

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In The Matter of Puget Sound)	
Power and Light, et al.)	
Amended Application for Construction)	Docket Nos.
Permits and Facility Licenses,)	STN 50-522, 50-523
SKAGIT/HANFORD NUCLEAR PROJECT)	

COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION'S
SECOND SUPPLEMENT TO PETITION TO INTERVENE

Pursuant to commission regulations, 10 C.F.R. § 2.714(b), petitioner Columbia River Inter-Tribal Fish Commission (CRITFC) submits this second supplement to its petition to intervene. This filing lists the contentions which CRITFC wishes to litigate in this proceeding, along with specific bases for these contentions.

LIST OF CONTENTIONS AND BASES

1. Applicants Have Relied On An Inflated Calculation Of Demand For Electrical Power; Reliable Regional Energy Forecasts Demonstrate No Need For The Skagit/Hanford Project _____

CRITFC herein incorporates by reference the contentions and bases filed by Natural Resources Defense Council (NRDC) on this matter.

2. There Are Cost-Effective, Environmentally Preferable Alternatives To The Project; The Environmental Report Is Inadequate In Its Discussion Of Those Alternatives _____

CRITFC incorporates by reference the NRDC contentions on this matter.

3. The Applicant Has Used An Inaccurately Low Estimate On The Environmental And Financial Cost Of The Project In Its Benefit/Cost Ratio

CRITFC herein incorporates by reference the contentions and bases filed by the National Wildlife Federation and the Oregon Environmental Council on this matter.

4. The Commission Should Not Issue Any Construction Permit Or Facility License For Skagit/Hanford Until It Has Assessed The Environmental Impacts of Temporary Waste Storage at the Project During The Life of the License and Has Complied with the Requirements of NRDC v. NRC, No. 74-1586 (D.C. Cir. April 27, 1982).

CRITFC herein incorporates by reference the contentions and bases filed by the National Wildlife Federation and Oregon Environmental Council on this matter.

5. The Environmental Impacts Of The Proposed Skagit/Hanford Nuclear Project On Columbia River Fish and Wildlife Resources Have Not Been Fully Assessed. Furthermore, Environmental Impacts Must Not Infringe Indian Treaty Rights.

CRITFC herein incorporates by reference the contentions and bases filed by the National Wildlife Federation and the Oregon Environmental Council on this matter.

In addition, CRITFC asserts that the design, construction, operation, or other occurrences resulting from authorization or approval of the Skagit/Hanford Nuclear Project by the U.S. Nuclear Regulatory Commission or through the Atomic Safety and Licensing Board processes, must not in any way threaten or diminish the value, availability, viability, production potential, accessibility, or usability of the treaty reserved fishing, hunting, and gathering rights of the Columbia River tribes, or diminish or impair the treaty water rights of the Columbia River tribes. CRITFC submits that applicants have not met their burden of persuasion regarding many environmental impacts and the

potential diminution of Indian treaty rights, particularly fishing rights.

The gravity of these treaty rights cannot be understated. For the Columbia River treaty tribes, the treaty fishing right is "not much less necessary to the existence of the Indians than the atmosphere they breathed." United States v. Winans, 198 U.S. 371, 381 (1905). In such situations it is incumbent upon the Atomic Safety and Licensing Board to require a greater degree of persuasion by which a party must convince the board. Virginia Electric & Power Co. (North Anna Power Station, Units 1, 2, 3, 4) ALAB-256 1 NRC 10, 17 at n.18 (1975). The strict fiduciary obligations of NRC and the ASLB with respect to Indian treaty rights requires no less. See F. Cohen, Handbook of Federal Indian Law, 220 (2d ed. 1982).

The Ninth Circuit has determined "that any federal government action is subject to the United States' fiduciary responsibilities toward the Indian tribes." Nance v. Environmental Protection Agency, 645 F.2d 701, 711 (9th Cir. 1981), citing Seminole Nation v. United States, 316 U.S. 286, 297 (1942). First articulated in Cherokee Nation v. Georgia, the trust principles contained therein have been applied in many situations to protect the rights of Indian tribes. Cherokee Nation v. Georgia, 30 U.S. (Pet.) 1 (1831). See e.g., Morton v. Ruiz, 415 U.S. 199, 236 (1974); Navajo Tribe v. United States, 364 F.2d 320 (Ct. Cl. 1966); Pyramid Lake Band of Paiute Tribes v. Morton, 354 F. Supp. 352 (D.D.C. 1972); Eric v. Secretary of the United States Department of Housing and Urban Development, 464 F. Supp. 44 (D. Alaska 1978); R. Chambers Judicial Enforcement of the Federal Trust Responsibility to Indians, 27 Stan. L. Rev. 1213, 1234 and nn. 100-101 (1975). The fiduciary obligations arising from this trust relationship between the United States and the Indian tribes have been likened to the obligations of private trustees or guardians. Consequently the acts of

federal representatives are to be judged by "the most exacting fiduciary standards." Seminole v. United States, 316 U.S. 286, 296-297 (1942). If the Nuclear Regulatory Commission has specific skill and expertise in dealing with impacts to aquatic biota from nuclear power plant construction and operations, such expertise must be used to the fullest extent possible to protect the treaty reserved assets of the Columbia River tribes. See Restatement (Second) of Trusts § 181 (1959); Calvert Cliff's Coordinating Committee v. Atomic Energy Commission, 449 F. 2d 1109, 1111 (D.C. Cir. 1971).

Petitioner, CRITFC, does not address in this proceeding the question of whether or not NRC regulations provide adequate procedures to fulfill the NRC trust responsibility. Rather, CRITFC urges that within the procedural confines of NRC regulations the ASLB must exercise its discretion on substantive issues in a manner which conforms to the strictest fiduciary obligations. Any judgement call which purports to reach an accommodation between a competing economic interest and Indian treaty rights is impermissible. Pyramid Lake Band of Paiute Tribes v. Morton, 354 F. Supp. 352, 356 (D.D.C. 1972); Confederated Tribes and Bands of the Yakima Indian Nation v. Malcolm Baldrige, No. C80-342T (W.D. Wash., Oral ruling Aug. 4, 1981). The NRC is obligated to use its resources and authorities to the fullest extent possible to protect the treaty reserved assets of the Columbia River tribes.

Additionally, under the National Environmental Policy Act agencies of the federal government have not only the obligation to consider the environmental consequences of proposed actions, but also the substantive authority to base decisions on environmental consideration. Gulf Oil v. Morton, 493 F. 2d 141, 145 (9th Cir. 1973), quoting, Calvert Cliffs Coordinating Committee v. A.E.C., 449 R. 2d 1109, 1112 (D.C. Cir. 1971). This authority has been recognized by the Atomic Safety and Licensing Board in various opinions. See

e.g., Wisconsin Electric Power Co. (Point Beach, Unit 2) ALAB-82, 5 A.E.C. 350, 352 (1972). The trust obligations of the Nuclear Regulatory Commission direct this authority of the Nuclear Regulatory Commission in effect to prevent authorization of any action which would impair or extinguish treaty established interests. See Confederated Tribes of the Umatilla Indian Reservation v. Alexander, 440 F. Supp. 553 (D.Or. 1977).

By the Steven's treaties of 1855, the Columbia River treaty tribes reserved to themselves the right of taking fish, at all usual and accustomed grounds and stations in common with all citizens of the United States. Treaty with the Nez Perce, June 11, 1855, 12 Stat. 957; Treaty with the Yakimas, June 9, 1855, 12 Stat 945; Treaty with the Walla Walla, Cayuse, and Umatilla, June 9, 1855, 12 Stat. 945; and Treaty with the Indians in Middle Oregon, June 25, 1855, 12 Stat. 939. In 1905, the United States Supreme Court addressed the off-reservation right to take fish. United States v. Winans, 198 U.S. 371 (1905). In Winans, a non-treaty party had effectively usurped the Indians' off-reservation right to take fish -- a right specifically guaranteed by treaty -- by installing a fish wheel in the river which caught so many fish as to render the Indians' right little more than illusory. There, the court found:

There was an exclusive right of fishing reserved within certain boundaries. There was a right outside of those boundaries reserved "in common with citizens of the territory." As a mere right it was not exclusive in the Indians. Citizens might share it, but the Indians were secured in its enjoyment by a special provision of means of its exercise ... And the right was intended to be continuing against the U.S.

Winans at 381. Not only did the court uphold the Indians' right of access to the fishing grounds, it also ordered the Circuit Court, on remand, to devise "some adjustment and accommodation" which would protect the Indians' right to take a share of the fish. Id. at 384

The significance of Winans to the issue of whether the treaty right precludes non-natural degradation of the resources is twofold:

1. The Court found that a meaningful right to fish included the right of access to the fishing sites.
2. The Court guaranteed the continuing validity of the right to take fish by finding the implied reservation of an easement upon the waterways of the anadromous fisheries to preclude their obstruction through the use of physical structures, structures which act to negate the treaty right by reducing the availability of the fish to the Indians.

In United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974) the treaty right guaranteed by the Stever's treaties was further explained. In developing its rationale the court consistently emphasized that the state lacks power to deny or qualify the treaty fishing rights which are made the supreme law of the land by the United States Constitution. See e.g. Id. 384 at 342, 346, 402, 407. The logical conclusion to be derived from the court's reasoning is that like state policies which sanctioned an over-harvest of the resource by non-treaty citizens, state activities which authorize or cause environmental deterioration resulting in diminution of salmon runs are similarly impermissible. Indeed, Judge Orrick in United States v. Washington (Phase II), decided precisely that issue:

The state has a correlative duty under the Supremacy Clause of the Constitution of the United States, the duty, moreover, is an affirmative one, independent of the duty of the United States and of third parties, to refrain from degrading or authorizing others to degrade the fish habitat to the extent that would deprive the tribes of their moderate living needs, as implemented through the allocation orders of the District Court in Phase I.

United States v. Washington (Phase II) No. 9213, at 2-3 (Amended Judgement, January 12, 1981) (emphasis added).

Additionally, this prohibition applies equally to federal agencies, states, and third parties. See Phase II, 506 F. Supp. at 208; Kittitas Reclamation District v. Sunnyside Valley Irrigation District, Civ. No. 21 (E.J. Wash. Nov. 28, 1980).

Concomitant with the treaty fishing rights held by the Columbia River treaty tribes are the treaty reserved water rights necessary to fulfill the purposes of the reservation and preserve these fishing rights. In 1908 the Supreme Court in Winters v. United States, 207 U.S. 564 (1908), explicitly articulated the reserved rights doctrine initially espoused in Winans. The effect of the Winters decision is in many respects the same as Winans. It holds that Indian treaties must be construed to contain the elements necessary to achieve their purpose. In Winters, a reservation of water was necessary to achieve the purpose of the congressionally ratified agreement with the tribes--the creation of a permanent home for the Indians. United States Attorney, Supplemental Memorandum in Support of Motion for Partial Summary Judgement, United States v. Washington, No. 9213 (Phase II) (W.D. Wash. Jan. 12, 1979). Winter's doctrine rights have been used to protect treaty fisheries by maintenance of both sufficient quantities and qualities of water. See e.g., United States v. Anderson, No. 3643 (E.D. Wash. July 23, 1979) and Colville Confederated Tribes v. Walton, 647 F.2d 42 (9th Cir. 1981).

In essence, Indian treaty rights, federal trust obligations, and National Environmental Policy Act authorities and obligations coalesce to cast the Skagit/Hanford Proceeding in a special light. The Skagit/Hanford

Project must not infringe the treaty rights of the Columbia River tribes and it is incumbent upon the Nuclear Regulatory Commission and the Atomic Safety and Licensing Board to exercise the strictest fiduciary standards to protect and guarantee these rights from infringement.

Both the Application for Site Certification/Environmental Report (ASC/ER) prepared by the applicant and the Draft Environmental Impact Statement (DEIS) prepared by Nuclear Regulatory Commission Staff are deficient with regard to the assessment of environmental impacts. The following is a description of those insufficiencies.

A. Neither the applicant nor NRC staff have described all the constituents and contaminants contained in the Columbia River at the Hanford Reach, which when processed through applicant's project could result in effluent discharges toxic to salmon and steelhead. For instance, 1978 United States Geological Survey data for the Hanford Reach at the Vernita Bridge shows recoverable quantities of the following water quality constituents: (1) Arsenic, (2) Barium, (3) Cobalt, (4) Silver. U.S.G.S. Water Resources Data for Washington, (1978). These constituents have been described as toxic to fish in minute concentrations. Forstner & Whittman, Metal Pollution in the Aquatic Environment, 28 (1981). Yet, neither the applicant nor the NRC staff has considered in their documentation of environmental impacts the potential toxic conditions that concentration and alteration of these and other contaminants will pose to the salmon and steelhead of the Hanford Reach.

B. Both the applicant's environmental report and the NRC staff's Draft Environmental Impact Statement discuss at some length the Columbia River flow quantities in the area of the discharge. ASC/ER at 2.41, 2.45; DEIS at 423, 4-24. However, these descriptions do not address the level of tur-

bulence or currents in the Columbia River at river mile 361.5. Rather such turbulence is superficially discussed, in one sentence, by the applicant in answer to a question posed by the Energy Facility Site Evaluation Council. ASC/ER at E-133 amendment 5. The DEIS does provide some information with respect to turbulence, stating that the "proposed (discharge) location is in an area where the main current crosses from northeast to the southwest side of the channel and judging from the channel conformation, an area where turbulence and predominating flow vectors would have a tendency to vary greatly with discharge," and that "river velocities under various flow conditions in the immediate vicinity of the intake structure are not available." DEIS at 4-66 and 4-57. Evidently, the applicant's efforts to model the discharge plume, described at pages 5.13 to 5.16 of the ASC/ER, do not reflect local currents and turbulence. This conclusion is supported by the total lack of data on either turbulence or local currents contained in table 5.11 entitled "Study Case Parameters." ASC/ER at Table 5.1-1. It is possible that the predominating flow vectors which may vary greatly with discharge will result in a size and shape of the discharge plume different from representations made by the applicant. For instance, both the applicant and NRC staff at times assume that the discharge plume occupies a width 0.7 percent of the cross-section of the Columbia River. Yet if the size of the plume were to actually occupy 1.4 percent of the river cross-section, due to "varying" flow vectors, the result would be a two fold increase in the numbers of evenly distributed organisms encountering the discharge. Assuming a condition where outmigrating salmon are evenly distributed, in the period of early-May 1966 approximately 70,000 juvenile salmonids would have encountered the discharge plume if it occupied 1.4 percent of the river cross-section. Considering that the exact migration patterns of juvenile salmon are not known at river mile 361.5, the size and shape of the discharge plume cannot be disregarded. See Testimony of Robert Gerke, NPDES Hearing June 2,

1982. Accordingly, "expected seasonal and other temporal variations of important parameters such as flows and currents should be described monthly." U.S. NRC Regulatory Guide 4.2. (Emphasis added).

C. The applicant states in the environmental report at page 3.6-4 that "[s]ulfuric acid will be added continuously into the circulating water system for scale and pH control. The operation of the sulfuric acid feed pumps will be regulated by circulating water pH sensors to maintain pH of the circulating water between 6.5 and 8.5." ASC/ER at 3.6-4. While the applicant describes NPDES Monitoring Device Capabilities in Exhibit 16 of its prefiled NPDES Testimony and Exhibits, this exhibit does not describe the ability of applicant to control cooling water pH; it only describes the range and accuracy of the pH monitoring devices. In the course of a recent Environmental Protection Agency nationwide review, no industrial plant examined consistently achieved 100 percent compliance with pH limitations on a monthly basis. 47 Fed. Reg. 24535 (1982). Both the susceptibility to corrosion of stainless steel 304, which applicant intends to use for heat exchanger tubes, and the toxicity of metal compounds in the cooling water are dependent on the pH. See Andrew, Hodson, and Konasewich, Toxicity to Biota of Metal Forms in Natural Water, 139 (1976); Peckner and Bernstein, Handbook of Stainless Steels, 161, 171 (1977). As discussed below at "D" and "H", both the corrosion of stainless steel 304 and increased toxicity of metal compounds in the cooling water pose a threat to the aquatic biota of the Hanford Reach. Without knowledge of how the applicant intends to control the pH of the cooling water system the magnitude of the threat to Indian treaty fishing rights cannot be fully ascertained, nor can it be guaranteed that these constitutionally protected treaty rights will not be impaired.

D. The NRC staff states that "[t]race metals would not be introduced from

plant operation or from corrosion products of the stainless steel condensor tubes." DEIS at 4-37. However, this conclusion seems contradicted by NRC staff emphasis on chemicals to be used for corrosion inhibition. Even though applicant's witness has stated that corrosion inhibiting chemicals will not be used in the cooling water system,¹ if one can assume perfect corrosion inhibition, the conclusion that trace metals will not be introduced has some basis. However, in light of both the applicant's testimony on this subject and the basic metalurgy of stainless steel 304 this conclusion is unfounded. Stainless steel 304 is composed of iron, chromium, nickel and some carbon. Its corrosion resistance or passivity is related to pH and chloride concentration. Both decreases in pH and increases in chloride concentration increase the probability of greater corrosion of this metal. Peckner and Bernstein at 16-5. Indeed, inadvertent exposure of 304 stainless steel heating coils to dilute sulfuric acid has been shown to result in heavy material losses. Peckner and Bernstein at 16-5. Such materials would include chromium, which has been shown to be toxic to anadromous fish in very minute quantities. U.S. EPA, Ambient Water Quality Criteria for Chromium, (Oct. 1980). Furthermore, complete corrosion of the condenser pipe might result in the introduction of corrosion inhibiting chemicals into the cooling water system--chemicals which applicant has admitted may have adverse impacts on aquatic environments. Testimony of Kan Lin at 198, NPDES Hearing May 6, 1982.

E. The applicant's environmental report states that "since 1962, the local fall chinook spawning population has increased to an average of 20,000 fish or approximately 15 to 20 percent of the total fall chinook escapement to the river." ASC/ER at 2.2-21. However, the applicant did not display anadromous fish passage counts in its environmental report. The DEIS does provide adult anadromous fish passage counts at Priest Rapids Dam and an estimate of

¹ Testimony of Kan Lin, NPDES Hearing May 6, 1982.

chinook spawning near Hanford. DEIS Table 409 at 4-51 . Some of the data supplied in this table, particularly data for 1981 spawning counts and chinook salmon passage counts at Priest Rapids, disagrees with the data generally accepted by the state and federal fish and wildlife agencies operating in the Columbia River basin, though data for other years are generally in agreement. For instance, Table 4-9 contains an estimate of 31,062 chinook spawning near Hanford in 1981. However, data prepared by Jensen shows that in 1981 a total of 25,700 summer, spring, and fall chinook which passed McNary Dam did not pass either Priest Rapids or Ice Harbor Dams. H. Jensen, Columbia River Fish Counts, Oregon Dept. of Fish and Wildlife, January 1982. Consequently an estimate that 34,000 chinook spawned near Hanford must be questioned.

Such an overestimation permits the inference that fall chinook populations are not a matter concern to the applicant. However, at present a significant effort is under way to rebuild base run sizes of these fish stocks. To implement section 4(h) of the Pacific Northwest Electric Power Planning and Conservation Act P.L. 96-501, (Regional Power Act), CRITFC as well as state and federal fish and wildlife agencies submitted recommendations to the Northwest Power Planning Council describing measures to rebuild anadromous fish runs. The work contained therein describes a chinook base run segment of 120,000 destined to pass McNary Dam. Based on this segment size, compensation of 22,000 adult returns was determined to be appropriate for dam related mortalities of the fall chinook population returning to the Columbia River between McNary and Priest Rapids Dams. Initial 4(h) Recommendations For the Protection, Mitigation, and Enhancement of Anadromous Fish in the Columbia Basin 134 (Nov. 16, 1981). In terms of hatchery production, this compensation will require releases on the order of 22,000,000 juvenile fall chinook to the Hanford Reach area. Neither the

applicant's ASC/ER nor the NRC staff's DEIS reflect the impact that the S/HNP may have on efforts to rebuild the depressed fall chinook population of the Hanford Reach.

F. Both the applicant's ASC/ER and the DEIS state that adult salmon and steelhead show a preference to migrate up the eastside of the Hanford Reach. DEIS at 4-63. However, neither the ASC/ER nor the DEIS adequately address the migration patterns of juvenile salmon and steelhead at river mile 361.5. The DEIS does state that,

[n]evertheless, some fish may pass directly through the area proposed for outfall location. Likewise, actively outmigrating juveniles are known to disperse in the river somewhat (S/HNP ASC/ER, 1981; WPPSS 1972). Although the tendency is to stay relatively near the shore, and some individuals could be carried through the plume area by the current."

DEIS at 4-63. (Emphasis added). No studies have been completed for the Hanford Reach at river mile 361.5 to measure the numbers of juvenile salmon and steelhead migrants likely to pass through the proposed discharge plume. Testimony of Robert Gerke, NPDES Hearing June 2, 1982. Yet, a conclusion is made in the DEIS that "some small increase in predator related mortalities to juvenile fish would occur; however, the magnitude of such an effect is not likely to cause significant reductions." DEIS at 4-63. Such statements typify fishery impact estimation. "On the Columbia River, where estimation of impacts is complex, and where most estimates have been potentially negative, this has often resulted either in non-estimation, or under estimation of potential fishery losses -- and a response by some independent decision makers 'if they can't estimate the loss, maybe there isn't going to be any,' but this is virtually a suicidal way to continue given present stock levels." Meyers, Fish, Energy and The Columbia River March 1982.

An estimation of the average yearly number of juvenile salmon does

appear at table 2.2-21 of the ASC/ER. This table suggests that 14 million salmon and steelhead outmigrants utilize the Hanford Reach. Even if 0.7 percent of these fish pass through the discharge zone, approximately 100,000 juvenile salmon per year will encounter toxic discharges. The NRC must exercise the strictest fiduciary standards to insure that this treaty reserved resource is not impaired by the S/HNP. In this regard the DEIS and ASC/ER are deficient.

G. Neither the applicant nor the NRC staff has examined the effect of additional stress to juvenile salmon and steelhead threatened by the proposed discharge in combination with pre-existing stress and stress-inducing conditions downstream. It is relatively clear that the five major dams in the Columbia River above the Hanford Reach (Priest Rapids, Wanapum, Rock Island, Rocky Reach, and Wells) impose substantial stress on juvenile salmon migrating through the Mid-Columbia portion of the River. Testimony of Robert Gerke, NPDES Hearing, June 2, 1982. Indeed mitigation measures are needed and have been proposed for those dams which may cost in excess of \$10-20 million per dam. Detailed Implementation Plan for Initial 4(h) Recommendations for the Protection, Mitigation, and Enhancement of Anadromous Fish in the Columbia Basin, April 1982. Additional stress such as disorientation will be caused by the S/HNP discharge. See U.S. EPA Toxicity of Chlorinated Power Plant Cooling Waters to Fish, (1976). This stress must be considered in light of the pre-existing stresses. In addition, stress-inducing conditions downstream of the S/HNP proposed discharge include McNary Dam, John Day Dam, The Dalles Dam, and Bonneville Dam. National Marine Fisheries Service, U.S. Fish and Wildlife Service, Columbia River Inter-Tribal Fish Commission, Washington Department of Fisheries, Washington Department of Game, Oregon Department of Fish and Wildlife, and Idaho Department of Fish and Game, Initial 4(h) Recommendations for the Protection, Mitigation,

and Enhancement of Anadromous Fish in the Columbia Basin, Tasks 1.3.5-1.3.9 (Nov. 1981). It has been estimated that the losses to the anadromous fishery caused by the hydroelectric projects of the Columbia River system have resulted in approximately a 6.5 billion dollar impact to the region over the past two decades. Meyers, Fish, Energy and the Columbia River, March 1982. This estimate does not attempt to monetize impacts to treaty fishing rights. The stress added by the S/HNP discharge to conditions such as WNP 1, 2, & 4 discharges, predation, collection at McNary Dam and migration survival at lower Columbia River dams and reservoirs (McNary, John Day, The Dalles, and Bonneville) must be considered.

H. Neither the applicant nor NRC staff has addressed in detail the potential toxic effects to migrating salmon and steelhead which would be caused by the discharge of metals from the S/HNP. While the DEIS states that ambient concentrations of certain heavy metals (notably cadmium, copper and mercury) exceed EPA maximum criteria for aquatic protection, the DEIS concludes that since EPA standards are generally at least an order of magnitude below observable threshold concentrations and in the cases of cadmium and copper the concentration would only continue to be slightly exceeded, no biological consequences of any increased concentrations of these metals would be expected. DEIS at 4-64. Applicant states that "[f]ollowing worst-case dilution on the order of 190:1 at the edge of the mixing zone, metal concentrations are estimated to be only six percent above ambient levels. This negligible increase in trace metal concentration should not affect aquatic biota." ASC/ER at 5.3-2. These conclusions ignore several basic considerations; (1) that tens of thousands of migrating juvenile salmon will encounter the discharge plume within the mixing zone; (2) EPA criteria generally recognize that regulating only for the acute lethal toxicity of wastes is no longer adequate; (3) the toxicity of metals will be increased by the applicant's

project; and (4) the concentrations of the metals should at least be controlled on an additive basis.

Applicant's proposed discharge will contain quantities of several toxic constituents in acute and chronic toxic amounts, at the point of discharge, as diluted within mixing zone boundaries, and beyond the boundaries of the mixing zone. Among these constituents are: cadmium, chromium, copper, lead, mercury and zinc. While the state of Washington has not developed numerical criteria for aquatic protection for these constituents, it has developed narrative criteria -- "toxic, radioactive or deleterious material concentrations shall be below those ... which may cause acute or chronic conditions to the aquatic biota" ... Wash. Admin. Code Rev. 173-201-045 (2)(c)(vii). Additionally, the U.S. Environmental Protection Agency has developed numerical criteria for these pollutants. U.S. EPA Criteria Documents, 45 Fed. Reg. 79318, 1980).

The applicant states that the proposed project will discharge the following concentrations at the point of discharge:

	<u>average</u>	<u>maximum</u>
Cadmium	12.9 ug/L	38.4 ug/L
Chromium	29.9 ug/L	257.4 ug/L
Copper	102.6 ug/L	360.4 ug/L
Lead	168.3 ug/L	939.7 ug/L
Mercury	1.69 ug/L	12.86 ug/L
Zinc	380.5 ug/L	1159.2 ug/L

Applicant estimates that 300 feet downstream from the discharge point concentrations will be diluted to the following:

	<u>average</u>	<u>maximum</u>
Cadmium	1.32 ug/L	3.19 ug/L
Chromium	3.05 ug/L	21.2 ug/L
Copper	10.5 ug/L	29.7 ug/L
Lead	17.2 ug/L	77.6 ug/L
Mercury	.177 ug/L	1.06 ug/L
Zinc	38.8 ug/L	95.6 ug/L

The following criteria based on the EPA criteria documents were derived using a hardness number of 55 mg/L as CaCO_3 for Columbia River water.

	<u>Chronic</u>	<u>Acute</u>
Cadmium	(1.05 in hardness - 6.53) e = .098 ug/L	(1.05. in hardness - 3.73) e = 1.6 ug/L
Copper	5.6 ug/L	(.94. in hardness - 1.23) e = 12.6 ug/L
Lead	(2.35. in hardness - 9.48) e = .94 ug/L	(1.22. in hardness - .47) e = 83.0 ug/L
Mercury	.00057 ug/L	.0017 ug/L
Zinc	.46 ug/L	(.83 in hardness + 1.72) e = 155.4 ug/L
Chromium	hexavalent .29 ug/L trivalent (1.08. in hardness + 3.48) e = 2460 ug/L	None

With the exceptions of zinc and lead, for all discharge parameters at the edge of the mixing zone, acute concentrations recommended by the U.S. EPA would be exceeded. Under average conditions all chronic concentrations recommended by the U.S. EPA would be exceeded.

The EPA criteria represent a reasonable estimate of pollutant concentrations consistent with maintaining the Class A designation of the Columbia River Hanford Reach. "Good health and ability to function vigorously are as important for aquatic ecosystems as they are for humans. The former endpoint of bioassays, viz. death, has been supplanted by more subtle endpoints such as the protection of respiration, growth, reproductive success and a variety of other functional changes." U.S. EPA Water Quality Criteria 1972, 117 (1973). Hence to aver that "EPA standards are generally at least an order of magnitude below observable threshold concentrations" as justification for disregarding EPA criteria is meritless. Indeed Lorz and MacPherson have shown that downstream migration of smolting coho salmon was partially inhibited by exposure to copper at levels as low as 5 ug/L. Lorz and MacPherson, Effects of Copper and Zinc on Smoltification of Coho Salmon, (1977). Neither the applicant nor the NRC has demonstrated with certitude that metal concentrations will not impair the production potential of Columbia River salmon and steelhead habitat in the Hanford Reach. This evidentiary gap is compounded by the apparent disregard for the chemical alteration of the metals which would be discharged from the applicant's project. The addition of scaling control chemicals, for instance sulfuric acid, allows a higher dissolved solids concentration to be achieved before scaling in condenser tubing would occur. U.S. EPA Proposed Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Point Source Category, 80 (1980). The toxicity of metals is believed to vary depending on whether the metal is a free ion or bound in an inorganic or organic complex. Chapman, Toxicological Considerations of Heavy Metals in the Aquatic Environment, (1978). Generally the dissolved form of metals is thought to be the most toxic form. Id. Applicants use of sulfuric acid to reduce and control pH would result in a thousand-fold increase in the free ion species of metal constituents in the applicant's discharge, as opposed to

bound forms. See Andrew, Hodson, Konasewich, Toxicity to Biota of Metal Forms in Natural Water, 139 (1976). This increase in toxicity was only cursorily considered by the NRC and applicant. ASC/ER at N-27. Unless controlled this increase in toxicity, would result in increased mortalities of juvenile migrating salmon and steelhead. As mentioned above, assuming even distribution of migrating juvenile salmon, and a discharge plume 0.7% the cross-section of the Columbia River, approximately 100,000 juvenile salmon will encounter the discharge plume per year. The Washington Department of Fisheries has expressed concern that "the potential exists for losses of fish due to high levels of copper at or near the discharge pipe We believe extreme care must be exercised to avoid problems related to copper." Direct Testimony of Robert Gerke, Witness for Washington Dept. of Fisheries. Neither the applicant nor NRC staff have established that the discharge will cause no chronic or acute toxic conditions. Indeed the contrary conclusion is indicated.

Additionally, neither the applicant nor NRC staff has considered additive and synergistic effects of the combined metal discharges from the S/HNP. It has been shown that with a mixture of copper, cadmium, and zinc, lethal thresholds have been attained when each metal was at a concentration of 40 percent or less of its individual lethal threshold. Eaton, Water Res. 7:1723-1736 (1973). Neither applicant nor the NRC have considered whether additive or synergistic toxic effects will result from the applicant's proposed discharge. Yet it is clear that the applicant's project will discharge copper, cadmium, and zinc as well as other metal contaminants in excess of EPA recommended criteria. As early as 1968, the Federal Water Pollution Control Administration recognized that,

When two or more toxic materials that have additive effects are present at the same time in the receiving water, some reduction is necessary in the permissible concentrations as derived from bioassays on individual substances or wastes. The amount of

reduction required is a function of both the number of toxic materials present and their concentrations in respect to the derived permissible concentration. An appropriate means of assuring that the combined amounts of the several substances do not exceed a permissible concentration for the mixture is through the use of the following relationship:

$$\left(\frac{C_a}{L_a} + \frac{C_b}{L_b} \dots + \frac{C_n}{L_n} \leq 1 \right)$$

Where C_s, C_b, \dots, C_n are the measured concentrations of the several toxic materials in the water and L_a, L_b, \dots, L_n are the respective permissible concentration limits derived for the materials on an individual basis. Should the sum of the several fractions exceed one, then a local restriction on the concentration of one or more of the substances is necessary.

Federal Water Pollution Control Administration, Water Quality Criteria, 35 (1968).

In light of the considerations of additive effects, salmonid migration patterns, sublethal thresholds, and increased toxicity of metal contaminants, no assurance is given by the NRC in its DEIS or the applicant in its ASC/ER that discharges of metal contaminants will not impair the production potential of the aquatic habitat in the Columbia River Hanford Reach.

I. It is clear that the total residual chlorine which would be discharged from the S/HNP would result in greater potential mortalities of juvenile salmonids. The Environmental Protection Agency has prescribed a criterion of 2.0 ug/L total residual chlorine for protection of salmonid fish. U.S. EPA Quality Criteria for Water, 33 (1976). The DEIS states that "[i]n addition, the nominal concentration at the edge of the mixing zone would be .002 mg/L (2.0 ug/L), precisely the maximum permissible level, leaving no room for errors in estimation of dilution patterns or for operational errors (i.e. accidental overuse or discharge of blowdown with greater than .38 mg/L TRC)." DEIS at 4-64. While these numbers have been changed slightly in applicant's exhibit 17A, considerations of accidental overuse or discharge

of blowdown have not been addressed. Further, the synergistic relationship of heat and chlorine has been well demonstrated. U.S. EPA Toxicity of Chlorinated Power Plant Condenser Cooling Waters to Fish (1976). While the DEIS addresses this relationship, the applicant's environmental report does not address synergism in any detail. Considering that "both indirect and direct effects would be expected [t]hose organisms not killed outright by exposure to the discharge plume would experience greatly increased susceptibility to predation," this omission is significant. DEIS at 4-64. In light of these anticipated impacts, neither the NRC staff nor the applicant has made a showing that Indian treaty fishing rights will not be impaired by discharges of chlorine and by the synergistic effects of heat and chlorine.

J. Neither the applicant nor NRC staff have displayed the importance of the Hanford Reach anadromous fish to the Indian fishery of the Columbia River. Fall chinook salmon (brights) spawning in the Hanford Reach are harvested by the ocean fisheries of S.E. Alaska, British Columbia, and Washington as well as the Indian and non-Indian commercial fisheries in the Columbia River. The following table summarizes pertinent 1981 harvest statistics for bright chinook:

Fishery	Estimated 1981 Harvest of Brights	%Contribution of Upriver Brights to Respective Fisheries	% of Total U.S. Bright Harvest
Alaska	45,400	16.9%	76.0
British Columbia	78,100	8.9	-
Washington-Ocean	6,200	3.1	10.4
CR non-Indian	1,350	4.2	2.3
CR Indian	6,800	15.3	11.4
Total	137,850		
Total U.S.	59,750		

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Affidavit of Willis E. McConnaha in Confederated Tribes and Bands of the Yakima Indian Nation et al v. Malcolm Baldrige, Civil No. C80-342T (April 26, 1982). If one assumes a value of \$35.00 per harvested bright chinook² total loss of upriver bright chinook would result in approximately a yearly \$5 million dollar impact to only commercial fisheries. This estimate does not reflect the value of other chinook stocks and steelhead utilizing the Hanford Reach. More important, this estimate does not take into account the full loss to treaty fisheries.

Economics provides an inadequate tool to fully capture the magnitude of such treaty fishery losses. A contemporary Indian leader's commentary captures the intrinsic but unquantifiable value of salmon to Native Americans. 'Our religious leaders told us that if we don't take care of the land, the water, the fish, the game, the roots and the berries, we will not be around here long. We must have our salmon forever!!!!' D. Frank, Sr., Chairman, Confederated Tribes of the Warm Springs.

Meyer, Fish, Energy and the Columbia River, March 1982.

Failure by the applicant and the NRC staff to give specific consideration to impacts to the treaty fishery of the Columbia River treaty tribes demonstrates the lack of certainty or guarantee that Indian treaty rights will not be impaired by the S/HNP construction and operation.

K. Neither the applicant nor NRC staff has described specific efforts which will be taken to minimize impacts to aquatic biota that will enure from construction of the S/HNP Intake/Discharge System. The staff and applicant state that "suspended materials (resulting from river bottom excavation) may also release or absorb dissolved substances affecting pH, nutrients, trace metals, and pesticide concentrations in the water." DEIS at 4-36. However, no analysis is presented regarding potential contaminants, such as trace metals and pesticides which would be released from bottom sediments. Such analysis must be conducted in any event pursuant to 40 C.F.R. § 230.60. Chemical constituents such as toxic radioactive nucleides are likely to be found in

2. See Meyer, Fish, Energy, and the Columbia River, March 1982.

this sediment. See Radionucleides in Transport in the Columbia River from Pasco to Vancouver, Washington, Batelle - Northwest (1971). Consequently the absence of data displaying the constituents of river bottom, particularly contaminants which may affect salmon and steelhead, demonstrates not that there will be no effect on Indian treaty rights, but that precise effects have not been evaluated.

L. Beginning at page 4-40 of the NRC DEIS, NRC staff discuss existing water rights in the vicinity of the S/HNP and environmental impacts associated with water withdrawals. DEIS 4-40, 4-42. The DEIS states at page 4-41 that:

The water rights authorization sought by the applicant, however, would pose two legal problems: (1) there may be additional water rights that are not public record (e.g. according to the Winters Doctrine, Federal lands, projects, and reservations have reserved water rights usually not of public record); and (2) the adopted WDE's minimum flow regulation (Washington State Department of Ecology, 1980) could preclude or limit the continuous withdrawal by S/HNP during a period of low flow. However, the latter could be resolved by EFSEC because it has the authority to preempt State permit authority and thus the minimum flow regulation in licensing energy facilities. EFSEC can authorize a water withdrawal for the project.

The staff goes on to conclude that, "[i]n the staff's judgement, no measures to mitigate water use or water rights as in the study area are necessary."

This conclusion ignores basic tenets of the Columbia River Instream Protection Program which focuses on providing instream flows in the Mid-Columbia River for anadromous fish as an indicator for the well-being of other equally important Columbia River instream resources. Washington Dept. of Ecology Columbia River Instream Resource Protection Program, 83, June 1981. In conjunction with the treaty reserved water right of the Columbia River treaty tribes, the Washington Instream Protection Program provides a strong mandate for flows of sufficient quantity and quality for mid-Columbia River anadromous fish.

The applicant's proposed diversion could preclude maintenance of recommended minimum flows for the Hanford Reach. The NRC staff as well as the applicant have not displayed the probability that the S/HNP diversion will reduce flows beyond minimum recommended flows for the protection of anadromous fish contained in the Washington Dept. of Ecology, Columbia River Instream Protection Program and the Initial Recommendation for the Protection, Mitigation, and Enhancement of Anadromous Fish in the Columbia River Basin. Involvement of the Nuclear Regulatory Commission in Columbia River instream flow considerations is not without precedent. In 1955, at the request of the Atomic Energy Commission, minimum flows of 36,000 cfs for the Hanford Reach were established by the Federal Power Commission. 14 F.P.C. 1067, 1074. If S/HNP withdrawals would cause reduction in minimum instream flow levels these must be accounted for.

M. The DEIS states that "locating the (intake and outfall) structures 853m (2,800 ft.) downstream of river mile 361.5 would reduce environmental effects of construction because of the size of excavations and the duration of excavation activities would be substantially reduced." DEIS at 4-57. The NRC staff reasons that by moving the intake and discharge structures closer toward shore by approximately 2,000 feet, significant short term impacts to aquatic biota due to construction would be significantly diminished.

However this analysis raises questions regarding both the salmon and steelhead migration routes and the construction impact control program.

The exact migration routes of these fish in the vicinity of the Hanford Reach at river mile 361.5 is not known. Testimony of Robert Gerke NPDES Hearing June 2, 1982. Until such migration routes are ascertained, it is not

possible to select specific locations for the discharge and intake structures while simultaneously ensuring that treaty fishing rights will not be impaired.

At page 4.5-3 of the ASC/ER, the applicant describes its construction impact control program for the construction of the S/HNP intake and outfall structures. Statements like "every effort will be made to achieve an environmental balance which results in minimal damaging effect upon wildlife, fish, or other aquatic species" does not provide useful information. The statement that "work will be scheduled to minimize turbidity and endangerment of aquatic life" cannot be considered a program. URS Engineers, Application Review S/HNP ASC/ER (May 20, 1982). In response to the question "[w]hat specific environmental constraints will be imposed on the construction of intake and discharge pipes", posed by EFSEC, the applicant responded that such information is provided in its U.S. Corps of Engineers Permit Application included as Appendix J of the ASC/ER. ASC/ER at E-128. However, beyond a bare description of time frames no meaningful environmental constraints appear in the permit application. In the absence of this information it is impossible to conclude that the construction of the intake and discharge lines will not harm outmigrating juvenile salmon and steelhead, or salmon and steelhead in other life stages. Until the exact migration patterns of salmon and steelhead are known for this area of the Hanford Reach and until sediment and river bottom substrate constituents are known, a useful construction impact control program cannot be formulated.

N. Neither the applicant nor the NRC staff has considered the potential bioconcentration of contaminants discharged from the S/HNP. Furthermore a witness for the Wash. Dept. of Fisheries could not testify with 100% certainty mercury or lead from the applicant's discharge would not bioaccumulate in salmon. Testimony of Robert Gerke NPDES Hearing June 2, 1982. Lead nickel, and mercury are known to bioconcentrate in the tissues of salmonid fish. U.S. Ambient Water Quality Criteria for Lead, Ambient Water Quality Criteria for Mercury, and Ambient Water Quality Criteria for Nickel Oct. 1980. Additionally all of these metals show human health toxicity levels at minute concentrations. Id. The applicant's proposed discharge will contain excessive concentrations of lead, nickel and mercury.

The Columbia River treaty tribes utilize the salmon and steelhead of the Columbia River for subsistence and ceremonial purposes. In the absence of any showing in the record, it cannot be guaranteed that bioconcentration of lead, mercury, and nickel will not impair Indian treaty rights.

O. The water quality monitoring program proposed by the applicant is not adequate to ensure that future operations of the S/HNP, if any, will not impair the production potential of anadromous fish. Applicant and the Washington Department of Ecology have entered into a stipulation regarding static salmonid bioassays. These tests are to be conducted quarterly for one year following the start up of each S/HNP unit. Letter from Theodore Thomsen to Darrel Peebles May 19, 1982. However, a Dept. of Ecology witness has already admitted the possibility that S/HNP operations will change after the first year of operation and consequently that it would be wise to consider a re-

quirement for bioassays subsequent to the first year of operation. Testimony of Roger Stanley, NPDES Hearing June 2, 1982.

Additionally the applicant has proposed biomonitoring at various stations in the Columbia River. Applicant's Prefiled NPDES Testimony and Exhibits, April 19, 1982. However, the biomonitoring proposed by the applicant would not measure effects of the discharge on evenly distributed juvenile salmon migrating downstream. The applicant's biomonitoring stations located in the vicinity of the discharge (i.e. stations BI-1 and BI-2) will only collect benthic invertebrates, not juvenile salmon. A monitoring program of four bioassays during the first year of operations and an instream biomonitoring program which measures effects only on benthic invertebrates in the vicinity of the discharge can not guarantee that Indian treaty rights will not be infringed.

P. The NRC staff has evaluated some environmental impacts associated with a possible accident at the S/HNP:

The environmental impacts that have been considered include potential radiation exposures to individuals and to the population as a whole, the risk of near- and long-term adverse health effects that such exposures could entail, and the potential economic and societal consequences of accidental contamination of the environment.

DEIS at 4-226.

However, the staff has not considered the effects of a possible accident on the anadromous fishery of the Yakima River system. Furthermore while the staff has considered groundwater travel times for radioactive contaminants such as strontium or cesium, there has been no consideration of inadvertent aquatic discharges of radioactive or other toxic materials through the discharge outfall to the Hanford Reach.

Even the thought that such releases occurred, has resulted in significant reductions in sports fisheries. U.S. NRC, Impact of the 1979 Accident at Three Mile Island Nuclear Station on Recreational Fishing in the Susquehanna River, NUREG - 0754 (1980). Absent consideration of impacts to relevant fisheries, no assurance is made that the S/HNP operation will not infringe Indian treaty rights.

Q. At pages 4-57 and 4-58 of the DEIS, the NRC staff discusses the threat of impingement and entrainment to juvenile fish posed by applicant's water withdrawal operations. The staff states that the "outerskin of the structures would be perforated with 0.95 cm. (3/8-in.) diameter holes." DEIS at 4-57 and 4-58. However it is questionable whether a 3/8" diameter perforation will be small enough to protect salmonid species . A witness for the Washington Dept. of Fisheries testified that the "Department of Fisheries has adopted certain screening criteria to protect the fisheries resource . . . which calls for no greater than 1/8" openings to protect salmon fry such as fall chinook that rear and migrate in the Hanford Reach. Direct Testimony of Robert Gerke (April 1982). This witness also testified that until the WWPPS 2 intake structure with 3/8" perforations is "thoroughly tested and proven an effective fish screening facility, it cannot be considered acceptable to the Department of Fisheries." Id. Additionally a witness for the applicant has testified that to make a sound scientific conclusion it would be necessary to complete the impingement and entrainment studies at WWPPS Plant 2. Cross Examination of Thomas Page, NPDES Hearing, (May 1982). In light of the uncertainty surrounding impingement and entrainment there is no guarantee that the treaty reserved rights of the Columbia River tribes will not be impaired by the applicant's water withdrawal operations.

Respectfully Submitted,

S. Timothy Wapato
S. Timothy Wapato

Dated this 16th day of July 1982.

MEMORANDUM IN SUPPORT OF PETITIONER'S MOTION FOR
ADMISSION OF SECOND SUPPLEMENT TO PETITION TO INTERVENE

On May 5, 1982, Petitioner CRITFC filed its Petition to Intervene together with a Supplement to the Petition to Intervene. Both the Applicant 1/ and the NRC staff 2/ concluded that the petition satisfied the requirements for intervenor standing set out in commission regulations. 10 C.F.R. 2.714(a)(2). The applicant, however, opposed CRITFC's Petition to Intervene, citing to its untimeliness.3/ The NRC staff, on the other hand, concluded that while CRITFC's petition was untimely, the balance of the factors listed in Commission regulations 10 C.F.R. 2.714(a)(1) favors granting CRITFC's Petition to Intervene. Petitioner agrees with the result reached by the NRC staff on this issue and requests that the board grant CRITFC's Petition to Intervene in these proceedings.

The applicant and the NRC staff, however, objected to certain alleged deficiencies in the contentions as stated in CRITFC's supplement to Petition to Intervene. Following review of these objections, CRITFC has prepared this filing which includes its Second Supplement to Petition to Intervene, the motion requesting admission of the Second Supplement, and this memorandum

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- 1/ Applicant's Response in Opposition to Untimely Petition to Intervene by Columbia River Inter-Tribal Fish Commission, May 19, 1982, at 3.
- 2/ NRC Staff Response to Untimely Petitions to Intervene by the Columbia River Inter-Tribal Fish Commission and the Yakima Indian Nation, May 25, 1982, at 9.
- 3/ Applicant's Objections to the timeliness of CRITFC's Petition to Intervene are anomalous in light of applicant's own requests that the hearings on the environmental issues be delayed perhaps as much as one year, until so time in 1983. See letter from Theodore Thomsen, Attorney for Applicants, to Judge John F. Wolfe, dated April 28, 1982.

which supports the admission of contention 1, 2, and 3 as stated in the Supplement to CRITFC Petition to Intervene, and the admission of contention 4 and contention 5 as amended in Petitioner's Second Supplement. The amended contention 5 is intended to satisfy objections to an alleged lack of specificity and basis for CRITFC contention number 4 as contained in CRITFC's first supplement. Moreover each contention is supported by specific documentation and basis. For the following reasons, the contentions listed in CRITFC Second Supplement to Petition to Intervene should be admitted in this proceeding.

A. CRITFC CONTENTIONS 1, 2, 3 and 4 (Previously CRITFC Contention Number 5)
SHOULD BE ADMITTED IN THIS PROCEEDING

CONTENTION 1:

Applicants Have Relied On An Inflated Calculation Of Demand For Electrical Power; Reliable Regional Energy Forecasts Demonstrate No Need For The Skagit/Hanford Project

CONTENTION 2:

There Are Cost-Effective, Environmentally Preferable Alternatives To The Project; The Environmental Report Is Inadequate In Its Discussion Of Those Alternatives

Contentions 1 and 2 were originally raised by the Natural Resources Defense Council (NRDC) and CRITFC adopted the contentions and incorporated by reference the bases set out by NRDC.

CONTENTION 3:

The Applicant Has Used An Inaccurately Low Estimate Of The Environmental And Financial Cost Of The Project In Its Benefit/Cost Ratio

Contention 3 was originally raised in pleadings filed by the National Wildlife Federation and Oregon Environmental Council. CRITFC adopted this contention and incorporated by reference the bases set out by NWF/OEC. The

NRC staff did not object to these contentions and concluded that they should be admitted as issues in the controversy.^{4/} The applicant, on the other hand, appears to object to these three contentions because they "simply adopt contentions offered by other intervenors in this proceeding..."^{5/} This objection is unfounded. As one Licensing Board has stated, "[o]riginality is not a pleading requirement." Commonwealth Edison Co. (Byron Nuclear Power Station, Units 1 and 2), LBP-80-30, 12 NRC 683, 689 (1980). Moreover, the adoption of contentions of other parties promotes administrative efficiency by eliminating the confusion resulting from the presentation of pleadings, discovery, and evidence on related, but facially distinct issues. For these reasons, CRITFC believes that its contentions 1, 2, and 3 should be admitted in this proceeding.

CONTENTION 4: (Replaces Contention 5 in Petitioner's First Supplement)

The Commission Should Not Issue Any Construction Permit Or Facility License For Skagit/Hanford Until It Has Assessed The Environmental Impacts Of Temporary Waste Storage At The Project During The Life Of The License And Has Complied With The Requirements Of NRDC v. NRC, No. 74-1586 (D.C.C.R. April 27, 1982).

This contention amends and replaces Previous Contention 5 in CRITFC's First Supplement to Petition to Intervene which concerned the nuclear waste - disposal issue. Pursuant to 10 C.F.R. 2.714(a)(1)+(3), Petitioner requests that the presiding officer approve the admission of CRITFC contention 4 as stated in 10 C.F.R. 2.714(a)(1).

- i.) Petitioner has good cause, for failure to file on time. Petitioner files this amended contention in response to the very recent decision of the Court of Appeals for the District of

^{4/} NRC Staff Response, May 25, 1982, at 16-17. The NRC staff, however, suggested consolidating CRITFC with NRDC or NWF/OEC on these issues. As discussed in Part C of this Memorandum, CRITFC opposes such consolidation.

^{5/} Applicant's Response, May 19, 1982, at 5.

Columbia in Natural Resources Defense Council v. United States Nuclear Regulatory Commission, No. 74-1586 (D.C. Cir. April 27, 1982). CRITFC was unaware of the entering of this decision when it filed its original Petition to Intervene and Supplement. Further, CRITFC had not yet received the Draft Environmental Impact Statement and therefore was unable to analyze the staff's discussion of the environmental effects of nuclear fuel cycle activities, including the discussion of short- and long-term waste disposal. (Table 5-3 of the commission regulations, 10 C.F.R. Part 51.)

- ii.) This contention is directly related to the consideration of the nuclear waste issue; further, the recent D.C. Circuit Court opinion directly affects the NRC Procedures for considering the waste issue. Therefore, these S/HNP proceedings are the most appropriate, and indeed the only available means to protect petitioner's interests in this issue.
- iii.) Petitioner's participation will assist in developing a sound record on this and other issues. Petitioner's staff includes fishery biologists (with expertise in environmental pollution, water quality, and fishery harvest management), water resources experts, and legal interns. Further, CRITFC has the ability to utilize outside experts and will do so as necessary to insure that matters of concern to it are fully developed in the record.
- iv.) Petitioner's interests will not be adequately represented by existing parties. CRITFC has adopted the wording and basis of NWF/OEC Contention 5, NWF/OEC Second Supplement to Petition to Intervene, May 21, 1982, for administrative convenience. Nevertheless, in protecting the treaty fishing rights of its member tribes CRITFC can not rely upon the existing environmental and public interest groups to represent this unique tribal right. CRITFC will,

of course, respect the Commission's concerns in restricting irrelevant, duplicative or repetitive evidence and argument and will coordinate with other groups interested in this matter.

- v.) Since the issue of the environmental effects of short- and long-term waste disposal has been raised by other parties to this proceeding, CRITFC's participation on this issue will neither broaden the issues nor delay the proceeding. Because of the importance of the opinion in NRDC v. NRC, Petitioners welcome the opportunity to assist the Commission in interpreting and complying with this important and lengthy opinion. CRITFC reserves the right to supplement this petition as further information becomes available.

- B. CRITFC CONTENTIONS 5 (Replacing Previous CRITFC Contention 4) SHOULD BE ADMITTED IN THIS PROCEEDING.

CONTENTION 5:

The Environmental Impacts Of The Proposed Skagit/Hanford Nuclear Project On Columbia River Fish And Wildlife Resources Have Not Been Full Assessed. Furthermore, Environmental Impacts Must Not Infringe Indian Treaty Rights.

In response to objections raised by the applicant and the NRC staff to an alleged lack of specificity and basis for CRITFC contention Number 4, and pursuant to Commission regulation, 10 C.F.R. 2.714(a)(3), petitioner seeks leave to amend its former contention 4 by the admission of contention 5. For the following reasons, petitioner submits that the requirements of the Commission regulations concerning amended contentions have been met, and the presiding officer should approve the admission of CRITFC contentions in this proceeding.

Commission regulation 2.714(a)(3) permits the amendment of contentions

after 15 days prior to the special prehearing conference only with approval of the presiding officer, based on a balancing of the five factors specified in 10 C.F.R. 2.714(a)(1). Each factor, standing alone as well as balanced with the other factors, supports the admission of contention 5, which amends former contention 4.

i.) Petitioner Has Good Cause For Filing On Amendment To Contention 4, At This Time.

At the time CRITFC filed its initial Petition to Intervene and Supplement, it had not received a copy of the NRC staff's Draft Environmental Impact Statement and therefore could not analyze its legal sufficiency. Indeed, we did not receive it until June 18, 1982, although we had requested it much earlier. Letter to S. Timothy Wapato From Richard L. Black dated June 14, 1982.

Therefore, it was impossible to submit these more detailed contentions before this time.

Second, although the NRC staff filed its response to CRITFC Petition to Intervene on May 25, 1982, CRITFC was not served and was only informed of its existence on June 4, 1982, during a telephone conversation with one of the parties. Therefore, petitioner was not aware of nor could it respond to the objection raised by the staff to our contention 4, until we received a copy of the NRC response on June 18, 1982.

Third, CRITFC was not familiar with the specificity required in contentions filed before the NRC until receipt of the NRC staffs response on June 18. These proceedings are the first formal adjudication before the NRC in which CRITFC has been involved.

Moreover, the staff analyst who is primarily responsible for the CRITFC response to S/HNP is new to the field of nuclear licensing.

It has been the regular practice of NRC Atomic Safety and Licensing

Boards to be more lenient with petitions for intervention drawn by counsel who are new to the field. Kansas Gas & Electric, et al., (Wolf Creek Generating Station), A LAB-279, 1 NRC 559, 576-77 (1975). See Also, Dignan, AEC Rules of Practice, 16 Atomic Energy L. J. 3, 9-24 (1974). Petitioner requests that this policy of leniency be applied in the instant proceedings. Finally, petitioner understands that it is the practice of NRC Licensing Boards to allow potential intervenors the opportunity to cure perceived defects in pleadings by amending their petitions. Virginia Electric & Power Co., (North Anna Power Station, Units 1 & 2), ALAB-146, 6 AEC 631 (1973). This practice is especially true where the issue sought to be raised is of such "overriding importance" that the "alternative of being over-strict in cutting off a potentially valid intervention two years before the reactors are ready for operation is wholly unpalatable." Id., 6 AEC at 634. The legal requirement that Indian treaty rights must in no way be impaired by the construction or operation of the proposed Skagit/Hanford Nuclear Plant is such an issue of "overriding importance."

ii.) No Other Means Exist To Protect Petitioner's Interest.

The issues raised in petitioner's contentions are directly related to the protection of the treaty reserved fishing, hunting, gathering and water rights of the four Columbia River tribes. These rights are federally protected and constitute the "Supreme Law of the Land." U.S. Cons. art. VI, 2. As such, they must be protected in a federal forum, absent express Congressional consent to the contrary. United States v. John, 437 U.S. 634 (1978); Fisher v. District Court, 424 U.S. 382 (1976); See generally, F. Cohen, Handbook Of Federal Indian Law 348 (2d ed. 1982).

Second, it should be noted that as a federal agency, the Nuclear

regulatory Commission has a trust obligation toward the Indian tribes of the "strictest fiduciary standards." Nance v. Environmental Protection Agency, 645 F.2d 701, 710-711 (9th Cir. 1981) citing United States v. Mason, 412 U.S. 391, 398 (1973) and Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942). See generally, F. Cohen, Handbook Of Federal Indian Law 220, 28 (2d ed. 1982). These proceedings constitute the best means by which the NRC can perform its trust obligation.

Finally, CRITFC has been admitted as an intervenor in the state proceedings for the proposed S/HNP. Petitioner has and will continue to participate in those proceedings. However, petitioner can not rely on the state of Washington to fully protect its federally guaranteed treaty rights and indeed CRITFC's member tribes and the state of Washington are currently opponents in litigation. See e.g. United States v. Oregon, 302 F. Supp. 899 (D.OR., 1969), subsequent order aff'd. sub nom., United States v. Oregon and Washington, 529 F.2d 570 (9th Cir., 1976); Yakima v. Baldrige, No. C-80-342T (W.D. Wash. June 1981). Therefore, there are no other available means, short of litigation in the federal courts, whereby Petitioner's interests can be protected.

iii.) Petitioner's Participation Will Assist In Developing a Sound Record.

As stated in CRITFC's Petition to Intervene, May 5, 1982, at 8, Petitioner possesses considerable biological, water resources, statistical and legal expertise which it can and will devote to these proceedings as necessary. CRITFC employs seven fisheries biologists, one civil engineer with notable credentials in Columbia River water management, three staff analysts with extensive environmental law and water quality expertise, and a number of legal researchers. All of whom may be devoted to developing a sound record. Finally, petitioner is capable

of obtaining outside expertise as necessary in these proceedings.

iv.) Petitioner's Interest Can Not Be Represented By Existing Parties.

No other parties to this proceeding have an interest in the subject matter comparable to the treaty reserved rights of the Columbia River tribes. Consequently, petitioner cannot rely upon other parties to adequately represent its interest in this hearing.

v.) Petitioner's Second Supplement Will Neither Broaden The Issues Nor Delay The Proceedings.

The issues raised in contention 5 and indeed all of petitioner's contentions, relate to health, safety and especially environmental concerns which are proper subjects for hearings under the Atomic Energy Act of 1954, 42 U.S.C. 2011-2282 (1976 & Supp. III 1979) or National Environmental Policy Act of 1969, 42 U.S.C. 4331-4334 (1976). The contentions of CRITFC are related to the contentions of other intervenors to these proceedings, including the National Wildlife Federation, the Natural Resources Defense Council and the Coalition for Safe Power. Further, contention 5 is a more detailed formulation of the concerns expressed in the "specific aspects" of CRITFC's Petition to Intervene and are therefore well within the scope of issues raised in CRITFC's Petition to Intervene.

Finally, the trust responsibility of the NRC vis a vis the Columbia River Indian tribes requires, inter alia, that the NRC fully investigate all issues related to the protection of treaty reserved rights. See Nance v. Environmental Protection Agency, 645 F.2d 701, 710-11 (9th Cir. 1981) and cases cited therein. See generally F. Cohen, Handbook Of Federal Indian Law, 225-28 (2d ed. 1982). The issues raised in CRITFC contention 5 will not broaden the issues beyond those which the commission is obligated by law to consider and hence will not unduly delay the proceedings.

CONCLUSION

In conclusion, the balance of the factors specified in 10 C.F.R. § 2.714(a)(1) weighs overwhelmingly in favor of the admission of the contentions set forth in CRITFC's Second Supplement to its Petition to Intervene and CRITFC requests that the presiding officer approve and admit the amended contention therein as the contentions which CRITFC intends to litigate in this proceeding.

C. PETITIONER'S POSITION OPPOSING CONSOLIDATION WITH OTHER PARTIES TO THE PROCEEDING.

In its response of May 25, 1982, the NRC staff suggested that CRITFC be consolidated with the Natural Resources Defense Council on Contention 1 and 2 and with the joint National Wildlife Federation/Oregon Environmental Council on Contention 3. CRITFC would vigorously oppose the suggestion of consolidation.

The law regarding consolidation of parties in proceedings such as the instant one is clear. Commission regulations 10 C.F.R. § 2.715 permits the consolidation of parties "who have substantially the same interest that may be affected by the proceeding and who raise substantially the same questions..." (emphasis added).

Both the same "interest" and the same "questions" must be present before consolidation is proper. Even if this language were ambiguous, which it is not, the following sentence of this regulation confirms that the Board, "may not order any consolidation that would prejudice the rights of any part." 10C.F.R. 2.715. The basis for this requirement is constitutional: The fifth and fourteenth amendments ensure parties the right to protect their rights in a hearing. See e.g. Goldberg v. Kelly, 397 U.S. 254 (1970). Moreover, the

treaty-protected rights adverted to herein may not be asserted by other parties to this proceeding because those parties lack standing to raise the rights or interests of third parties. See Warth v. Seldin, 422 U.S. 490 (1975); Detroit Edison Company Enrico Fermi Atomic Power Plant, Unit 2 LBP-78-11, 7 NRC 381, 387 (1978); Tennessee Valley Authority (Watts Bar Nuclear Plant Units 1 and 2 ALAB-413 5 NRC 1418, 1421 (1977)).

Thus, consolidation is not proper, where, as here, the parties do not have the "same interest than may be affected" even though they may raise similar questions.

The Columbia River Inter-Tribal Fish Commission is composed of representatives of the fish and wildlife committees of four Columbia River tribes: The Confederated Tribes of the Warm Springs Reservation, Confederated Tribes of the Umatilla Indian Reservation, the Yakima Indian Nation and the Nez Perce Tribe of Idaho. As such CRITFC is primarily concerned with conserving and enhancing the populations of anadromous fish in the Columbia River Basin pursuant to the treaty reserved fishing and water rights of the Columbia River treaty tribes. See Treaty with the Indians in Middle Oregon, June 25, 1855, 12 Stat. 963; Treaty with the Nez Perce, June 11, 1855, 12 Stat. 957; Treaty with the Yakimas, June 9, 1855, 12 Stat 951; Treaty with the Walla Walla, Cayuse, and Umatilla, June 9, 1855, 12 Stat 945. On the other hand, the Natural Resources Defense Council and the National Wildlife Federation are both national organizations that of the public at large and are concerned with the conservation of all natural resources. The Oregon Environmental Council represents similar interests on a statewide basis. Their rights arise chiefly from statutes and caselaw, not treaties. Although CRITFC raises questions similar to those posed by these environmental groups, its rights are distinct and the standards by which agency actions are judged differ. See United States v. Washington (Phase II), 506 F. Supp. 187 (W.D.

Wash. 1980).

CRITFC is aware of the concerns of the commission and the licensing board in "restricting irrelevant, duplicative or repetitive evidence and argument." 10 C.F.R. § 2.714(e)(1), and it will abide by the commission regulations and Licensing Board orders in these proceedings. However, petitioner has sought to intervene solely to ensure that the tribal treaty protected fishing, hunting, gathering rights, and water rights are not impaired in any way.

CONCLUSION

For all the foregoing reasons, CRITFC would oppose any motion to consolidate it with other parties to this proceeding.

Dated this 16th day of July, 1982

Respectfully Submitted,

S. Timothy Wapato
S. Timothy Wapato



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

RECEIVED

JUN 18 1982

June 14, 1982

COLUMBIA RIVER INTER-
TRIBAL FISH COMMISSION
PORTLAND, OREGON

Mr. S. Timothy Wapato
Executive Director
Columbia River Inter-Tribal Fish Commission
8383 N.E. Sandy Blvd, Suite 320
Portland, Oregon 97220

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

Dear Mr. Wapato:

Pursuant to our telephone conversation of June 8 and your letter of June 10, 1982, enclosed is a copy of documents in the staff's legal file which have not been previously served on you in this proceeding. On June 9, 1982, I forwarded to you a copy of (1) the S/HNP DEIS, and (2) the NRC Staff Response to the Untimely Petitions to Intervene Filed by the Columbia River Inter-Tribal Fish Commission and the Yakima Indian Nation, dated May 25, 1982.

If you need anything else, please give me a call.

Sincerely,

A handwritten signature in cursive script that reads "Richard L. Black".

Richard L. Black
Counsel for NRC Staff

Enclosures: As stated

~~SECRET~~