

BEFORE THE WASHINGTON STATE THERMAL POWER
PLANT SITE EVALUATION COUNCIL

*Amended by
Council Orders No.
504 dated 7-12-76 and
No. 505 dated 7-26-76*

In the matter of Application)
No. 73-2 of the)
WASHINGTON PUBLIC POWER SUPPLY)
SYSTEM, a Municipal Corporation,)
for an NPDES permit and a Section)
401(a) Certificate of Compliance)
.)

FINDINGS OF FACT,
CONCLUSIONS OF LAW,
AND ORDER

This matter came on regularly for hearing on April 10,
11, 15, 16, and 17, and on July 24 and 25, 1975, in Elma and
Montesano, Washington, pursuant to notice duly given, before
the Washington State Thermal Power Plant Site Evaluation Council
and Legal Examiner John von Reis.

The parties were represented as follows:

APPLICANT: WASHINGTON PUBLIC POWER SUPPLY SYSTEM
By Joel Haggard
Attorney at Law
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Seattle, Washington

and

By Richard Quigley
Attorney at Law
3000 George Washington Way
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and

By John Riley
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900 Hoge Building
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COUNSEL FOR THE ENVIRONMENT:

By Malachy Murphy
Deputy Attorney General
Temple of Justice
Olympia, Washington 98504

COUNCIL MEMBER AGENCIES:

DEPARTMENT OF ECOLOGY
By Charles Roe
Assistant Attorney General
Temple of Justice
Olympia, Washington 98504

DEPARTMENT OF SOCIAL AND HEALTH SERVICES
By James Humphries
Assistant Attorney General
Temple of Justice
Olympia, Washington 98504

and

By Thomas A. Shepherd
P. O. Box 1788
Olympia, Washington

Mr. Darrel Peeples, Assistant Attorney General for the Council, also participated in the hearing.

The Department of Game was represented in post hearing matters by Donald Hayen, Assistant Attorney General, Temple of Justice, Olympia, Washington 98504.

The following witnesses testified on behalf of the applicant:

Kenneth R. Wise
Kent Dyckman
Dana E. Cooley
Richard Nicklas
Alan Wern
Orville Trapp

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Joseph Alesi
John Mauro
Ronald Chitwood
Jei-Hsuan Huang
David B. Whitford
Dr. Nagalapur Shashidhara

The following public witnesses testified in the course
of the proceeding:

Donald Blanchard
Tony Zuvich
Walter Failor
Harry J. Denny
William C. Gordon
Lynn W. Daneker
John B. Welch
Glenn Sundstrom
Mr. Terry O'Connor
S. Fred Rapp
Henry E. Soike
John Stevens
Woodis Sundstrom
Betty McClelland
Robert S. Bouch

The following exhibits were admitted into evidence:

EXHIBITS

<u>No.</u>	<u>Description</u>
1	Aerial Photograph of Plant Site
2	Cross Section of the River with Diffuser Pipe
3	Graph of Chehalis River Channel
4	Temperature and Flow Variation Graph of Chehalis River

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- 5 Table of Chehalis River
Low-flow Possibilities
- 6 Spot-check Made on the River
Cross-sectional Temperature
Distribution
- 7 Map of the Chehalis River
Watershed and Surrounding
Area
- 8 Measured Water Quality
and Recorded Extremes from
EPA Storet Retrieval Data
Dated September 27, 1974,
Chehalis River at Porter
- 8A Measured Water Quality and
Recorded Extremes from EPA
Storet Retrieval dated
September 27, 1974, Chehalis
River at Porter Water Years
1961 to 1973
- 9 Water Sampling Sites
- 10 Total Dissolved Solids
Predicted and Observed --
Chehalis at Discharge Site
- 11 Summary of On-site Water
Quality Sampling Data
- 11A Summary of On-site Water
Quality Sampling Data
[Modified from Exhibit 11]
- 12 Scale Drawing of the Site Creeks
- 13 Schematic of Water Flow
- 14 Materials in Final Effluent
Resulting from Operation of
WPPSS Nuclear Project Nos.
3 and 5
- 15 Erosion and Sedimentation
Control Stage I - Plan
- 16 Erosion and Sedimentation
Control Stage II - Plan

- 17 Erosion and Sedimentation
Control Stage III - Plan
- 18 Detailed Drawing of Erosion
and Sediment Control Plan
Structured in Stages I, II,
and III
- 19 Terrace Material Laboratory
Settling Tests
- 20 Residual Soil Derived from
Sandstone Laboratory
Settling Test
- 21 Calculations on Suspended
Solids and Flows
- 22 Graph of Temperatures --
Relating Water Quality
Standards to Performance
of Plant Systems
- 23 Diffuser Discharge Isothermal
Contours
- 24 Diffuser Discharge Isothermal
Contours for Critical Flow
Condition [elevation]
- 25 Diffuser Discharge Isothermal
Contours for Critical Flow
Condition [plan view]
- 26 Diffuser Discharge Isothermal
Contours for Extreme Temperatures
Condition
- 27 Diffuser Discharge Isothermal
Contours for Extreme
Temperatures Condition
[plan view]
- 28 Change in Temperature
Number of Dilutions
after Entry of Blowdown
as a Function of Time
- 29 Important Chehalis River Species
- 30 Aquatic Food Web Relationship

- 31 No Exhibit Offered
- 32 Water Criteria Pt. 1 126 - 129
- 33 Water Criteria Pt. 2 189
- 34 Comparison of exposures to humans and aquatic biota
- 35 No Exhibit Offered
- 36 Applicant's proposed form NPDES permit
- 37 Biographies
- 38 Flow Rates at River Mile 19.7 During One Tidal Cycle, Using Spring Tide of October 6, 7 - 1967
- 39 Resume of David Burson Whitford
- 40 Schematic Drawing of the Cooling Water Systems for WPPSS Nuclear Project Nos. 3 and 5
- 41 Location Map of Primary Fishing Areas
- 42 Plant Coolant System Interfaces
- 43 Examples of Possible Events Occasioning Discharge of Liquids Containing Radioactivity

All offered exhibits were admitted into evidence.

MEMORANDUM

Water in the Chehalis River comes from ground sources, seasonal snow melt, and rain. During much of the year the river is quite small; at other times it is flood-swollen. Significant

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sports fishing is conducted along the river and in Grays Harbor near the river's mouth. A commercial fish and shellfish industry also operates in the ocean near the river's mouth. The quality of the river's waters is excellent in the area of the project. The river and the anadromous fish populations are productive, presently viable resources.

Application 73-2, for permission to discharge pollutants into these waters, raises issues which should be approached with great caution and with an eye to exemplary disposition. This order imposes additional restrictions over and above those described in the Council's March 5, 1975, (tentative draft permit) upon any pollutant discharges made to state waters from constructing or operating nuclear electric generating plants proposed near Satsop, Washington.

Having considered the evidence and record in the matter, the Council makes the following findings of fact and conclusions of law:

FINDINGS OF FACT

1. On December 17, 1973. the Washington Public Power Supply System ("WPPSS" or "the Supply System") filed with the Council an application for site certification for its proposed WPPSS 3 and 5 projects to be located approximately 2 miles south

of the town of Satsop in Grays Harbor County, State of Washington. The application for site certification included an application for a National Pollutant Discharge Elimination System (NPDES) Permit which, if issued, would authorize applicant to discharge liquid effluents from the project to waters of the Chehalis River system in accordance with the permit. The application has been subsequently amended. Applicant also requested that the Council issue a 33 U.S.C. Section 1341 Certification (Section 401(a) Certification) stating that discharges made in accordance with such a permit would comply with requirements stated in 33 U.S.C. §1311, 1312, 1316, and 1317.

2. Applicant seeks authority to discharge various effluents from the following numbered and identified outfall locations:

<u>OUTFALL</u>	<u>RECEIVING WATER</u>	<u>DISCHARGE LOCATION</u>
001	Chehalis River	Lat. 46°58'26" N Lo. 123°29'19" W
002	Fuller Creek	Lat. 46°58'22" N Lo. 123°27'43" W
003	Workman's Creek	Lat. 46°57'27" N Lo. 123°27'49" W
004	Fuller Creek	Lat. 46°57'55" N Lo. 123°28'27" W
005	Fuller Creek	Lat. 46°58'1" N Lo. 123°28'20" W

006	Fuller Creek	Lat. 46°58'6" N Lo. 123°28'9" W
007	Fuller Creek	Lat. 46°58'12" N Lo. 123°28'9" W
008	Fuller Creek	Lat. 46°58'22" N Lo. 123°47'21" W
009	Chehalis River	Lat. 46°58'30" N Lo. 123°27'15" W
010	Purgatory Creek	Lat. 46°58'20" N Lo. 123°27'19" W

3. On March 5, 1975, the Council published a draft NPDES permit for Nuclear Projects 3 and 5, made tentative determinations that it would approve an NPDES permit as stated in that draft, issued a fact sheet, and set the matter for hearing on April 10, 1975.

4. The proposed project anticipates construction and use of two nuclear electric generating units, each unit intended to produce a net output of approximately 1240 megawatts.

5. During construction and operation of the proposed project, applicant intends to discharge liquid effluents from recirculated cooling water blowdown, low volume waste sources, metal cleaning wastes, and sanitary service streams through discharge point 001, identified above. Applicant intends to discharge area runoff at the site from points 002 through 010, also identified above.

6. All receiving waters potentially affected by the project have been designated as class A in accordance with Wash-

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ington state water quality standards set forth in WAC 173, ch. 201. These receiving waters generally possess excellent ambient water quality. High suspended solid levels occurring during heavy rainfall periods (normally November through April) constitute the principle exception to good water quality. Existing water quality determinations at discharge location 001 were based on U. S. Geological Survey historic flow and quality data and on state Department of Ecology records from monitoring stations at Porter and Satsop. Average monthly flow contributions from the Chehalis and Satsop Rivers were considered. Certain total dissolved solids measurements were taken at the site.

7. The reasonably anticipated minimum average 7 consecutive day once-in-ten-year Chehalis River flow in the vicinity of discharge location 001 is 440 cfs. The reasonably anticipated minimum average one day once-in-ten-year Chehalis River flow in the vicinity of location 001 is 420 cfs. Minimum flows most commonly occur during the period from July through September of each year. Mean annual Chehalis River flow in the vicinity of location 001 is 6600 cfs. Daily average river flows in the vicinity of outfall 001 may vary from 360 cfs to 15,000 cfs. The above-stated flows represent physical parameters of the river in the vicinity of the outfall site. The record herein does not establish what physical flows are sufficient to maintain the river's environmental values without stress.

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8. Instantaneous river flow rates in the vicinity of outfall 001 are subject to tidal influences. Exhibit 38 indicates that when instantaneous flow absent tidal influence at location 001 does not exceed 850 cfs, the effect of tidal intrusions from Grays Harbor into the lower Chehalis is to cause actual instantaneous flow at the discharge site to fall substantially below 440 cfs, to stagnate or to cause reversals of the river's flow at the discharge site for periods of up to two (2) hours. Water forced upstream from the discharge site for two consecutive hours may take as much as one-and-one-half (1-1/2) hours to return downstream to the plant site. A representative tidal event can reasonably be anticipated to influence instantaneous flows in the vicinity of the discharge for approximately three-and-one-half (3-1/2) to four (4) hours. Tidal influence in the vicinity of outfall 001 may be expected to occur most frequently during normal low flow months (July through September) though tidal influence may occur at any time when instantaneous flows less than 850 cfs combine with sufficiently high tides. Tidal influence events will not normally occur more than two times in any daily (diurnal) tide cycle, but may occur on several successive days in any monthly cycle. No saltwater intrusion at the outfall site has been shown to occur.

9. In the vicinity of outfall 001, the Chehalis River has a consolidated cobble bottom. Here, the river varies only slightly in depth. The river's southern border in the area

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is a steep low bank. The record does not specifically establish the river's width in this vicinity; however, minimum flow volume and velocity data, and cited depth indicate a width substantially less than the 220 to 250 foot width testified to by applicant's witnesses.

10. The total site's distinctive land characteristics include a high, steep ridge with a relatively level terrace at its base. The high steep ridge composition consists of sandstone weathered to fine sand and silt overlaying an unweathered sandstone foundation. Approximately 40% of the weathered sandstone is finer than #200 sieve. The terrace composition consists of river-deposited sand and silt, approximately 40% of which is finer than #200 sieve. The entire area is covered with native vegetation and trees.

11. The U. S. Soil Conservation Service classifies rainfall at the proposed site as type 1A, indicating that rains are most frequently gentle. The maximum 24-hour once-in-ten-years rainfall at the proposed site is approximately 5.5 inches. Maximum 24-hour once-in-one-hundred years rainfall is approximately 7.9 inches. Annual rainfall at the site averages 65 inches. Monthly average rainfalls vary from one inch in July to ten inches in December.

12. The ridge material is not readily permeable. Most rain falling there will run off. Terrace permeability is variable. A larger percentage of rain will percolate into terrace ground than into ridge ground.

SEDIMENTATION AND EROSION CONTROL FOR AREA RUNOFF

13. Should project construction be authorized, great quantities of earth will be dug, shaped and shifted to prepare the site. It is essential to water quality maintenance that the best practicable techniques of sedimentation and erosion control be used in excavating and moving the displaced earth. Such techniques must equal or surpass state of the art methods recognized by the U. S. Environmental Protection Agency at the time construction commences. In the event construction is authorized, the following site preparation procedures are necessary:

- a. All temporary control systems should be installed before excavation and filling is begun;
- b. Permanent control systems should be installed as final grades are reached, and must be segmented wherever possible to avoid conditions causing uncontrolled overflow;
- c. All grades should be maintained in a manner as level as possible without preventing site drainage to minimize erosion potential;

- d. Soil exposure time must be minimized;
- e. All site excavation runoff must be collected into ditches;
- f. All ditch runoff must be routed to sedimentation ponds;
- g. Total suspended solids in any point source discharges and the effect of such solids discharges on all receiving waters must be minimized to the extent practicable and must in no event exceed limits set forth elsewhere in this order and attachments;
- h. All most favorable erosion control procedures must be employed, including but not limited to mulching of all exposed slopes, proper maintenance of ditch slopes, restriction of ditch flows to minimum practicable amounts not to exceed 1-3/4 cfs, baffle installation at all retaining pond inflow ends in such manner as to prevent short-circuiting and maximize retention time.
- i. All final slopes must be mulched with straw or its equivalent within 24 hours of completion.

j. All construction-related bid and contract documents must contain explicit provisions which adequately and specifically inform contractors of their obligation to strictly adhere to all sedimentation and erosion control standards set forth in this order and appendix. Such documents must be made available to the council on request.

k. All sedimentation and erosion control practices employed in excavating and moving earth must meet standards of performance described by applicant in the record of hearings held on this application in addition to satisfying other criteria here set forth.

l. During the period from May through October, any unfinished slopes bare for more than 48 hours without substantial work must be treated by straw mulching or its equivalent. During the period from November through April, any unfinished slopes bare for more than 24 hours must be treated by straw mulching or its equivalent.

14. Surface loading of a settling pond, calculated by the number of gallons per day passed through the pond divided by the pond's surface area, is one indicator of potential pond efficiency. Surface loading for sedimentation and erosion control ponds at the proposed project site will average 40 gallons per square foot per day.

15. The Universal Soil Loss Equation, a calculation method based on data developed by the United States Agricultural Research Service and the Soil Conservation Service, has been used to estimate sedimentation and erosion which would be caused by the proposed project. The Universal Soil Loss Equation considers five factors: rainfall, topography, soil erodability, plant cover, and construction practices.

16. WPPSS proposes to perform sedimentation processes on discharges made at outfall locations 002 through 010. The processes would necessarily be performed on runoff diverted through these outfall locations. Outfall locations 002 through 010 have been proposed to discharge turbid water in the form of sediments and eroded materials from the construction site. Consonant with preservation of water quality in the respective receiving waters, no oil, grease or poly-chlorinated biphenyl discharges can be made from outfall locations 002 through 010, and pH factors, and coliform, dissolved oxygen, and total dissolved gas contents as well as temperature and other water quality criteria must not substantially vary from conditions present in existing area runoff. Those suspended solids carried through the sedimentation and control ponds and discharged through locations 002 through 010 may affect light transmissivity in receiving water, and may not entirely settle in the receiving waters. No reliable method of predicting turbidity now exists; measures necessary to appropriately control turbidity resulting from construction and operation discharges are described in finding of fact 59 below.

17. No sufficient description of location, quantity or quality of pollutants carried, functions or other characteristics of discharges made to waters of the State of Washington from work on project-related access roads, railroad tracks and lines, or other associated construction areas was testified to in the course of hearings held on this application. It is essential to the preservation of water quality that any discharges to state receiving waters from additional project-related sources such as those listed in this paragraph be regulated and controlled in accordance with the public interest. No description of number or location of outfalls, maximum anticipated water or waste volumes, waste type or concentration, character of receiving waters, discharge frequency or duration, control methods or other essential information was provided. Hence, no finding on the acceptability of discharges from these same additional listed sources can be made in this order.

18. Before March 4, 1974, applicant became contractually obligated to purchase nuclear steam supply systems, turbine generators, the fabrication of reload fuel, and uranium for initial cores. The contracts are not site-specific. The materials mentioned therein may be used elsewhere. Moreover, the materials mentioned in the contract bear direct relation only to operational discharges of the sort contemplated from outfall location 001. The purchases bear no direct relation to construction discharges at outfall locations 002 through 010 resulting from disturbance and movement of earth.

19. Considering the type and size of construction and location, climatic conditions, land and receiving water characteristics, no fundamental difference exists between this proposed project and standard projects as described in the "United States Environmental Protection Agency Steam Electric Power Generating Point Source Category Effluent Guidelines and Standards," of which the Council has taken notice.

20. Discharges of suspended solids to receiving waters from project area runoff made in concentrations greater than 50 milligrams per liter are likely to be deleterious to the quality of receiving waters. [See related finding 44, below.]

BIOLOGICAL GROWTH AND PLANT OPERATION

21. Applicant has designed a chlorination system to control biological growth in the two cooling towers. Unchecked biological growth would restrict heat transfer, would restrict cooling water flow, and would cause other operational difficulties in the plants. Applicant proposes to discharge chlorine through outfall location 001 to the Chehalis River as part of the chlorination system's operation.

22. Chlorination is the most appropriate technique for controlling biological growths in a system of the type applicant proposes.

23. Chlorine discharge standards set by the U. S. Environmental Protection Agency, which standards permit massive discharges of chlorine for two (2) hours in any 24-hour period but no discharge at all for the remaining 22 hours are appropriate for once-through cooling systems, but are not compatible with recirculating water cooling systems of the type the applicant proposes. The incompatibility results from the comparatively large volume of water chlorinated in a recirculating system. Applicant has demonstrated that the chlorine necessary to maintain cooling system operation cannot be discharged within 2 hours of a 24-hour period.

24. Applicant proposes a significant variation in measuring chlorine discharge limits for the proposed plants. In its draft permit, the Council called for an absolute chlorine discharge limit stated in terms of pounds per day. The Supply System proposes a limit measured at the cooling tower basins, of .02 parts per million based on chlorine concentration in water, but establishing no direct quantitative limit on chlorine to be discharged in any time period. Applicant proposes to inject chlorine intermittently into its plant recirculating systems at rates significantly higher than .02 mg/L, but also to withhold chlorine discharges to the river for a sufficient period after injection, (a minimum of two hours) to reduce the chlorine to concentrations no greater than the .02 mg/L level suggested. The combined discharge from Projects Nos. 3 and 5 which applicant

proposes would occur in concentrations not to exceed .02 mg/L for approximately 20 hours out of each 24-hour period.

25. A .02 mg/L chlorine discharge at the discharge diffuser under low flow river conditions absent tidal influence should produce a chlorine concentration no greater than .0013 mg/L at the edge of the applicant's proposed mixing zone.

ACCEPTANCE OF DISCHARGE BY RECEIVING WATERS

26. Discharge of effluents at outfall location 001 would be made through a 30 feet long multiport diffuser. The diffuser was originally proposed to be positioned laterally to the Chehalis River's normal flow at or near the following location: Latitude 46° 58' 22" N, Longitude 123° 29' 19" W, approximately 30 feet north of the south bank of the Chehalis River, at a point approximately 1/2 mile downstream from the confluence of the Satsop River with the Chehalis. Applicant intends the proposed location to provide a seven foot water cover at a riverflow of 440 cfs. The location is also intended to provide a 15 to 1 dilution ratio in a mixing zone extending from 10 feet upstream to 100 feet downstream from the diffuser's center line, bounded laterally by lines parallel to and 50 feet on either side of the diffuser's center line, and bounded vertically on top by the river's surface and on bottom by lines representing the river's bed. The diffuser location as proposed would put the mixing zone's southern boundary 5 feet south of the river's south bank.

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27. Discharges from outfall locations 002 through 010 will be made by means of gravel ditches or pipes running into the receiving water in such manner that the discharge's entrance velocity will not occasion any scouring of banks or stirring of sedimentation.

28. One of the pollutants applicant proposes to discharge at outfall location 001 is heat. Heat reduces dissolved oxygen content, especially in warmer water, acts synergistically with other pollutants, and causes direct damage to organisms. Applicant proposes to discharge thermal wastes from its cooling systems at temperatures closely approximating Chehalis River temperatures on some occasions and at temperatures exceeding ambient river temperatures at other times. The design of the proposed mixing zone is intended to assure that thermal discharge effects measured at the mixing zone's edge will comply with state water quality standards.

29. Conditions under applicant's proposal which are expected to create a maximum temperature differential during summer minimum flow periods are a river temperature approximating 50° F and a discharge temperature no greater than 62° F. Applicant states that the occurrence of these conditions will not likely produce a violation of state water quality standards relating to thermal discharges at the edge of the proposed mixing zone.

30. The maximum temperature differential between discharge and river will likely be caused by a 56° F maximum discharge entering 40° F river water. Applicant states that these conditions can be expected to produce no violation of state water quality standards relating to thermal discharges at the edge of the proposed mixing zone.

31. Applicant states that it will regulate thermal discharges at outfall 001 in such a way that when ambient river temperature upstream from the proposed mixing zone exceeds 65° F, resulting temperature increases at the mixing zone's edge will never be greater than 0.5° F; that, similarly, when ambient upstream temperatures are less than 65° F, temperature differentials at the proposed mixing zone's downstream edge will not be permitted to exceed maximums established by applicable state water criteria, including but not limited to criteria set forth in WAC 173-201-030 (2) (c) (iv).

32. As noted in finding of fact number eight above, the Chehalis River in the vicinity of outfall 001 is subject to tidal influences, which influences at times cause flow reversals of up to 3-1/2 to 4 hours effective duration. Operating the cooling tower blowdown discharge at maximum capacity or normal release volumes during periods of tidal influence or other minimal flow conditions is not consonant with maintenance of water quality in the affected area of the river. Maintenance of water quality in

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the vicinity of the diffuser requires adequate monitoring of tidal influences and other river conditions, especially during low flow. Instantaneous daily flow conditions in the vicinity of outfall 001 occurring in the absence of tidal influences may adequately be determined by combining measured instantaneous flows taken at stations on the Chehalis River at Porter and on the Satsop River near Satsop, Washington, or at other upstream sites approved by the Council. No reliable means of monitoring tidal influence in the lower Chehalis River presently exists. It is found essential to the preservation of water quality in the Chehalis River that prior to the discharge of any pollutants from outfall 001, applicant design and install a permanent tidal influence monitoring device or station sufficient to provide instantaneous monitoring and permanent recording of flow direction, flow velocity and river depth in the vicinity of the diffuser. The device or station must provide applicant with sufficient advance warning to make possible the orderly reduction or elimination of blowdown discharges from outfall 001 at the onset and for the duration of minimal flow conditions.

33. Applicant contends that a dilution factor of 15-1 between river flow and discharge volume maintained in the proposed mixing zone will assure that the discharge will comply with state water quality standards. The proposed discharge plume from outfall location .001 will not comply with state water quality standards within the proposed mixing zone.

34. The sanitary service stream carrying certain human and other wastes must always be treated sufficiently to reduce pollutants to levels no greater than those stated in Special Condition 1(D) of Appendix A, attached hereto, and must then be mixed with the recirculated cooling water blowdown stream during times when either of the two cooling towers is operational. This mixing method would dilute sanitary waste effluent by a minimum factor of 200-1. When neither cooling tower is operational, the sanitary service waste stream must be retained.

35. The low volume waste source stream must be mixed with recirculated cooling water blowdown streams when either of the cooling towers is operational. This mixing method would cause low volume waste source effluent concentrations to be diluted by a minimum factor of 50-1. Low volume wastes are to be retained when neither cooling tower is operating.

36. All the various waste streams, among them the low volume waste stream, the recirculated cooling water blowdown waste stream, the metal cleaning waste stream, and the sanitary service waste stream, must be monitored prior to any mixing with other in-plant streams and discharges.

37. Project construction runoff discharge through outfall locations 002 through 010 will cause ambient receiving water quality parameters to vary primarily in suspended solids

and turbidity. Other water quality parameters are not expected to be significantly altered by these discharges.

AQUATIC BIOTA

38. Water flows through the Chehalis River main stem and its tributaries into Grays Harbor, a natural inlet of the Pacific Ocean. Many animal and plant species inhabit the river. For man, the most important organisms are the several species of anadromous fish, notably salmon and steelhead, which hatch, grow, and spawn in the river system. Important sport fishing for anadromous species is conducted on the Chehalis River and in the Pacific Ocean and Grays Harbor. A viable shellfish industry exists in and near the harbor and sizable amounts of commercial fishing for various species are conducted in the Pacific Ocean and Grays Harbor.

39. The Chehalis River for a distance from approximately 1/4 of a mile upstream to 3/8 of a mile downstream from the proposed location of outfall 001 offers essentially similar conditions for aquatic biota.

40. No spawning by anadromous species has been identified within the mixing zone proposed for outfall location 001. The bottom area there is not appropriate for spawning by anadromous species, though it is acceptable as a spawning ground for other species. Applicant did not attempt to determine whether or not

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other species spawn in this proposed mixing zone. The area proposed for the mixing zone is appropriate for the rearing of juvenile salmonids.

41. There is some spawning potential in creeks which would be affected by construction runoff discharges. At least two potential anadromous spawning beds have been identified in the areas identified in Appendix A as proposed mixing zones for outfall locations 002 through 010. Spawning by other fish species may occur in these mixing zones.

42. Chehalis River animal organisms found in the lower Chehalis River include important anadromous fish, resident fish, and benthic organisms. Anadromous species include Coho, Chinook, and Chum Salmon, Steelhead, Searun Cutthroat, Smelt, Shad, White Sturgeon and Pacific Lamprey. Important resident species include Mountain Whitefish, Cutthroat, Rainbow Trout, Starry Flounder, Large-mouth Bass, Bluegill and certain minnows. Important benthic species, in some cases the food sources for resident and anadromous fish living or rearing in the river, include clams, snails, shrimp, crayfish and insect larvae. Benthic biota found in creeks applicant intends to use as receiving waters for construction runoff are essentially similar to benthic biota found in the Chehalis near outfall 001. Resident and anadromous fish found in creeks are likewise similar to those found in the vicinity of outfall location 001; important species include Coho Salmon, Searun Cutthroat,

Rainbow Trout, Bluegills, Large-mouth Bass and various species of minnows.

Bank fishing for certain anadromous species occurs on both shores of the river immediately downstream from the diffuser location. Drift fishing and trolling are also conducted in the vicinity proposed for the diffuser.

43. Chemical spills and reductions in dissolved oxygen content have caused fish kills on the Chehalis River. Dissolved oxygen content in water must be at least 7.6 parts per million to avoid stress on migrating or rearing fish. For Chehalis River species, dissolved oxygen content is often critically low during the warm water months of July, August, September and October. Increases in water temperature reduce dissolved oxygen content. Low flow, low dissolved oxygen content, temperature and other factors occurring in the Chehalis from July through September, when combined, place considerable stress on mature Searun Cutthroat and Fall Chinook. Added stress placed on these fish populations would likely have an undesirable and deleterious effect causing delay or blockage of migration or other damage. A mature female salmon or steelhead has greater biological value than does the juvenile or smolt.

Anadromous fish are able to detect the presence of effluents in waters when effluent concentrations are diluted in water as much as one to ten parts per billion. The lower threshold may

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apply to concentrations of a single effluent or to various heat, chemical and other effluent combinations whose total concentration reaches the threshold. Anadromous fish tend to avoid chlorine gradients by delaying migration in search of a path circumventing such gradients. Certain anadromous fish normally may avoid heat increase gradients though they do tend to move toward optimum temperatures which temperatures might on occasion be found within an effluent discharge plume. Copper, a potential deleterious pollutant, often attracts anadromous fish. Fish are sometimes able to detect effluent concentration gradients. A fish detecting effluent presence has no reliable cue as to directions leading away from deleterious material concentrations.

A combination of pollutants in an effluent plume can be expected to have a more debilitating effect upon fish populations encountering the proposed plume than would be indicated by the additive effect of each pollutant. This synergistic effect can be expected from the combination and concentration of pollutants applicant proposes to discharge at outfall location 001.

Anadromous smolts, which normally come downstream at times when the river volume is great and the water velocity is high, would have a relatively brief opportunity to detect the discharge plume applicant proposes to create at outfall location 001. Should the smolt fail to avoid the discharge plume, they could not swim out of the plume.

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44. Applicant proposes to discharge construction runoff effluent resulting from site preparation work at outfall locations 002 through 010. Applicant proposes that it be permitted to discharge suspended solids at these outfall locations in concentrations up to 100 mg/l. No legal basis [See related finding 18 and 19.] exists for permitting applicant to discharge suspended solids at outfall locations 002 through 010 in concentrations exceeding 50 mg/l. Additional aspects of the matter of construction runoff discharge limits are treated herein:

a. Outfall locations 002, 004, 005, 006, 007, and 008 are intended to discharge into Fuller Creek. Outfall location 003 is intended to discharge into Workman Creek. Outfall location 009 is intended to discharge into the Chehalis River, and outfall location 010 is intended to discharge into Purgatory Creek.

b. Applicant measured naturally occurring total suspended solids content only in the Chehalis River and on Workman Creek. Measurements taken over time showed a high suspended solids content for the Chehalis River of 54 mg/l and a high suspended solids content for Workman Creek of 31 mg/l.

c. Applicant's witness was unwilling to state that suspended solids or turbidity measurements taken at

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Workman Creek were typical of other creeks flowing through or near the proposed plant site. Nevertheless, applicant presented calculations extrapolated from the actual measurements taken, which calculations were intended to show that discharges made at outfall locations 002 through 010 would reduce net total suspended solids content in the various receiving waters if discharges were made in conjunction with the occurrence of a ten-year storm or a one-year storm. Assuming the validity of applicant's extrapolated calculations without accepting them, the total suspended solids content of receiving waters during and immediately after an exceptionally severe storm is not the Council's only concern regarding discharges made at outfall locations 002 through 010. Applicant has not provided data indicating what the total suspended solids content of any or all of the receiving waters for those discharges is on an average basis at different times of the year or what the suspended solids content of the receiving waters are during and after many days of gentle rainfall which applicant's witnesses testified occur in the area. Additionally unknown is what the representative turbidity content of the various receiving waters are at representative times during the year and other relevant information indicating the quality of the receiving water which results during the 99 percent of any average year when exceptionally severe weather would not be anticipated, but nevertheless discharges would occur.

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d. No information was provided as to the number of days in any year in which suspended solid and turbidity discharges from outfall locations 002 through 010 could reasonably be expected to exceed the normal conditions of receiving waters and thus diminish ambient water quality in the receiving waters. It is apparent from the record that receiving waters would stay murky longer after storms than they presently do because of the delayed release of discharge from settling ponds.

e. Applicant presented information indicating that Workman and Fuller Creeks at times experience high summer temperatures. Increases in turbidity and suspended solids content in these streams would greatly increase stress upon populations of biota in the streams and would otherwise diminish water quality.

45. The determination of whether or not applicant should be permitted to discharge pollutants to the Chehalis River at outfall location 001 is properly based upon an assessment of the effect of discharge of pollutants upon water quality, fish, and other wildlife populations. The testimony applicant offered regarding the effect of its proposed discharges upon the main stem and tributary waters of the Chehalis River is insufficient to permit a finding that its proposal assures the protection and propagation of a balanced population of fish and other wildlife or that it will

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otherwise maintain or contribute to water quality in the Chehalis River and its tributaries. Restrictions considerably more stringent than applicant suggests must be imposed upon any discharges permitted at outfall location 001. Certain findings as to limits necessary to maintain or enhance water quality are set forth elsewhere in this order. Certain appropriate restrictions are stated in the course of the permit included in this order as Appendix A, attached hereto and by this reference made a part hereof. Other limitations are set forth herewith:

a. Neither chlorine nor copper may be discharged from this outfall location in concentrations exceeding .0013 parts per million.

b. Discharge of heat in plant effluent water must meet state water quality criteria at the discharge point as measured in accordance with methods set forth in Appendix A.

c. In order to provide that the effluent discharges are not made at a time when instantaneous net river flow is too low to avoid stress on resident or anadromous fish or benthic biota in the receiving waters, no discharges may be made to the waters when net instantaneous river outflow is less than 550 cubic feet per second. The difference between instantaneous flow which reflects river conditions at any moment, and daily average water

flow, which is a retrospective measurement, permitting significant variations in river flow at different times during a previous day, is clear. Discharge limitations based upon instantaneous flow offer the best assurance of water quality maintenance.

The following elements drawn from the hearing record are the base for discharge limits found necessary in this finding:

i. Applicant intends to discharge cooling water into the class A waters of the Chehalis River. WAC 173-201-130(2)(b) allows the discharge of cooling water into class A (excellent) streams. However, cooling water is not one of the typical uses enumerated for class A waters. Nor, though not specifically forbidden, is it a typical use of class B (good) waters. See WAC 173-201-030(3)(b). Cooling water is listed as a typical use of class C (fair) waters by WAC 173-201-030(4)(c). At times when other Chehalis River quality parameters place the aquatic biota under most stress, the river can be expected to be under low flow conditions.

ii. The testimony describing the effect of proposed discharges upon various species in the river offered by applicant's witness Mr. Alesi is of little value in ascertaining discharge conditions adequate to prevent acute

biological shock on a population basis or to preserve a balanced indigenous population of fish and other wildlife in the vicinity of the outfall. This testimony did offer conclusions and opinions consistent with discharge levels applicant proposes. However, the testimony demonstrated no thorough knowledge of species in the river, effects of any of proposed discharges on the species, or the likelihood of damaging interference with biological communities or populations of important species. The lack of sufficient specific knowledge of the river and species therein detracts from the credibility of assertions applicant made. Therefore, the limits placed on any discharge made from outfall location 001 must be conservative.

iii. Applicant's witness had no knowledge of migratory routes taken by salmonids in the vicinity of outfall location 001. He had no knowledge of whether or not the discharge area would impact migratory routes. He offered incorrect information as to juvenile salmon rearing habits and time spent in the river. He had only limited knowledge of fishing practices in the area of outfall location 001 and had the benefit of no survey of area fishermen. The witness did not know concentration levels at which oil and gease might cause tainting of fish flesh or the level at which copper might cause cellular damage to river species, although he did indicate that chlorine levels lower than applicant proposed to discharge might

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be sufficient to cause cellular damage. His previous experience is largely limited to once-through cooling systems discharging into large receiving waters; he had no previous experience in working with recirculated water cooling systems discharging into small bodies of water. Applicant's siltation criteria were developed in regard to unknown species of European fish. The witness was unfamiliar with salmonid spawning habits and had done no study of non-anadromous rearing or spawning in the outfall vicinity. Mr. Alesi admitted that he did not know whether or not discharges applicant proposed would delay the migration of salmonids. He was unfamiliar with the spawning habits of Chinook salmon and with normal river flows for smolt migration.

iv. Several criteria were stated at different times in the hearing for location of the diffuser. One of these criteria was that the diffuser be located near the center line of the river. Applicant has offered a revised commitment in its exceptions to place the diffuser at a minimum of 45', (i.e., centerline placement of the diffuser is 60 feet) out from the south bank.

v. The assertions concerning discharges made during extreme low flow conditions, including times when flow is influenced by Grays Harbor tides, cannot be honored because of the witness's lack of specific knowledge

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concerning habits and characteristics of resident and anadromous fish in the Chehalis River.

vi. Water quality in affected portions of the river will be maintained or enhanced, and deleterious or damaging conditions and possible acute biological shock on a population basis will be avoided, only if all water quality standards and limits established in this order and Appendix A attached hereto are met at the discharge point and measured as may be specified in this order or attached permit.

46. The pragmatic test of the acceptability of discharges is their anticipated effect upon water quality and upon affected biotic populations. For reasons noted elsewhere in this order, the Council can have little confidence in applicant's judgments that discharges made as it proposes at outfall location 001 will contribute to or maintain water quality in portions of the Chehalis River near location 001, that such discharges will not have deleterious effects in those waters, or that biotic populations in those waters will not be damaged. When, as in this case, sufficient credibility cannot be attached to an applicant's assessment of the effects of discharges it proposes, the conservative treatment of permitted discharges must follow. It is not appropriate, given the present record, that applicant be permitted a mixing zone at outfall location 001.

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Applicant offered no factual evidence to support his contention that Chehalis River flow characteristics are uniform in nature for some distance upstream and downstream from the proposed diffuser location. Applicant acknowledged that velocity of the river varies greatly throughout the year, ranging from a low of -.3 feet per second during tidal reversals to higher than 5 feet per second during flood periods. Applicant's statement that the dilution response of the diffuser as finally designed and installed can be achieved or is achievable is not supported in the record. The record lacks a plot of the river's cross-section reflective of expected seasonal flows, a statement of the quantity of water passing the diffuser location over time, a listing of river velocity changes in the vicinity of the diffuser over time, and a depiction of plume characteristics as they are affected by river conditions.

47. For outfall locations 002 through 008 and 010 discharging, as noted in Finding of Fact No. 44, above, into Fuller Creek, Workman Creek, or Purgatory Creek, mixing zones have been proposed which encompass the entirety of the streams for distance from 30 feet upstream to 300 feet downstream from the center line of discharge spillways. For outfall location 009, discharging into the Chehalis River, a mixing zone was proposed which would extend from the river surface to one foot above the river bed, extending from 10 feet upstream to 100 feet downstream from the center line of the diffuser and extending for 50 feet on each side of the diffuser. No detailed discussion was presented of any diffuser intended to be placed in the Chehalis River in connection

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with outfall 009, no discussion of criteria for location or design of such a diffuser was presented, and no discussion of the characteristics of the plume of such a diffuser took place.

The location of proposed outfall 001 now is given as latitude 45° 58' 26" N, longitude 123° 29' 19" W, while the location of proposed outfall location 009 is given as latitude 46° 58' 30" N, and longitude 123° 27' 15" W, an entirely different location. It is not appropriate that a mixing zone for outfall location 009 be approved. Water quality standards and limitations stated in this order in Appendix A, attached hereto, must be met at outfall location 009. Likewise, outfall locations 002, 004, 005, 006, 007, and 008 discharging into Fuller Creek, outfall location 003 discharging into Workman Creek and outfall location 010 discharging into Purgatory Creek would cause unacceptable increases in turbidity if mixing zones for the various outfalls were permitted. Data applicant has presented indicating background water quality conditions during exceptional days is extrapolated to a degree that renders its reliability questionable at best. Mixing zones are inappropriate at outfall locations 002, 003, 004, 005, 006, 007, 008 and 010.

48. Applicant stated that one criteria for selecting both its proposed diffuser site at outfall location 001 and its downstream water intake location was to provide makeup water having a constituency composition similar to that of the receiving waters at the diffuser site. Similar makeup and receiving

water composition would contribute to maintaining water quality and would not add to other stresses the diffuser will place on populations of fish. No water imported from outside the reach of the river in the vicinity of the plant or that reach's closely related aquifer may be discharged from the diffuser.

49. For review and approval and before construction begins, applicant must submit to the Council plans for the diffuser and attaching pipe which assures the integrity of these facilities and likewise assure that procedures and materials used to set, cure, and bury the pipe will have minimal adverse effect on river water quality. Applicant must submit schedules to the Council for its approval for all work on the diffuser, its attaching pipe, and any associated facilities located in or proximate to the Chehalis River. Such work schedules shall be planned to maintain water quality in the Chehalis.

50. Discharges authorized by Appendix A will have a negligible effect upon migrating species in the Chehalis River. Small numbers of individual aquatic biota, particularly of benthic organisms, might be detrimentally affected by discharges in the immediate area of discharge outfall 001. Negligible adverse effect on the river's eco-system will result from the proposed discharges. Conditions contained in Appendix A are sufficient to assure the protection and propagation of a balanced indigenous population of fish, shellfish and wildlife.

51. The probable impact of discharges as authorized by this order at outfall 001 upon the amount of bank fishing in the Chehalis River is negligible.

52. The anticipated effect upon upstream adult fish migration patterns due to the Project's effluent dispersion as authorized by this order at outfall location 001 is minimal. Adult migrants can reasonably be expected to exhibit customary behavioral tendencies. Physical or hydrological factors in the discharge area are not anticipated to inhibit adult fish passage upstream or downstream. Any exposure of migrants to effluent cannot be expected to cause acute biological shock conditions.

RADIOACTIVE DISCHARGES

53. Applicant will install sufficient tankage and waste treatment systems to collect, store, process, monitor, and recycle all liquids which could contain radionuclides. No intentional release of radioactive liquids will occur during normal reactor operation, including fuel reloading operations and anticipated operational occurrences. Anticipated operational occurrences include but are not limited to conditions such as failed fuel to as much as 1 per cent or minor condenser leaks.

54. Applicable federal radionuclide limitations for nuclear power plants as stated in Appendix I to 10 CFR 50 are less stringent than the qualitative state limitations set forth in

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WAC 173-201-040(10) as those state limitations are applied to the project herein considered.

55. The lowest practicable concentration of radioactive materials attainable in discharges from the proposed project to receiving waters is no discharge of radioactive materials during normal operations. Excess volumes of process water containing trace quantities of radioactivity can be expected to result in releases on infrequent occasions. These abnormal volumes of excess process water may be discharged to the river only after sampling and analysis has demonstrated that radioactive concentrations therein are as low as practicable. Because insufficient information was presented as to the cause and frequency of such volumes of excess process water, all such discharges shall be handled in accordance with general Condition G9, Appendix A, attached hereto.

56. Since no release of liquid radioactive wastes will occur during normal operations, there should be no detectable alteration of the radiological characteristics of the Chehalis River.

SUMMARY FINDINGS

57. The discharge limits stated in this order and Appendix A attached hereto protect and permit the propagation of balanced indigenous populations of fish, shellfish and wildlife in and on

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the receiving waters potentially affected by the discharges. No effluent limitations more stringent than those identified in the order and in Appendix A are necessary for the protection and propagation of a balanced indigenous population of fish, shellfish and wildlife. Each and every effluent limitation stated in this order and Appendix A, attached hereto, is essential for the protection and propagation of balanced indigenous populations of fish, shellfish and wildlife.

58. No acute biological shock, deleterious concentration of toxic, radioactive or hazardous materials, or effect upon biota, humans, or subsequent water use is anticipated to result from proposed project discharges, provided that radionuclide and other discharges are strictly limited in accordance with this order and Appendix A attached hereto. Likewise, no significant public health matters will be occasioned.

59. Area runoff discharge at outfall locations 002 through 010, as limited by the terms of this order and Appendix A, attached hereto, will not violate water quality criteria or standards. Discharges so limited are not anticipated to cause violations of the pH requirements stated in state water quality criteria. Measurements of turbidity resulting from such discharges must be made at earliest possible times for all outfall locations and as necessary thereafter; measurements taken together with measurement methods must be submitted to the Council for the Council's review and determination that state water quality cri-

teria relating to turbidity have been met; and applicant must at the earliest practicable date perform such modifications as are necessary and approved by the Council to assure that discharges made at outfall locations 002 through 010 meet state water quality criteria relating to turbidity without causing such discharges to exceed other state water quality criteria. Discharges from outfall locations 002 through 010 made in accordance with provisions stated in this paragraph and elsewhere in this order and Appendix A, attached hereto, will not cause acute biological shock conditions or violate aesthetic or other water quality measurement criteria or standards.

60. Discharges from the proposed project, if made strictly in the manner authorized by this order and Appendix A, attached hereto, will result in construction and operation of the project in a manner not violating water quality criteria or standards of the State of Washington.

61. Discharges made in accordance with limitations stated in this order and Appendix A, attached hereto, will maintain water quality of receiving waters in a manner sufficient to insure their continued potential for characteristic uses. No more stringent effluent limitations than those reflected in this order and Appendix A, attached hereto, are required to maintain water quality standards, and each and every limitation stated in this order and Appendix A is essential to the maintenance of water quality standards.

62. No toxic pollutants as defined in accordance with either state law or 33 U.S. Code, Section 1317, should be discharged from the proposed project. Should any material authorized to be discharged from the project be identified as a pollutant in accordance with procedures established by either state law or 33 U.S. Code, Section 1317, and associated provisions, the permit stated in Appendix A, attached hereto, should be revised or modified in accordance with any prohibition or more stringent toxic effluent discharge standards propounded. Permittee should be so notified, and permittee should, subject to Council approval, make such modifications in its discharge systems as are necessary to bring discharges in compliance with these same prohibitions or more stringent discharge standards.

63. The Council's draft permit as issued in its March 5, 1975, tentative determination, has been modified by certain changes reflecting the entire record in this matter. The permit, as modified, is set out in Appendix A, attached hereto and by this reference made a part hereof. The permit as identified in Appendix A contains limitations appropriate to insure that operation of the project will contribute to the maintenance of water quality in the Chehalis River system and other state waters potentially affected by the proposed project. If the proposed project is approved and is constructed and operated in accordance with each and every provision stated in this Order and Appendix A, attached hereto, construction and operation will comply with the requirements of 33 U.S. Code, Sections 1311, 1312, 1316 and 1317.

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CONCLUSIONS OF LAW

1. The Washington State Thermal Power Plant Site Evaluation Council has jurisdiction over the persons and subject matter of this proceeding.

2. Applicant has demonstrated, and the Council has determined, that the project at its proposed location cannot be operated at or below the level of chlorination specified in the applicable steam electric power generating point source category effluent guidelines and standards promulgated by the United States Environmental Protection Agency (40 CFR 423, Sub. Part A). Chlorination discharged in accordance with limitations stated in this Order and Appendix A, attached hereto and by this reference made a part hereof, will contribute to the attainment and maintenance of water quality in the waters of the state.

3. The Council is without power to grant a variance from the 50 mg/l maximum suspended solids concentration stated in the United States Environmental Protection Agency steam electric power generating point source category effluent guidelines and standards inasmuch as outfall locations 002 through 010 must be deemed new sources under the criteria stated in those guidelines and standards. The contracts applicant let before March 4, 1974, are not site specific contracts, but are contracts for items or processes usable at sites or locations other than that proposed in the instant

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application. As such, they are insufficient to constitute placement at the premises and cannot serve as a base for removing any outfall location considered herein from designation as a "new source." Further, 33 U.S. Code, Section 1316, Subsection (A)(2) and (A)(5) clearly distinguish between contractual obligations to purchase facilities or equipment on the one hand and preparation work on the other hand. If it is assumed without so deciding that applicant's contractual obligations did amount to placement on the premises, the items so placed would constitute a portion of the pollutant source identified in this application as discharging at outfall location 001. The clearly distinguished site preparation effluent to be discharged at outfall locations 002 through 010 constitutes a discharge from "new sources", even in the hypothetical event that outfall location 001 is removed from its designation as a "new source". The Council has no power to grant a variation from the 50 mg/l maximum suspended solids concentration stated for "new source point discharges".

4. Independent of Conclusion of Law 3 stated above, factors relating to the equipment or facilities involved, the process applied, and other factors related to discharges from the project are not fundamentally different from factors contained in the establishment of the United States Environmental Protection Agency's steam electric power generating point source category effluent guidelines and standards promulgated by the United States Environmental Protection Agency. To permit applicant to discharge construction runoff at outfall locations 002 through 010, if such

construction runoff were to contain suspended solids concentrations exceeding 50 mg/l would diminish, rather than contribute, to the attainment and maintenance of water quality in waters of the State of Washington.

5. Except as authorized herein, no discharges of pollutants into state waters can be permitted by virtue of this order.

6. The Council determined on April 16, 1975, that it had coordinate jurisdiction in the instant application to establish standards for the discharge of radioactive materials from the proposed project to state waters or to prohibit such radioactive materials discharges where appropriate. The Council's proper assumption of jurisdiction over discharge of radioactive materials to state waters is based upon the Council's own authority to issue NPDES permits as established in Title 463 of the Washington Administrative Code and relevant statutes, state water quality standards as noted in WAC 173-201-040(10) and State and Federal statutes relevant thereto, including, but not limited to, RCW 90.54.030 and 90.52.040 and 33 U.S. Code, Sections 1341, 1342 and 1362, Subsection 6, together with other pertinent provisions of the Federal Water Pollution Control Act as amended in 1972. Consideration of the record in this matter and the mandates of the regulations and statutes cited in this conclusion require that the Council permit no discharge of radioactive materials from the proposed project to waters of the State of Washington during normal plant operations.

Discharge to State waters of radioactive material resulting from abnormal plant operations, including but not limited to excess process water buildup, may be made only in lowest practicable concentrations.

7. Effluent limitations contained in this order and Appendix A, attached hereto, constitute construction and operational safeguards at least as stringent as applicable Federal standards. These safeguards reasonably assure the public's protection and welfare.

8. Adherence to this order and to the NPDES Permit identified in Appendix A, attached hereto and by this reference made a part hereof, will reasonably assure that discharges made from identified outfalls in the course of construction and operation of the proposed project at its proposed location, should the project be approved, will comply with provisions of 33 USC §1311, 1312, 1316, and 1317.

9. The Council may properly issue a certification that any discharges to navigable waters made in strict accordance with every provision of this Order and Appendix A, attached hereto and by this reference made a part hereof, will comply with provisions of 33 USC §1311, 1312, 1316, and 1317.

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10. The findings and conclusions stated herein in no way resolve the issue currently before the Council of whether the site Applicant seeks to have certified for its proposed Project should or should not be approved. The issue of site approval or rejection is a matter concerning which the Council has held hearings separated from those resulting in this decision. No determination on the question of site certification or rejection has been made.

From the foregoing findings of fact and conclusions of law, the Council makes the following order.

O R D E R

IT IS THEREFORE ORDERED That the application of the Washington Public Power Supply System for an NPDES Permit authorizing the discharge of pollutants from its WPPSS Nos. 3 and 5 projects be, and the same is hereby, granted only upon conditions as noted in these findings of fact and conclusions of law and order and in the permit set forth in Appendix A, attached hereto and by this reference made a part hereof, which permit shall be issued forthwith for the term of five (5) years from the date of issuance.

IT IS FURTHER ORDERED That upon issuance of an NPDES Permit as set forth in Appendix A, attached hereto and by this reference made a part hereof, a certificate issued pursuant to 33 USC 1341, stating and affirming that conditions set forth in

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the NPDES Permit now issued reasonably assure that any discharges made from the construction or operation of those two projects will be made in compliance with 33 USC §1311, 1312, 1316, and 1317.

DATED at Olympia, Washington and effective this 26th day of April, 1976.

WASHINGTON STATE THERMAL POWER
PLANT SITE EVALUATION COUNCIL

By: 
THOMAS C. STACER
Acting Chairman

Approved for Entry:

By: 
THOMAS F. CARR
Assistant Attorney General