2.802. [Section 2.714(a)(1)(ii)].

Third, the hypothetical language used in Sunflower's Motion, the absence of any documentation in the <u>Science News</u> article tending to substantiate a relationship between shift rotation and safety, and the need for additional research in this area noted by the Commission in NUREG-0737 (see discussion, <u>infra</u>.), suggest that Sunflower's participation is unlikely to assist in developing a sound record on this matter. [Section 2.714(a)(1)(iii)]. Indeed, Sunflower points to no particular expertise it would bring to bear, or contribution it might make, in developing a record on this issue and, in essense, has failed to address this factor.

As to the fourth factor, while the Staff concedes that no other party will represent Sunflower's interest, this factor, as well as the second factor are to be accorded relatively less weight in the balancing process. <u>South Carolina Electric and Gas Co., et al.</u> (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, at 895 (1981).

Fifth, there can be no doubt that Sunflower's new contention would open up an entirely new area of contention not now a specific subject of this proceeding. Thus, admission of the contention would clearly broaden the issues, and the time needed to develop a record would likely result in some delay in this proceeding. [Section 2.714(a)(1)(v)].

In summary, only the fourth factor clearly favors admission of this contention. Sunflower's good cause for its late contention is extremely weak, if not wholly nonexistent, there are other means to protect its

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interest, it has failed to show that it can make any contribution to the record on the issue, and admission of the contention will clearly broaden the issues and arguably delay the proceeding. On balance, the five factors weigh substantially against admission of this late filed contention and it should be rejected.

B. Even If Not Rejected As Untimely, Sunflower's Shift Rotation Contention Should Be Rejected As An Impermissible Challenge To NRC Regulations and for Lack of Basis

Sunflower's contention suffers from two fatal flaws: (1) there is no requirement in NRC regulations as augmented by recent Commission guidance that requires use of a specific type of shift rotation, and and thus the contention is an impermissible challenge to Commission regulations under 10 CFR Section 2.758; and (2) Sunflower's contention is not based upon specific assertions of deficiencies related to the Perry facility, and therefore fails to meet the 10 CFR Section 2.714(b) basis requirement.

 Since NRC Regulations Do Not Impose any Requirement as to the Direction or Frequency of Shift Rotation, Sunflower's Contention Challenges Commission Regulations Contrary to 10 CFR Section 2.758

It is a well-settled principle in NRC proceedings that, in general, the adequacy of Commission regulations may not be challenged in individual licensing proceedings. 10 CFR Section 2.758. This Licensing Board has already had occasion to recognize this principle in ruling on another contention in this proceeding. <u>See LBP-81-24</u>, 14 NRC 175, at 227 (1981). A party may seek waiver or exception from application of a specified regulation, based on a showing that "special circumstances with respect to the subject matter of the particular proceeding are such chat

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application of the rule or regulation or provision thereof would not serve the purposes for which the rule or regulation was adopted." 10 CFR Section 2.758(b)-(d). However, where the contention seeking to impose requirements beyond those in the regulations raises a generic issue unrelated to a particular plant, a petition for rule-making, rather than a waiver petition, is the more appropriate response. See, Metropolitan Edison Company, (Three Mile Island Nuclear Station, Unit No. 1), CLI-80-16, 11 NRC 674, at 675 (1980). The Commission has, pursuant to its Statement of Policy: Further Commission Guidance for Power Reactor Operating Licenses, CLI-80-42, 12 NRC 654, 660 (1980). permitted parties in individual licensing proceedings to challenge, without a showing of special circumstances, either the necessity or sufficiency of TMI-related requirements found in NUREG-0737 which supplement already existing regulations. Nevertheless, the Commission has provided further guidance that "[c]ontentions which address a safety concern not considered in NUREG-0694 and -0737 shall not be entertained as challenges to the sufficiency of these requirements." Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-5, 13 NRC 361, 363 (1981).

Applying these considerations to Sunflower's shift rotation contention, it is clear that this contention may not be admitted to this proceeding. First, those portions of the regulations  $\frac{1}{}$  and Commission guidance  $\frac{2}{}$  which address whether an applicant's onsite operating

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<sup>1/ 10</sup> CFR Section 50.40(b) and 50.54(j)-(m).

<sup>2/</sup> NUREG-0737, Item I.A.1.3 and NUREG-0800, Section 13.1.2--13.1.3, including applicable Regulatory Guides referenced therein. See also, "Policy on Factors Causing Fatigue of Operating Personnel at Nuclear Reactors", 47 Fed. Reg. 23836, June 1, 1982, revising earlier policy statement of February 11, 1982 (47 Fed. Reg. 7352).

organization is sufficient to assure safe operation of the plant do not contain any requirement for a particular direction or frequency of shift rotation. Item I.A.1.3, "Shift Manning", of NUREG-0737, "Clarification of TMI-Action Plan Requirements", which, pursuant to the Commission's <u>Revised Policy Statement, supra</u>, is applicable to NEC review of all new license applications, contained interim criteria for shift staffing and restrictions limiting the amount of overtime for plant staff who perform safety-related functions and, as previously noted, the Commission recently has had occasion to revise its policy statement on the specific subject of overtime. However, none of these policy statements contains any guidance on shift rotation direction or frequency. In fact, Item I.A.1.3 contains the following observation:

The staff recognizes that there are diverse opinions on the amount of overtime that would be considered permissible and that there is a lack of hard data on the effects of overtime beyond the generally recognized normal 8-hour working day, the effects of shift rotation, and other factors. NRC has initiated studies in this area. Until a firmer basis is developed on working hours, the administrative procedures shall include as an interim measure the following guidance, which generally follows that of IE Circular No. 80-02.

NUREG-0737, at p. I.A.1.3-1. Thus, the Commission has directed its concern to minimum shift manning levels and maximum overtime for plant staff performing safety-related functions, and identified the effects of shift rotation as a separate concern from overtime deserving further study. Since the Commission has indicated that contentions challenging the sufficiency of TNI Action Plan items are "limited to the particular safety concern that prompted the specific 'requirements' in NUREG-0694 and -0737" <u>Diablo Canyon</u>, <u>supra</u>, CLI-81-5, 13 NRC at 363, and shift rotation was specifically excluded from the scope of the concerns therein being

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addressed, a contention thereon "shall not be entertained". <u>Id</u>. at 364. Moreover, even if Sunflower had relied upon a supplementary TMI-Action Plan item (which it did not), it must still state as a basis for its contention the manner in which "compliance with the Commission's Regulation is not a sufficient basis upon which to grant a license." <u>Public Service Company of New Hampshire, et al</u>. (Seabrook Station, Units 1 and 2), slip op. at 36, September 13, 1982 (basis for requiring testing of environmental qualification of electrical equipment beyond regulatory requirements not demonstrated). <u>See also</u>, <u>Seabrook</u>, ALAB-422, 6 NRC 33,42 (1977). Sunflower has not provided this basis.

Finally, applying this Licensing Board's fifth criterion for judging the admissibility of contentions, even if all the facts alleged in the contention were proved, [i.e., there were a relationship between safety and shift rotation] those facts would not require imposition of a licensing condition or the denial of an operating license. LBP-81-24, <u>supra</u>, 14 NRC at 184. As noted by the Commission in <u>Three Mile Island</u>, CLI-80-16, <u>supra</u>, the proper vehicle for raising a concern of this nature is a petition for rulemaking. There is no legal basis for admitting Sunflower's contention in this proceeding.

2. Sunflower's Contention Lacks a Nexus to the Perry Facility

Sunflower's Motion asserts that "unnatural shift rotations <u>may</u> increase the likelihood of errors made by workers" (emphasis added), and control room workers "may" be forced to work unnatural shift rotations which "may lead to human error" -- a problem area which "can" degrade the safety of nuclear power plants. Sunflower's Motion at 1. One can only conclude from these statements that Sunflower doesn't know whether shift

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rotation presents a safety concern, and would like to explore this possibility in this proceeding. Sunflower admits that it has no basis founded in the Applicant's plans when it requests discovery to learn more about shift rotations anticipated at Perry.<sup>3</sup>/ Moreover, due to the speculative nature of its contention, Sunflower has not, and very likely cannot, provide "either a reasonable explanation or plausible authority for [its] factual assertions." LBP-81-24, <u>supra</u>, 14 NRC at 184. As a result, Sunflower's contention does not meet the basis requirement of 10 CFR Section 2.714(b) and should be dismissed.

# III. CONCLUSION

Sunflower's additional contention on shift rotation is impermissibly late, is barred as a challenge to NRC regulations, and is too speculative and lacks the necessary nexus to Perry to provide the basis required by Section 2.714(b). In view of the foregoing, this new contention should be rejected.

Respectfully submitted,

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Counsel for NRC Staff

Dated at Bethesda, Maryland this 30th day of September, 1982.

<sup>3/</sup> The principle that an intervenor may not obtain discovery for the purpose of providing the basis for admitting a contention was recently reaffirmed in Duke Power Co., et al. (Catawba Nuclear Station, Units 1 and 2), ALAB-687, August 19, 1982, slip op. at 11. See also, Northern States Power Co. (Prairie Island Nuclear Generating Plant, Units 1 and 2), ALAB-107, 6 AEC 188, 192, aff'd, CLI-73-12, 6 AEC 241, aff'd sub nom., BPI v. AEC, 502 F. 2d 424 (D.C. Cir. 1974).