

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

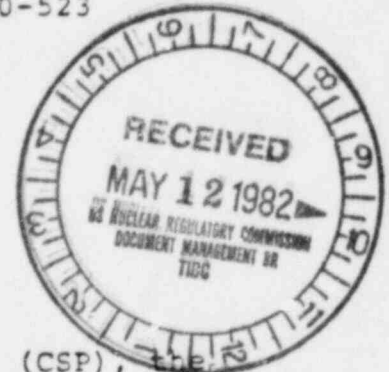
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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
PUGET SOUND POWER & LIGHT)
COMPANY)
)
(Skagit/Hanford Nuclear)
Project, Units 1 & 2))

Docket Nos. STN 50-522
STN 50-523

APPLICANT'S ANSWER TO SUPPLEMENTAL
PETITIONS TO INTERVENE AND MOTION FOR
EXTENSION OF TIME



On April 20, 1982, the Coalition for Safe Power (CSP), the Natural Resources Defense Council, Inc. (NRDC), and the National Wildlife Federation and the Oregon Environmental Council (NWF/OEC) each served an amended petition to intervene in this construction permit proceeding for Skagit/Hanford Nuclear Project (S/HNP).— Each amended petition included a list of proposed contentions which the petitioner desires to litigate and, in the case of NWF/OEC, an amended statement of interest.—

—/ "Supplement to Amended Petition for Leave to Intervene by Coalition for Safe Power"; "Supplement to Amended Petition of the National Resources Defense Council, Inc. for Leave to Intervene: Contentions"; "Amended Petition to Intervene" by NWF/OEC and "Supplement to Petition to Intervene of National Wildlife Federation and Oregon Environmental Council."

—/ CSP also served a "Motion for Extension of Time" to file additional contentions, based upon the allegation that it did not receive copies of Amendment 5 to the ASC/ER and the PSAR until four days prior to the filing deadline for contentions and the fact that the NRC Staff has not yet issued all of its evaluations of S/HNP. This motion is premature and should be denied. It is completely uncertain (footnote continued)

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The Applicant hereby submits its answer to these amended petitions.

Amended Petition of the NRDC

The NRDC has proffered four contentions related to need for power and alternatives to the plant which it desires to litigate. The NRDC also provided a basis for each contention. The Applicant has no objection to the admission of these contentions as refined by and limited to the bases supplied by NRDC.

Amended Petition for NWF/OEC

In its amended petition NWF/OEC supplied new information to justify its standing to intervene. NWF/OEC identified members who allegedly live within fifty miles of the proposed site for S/HNP and who allegedly would be affected by an accidental release of fission products from the plant. Based upon this information, the Applicant has no objection to the standing of NWF/OEC to intervene in this proceeding.

NWF/OEC also proposed six contentions for admission into this proceeding.

The first two contentions merely incorporate the NRDC contentions on need for power and alternatives. For the reasons given above, the Applicant has no objection to the admission of these contentions.

(footnote continued)

whether CSP will in fact desire to submit additional contentions following a review of these documents and evaluations. Moreover, it is impossible to determine whether admission of late-filed contentions is warranted without knowing the nature of those contentions. Consequently, the Board should deny the motion without prejudice to the later submission of untimely contentions pursuant to 10 CFR § 2.714(a).

The third contention alleges that the "Applicant has used an inaccurately low estimate of the environmental and financial cost of the project in its benefit/cost ratio," and it includes several bases for this allegation. With the exceptions provided in the footnote below, the Applicant has no objection to the admission of these contentions as refined by and limited to the bases supplied by NWF/OEC.-/

The fourth contention alleges that the Applicant has not assessed the environmental impact of greater use of hydro resources for peaking power. In particular, NWF/OEC relies upon the following statement on page 1.0-3 of the ASC/ER:

The [Pacific Northwest] region foresees even greater usage of hydro resources for peaking, with thermal resources, such as the proposed Skagit/Hanford Nuclear Project, operating as baseload units at high plant factors, except during periods when sufficient water supply is available to displace thermal generation.

The implied premise of Contention 4 is that greater usage of hydro resources for peaking will be necessary as a result of operation of S/HNP, and therefore that the Applicant and the NRC should be required to consider any environmental impacts attributable to that greater usage.

-/ The second paragraph of basis "D" for Contention 3 alleges that the Applicant has failed to consider the environmental costs of the use of hydroelectric power for peaking purposes. As is discussed infra with respect to NWF/OEC Contention 4, such a consideration is not required and is outside of the scope of this proceeding. Basis "B" for Contention 3 alleges that the Applicant has not accounted for decommissioning costs. That allegation is incorrect. See Application for Site Certification/Environmental Report (ASC/ER) for S/HNP, Section 5.8.

This premise is entirely without foundation. The demand upon the Applicant's system for peaking power is completely independent of whether the Applicant employs hydro, fossil, nuclear, or other sources to supply base-load power. Consequently, as a result of operation of S/HNP, usage of hydro resources for peaking power will not increase beyond what would have occurred if S/HNP does not operate. Since there is no relationship between greater usage of hydro resources for peaking power and operation of S/HNP, there is no requirement that the Applicant or the NRC evaluate the environmental impacts of such greater usage. In fact, evaluation of such usage is foreclosed since it would require inquiry into matters outside the scope of this proceeding. Therefore, this proposed contention should not be admitted into this proceeding.

The fifth contention asserts that a "critical factor in the financability" of S/HNP under 10 CFR § 50.33(f) is whether the output of the project will be acquired by Bonneville Power Administration. Apparently, NWF/OEC is not familiar with a recent amendment of Section 50.33(f) which eliminated the requirement to consider the financial capability of electric utility applicants for licenses to construct or operate power reactors. 47 Fed. Reg. 13750 (March 31, 1982). Consequently, this proposed contention should be rejected as a challenge to the Commission's rule. See 10 CFR § 2.758(a).

NWF/OEC's final contention states that the "Commission should not issue any construction permit or facility license

for Skagit/Hanford pending completion of the Waste-Disposal Confidence Proceeding." As a basis for this contention, NWF/OEC referred to 10 CFR § 50.35(a)(4) and alleged that "the required assurances with respect to the waste disposal hazards from Skagit/Hanford cannot be made" until completion of the "Waste-Disposal Confidence Proceeding."

Presumably, NWF/OEC is referring to the waste confidence proceeding arising from the decision in Minnesota v. NRC, 602 F.2d 412 (D.C. Cir. 1979). However, the court itself in that case authorized the Commission to issue license amendments pending completion of the waste confidence proceeding. Similarly, the Commission has stated that matters encompassed within the waste confidence proceeding should not be considered in individual facility licensing proceedings. 44 Fed. Reg. 61372 (October 29, 1979). See also Virginia Electric and Power Co. (North Anna Nuclear Power Station, Units 1 and 2), ALAB-584, 11 NRC 451, 463-65 (1980); Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-573, 10 NRC 775, 800 (1979). Consequently, proposed Contention 6 is contrary to the Commission's directives, and it should accordingly be rejected.

Amended Petition of CSP

CSP submitted seventy proposed contentions for consideration. Most of the proposed contentions are defective in that they do not fulfill the prerequisites for an admissible contention.

10 CFR § 2.714(b) requires the proponent of a proposed contention to "set forth with reasonable specificity" the basis

for each contention. Although this section does not require that a petitioner plead evidence, Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 547-49 (1980); Mississippi Power and Light Co. (Grand Gulf Nuclear Station, Units 1 and 2), ALAB-130, 6 AEC 423, 426 (1973), it does require that a proposed contention contain enough specificity and basis to put the parties on sufficient notice as to "what they will have to defend against or oppose." Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974). Thus, a proposed contention is not admissible if it contains only "vague generalized assertions, drawn without any particularized reference to the details of the challenged facility," Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), CLI-73-10, 6 AEC 173, 174 (1973), or if it does not "seek resolution of concrete issues," Peach Bottom, supra, ALAB-216, 8 AEC at 21, or if the only basis for the proposed contention is a reference to lengthy documents "without any attempt to direct specific attention to pertinent portions particularly germane to issues in this proceeding." Tennessee Valley Authority (Browns Ferry Nuclear Plant, Units 1 and 2), LBP-76-10, 3 NRC 209, 216 (1976). Finally it should be noted that a licensing board is under no obligation "to recast contentions offered by one of the litigants for the purpose of making those contentions acceptable." Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-226, 8 AEC 381, 406 (1974).

As is demonstrated below, most of CSP's proposed contentions fail to satisfy the requirements of Section 2.714(b). Many of

the proposed contentions are vague and lack sufficient specificity or a statement of basis to provide reasonable notice of what CSP desires to litigate. Other proposed contentions allege that the Applicant has "failed" to perform some activity or consider some subject which the Applicant had no legal obligation to perform or consider. Finally, in several cases, CSP contends that the Applicant did not consider certain matters when in fact it did.

These and other objections are more fully discussed below with respect to each proposed contention. In some cases, two or more of the proposed contentions are similar in nature and will be analyzed as a group.

Contention 1

1. Petitioner contends that Applicant has failed to show a need for the S/HNP as required by the National Environmental Policy Act and the Commission's rules. The need for the electrical generating capacity of the project has not been properly established because Applicant has not developed an adequate model which takes the following into consideration:

- a. voluntary curtailment of electrical consumption;
- b. the continuing poor economy of the region;
- c. Bonneville Power Administration incentives for conservation;
- d. elasticity of demand;
- e. peak load pricing to flatten demand;
- f. mandatory new construction standards for conservation and solar;
- g. mandatory standards for commercial and industrial space heating and cooling, lighting and appliance use;
- h. the effect of the Washington Public Power Supply System plants 1, 2, 3, 4, and 5 on electric rates; and
- i. the contribution of conservation and the alternatives.

CSP's contentions that the Applicant has not considered these or similar factors in its need for power analysis is without basis.

See ASC/ER Sections 1.1, 9.1.3, and 9.1.4. Consequently, this contention should be rejected.

Contention 2

2. Petitioner contends that Applicant fails to provide an end-use analysis for the projected demand of their forecast. Applicant overestimates the contribution of such end-uses as electric space heating and cooling and water heating.

CSP's contentions that the Applicant has not considered end-uses in its need for power analysis is without basis. See ASC/ER Sections 1.1. Additionally, CSP has not provided a basis for its contention that the applicant has overestimated demands from electric space heating and cooling and water heating. Consequently, this contention should be rejected.

Contention 3

3. Petitioner contends that if the projects are constructed the entire output of both units will be available for sale outside the region and at the high cost of their power it will not be competitive with other excess power sales.

This contention is extremely vague and ambiguous, and it is difficult to discern the precise point which CSP is raising. For example, CSP does not identify the "outside region" or the "other excess power sales" to which it is referring, nor does it specify what is meant by the term "the entire output of both units will be available." Furthermore, it is totally unclear whether this proposed contention is intended to address need for power in the Pacific Northwest region, need for power in other regions, the cost of generating electricity by S/HNP, or some other issue. Moreover, CSP has offered no basis for its contention that "the entire output of both units will be available for sale outside the region" or its contention that the "high cost of their

power . . . will not be competitive with other excess power sales." In summary, this proposed contention utterly fails to satisfy the requirements for specificity and basis.

Contention 4

4. Petitioner contends that any decision on need for power must include consideration of the Regional Forecast to be accepted by the Northwest Power Planning Council in April, 1983.

This proposed contention does not explain why a decision on need for power "must include" a consideration of the Regional Forecast and why it is not possible to arrive at an adequate decision without such a consideration. The Regional Forecast will be just one of many forecasts on the need for power in the Pacific Northwest, the need for power can be evaluated independently of the Regional Forecast (as many other forecasts have already proved), and the weight to be afforded the Regional Forecast cannot be determined in advance of its issuance. In short, there is no legal requirement or factual necessity which mandates that the decision on need for power consider the Regional Forecast. Consequently, this proposed contention is without basis and should be rejected.

Contention 5

5. Petitioner contends that the NRC and the ASLB cannot rely upon Applicant's forecast of future electrical needs. All of Applicant's forecast presented before the NRC in the original Skagit and Pebble Springs hearings grossly overstated the need for these projects. Furthermore, Applicant's original forecast had projected the operation of all five WPPSS plants by 1982.

This proposed contention is patently defective. It does not fault any specific of the Applicant's current need for

power analysis. Instead, it merely criticizes previous analyses which are not applicable to the present proceeding. Such a contention is irrelevant to this proceeding. See Consumers Power Co. (Palisades Nuclear Plant), LBP-79-20, 10 NRC 108, 123 (1979). See also Wisconsin Electric Power Co. (Point Beach Nuclear Plant, Units 1 and 2), LBP-81-55, 14 NRC 1017, 1025-26 (1981). Since Contention 5 does not present a subject matter for litigation in this proceeding, it should be rejected.

Contention 6

6. Petitioner contends that Applicant has failed to meet the requirements of NEPA and the Commission's rules by ignoring altogether the following energy resources as alternatives to the S/HNP:

- a. low-head hydro;
- b. cogeneration;
- c. utilization of ocean temperature differences;

and

- d. alcohol fuels,

thus overstating the need for the project.

CSP's contention that the Applicant has not considered low-head hydro and alcohol fuels is without basis. See ASC/ER, Sections 9.2.1.1.3 and 9.2.1.2.4. Consequently, Contentions 6.a and 6.d should be rejected.

The ASC/ER does not specifically consider utilization of ocean temperature differentials to generate electricity. CSP has not suggested that this alternative is either viable or environmentally preferable to S/HNP. Consequently, Contention 6.c should be rejected for lack of basis. Cf. Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1),

ALAB-590, 11 NRC 542 (1980) (the Appeal Board admitted a contention regarding biomass as an alternative, but only after the petitioner alleged that biomass was both available and environmentally preferable and after the petitioner referred to a published report as a basis for his contention).

Finally, Contention 6.b does not identify either the type of cogeneration facility which CSP contends should be considered or the source[s] of fuel for that facility. Moreover, CSP has not suggested that cogeneration is either environmentally preferable or a viable alternative to S/HNP, nor has it provided any other basis for contending that cogeneration should be considered as an alternative to S/HNP. Consequently, this contention contains neither the requisite specificity nor basis for an admissible contention, and it should be rejected.

Contention 7

7. Petitioner contends that Applicant has not given adequate or accurate consideration of the following energy alternatives as required by NEPA and the Commission's rules:

- a. geothermal;
- b. wind power;
- c. biomass;
- d. solar;
- e. fossil fuels; and
- f. conservation.

Specifically Applicant has failed to provide the existing use of these alternatives, future uses and site locations, the energy potential in quantitative data, the cost of the alternatives and their attendant health benefits in comparison to nuclear generating in the Northwest region.

The Applicant has considered each of these alternatives.

See ASC/ER, Sections 9.1 and 9.2. In each case, the alternative was rejected for one or more reasons, among which included

technical infeasibility and illegality of the alternative.

The National Environmental Policy Act (NEPA), 42 U.S.C. § 4321 et seq., embodies a "rule of reason" and only requires a "hard look" at alternatives. Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 834, 837-38 (D.C. Cir. 1972). See also Florida Power & Light Co. (Turkey Point Nuclear Generating, Unit Nos. 3 and 4), ALAB-660, 14 NRC 987, 1004 (1981). Nothing in either NEPA or the Commission's regulations requires the Applicant or the NRC to provide the type of detailed analysis suggested by this contention. In fact, conducting such an analysis for obviously inadequate, inferior, or unavailable alternatives would not comport with the "rule of reason." As the Appeal Board has stated: "The NEPA evaluation of alternatives is subject to a 'rule of reason,' and application of that rule 'may well justify exclusion or but limited treatment' of a suggested alternative." Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 100 (1977). The Applicant has taken a "hard look" at the alternatives listed in this proposed contention, and CSP's contention that the Applicant should have given further consideration to these alternatives is without a basis. Consequently, this proposed contention should be rejected.

Contention 8

8. Petitioner contends that the Applicant's discussion of alternatives ignores numerous studies showing that such alternatives would render the need for the S/HNP non-existent, including:

a. the Oregon Alternative Energy Development Commission;

- b. Energy Futures by the Harvard Business School;
 - c. Skidmore Owens & Merrill Report;
 - d. Region at the Crossroads, GAO; and
 - e. Rocket Report on co-generation.
- Thus the requirements of NEPA and the Commission's rules have not been met.

Neither NEPA nor the Commission's regulations require that an Applicant discuss every report which conceivably could relate to the alternatives under consideration. As long as a "hard look" has been given to alternatives, the requirements of NEPA and the regulations have been satisfied. NRDC v. Morton, supra. Consequently, this proposed contention should be rejected.

Moreover, this proposed contention is objectionable for several other reasons. First, the reports and their relevant portions are not sufficiently identified, thus rendering them inadequate as a basis for this contention. See Browns Ferry, supra. Second, the proposed contention does not even identify the particular alternatives to which it is referring, thereby rendering the proposed contention lacking in the requisite specificity. Finally, the proposed contention does not specify which portions of the Applicant's analysis are allegedly defective. In short, this proposed contention does not provide sufficient notice of what CSP desires to litigate, and therefore it should be rejected.

Contention 9

9. Petitioner contends that energy alternatives mentioned (sic) in contentions 5 and 6 above would be cheaper, more reliable and have greater socio economic and health benefits that the S/HNP based on the studies in contention 8 above.

Initially, it should be noted that Contention 5 does not mention any energy alternatives. Moreover, to the extent that this contention relies upon Contention 8, it suffers the same defects as Contention 8 and therefore should be rejected. Finally, CSP has not provided a proper basis for selection of these alternatives in preference to S/HNP, since it has not alleged that these alternatives are environmentally superior to S/HNP or that they are feasible alternatives to S/HNP. See Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 162-63 (1978).

Contention 10

10. Petitioner contends that Applicant falsely characterizes solar power in the northwest as "experimental" in its Environmental Report, Sections 1.1 and 9.2.

This proposed contention may be rejected on any one of several grounds. First, this contention incorrectly states that ASC/ER Sections 1.1 and 9.2 characterize solar power as "experimental"; those sections do not contain any such statement. Second, CSP has provided absolutely no basis for its contention that solar power is not "experimental." Finally, even if this contention is accepted as accurate in all respects, CSP does not specify what, if any, consequences should ensue. This proposed contention lacks specificity and basis, and therefore it is not admissible.

Contentions 11 and 12

11. Petitioner contends that Applicant wrongly weighs the geology of the proposed Hanford site as a "4" or "4.5" and thus jeopardizes the accuracy of the alternative site evaluation.

12. Petitioner contends that Applicant has wrongly weighed the alternate site issue on the basis of the political climate of the Hanford area. The location of the site distant from the load centers of the region has a negative effect on reserves and reliability as the Applicant testified in the Skagit proceeding, and thus increases the overall cost of the project. This cost far outweighs the political considerations.

CSP has provided absolutely no basis for its contentions that the Applicant wrongly weighed geology and the political climate- / in its alternative site analysis. Furthermore, CSP has not specified what the correct weights should have been, nor has it specified what effect, if any, the correct weights would have produced on the ultimate site selection.- / Consequently, these proposed contentions lack specificity and bases and should be rejected.

Contention 13

13. Petitioner contends that Applicant's architect/engineer, Bechtel Corporation, and nuclear steam system supplier, General Electric, are not technically qualified to engage in the proposed activities and cannot provide an adequate quality assurance program based on their previous record in similar ventures. Bechtel has been responsible for numerous safety errors including the failure to design and construct the Trojan Control Building to NRC requirements. General Electric has a history of design problems in BWR reactors.

This proposed contention does not contain a sufficient basis for admission. CSP's only basis for questioning the technical qualifications of General Electric is unspecified "design problems"

- / The Applicant did not weigh "political climate" as a separate factor in its alternative site analysis. See ASC/ER Section 9.3. Presumably, CSP is referring to the Category "socioeconomics/aesthetics/cultural resources" in the Applicant's analysis.

- / To the extent that CSP is alleging that the Applicant has not accounted for transmission costs, it is in error. See ASC/ER Table 9.3-5.

in BWR reactors. Since CSP has not specified the design problems to which it is referring, it has not provided an adequate basis for this contention. With respect to Bechtel, CSP has only identified alleged "safety errors" in the design and construction of the Trojan Control Building. Even if this allegation is assumed arguendo to be true, the existence of errors in one of numerous Bechtel projects is not a sufficient basis for questioning Bechtel's technical competence. Consequently, this contention should be rejected.

Contentions 14 and 15

14. Petitioner contends that the work force relied upon for construction of the project is not capable of constructing the units in conformance with NRC regulations. Over the years this workforce, from supervisors and quality assurance inspectors to construction work crews, has been responsible for numerous safety violations at the WPPSS nuclear projects 1, 2 and 4. These violations range from forgery of documents to improper construction methods.

15. Petitioner contends that contractors relied upon to perform the major construction work at the project are not capable of doing so in conformance with NRC regulations and thus the project would pose an undue risk to the public health and safety. In the past these contractors have been responsible for the numerous safety violations at the WPPSS nuclear projects 1, 2 and 4.

The premise of these contentions is that the particular workers, supervisors, quality assurance inspectors, and contractors, who allegedly were "responsible for numerous safety violations at the WPPSS nuclear projects 1, 2 and 4," will also be eventually employed to work on S/HNP. CSP neither identifies the particular persons in question nor the specific "safety violations" to which it is referring. These proposed contentions are based upon the unmitigated speculation that

unidentified personnel who allegedly were responsible for unspecified "safety violations" will eventually be hired for S/HNP and will be allowed by some unknown mechanism to cause further violations. Such a contention lacks both specificity and an acceptable basis.

Contentions 16 and 18

16. Petitioner contends that the Applicant understates the risk of theft of nuclear materials and sabotage attendant upon nuclear generation, the cost of which, when factored into the cost-benefit analysis would cause the overall cost of the facility to outweigh the benefits. Sabotage, as a common-cause failure, is not adequately evaluated in the Reactor Safety Study and is not included in the rebaselining for the S/HNP.

18. Petitioner contends that Applicant has not considered the effect of government actions on the Hanford Reservation in times of war on the S/HNP. The Reservation is a major source of plutonium for nuclear weapons and the site of many other defense-related activities.

These contentions allege that the Applicant has not adequately considered the effects of sabotage and war upon S/HNP. 10 CFR § 50.13 states that protective measures against sabotage and armed attacks need not be considered. Under NEPA's "rule of reason," there is no requirement to consider the environmental impacts of such acts. Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 851 (1973). Consequently, whether these contentions are interpreted as being related to environmental or to health and safety issues, the contentions should be rejected as requesting consideration of a subject not required by law.

Contention 17

17. Petitioner contends that Applicant has failed to provide an assessment of the threat to national security posed by a major accident at the S/HNP which would decrease the government's ability to maintain adequate security on the Hanford Reservation and to continued defense-related activities.

This proposed contention is totally lacking in basis and specificity. It does not identify the "defense-related activities" to which it is referring, it does not identify any basis for the speculation that an accident would cause a decrease in the security of the Hanford Reservation or "defense-related activities," and it does not specify any basis for the speculation that a decrease in the security of the Hanford Reservation of "defense-related activities" would threaten national security. Consequently, this contention should be rejected.

Contention 19

19. Petitioner contends that Applicant does not possess the technical ability to construct the proposed project in a manner consistent with NRC regulations. Applicant has never been engaged in a project of this magnitude and lacks the required expertise. One of the main reasons for the numerous safety violations and delays at the WPPSS nuclear projects has been the Permittee's inexperience as noted by the NRC project manager of WPPSS No. 2.

The fact that an applicant does not have experience in constructing a nuclear power plant is not a sufficient basis for challenging the technical qualifications of the applicant.

Northern Indiana Public Service Co. (Bailly Generating Station, Nuclear-1), LBP-74-19, 7 AEC 557, 567-68 (1974), aff'd ALAB-224, 8 AEC 244 (1974), rev'd Porter County Chapter v. AEC, 515 F.2d 513 (7th Cir. 1975), rev'd Northern Indiana Public Service Co. v. Porter County Chapter, 423 U.S. 12 (1975). Consequently, this contention should be rejected for lack of an adequate basis.

Contention 20

20. Petitioner contends that Applicant fails to show that adequate flexibility exists in its management system to handle the continuing regulatory changes which are in large part due to the TMI accident.

This proposed contention is completely lacking in specificity and basis. CSP does not define what it means by use of the term "adequate flexibility," and it does not specify any defects in Applicant's management or recommend any specific changes in Applicant's management. Furthermore, CSP has not provided any basis for the allegation that the Applicant's management lacks "adequate flexibility." This contention should be rejected.

Contention 21

21. Petitioner contends that Applicant has no intention of meeting the requirements imposed by the NRC. Applicant-Puget's management has stated that NRC regulations are too strict and only a relaxing of these standards would allow the construction and operation of the proposed projects.

This contention lacks specificity and basis. Even assuming arguendo that CSP has accurately related Applicant's position regarding the strictness of NRC regulations, it cannot reasonably be inferred from this position that Applicant has no intention of complying with the regulations. Consequently, this contention should be rejected.

Contentions 22 and 23

These contentions pertain to the financial qualifications of the Applicant. Apparently, CSP is not familiar with a recent amendment of the financial qualification rule which eliminated the requirement to consider the financial capability of electricity utility applicants for licenses to construct or operate power reactors. 47 Fed. Reg. 13750 (March 31, 1982).

Consequently, these proposed contentions should be rejected as a challenge to the Commission's rules. See 10 CFR § 2.758(a)

Contention 24

24. Petitioner contends that Applicant-Puget's survey on the Socio-economic cost of Electrical Energy Shortages is entirely outdated and cannot be relied upon in any decision-making process. Events have occurred in the past year in the Pacific Northwest regarding nuclear power, in particular the WPPSS projects, that have changed the attitudes of the majority of the region's residents.

CSP has provided absolutely no basis for its allegation that events regarding nuclear power in the last year have changed the attitudes of the majority of the region's residents regarding the costs associated with electrical shortages. Moreover, such an allegation contains a non sequitor; impacts resulting from electrical shortages are not logically related to perceived or actual costs of electrical generation, whether by nuclear power or any other form of electrical generation. Consequently, this proposed contention should be rejected for lack of an adequate basis.

Contention 25

25. Petitioner contends that Applicant has withheld the results of surveys done by member utilities that show electrical consumers prefer other means of supplying energy rather than nuclear power.

This contention lacks specificity and basis. CSP has not identified the survey in question, and it has not provided any basis for the allegation that the Applicant has "withheld" such a survey.

Moreover, even if this contention is assumed arguendo to be accurate, it is difficult to perceive its relevance to this proceeding. Whether or not consumers "prefer" nuclear power or some other form of electrical generation has no bearing on the environmental impacts caused by construction and operation of S/HNP or on the cost/benefit balance for the plant. Consequently, this contention should be rejected.

Contention 26

26. Petitioner contends that Applicant has not accounted for the financial burden placed on rate-payers by the proposed project and its economic effects in their cost-benefit analysis.

CSP's contention that the Applicant has not considered the economic costs of S/HNP is without basis. See ASC/ER, Section 8.2. Consequently, this contention should be rejected.

Contention 27

27. Petitioner contends that Applicant grossly underestimates the unemployment created by the proposed project. Applicant fails to discuss the negative impact of increased electrification of industrial operations upon employment. Applicant further fails to provide a comparison of employment provided by the S/HNP and other energy alternatives.

This proposed contention consists of three independent statements, each of which is deficient as a contention.

The first sentence contains an incorrect implication. The Applicant has not estimated that any unemployment will be created by S/HNP; to the contrary, Applicant estimates that construction and operation will provide jobs. See ASC/ER, Section 8.3.8.2. To the extent that CSP is contending that the Applicant has over-estimated the amount of jobs to be created by S/HNP, it has

provided no basis for this contention.

The second sentence alleges that the Applicant has not discussed negative impacts upon employment as a result of increased electrification of industrial operations. However, any alleged increased electrification would be a product of independent decisions made by third parties which have no discernable relationship to licensing of S/HNP; therefore increased electrification is not relevant to this proceeding. In any case, the Commission has already held that NEPA does not require a consideration of the environmental impacts associated with the use of electricity, Consumers Power Co. (Midland Plant Units 1 and 2), CLI-74-5, 7 AEC 19, 27-28 (1974), rev'd on other grounds Aeschliman v. AEC, 547 F.2d 622 (D.C. Cir. 1976), rev'd Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, 435 U.S. 519 (1978), thereby foreclosing a consideration of the impacts associated with increased electrification.

The final sentence states that the Applicant has failed to compare employment from S/HNP with employment from alternatives. No such comparison is required, especially in a case such as this where most alternatives can be rejected for lack of feasibility.

Contentions 28-35

These proposed contentions criticize in general the competence of the NRC Staff. As such, they have no relevance to the adequacy of the Applicant's proposal to construct and

operate S/HNP, and consequently should be rejected as outside the scope of this proceeding. Similar proposed contentions have previously been rejected in other proceedings. Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 690 (1980).

Contentions 30 and 31 allege that the licensing board cannot approve construction permits for S/HNP because the NRC Staff has not updated its safety evaluation report and completed its review. Such a situation is not unusual for this stage of a proceeding. Presumably, the NRC Staff will complete its review and issue a final environmental statement. These contentions are premature and should be rejected.

Contention 34 alleges that the NRC Staff Supplement No. 2 is inadequate because it does not identify problems in reports about other plants which were referenced by the Applicant and, in particular, the fact that hydrogen control is an open item at Grand Gulf. CSP has not contended that the Applicant's program for hydrogen control at S/HNP is inadequate or that the NRC Staff's evaluation of that program is inadequate; nor has it contended that the alleged problems in the reports regarding other plants are even relevant to the review of S/HNP. Consequently, this proposed contention lacks specificity and is irrelevant to the issues to be considered in this proceeding.

Contention 36

36. Petitioner contends that the Applicant has underestimated the environmental cost of the S/HNP by:

a. mistating[sic] the existing radiological burden on the Hanford area environment and the

Columbia River and their respective terrestrial aquatic [sic] biota and thus misrepresent the effect of the project. The Columba [sic] River is a known source of artificial radionuclides [sic] to the Pacific Ocean. Existing radiation in the Columbia River water and sediment is known to cause measurable doses [sic] to people recreating, mollusks, fish and fish eaters. Additionally radioactive mice, tumbleweed, snakes, wasp nests, coyote and rabbit feces, to name a few, have been found on the Reservation.

b. failing to include the operation of WPPSS 1, 2, and 4 in assessing the cumulative effect of the S/HNP.

c. failing to consider the effect of a major accident on the terrestrial and aquatic biota of the area, and especially upon rare, threatened and endangered species.

Contention 36.a alleges that the Applicant has misstated the existing radiological burden in the area of the proposed S/HNP site. The only basis that CSP has provided for this contention is the allegation that radioactivity exists in the Columbia River and that radioactive biota have been found on the Hanford Reservation. However, ASC/ER Section 2.8 acknowledges that some radioactivity has been found in both the Columbia River and in biota on the Hanford Reservation. Since CSP has not identified any defect in the discussion which appears in this section of the ASC/ER, and since CSP has not provided a basis for a contention that the Applicant's radiological estimates are erroneous, this contention should be rejected.

CSP's contention that the Applicant has failed to include operation of WPPSS units 1, 2 and 4 in its assessment of the cumulative radiological effect of S/HNP is without basis. See ASC/ER, Appendix G.IV. Consequently, Contention 36.b should be rejected.

Contention 36.c states that the Applicant failed to consider the effect of a major accident on terrestrial and aquatic biota. The Applicant did analyze the primary consequences of a major accident, and it found the risk to humans from such an accident to be small. See ASC/ER Section 7.4. CSP has not taken issue with this conclusion, but instead argues that the Applicant should have additionally considered secondary impacts upon the biota. CSP has provided no basis for requiring further consideration of the effects of major accidents, and it would be inconsistent with NEPA's "rule of reason" to perform further analyses when the primary impacts have been evaluated and found to be small. Therefore, this contention should be rejected.

Contention 37

37. Petitioner contends that Applicant has failed to provide adequate qualitative data on which to base the environmental cost of the S/HNP:

- a. a complete list of the races of salmon which depend on the Hanford Reach;
- b. the existence of the Oregon swallowtail butterfly;
- c. swimming and migratory habits of salmon along the Hanford Reach;
- d. the location of *Rorippa calycina* var. *columbiae*;
- e. the location of all species of raptors; and
- f. the sensitivity of the giant Columbia River limpet and the great Columbia [sic] River spire snail to radiation and thermal effects.

In the ASC/ER, the Applicant discusses salmon in the Hanford Reach, including their spawning and migrating habits (§ 2.2.2.6); the location of raptors (§ 2.2.1.3.1); and the location of *Rorippa calycina* var. *columbiae* (§ 2.2.1.7.1). CSP has not specified any deficiency in these discussions and has not provided any basis for the allegation that the Applicant's data is inadequate.

With respect to the Oregon swallowtail butterfly and the giant Columbia River limpet and great Columbia River spire snail, CSP has not alleged that they would be affected by S/HNP, and it has provided absolutely no basis for requiring a discussion of these species. Consequently, Contention 37 should be rejected.

Contention 38

38. Petitioner contends that Applicant has failed to show that the following measures are adequate to ensure damage to the environment and biota is minimized during construction:

- a. scheduling of construction which will be used to minimize damage to aquatic life;
- b. that contractors and subcontractors will take every effort to minimize damage of habitat and biota;
- c. that construction of the proposed intake/discharge structure in the riparian area will remain within one acre; and
- d. the methods employed to prevent the dispersion of chemicals.

Each of these subjects is discussed in the ASC/ER. See ASC/ER, Section 4.1 and Appendix J. CSP has not identified any deficiency in this discussion, nor has it provided any basis for the contention that the Applicant's measures are inadequate. Consequently, this contention should be rejected.

Contentions 39 and 40

39. Petitioner contends that Applicant has failed to provide reasonable specificity regarding the efforts used to minimize damage to habitat and biota. Furthermore Applicant has failed to show that if construction in the riparian area is limited to one acre that irreversible damage to habitat and biota will not occur.

40. Petitioner contends that Applicant has failed to substantiate the following claims used to meet NEPA requirements:

- a. "construction of the S/HNP will have no significant effect on wildlife";
- b. "the effects from the S/HNP would be unmeasurable at distances of more than 50 miles"; and
- c. "none of the areas to be disturbed by the proposed project have significant value".

These contentions totally lack specificity and basis. Each of the subjects mentioned in these contentions is discussed in the ASC/ER. CSP has not specified why the Applicant's discussion is alleged defective, and it has not provided any basis which would indicate that the Applicant's program is defective. Consequently, these contentions should be rejected.

Contention 41

41. Petitioner contends that Applicant fails to adequately and specifically quantify the following environmental effects caused by the construction and operation of the S/HNP:

- a. the effect of construction and operation and transmission on the raptor population, in particular the bald eagle and the peregrine falcon;
- b. the effect of construction and operation on rare, threatened and endangered species of vegetation, namely *Rorippa calycina* var. *columbiae*, *Astragalus sclerocarpus* and *Cryptantha leucophaea*;
- c. the impingement of Chinook salmon fry by the intake structure; and
- d. the effect of construction and operation upon the giant Columbia [sic] River limpet and the great Columbia River spire snail.

The ASC/ER does describe the effect of S/HNP on the raptor population (§ 4.1.1) on rare, threatened, and endangered species of vegetation (§ 4.1.1) and on impingement of Chinook salmon fry (§ 5.1.3.1). CSP has not identified any deficiency in this discussion, nor has it alleged that the impacts will be greater than estimated by the Applicant. With respect to the giant Columbia River limpet and the great Columbia River spire snail, CSP has not specified that any environmental effects would occur as a result of operation and construction of S/HNP, thereby obviating any need for consideration. Consequently, this contention should be rejected.

Contention 42

42. Petitioner contends that Applicant fails to consider the cumulative effect of additional intake and discharge structures or the cumulative thermal and radiological effects of other nuclear facilities, presently non-operational, on the Columbia and environs.

This contention is completely without basis. The Applicant has considered the cumulative radiological effect of S/HNP and other nuclear facilities. See ASC/ER, Appendix G.IV. Similarly, the Applicant has demonstrated that the thermal impact of S/HNP upon ambient river temperatures will be insignificant. See ASC/ER, Section 5.1. Consequently, this contention should be rejected.

Contention 43

43. Petitioner contends that Applicant specifically avoids definitive conclusions regarding the effect of construction of the S/HNP on certain flora and fauna and thus avoids an accurate assessment of environmental costs and fails to provide adequate substantiation for the following conclusions:

- a. harm to raptors is "expected to improve";
 - b. the effect of river construction on salmon is "not expected";
 - c. Rorippa "should not be threatened";
 - d. the effect on curlews is "probably not lasting"; and
 - e. the effect of transmission system on raptors is "not expected".
- Applicant further fails to provide any indication of its ability to detect the unexpected or its actions in response to the unexpected.

This contention is specious. Nothing in NEPA or the Commission's regulations require "definitive conclusions" about future events. Since CSP has not provided any basis for questioning the Applicant's assessments, this contention should be rejected.

Contention 44

44. Petitioner contends that Applicant fails to show that none of the lost or displaced species are considered rare, endangered or threatened.

The ASC/ER does discuss endangered and threatened species and impacts upon those species as a result of S/HNP. See ASC/ER, Sections 2.2.1.7, 2.2.2.9, and 4.1. CSP has not identified any specific defect in that discussion, nor has it provided a basis for a contention that S/HNP will result in the loss or displacement of threatened or endangered species. This contention should be rejected for lack of specificity and basis.

Contention 45

45. Petitioner contends that Applicant fails to adequately assess the environmental effects of decommissioning and is incorrect in stating that decommissioning "does not usually invoke environmental impacts which are unique to a specific project." (Section 5.8, Environmental Report) The site has been addressed specifically in the construction phase and as decommissioning represents an equal or greater undertaking, the site specific environmental impacts of dismantling, entombment etc. should be addressed.

Section 5.8 of the ASC/ER provides an assessment of the environmental impacts expected as a result of decommissioning of S/HNP. CSP has not alleged that this assessment underestimates those impacts, and it has provided no basis for a contention that a different analysis of decommissioning would in any manner affect the Applicant's conclusions regarding the expected environmental impacts from decommissioning of S/HNP. Consequently, this contention should be rejected.

Contentions 46 and 48

46. Petitioner contends that Applicant has inaccurately concluded that the S/HNP is compatible with present or future uses of the Hanford Reservation in failing to provide an assessment of the interactivity between the project and other nuclear and chemical industrial facilities by inadequately describing:

a. the changes in land-use within a fifty mile radius, including the development of a hazardous waste dump three miles from the proposed site; and

b. nuclear and chemical facilities within a fifty mile radius and the activities [sic] conducted therein.

48. Petitioner contends that the Applicant has failed to conduct an assessment of the potential impact of surrounding nuclear facilities and activities on the S/HNP, its ability to continue operation in the event of accidents at these facilities and the loss of operation ability of S/HNP. These facilities include the Fast Flux Test Facility, four miles from the proposed site, which has the potential for a 1,160 lbs. TNT accident and a containment capable of withstanding up to 150-300 lbs. TNT and the N-reactor which has no containment building.

CSP has provided absolutely no basis for the contention that S/HNP is incompatible with other nuclear facilities or chemical uses near the plant. Section 2.2 of the Preliminary Safety Analysis Report (PSAR) for S/HNP analyzes industrial, transportation, and military installation and operations (including nuclear facilities and operations) in the vicinity of the proposed site for S/HNP, and the design of S/HNP accounts for the potential effects from those facilities and operations. CSP has not identified any deficiency in this analysis or in the design of S/HNP. Consequently, these contentions should be rejected for lack of specificity and basis.

Contention 47

47. Petitioner contends that Applicant has failed to conduct an assessment of the potential impact of the S/HNP on nuclear facilities and activities located on the Hanford Reservation and the ability of these operations to continue in the event of a major accident at the S/HNP.

The Applicant has analyzed the effects of a major accident at S/HNP. See ASC/ER Section 7.4. CSP has provided absolutely no basis for concluding that such an accident would affect the operation of other facilities on the Hanford Reservation or that the cost of cessation of continued operation of these facilities would be significant in relation to the other costs associated with a major accident which are described in the ASC/ER. Since CSP has not provided an adequate basis for requiring consideration of potential impacts upon operation of other facilities, this contention should be rejected.

Contentions 49-51

In general, these contentions allege that the Applicant has not given sufficient consideration to the geology of the area about the proposed S/HNP site.

The geology of this area is analyzed in Section 2.5 and Appendices 2L through 2S of the PSAR for S/HNP, which incorporates a three volume analysis in Amendment 18 of the Final Safety Analysis for WPPSS Nuclear Project No. 2. This analysis includes consideration of lineaments, faults, the Cold Creek syncline, and the Missoula sands. CSP has not identified any specific geological structures which the Applicant has not considered. Instead, CSP has merely alleged that the Applicant's

consideration has not been adequate, without identifying any particular defects in the Applicant's analysis or conclusions or providing a basis for a contention that the design of S/HNP is inadequate to withstand seismic events. Consequently, these contentions should be rejected for lack of specificity and basis.

Contention 52

52. Petitioner contends that Applicant has not considered the completion of the terminated nuclear projects WPPSS 4 and 5 as an alternative to the proposed project. Furthermore, Petitioner contends that since these two plants are under NRC jurisdiction the NRC Staff and the ASLB must investigate this alternative. Failure to do so would violate NEPA and the Commission's regulations.

The contention that the Applicant has not considered the alternatives of WPPSS units 4 and 5 is without basis. See Amendment 5 to ACS/ER, Response to NRC Question N230.01. Consequently, this contention should be rejected.

Contention 53

53. Petitioner contends that WPPSS 4 and 5 would be more likely to be accepted by the Northwest Power Planning Council for regionalization than the S/HNP because construction has already been started on the units and because a majority of the region's utilities are involved in the plants, including Applicant-Pacific Power and Light Co.

This contention is irrelevant to any cognizable issue in this proceeding. Whether or not WPPSS 4 and 5 would be more likely to be accepted by the Northwest Power Planning Council has no bearing on the environmental impacts and costs and benefits of construction and operation of S/HNP.

Contention 54

54. Petitioner contends that Applicant has failed to meet the requirements of 10 CFR 50 Appendix E (II) in failing to supply information required by:

- a. Paragraph B - Applicant has supplied an Appendix B which it claims fulfills [sic] this purpose. However Appendix A consists of one page which states "To be provided subsequently".
- b. Paragraph C - Applicant fails to describe procedures [sic] on how an evacuation will be carried out. Applicant states in Section 7.4.2.1 of the PSAR that "if evacuation is deemed necessary it will be carried out in accordance with detailed evacuation plans [sic] which will be contained in Benton and Franklin Counties Emergency Response Plan." Such a statement is wholly inadequate.
- c. Paragraph D - Applicant has failed to provide features of facility to be provided for onsite emergency firstaid. Applicant merely states in Section 7.5.1 of the PSAR that "further description of the facility will be provided in the PSAR."
- d. Paragraph G - Applicant fails to note major impediments to the evacuation or the taking of protective actions. Applicant does not consider the pro-nuclear attitudes of local residents and their disregard for exposure to radiation.
- e. Paragraph H - Applicant has not done a preliminary analysis reflecting the need to include facilities, systems and methods for identifying the degree of seriousness and potential scope of radiological consequences of emergency situations within and outside the site boundary.

Each of the subparts of this contention is defective and should be rejected.

Contention 54.a alleges that the Applicant has not described the contacts with local, state, and Federal agencies with responsibility for coping with emergencies. This contention is without basis. See Amendment 24 to PSAR, Appendix A to Appendix 13A.

Contentions 54.b and 54.c allege that the Applicant has not provided sufficient details of its evacuation plans and onsite emergency firstaid facilities. The level of detail requested by these contentions is not required to be provided at the

construction permit stage; a PSAR is only required to describe "generally" the emergency plans and "contain sufficient information to ensure the compatibility of proposed emergency plans" with the site area and the plant design. 10 CFR Part 50 Appendix E.I and E.II. Consequently, these contentions should be rejected as a challenge to the Commission's rules. See 10 CFR § 2.758(a).

Contentions 54.d and 54.e allege that the Applicant has failed to note major impediments to evacuation or protective actions and to perform a preliminary analysis for identifying the seriousness and consequences of emergency situations. These contentions are without basis. See PSAR, Appendix 13A: Sections 7.3 and 7.4, and Appendix B; PSAR, Appendix 13A: Section 5.2. Consequently, these contentions should be rejected.

Contention 55

55. Petitioner contends that Applicant fails to provide data on location and quantity of recreational use of lands within a fifty-mile radius of the S/HNP.

The contention that the Applicant has failed to provide data on location and quantity of recreational use of lands within fifty miles of the proposed S/HNP site is without basis. See ASC/ER, Section 2.1.4. In any case, even if it is assumed arguendo that this contention was accurate, CSP has not specified what, if any, consequences would ensue. Consequently, this contention should be rejected for lack of specificity and basis.

Contention 56

56. Petitioner contends that under the Pacific Northwest Electric Power Planning and Conservation Act, Pl 96-501, 94 Stat. 2697, it is the responsibility of the Northwest Power Planning Council (Power Council) and the Bonneville Power Administration (BPA) to plan and meet the electrical needs of the Northwest not the Applicant. Petitioner further contends that:

a. Applicant has not been authorized by either the Power Council nor the BPA to appear before the NRC on this matter;

b. Applicant incorrectly characterizes the project as a regional resource (Section 1 of the PSAR and ER);

c. Applicant-Puget has stated in press releases that it will not construct the project unless it is "regionalized", ie. included in the Power Council's plan and financed by the BPA; and

d. Applicant incorrectly states that the "Pacific Northwest region is thus the appropriate area" to be considered in evaluating the need for the proposed project (PSAR Section 1.1). A final determination by the Power Council on the needs of the region is expected in April, 1983. This date is the same given by Applicant to start construction of the proposed project. Thus the application for construction permit for the S/HNP is premature.

This contention is not relevant to this proceeding. To the extent that CSP is alleging that the Applicant is violating the Pacific Northwest Electric Power Planning and Conservation Act or that the Applicant has usurped the responsibility of the Northwest Power Planning Council or the Bonneville Power Administration, its remedy lies other than with the NRC.

Contention 57

57. Petitioner contends that the cost-benefit analysis performed by the Applicant is wholly falsified. This cost-benefit analysis does not represent an analysis "conducted fully and in good faith" (See Calvert Cliffs Coordinating Committee v. U.S.A.E.C., D.C. Cir., 1971 at p11) because:

a. Applicant, in stating that seven years will be sufficient to construct each unit (ER

Section 4.1). ignores present construction times for nuclear power plants which, according to NUREG 0030 is an average of 8.9 years. Such an underestimate affects the overall projected cost of the project. Applicants also fail to include dealys due to labor difficulties which WPPSS has experienced with the labor force that will be used by the project.

b. Applicant underestimates interest rates it will have to pay for construction on the project. Applicant has provided no basis for its over-optimistic projections.

c. Applicant has underestimated inflation rates for the S/HNP and provides no basis for its over-optimistic conclusions.

d. Applicant has failed to account for the cost of design changes due to the TMI requirements and other required safety changes:

e. Applicant claims a 72% capacity factor which may be overestimated by as high as 20%. Any decrease in the projected capacity factor will increase the cost of the project.

f. Applicant overestimates the net electrical generation from the project. Applicant has testified before the ASLB in the Skagit proceeding that siting a plant on the east side of the Cascades would mean a ten percent increase in transmission losses. Such a decrease in electrical output would increase the overall cost of the project to consumers and the public.

g. Applicant overestimates the reliability of the project. To account for the unreliability, due to its location, Applicant will be required to acquire more reserves. This cost has not been factored into the cost-benefit analysis

h. Applicant underestimates the effects of low-level radiation emissions on the health of the population near the project and facilities related to the fuel cycle. Applicant further fails to include the chemical and radiation hazards of the zirconium cladding production in Albany, Oregon.

i. Applicant analyzes only the option of coal-fired generation contrary to Commission rules and policy.

j. When taken together and factored into lifetime monetary full cost determinations for the S/HNP that plant decommissioning and ultimate dismantling and site decontamination, interim spent fuel storage and subsequent disposal, radioactive waste management and disposal at all stages of the nuclear fuel cycle, and health costs for the full period of toxicity of radioactive materials attributable to the operation of S/HNP will render

this nuclear facility economically non-competitive with virtually any of the many alternative sources of energy or with conservation. Absent national policy determinations, federal legislation and administrative agency regulation of these issues, Petitioners contend that no construction permit should be issued for S/HNP.

k. Applicant has underestimated dewatering, erosion control and soil stabilization techniques and the cost of the methods thereof due to the underestimation of the anticipated excavation level.

l. Applicant grossly underestimates the cost of nuclear waste disposal and storage. Effective 1/15/82 the cost of low-level waste burial at the U.S. Ecology dump went up 625% partially to cover expenses for increased surveillance and a site closure fund. This example will not only affect the projections of Applicant's cost for low-level waste disposal but also illustrates how unpredictable and expensive the costs can be. Applicants projections do not take these items into account.

m. Applicant misrepresents reprocessing as a current and viable technology and therefore cannot adequately assess the cost of using the technology.

n. Applicant fails to adequately assess the costs of decommissioning a reactor as large as the S/HNP units and fails to consider the Oyster Creek example where decommissioning cost ran 100% of construction cost. Applicant fails to consider the potential cost of decommissioning the project in the case of an accident. Applicant provides no basis for the assumption in Section 5.8 of the ER that "at the present time decommissioning can be performed safely and at reasonable cost."

Each subpart of this contention is defective.

Contention 57.a states that the Applicant has underestimated the period for construction of S/HNP. As a basis for this contention, CSP alleges that NUREG-0030 contains an average construction time of 8.9 years. NUREG-0030, "Nuclear Power Plants, Construction Status Report," is a multi-volume, multi-subpart, report. CSP has not identified the particular volume, part, or page of NUREG-0030 which it claims is a basis for this contention. Moreover, our review of the latest issue of

NUREG-0300—/ indicates that no such estimate appears in that issue. Since a proponent of a proposed contention cannot rely upon lengthy documents as a basis without any attempt to specify the particular portions which are germane, see Browns Ferry, supra, this contention should be rejected for lack of specificity and a proper basis.

Contentions 57.b, 57.c, 57.e, 57.g, 57.h, and 57.k allege that the Applicant has underestimated interest rates, inflation rates, and the effects of low-level radiation, excavation problems, and has overestimated the capacity factor and reliability of S/HNP. CSP has provided absolutely no basis for any of these allegations. Consequently, each of these contentions should be rejected.

Contention 57.d alleges that the Applicant has failed to account for the cost of design changes due to TMI and other safety changes. CSP has provided absolutely no basis for this allegation, and it has not identified any design change which the Applicant has not accounted for. Consequently, this contention should be rejected.

Contention 57.f alleges that the Applicant has overestimated the net electrical generation from the project due to transmission losses. This contention is totally without basis. Initially, it should be noted that net electrical generation is defined as the electrical generation for distribution outside the plant, and thus by definition it does not include transmission losses. See ASC/ER, Section 3.2.2. In any case,

the Applicant did account for transmission costs in its analysis of S/HNP. See ASC/ER, Section 9.3.2.4.3. Consequently, this contention should be dismissed.

Contention 57.h alleges that the Applicant has failed to account for the chemical and radiation hazards of the zirconium cladding production in Albany, Oregon. Since CSP has not explained why the Applicant should have accounted for hazards associated with an alleged facility located in a town approximately 200 miles from the proposed S/HNP site, this contention should be rejected for lack of specificity and basis.

Contention 57.i alleges that the Applicant has only analyzed the alternative of coal-fired generation. This allegation is without basis. See ASC/ER, Section 9.1 and 9.2. Consequently, this contention should be rejected.

Finally, Contention 57.j alleges that fuel cycle costs render S/HNP "economically non-competitive with virtually any of the many alternative sources of energy or with conservation." Contrary to the implication of this contention, the Applicant has accounted for fuel cycle costs in its analysis. See ASC/ER Section 8.2. CSP has not alleged that the Applicant's estimate is inaccurate or faulty. Moreover, CSP has not provided a basis for its allegation that fuel cycle costs render S/HNP uneconomical. Finally, this contention does not specify the alternatives which are allegedly economically superior to S/HNP and, in any case, mere economic superiority of an alternative is not a valid grounds for its consideration. See Midland, supra. Consequently, this contention should be rejected

Contention 57.l alleges that the Applicant has grossly underestimated the costs of nuclear waste disposal. This allegation is predicated upon an allegation that one disposal facility has recently increased its disposal fees. CSP has provided absolutely no basis for the allegation that the Applicant has not accounted for long-term price increases over the life of S/HNP. Consequently, this contention should be rejected for lack of specificity.

Contention 57.m alleges that the Applicant has misrepresented reprocessing as a current and viable technology and therefore has inaccurately assessed its cost. This contention is completely without basis; the Applicant has taken no credit for reprocessing. See ASC/ER, Table 2.2-2. Consequently, this contention should be rejected.

Finally, Contention 57.n alleges that the Applicant's assessment of decommissioning costs in ASC/ER Section 5.6 is inadequate. CSP has provided no basis for this contention other than alleging that decommissioning costs at Oyster Creek ran 100% of construction costs. Oyster Creek is an operating unit and has never been decommissioned. Thus, CSP has not provided an adequate basis for this contention, and it should be rejected.

Contention 58

58. Petitioner contends that Applicant has failed to adequately and accurately assess the radiation exposure pathways in:

- a. providing incomplete meteorological [sic] data, eg. the existence of "dust devils" is not mentioned; and
- b. providing incomplete history of radiation in the Columbia River and biota of the Hanford Reservation in Sections 2.8 and 5.2 of the ER.

Both short term and long term dispersion factors for S/HNP were determined using the methodology presented in NRC regulatory guides. PSAR, Sections 2.3.4 and 2.3.5. Meteorological input data for calculating the dispersion factors was based upon two years of data collected nearby WPPSS Unit 2. Id. CSP has not alleged that this meteorological data is inaccurate or that this data is inadequate to provide appropriate dispersion factors; instead, it simply alleges that the Applicant has "not mentioned" dust devils. This allegation is an insufficient basis for a contention that the "Applicant has failed to adequately and accurately assess the radiation exposure pathways."

ASC/ER Section 2.8 describes the background radiological characteristics of the area of the proposed S/HNP site. CSP has not identified any specific deficiencies in the characteristics described in that section. Consequently, Contention 58.b should be rejected for lack of specificity and basis.

Contention 59

59. Petitioner contends that Applicant underestimates the radiological effects of the S/HNP on the human population by:

- a. mistating [sic] the radiation doses to the public and workers from the decommissioning process

and the effect that mingling of decommissioning workers with the public will have on the overall genetic pool;

b. failing to provide projections of children in utero in the population and to assess the radiation doses and subsequent health effects in utero from routine or accidental releases of radiation;

c. failing to address the radiation exposure and subsequent somatic and genetic effects on nuclear workers including temporary or transient "sponges" for whom no radiation records are kept; and

d. failing to provide health data for persons living in and around the Hanford Area and the Columbia River on which to calculate the existing radiological and other health burdens without which it is impossible to adequately assess the radiobiological impact of the S/HNP.

Each part of this contention is defective. No basis is provided in Contention 59.a for the allegation that the Applicant has underestimated the doses resulting from decommissioning of S/HNP. With respect to Contention 59.b, the Applicant's population dose calculations conservatively used projected populations for the year 2010, thereby presenting a bounding analysis. See ASC/ER, Section 5.2.4.4. This contention provides no basis for attacking the conservatism of this calculation. Additionally, there is no basis for the allegation in 59.c that the Applicant has failed to address the radiation exposure to nuclear workers.—/ See PSAR, Section 12.1.6. Consequently, this contention should be rejected. Finally, CSP has provided absolutely no basis for the allegation in

—/ CSP's allegation that radiation records are not kept for temporary or transient "sponges" is without basis. See 10 CFR § 20.401 and § 20.202.

Contention 59.d that it is impossible to assess adequately the radiological impact of S/HNP without health data for residents in the Hanford area. Consequently, this contention should be rejected for lack of a basis.

Contention 60

60. Petitioner contends that the radiation monitoring system is inadequate because:

a. the milk monitoring plan is not located in either the major milk production area or what is normally downwind of the site; and

b. that Applicant should be required to use the Spiderwort Strategy of biological indicators to monitor low-level radiation release from the plant. Spiderwort, Tradescantia, is a highly sensitive indicator of somatic mutations which yields results within 8 to 12 days from exposure.

The Radiological Environmental Monitoring Program (REMP) for S/HNP will obtain milk samples from those sectors with the higher calculated annual average atmospheric dilution factors. See ASC/ER, Sections 6.1.5 and 6.2.1, PSAR Section 2.3. Additionally, a state-wide radiological monitoring program samples milk at locations near S/HNP. See ASC/ER, Section 6.3.4. Contention 60.a provides no basis for an allegation that the "milk monitoring program" will not be located in "what is normally downwind of the site" or that these programs will be inadequate to satisfy regulatory requirements. Consequently, this contention should be rejected.

CSP has not alleged that use of the "Spiderwort Strategy of biological indicators" would provide any significant new or necessary information in addition to that which will be provided by the REMP for S/HNP. Consequently, Contention 60.b provides no basis for requiring use of the Spiderwort Strategy, and this contention should be rejected.

Contention 61

61. Petitioner contends that the Applicant's plant design does not comply with the Commission's As Low As Reasonably Achievable standards since the releases of radioactive material in liquid and gaseous effluents may be further reduced through the use of alternative or additional means such as, for example, additional solidification and filtration systems.

Appendix G of the ASC/ER presents an evaluation of the design of S/HNP with the limits in Appendix I to 10 CFR Part 50 and demonstrates that S/HNP complies with As Low As Reasonably Achievable (ALARA) standards. CSP has not taken issue with this evaluation. Instead, it contends that unidentified solidification and filtration systems could reduce radioactive effluents by an unspecified amount for an unspecified cost. This contention lacks specificity and basis, and should be rejected.

Contention 62

62. Petitioner contends that Applicant has underestimated the somatic and genetic effects of radiation released during normal and abnormal operating conditions and thus falsely [sic] concludes that no fatalities or economic risks are associated with normal releases in the ER Section 7.4. The failures in their model include both the projected uptake and effect of the dose. The Heidelberg Report and studies and conclusions of Radiation and Human Health by Dr. John Gofman address the inadequacies of these models, respectively.

This contention lacks sufficient specificity. CSP does not identify the "Heidelberg Report" to which it refers, it does not identify which particular portions of the "Heidelberg Report" or Radiation and Human Health provide the basis for this contention, and it does not identify the inadequacies in the Applicant's modeling of uptake and effect of doses. Consequently, this contention should be rejected.

Contention 63

63. Petitioner contends that Applicant errs in projecting doses in case of an accident at the S/HNP by:

- a. using as a receptor a standard man - the lease [sic] susceptible form of human life to the effects of radiation;
- b. failing to consider the radiological effects of accidental releases of liquid effluent on the surface and groundwater supply of the downstream population.

CSP has provided no basis for its contention that the Applicant's projected doses from accidents are in error because it used a standard man as a receptor. Moreover, CSP has not specified what type of receptor should have been used, nor has it specified how use of a different receptor would have affected the projected doses. Consequently, Contention 63.a should be rejected for lack of specificity and basis.

CSP's contention that the Applicant has not considered the radiological effects of accidental releases of liquid effluent on surface and groundwater supply is without basis. See ASC/ER Section 7.4.8. Consequently, this contention should be rejected.

Contention 64

64. Petitioner further contends that Applicant underestimates the effect of an accident by inadequately assessing the early illnesses and attendant early morbidity including:

- a. respiratory impairment;
- b. hypothyroidism;
- c. temporary sterility of males;
- d. permanent sterility of females;
- e. in utero effects;
- f. genetic effects; and
- g. the synergistic effects of one or more [of] the above illnesses and chronic diseases.

In ASC/ER, Section 7.4, the Applicant analyzed the primary consequences of a major accident and concluded that the health

risk contribution posed by S/HNP is negligible. CSP has not taken issue with the Applicant's analysis, but instead has argued that the Applicant underestimated the consequences of a major accident by failing to consider such secondary effects as "early illnesses." CSP has not alleged that these secondary effects would be significant in relation to the primary consequences; consequently, under NEPA's "rule of reason," there is no basis for a further consideration of effects raised by CSP. Therefore this contention should be rejected.

Contention 65

65. Petitioner contends that Applicant has not met the requirements of NUREG 0718 Rev. 1 and has no intention of meeting these requirements. Action items II.B.8(11) states, "demonstrate how the risk assessment program will be scheduled so as to influence system designs as they are being developed." Applicant's response to this requirement merely states that 70% of the nuclear supply system components have already been fabricated and delivered into storage and that two-thirds of engineering design has been completed.

Applicant goes on to state that any design changes will be made on a judgemental basis and not be [sic] license requirements. Clearly this Board has no basis to believe the plant will be constructed in a manner to adequately protect the public [sic] health and safety. Furthermore Applicant is relying on studies done at other plants that are still under question by the NRC Staff.

NUREG-0718—/ itself states that it is not a regulation, and that compliance with it is not a requirement. NUREG-0718, p. iii.

See also Porter County Chapter v. AEC, 533 F.2d 1011, 1016

—/ NUREG-0718, "Licensing Requirements for Pending Applications for Construction Permits and Manufacturing Requirements" Rev. 2 (January 1982).

(7th Cir.), cert. den. 429 U.S. 945 (1976). Consequently, failure to satisfy the provisions of NUREG-0718 is not equivalent to a failure to abide by a regulation, and non-compliance with NUREG-0718 is not, in and of itself, a sufficient ground for alleging that an applicant will not take adequate measures to protect the health and safety of the public. Since CSP has not alleged that any specific structure, system, or component of S/HNP is defective, inadequate, or violative of the Commission's rules, Contention 65 should be rejected for lack of specificity and basis.—/

Contention 66

66. Petitioner contends that Applicant has not adequately addressed generic safety issues applicable to the S/HNP. This is evidenced by the NRC Staff letter of 1/29/82 to Applicant. Until such time as Applicant does adequately address these issues the Board has no basis to believe the plants will be safe.

This contention is totally lacking in specificity. It does not identify the specific generic issues to which it is referring, it does not specify the respect in which the Applicant has not adequately addressed the issues, and it does not provide a basis for the allegation that the issues are not adequately addressed. Consequently, this contention should be rejected.

—/ It should be noted that the Commission recently amended 10 CFR § 50.34 with respect to requirements upon construction permit applicants. See 47 Fed. Reg. 2286 (January 28, 1982). The amendment requires applicants to provide certain information, including information which is related to the action plan items in NUREG-0718, such as item II.B.8(1). 10 CFR § 50.34(f)(1)(i). Nothing in Contention 65 alleges that the Applicant has not complied with this amendment.

Contention 67

67. Petitioner contends that Applicant underestimates the probability of an accident by relying on the Reactor Safety Study which is deficient in the following ways:

- a. RSS incorrectly assesses the contribution of BWR accident sequences to the probability of a major radiation release;
- b. RSS incorrectly assesses the ability of the Emergency Core Cooling System to perform its intended functions;
- c. RSS inadequately assesses the effect of aging on reactor safety;
- d. RSS inadequately assess the effects of sabotage;
- e. RSS fails to assess satisfactorily the impact of unresolved safety issues on overall risks; and
- d. RSS relies excessively on "single failure" events when it is known that multiple failures occur.

CSP has provided absolutely no basis for its contention that the Reactor Safety Study is deficient and inadequate. Consequently, this contention should be rejected.

Contention 68

68. Petitioner contends that Applicant further underestimates the effects of an accident by failing to include in its rebaselining of the RSS, the findings and recommendations of NUREG / CR 0400 that:

- a. the effectiveness of evacuation is over-emphasized;
- b. the bio-effect models need to be updated and improved; and
- c. the effect of common cause failures including sabotage, fire, earthquakes [sic] etc. are underestimated. Section 7.4 of the ER specifically excludes these common cause failures.

This contention lacks the requisite specificity for admission. CSP has not specified the extent of the alleged underestimation, nor has it identified what, if any, impacts such an underestimation had upon the results. In short, CSP has not contended that

any of the alleged deficiencies is at all significant to the Applicant's analysis or its results. Consequently, this contention should be rejected.

Contention 69

69. Petitioner contends that the nuclear steam supply system of the S/HNP contains numerous generic design deficiencies, some of which may never be resolvable, and which, when reviewed together, render a picture of an unsafe nuclear installation which may never be safe enough to operate. Specifically:

- a. The pressure suppression containment structure may not be constructed with sufficient strength to withstand the dynamic forces realized during blowdown;
- b. The cracking of stainless steel piping in BWR coolant water environments due to stress corrosion has yet to be prevented or avoided;
- c. BWR core spray nozzles occasionally [sic] crack, a problem which reduces their effectiveness;
- d. The ability of the S/HNP to survive anticipated transients [sic] without scram (ATWS) remains to be demonstrated. In this regard, reliance on probabilistic numbers is unwise and unsafe; and
- e. that in the event of a loss of coolant accident substantial quantities of hydrogen, in excess of the design basis of 10 CFR 50.44, will not be generated and that in the event of such excess generation, the [sic] hydrogen will not combust.

This contention utterly lacks the requisite specificity. It has long been established that an allegation which merely lists generic safety issues is not sufficient for admission; to be admissible, a contention regarding a generic issue must demonstrate that the generic issue has safety significance to the reactor under review and that the manner in which the applicant has dealt with the issue is unsatisfactory. Gulf States Utilities Co. (River Bend Station, Units 1 and 2), ALAB-444, 6 NRC 760, 771-73 (1977). CSP has not provided a

basis for the contention that any of the generic concerns listed by it has safety significance to the particular design of S/HNP. Moreover, the Applicant has addressed generic safety issues which could be considered to be applicable to S/HNP,— and CSP has not alleged, or provided a basis for the allegation, that the Applicant's program is unsatisfactory. Consequently, Contention 69 should be rejected.

Contention 70

70. Petitioner contends that the Applicants [sic] ER Section 7.4 on the economic impact of an accident at the S/HNP fails entirely to accurately assess the costs by:

- a. not considering the effects upon commercial [sic] river traffic [sic] on the Columbia River;
- b. not assessing the cost of replacement power;
- c. not considering the temporary or permanent closure or abandonment of adjacent nuclear facilities;
- d. underestimating the cost of clean-up and decommissioning of the facility;
- e. not considering the long-term contamination of water supplies within and without the fifty-mile radius dependent on the Columbia River and associated social and economic costs of population dislocation; and
- f. not considering the cost of preventing the liquid pathways of radioactive isotopes to the Columbia River.

To the extent that this contention is alleging that the Applicant has not considered the costs of mitigation of an accident, the contention is without basis. See ASC/ER, Section 7.4.6.2. Moreover, even if it is assumed arguendo that the factual allegations in this contention are accurate, CSP has not provided an adequate basis for admission of this contention. Under NEPS's

—/ Letter PLN-245 dated February 22, 1962, from Robert V. Myers to Harold R. Denton.

"rule of reason," there is no requirement to consider every conceivable cost or impact. CSP has not alleged, or provided a basis for the allegation, that any of the costs raised by CSP would be significant or would in any manner affect the cost/benefit balance or consideration of alternatives for S/HNP. Consequently, this contention should be rejected for lack of an adequate basis.

Summary of CSP's Contentions

In large, CSP's contentions consist simply of allegations that the Applicant's consideration of various matters has not been adequate. In most cases, CSP has not identified any specific defect or inaccuracy in the Applicant's consideration. Similarly, CSP has not provided bases in support of its allegations that the Applicant's analysis has been faulty. In short, CSP's contentions do not provide adequate notice of any particular issues to be litigated, but merely indicate a general and unfocused displeasure with the Applicant's discussion in the ASC/ER and PSAR. Such proposed contentions do not comply with the Commission's rules and should not be admitted into this proceeding.

Finally, as CSP itself has emphasized,—/ it is no stranger to NRC proceedings. To use CSP's own words, it has "familiarity with the process and issues" in NRC proceedings.—/ Consequently,

—/ "Request for Hearings and Amended Petition for Leave to Intervene" (March 6, 1982), pp. 2, 5-6.

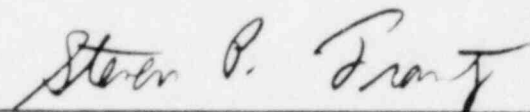
—/ Id., p. 5.

there is no reasonable excuse for CSP's failure to raise contentions which have the requisite specificity and basis. Therefore, all of the contentions proffered by CSP should be rejected, and CSP should not be permitted to participate as a party to this proceeding for failure to comply with the requirements of 10 CFR § 2.714(b) to submit at least one admissible contention.

Respectfully submitted,

LOWENSTEIN, NEWMAN, REIS & AXELRAD

Dated May 4, 1982



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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
PUGET SOUND POWER & LIGHT COMPANY,)	DOCKET NOS.
et al.)	
)	
(Skagit/Hanford Nuclear Project,)	STN 50-522
Units 1 and 2))	STN 50-523
)	

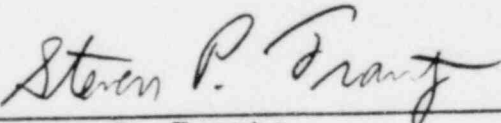
CERTIFICATE OF SERVICE

I hereby certify that the following:

APPLICANT'S ANSWER TO SUPPLEMENTAL PETITIONS
TO INTERVENE AND MOTION FOR EXTENSION OF TIME

in the above-captioned proceeding have been served upon the persons shown on the attached list by depositing copies thereof in the United States mail on May 4, 1982 with proper postage affixed for first class mail.

DATED: May 4, 1982



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