

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of

NRG PUBLIC DOCUMENT ROOM

PUGET SOUND POWER & LIGHT
COMPANY, et al.,

) Docket Nos. 50-522
) 50-523
)

(Skagit Nuclear Power Project
Units 1 and 2)

) June 19, 1979
)
)

PUGET SOUND POWER & LIGHT COMPANY'S RESPONSE TO
INTERVENOR SCANP'S INTERROGATORIES
AND REQUESTS FOR PRODUCTION TO APPLICANTS
OF MAY 24, 1979

REQUEST FOR PRODUCTION NO. 1. The letter of March 29, 1979 from J. E. Mecca to John F. Stolz describes on page 2 an extensive reinvestigation of the site area conducted by Bechtel. Please produce all field mapping and field notes made in connection with this extensive reinvestigation.

ANSWER. The requested materials are available for inspection in the offices of attorneys for Applicants.

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REQUEST FOR PRODUCTION NO. 2. In connection with the extensive reinvestigation undertaken by Bechtel referred to in Request for Production No. 1, please produce all aeromagnetic surveys and interpretations thereof.

ANSWER. The aeromagnetic surveys requested are presented as proprietary figures in the Edcon report, which is Appendix A to the Report of Geologic Investigations in 1978-1979 by Bechtel Incorporated. These proprietary surveys (magnetic contour maps)

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have previously been made available for inspection by SCANP. Applicants have offered to provide SCANP with a set of the proprietary surveys pursuant to a protective agreement. The interpretations of the aeromagnetic surveys are presented in the Edcon report, which has been given to SCANP.

REQUEST FOR PRODUCTION NO. 3. In connection with the extensive reinvestigation referenced in Request for Production No.1, please produce all data and interpretations produced through reinvestigation of the site area involving magnetics.

ANSWER. Appendix B to the Report of Geologic Investigations in 1978-1979 by Bechtel contains magnetic data and interpretations which are in addition to the aeromagnetic data and interpretations that were the subject of the preceding request for production. This additional magnetic data involves ground magnetometer lines, the location of which are shown on figures B-1 of Appendix B of the Bechtel report. The magnetic profiles of many of those lines are reproduced in Appendix B. The other profile lines are available for inspection in the offices of attorneys for Applicants.

INTERROGATORY NO. 1. In connection with the reinvestigation referenced in Request for Production No. 1, please describe all other investigative programs undertaken on Gilligan and Day Creeks in response to the NRC's questions.

ANSWER: The other investigative programs undertaken on Gilligan and Day Creeks are described in the Bechtel report.

REQUEST FOR PRODUCTION NO. 4. With respect to the reinvestigation referenced in Request for Production No. 1, please produce all data and interpretations obtained in re-review of imagery studies.

ANSWER. The data are identified and the interpretations are presented in the Bechtel report. The imagery that was used includes (1) side looking airborne radar, which is available from the U.S. Corps of Engineers in Seattle, (2) Black and white and color aerial photographs (1:24,000 and 1:6,000 scales), which are available from the Resource Inventory Section of the Washington State Department of Natural Resources in Olympia, and (3) imagery which has been discussed previously in hearings and in responses to prior discovery requests.

REQUEST FOR PRODUCTION NO. 5. Please produce any data, interpretations, or other written materials produced or assessed in connection with these other investigative programs referenced in Interrogatory No. 1 above.

ANSWER. The requested materials are provided in the Bechtel report and in the report entitled "Subsurface Investigation of Disturbed Glacial Deposits on Lake Cavanaugh Road" dated 29 December 1978 by Bechtel. Applicants have previously given both reports to SCANP.

INTERROGATORY NO. 2. In connection with the reinvestigation referenced in Request for Production No. 1, please describe the information from seismic profiles which have been reviewed to define if a structure as hypothesized by Dr. Hays exists.

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ANSWER: See Dr. Dobrin's latter report dated May 15, 1969 in Appendix D of the Bechtel report and his other reports in Appendix 2G of the PSAR for the requested description.

REQUEST FOR PRODUCTION NO. 6. Please produce all of the information described in Interrogatory No. 2 above.

ANSWER. There are four sets of seismic reflection data that are referenced in Dr. Dobrin's reports. The Mobil Oil Co. data, the 1976 USGS data, and the BBN data have previously been made available to SCANP. The 1978 USGS profiles data are available from the USGS, from whom Applicants obtained it. A copy of the 1978 USGS data can be inspected in the offices of attorneys for Applicants.

INTERROGATORY NO. 3. Please describe any factual conclusions which Applicants reached based upon the extensive reinvestigation undertaken by Bechtel considering the hypothesized "B & B Fault", including a discussion of how this reinvestigation supports those conclusions. .

ANSWER: The factual conclusions are described in Section 3.4.1 of the Bechtel report.

REQUEST FOR PRODUCTION NO. 7. Please produce any minutes, memoranda, or notes taken or produced in connection with the discussions with Dr. Hays and other reviewers referenced on pages 1 and 2 of the letter referred to in Request for Production No. 1.

ANSWER. The requested material is available for inspection in the offices of attorneys for Applicants.

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REQUEST FOR PRODUCTION NO. 8. Please produce the aeromagnetic data referenced in the letter dated February 23, 1979 from J. E. Mecca to John F. Stolz. Please produce also any aeromagnetic data acquired for Puget Power by D.K.B. Resources, Inc. and Aero Services, which has not been submitted to the NRC staff or USGS. Please submit also all written evaluations of this data, including the factual conclusions, if any, which applicants have reached in connection with this data and the basis thereof.

ANSWER. The aeromagnetic data referenced in the letter dated February 23, 1979 from J. E. Mecca to John F. Stolz are the same data that were acquired for Puget Power by D.K.B. Resources Inc. and Aeroservices. These data are presented on the proprietary aeromagnetic contour maps, which were discussed above in the response to Request No. 2. The methods for collecting, processing, and presenting this aeromagnetic data are described in Appendices 3 and 4 to the Edcon report. The evaluations of and conclusions regarding the data is presented in the Bechtel report, particularly in Appendix A (the Edcon report).

INTERROGATORY NO. 4. Please describe the location, quantity, and types of gravel which applicants intend to use for construction of the Skagit Nuclear Power Project. Please state whether any studies have been undertaken to assess the environmental and other impacts of gravel removal, including impacts on fisheries. If any such studies have been undertaken, please produce all documents, including notes, produced in connection with such studies.

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OBJECTION: Applicants object to this interrogatory on the ground that the information sought falls outside the permissible scope of discovery under 10 CFR 2.740(b) in that it neither relates to any matter in controversy in this proceeding nor is reasonably calculated to lead to the discovery of admissible evidence.

INTERROGATORY NO. 5. Please state whether applicants have reevaluated or amended their evacuation plan in light of 1) the proposed use of the Northern State Hospital Site, and 2) the 3-Mile Island Accident. Please produce documents produced in connection with any such reevaluation.

ANSWER. Not yet.

REQUEST FOR PRODUCTION NO. 9. With reference to the meeting of February 23, 1979, between the NRC staff, USGS, and Puget Sound Power & Light Company, held in Bethesda, Maryland, please produce all materials presented by Puget at that meeting, together with any and all notes taken by Puget representatives at that meeting.

ANSWER. The materials presented at that meeting included material by Edcon and by Bechtel. Edcon's material is contained in the Edcon report, which has previously been made available to SCANP. Copies of the Bechtel material and the notes by Puget representatives are available in the offices of attorneys for Applicants.

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INTERROGATORY NO. 6. On March 8, 1979, the Washington Utilities and Transportation Commission issued a Second Supplemental Order in Cause No. U-78-21. The Commission in that order authorized Puget to file tariff revisions, including revenues for construction work in progress (CWIP). Please state the annual dollar amount of CWIP rates which Puget has sought or will seek in its revised filing. Please state the annual dollar amount of CWIP rates which are attributed to the Skagit Nuclear Power Project, and please itemize all amounts thereunder. Please include in your answer the amount for the next year and every year thereafter included in the revised tariff filing.

ANSWER: The annual dollar amount of revenue attributable to CWIP, which is shown below, is based on the 1977 test year. The percentages shown represent the percent of gross revenue derived from the inclusion of CWIP - Major Projects in rate base. These percentages will remain unchanged in subsequent years until such time as the second Supplemental Order Cause U-78-21, is superceded.

<u>Plant</u>	<u>Revenue</u>	<u>% of Revenue</u>
Skagit	1,743,065	0.65%
WPPS #3	128,595	0.05
Pebble Springs	1,090,584	0.41
Colstrip 3 & 4	441,076	0.17

INTERROGATORY NO. 7. With respect to the proceeding referenced in the immediately preceding interrogatory, please answer all questions in that Interrogatory with respect to the tariff filing which was rejected in the Commission's Second Supplemental Order.

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ANSWER:

<u>Plant</u>	<u>Revenue</u>	<u>% of Revenue</u>
Skagit	4,420,296	1.60
WPPS #3	573,491	0.21
Pebble Springs	2,479,248	0.90
Colstrip 3 & 4	1,349,911	0.49

REQUEST FOR PRODUCTION NO. 10. Produce all notes, memoranda, correspondence, studies, reports and other documents of any kind relating in any way to the proposed WWP coal-fired plant in Eastern Washington, including all such materials in the hands of engineers and consultants.

ANSWER. See The Washington Water Power Company's separately filed response and objection dated June 13, 1979.

INTERROGATORY NO. 8. With respect to the proposed WWP coal-fired plants in Eastern Washington:

- a) What sources for coal have been considered?
- b) Describe all information WWP has regarding availability, supply, price, and transportation cost for such coal.
- c) Who will 1) design, 2) build, and 3) operate the plant?
- d) When did design work begin?
- e) Have any purchases been made to date relating to such plant, and if so, when, by whom, from whom, of what, and in what amount?
- f) Is such plant yet reflected in any formal or informal, in-house, or public forecast of resources?
- g) When is construction to begin?

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ANSWER: See The Washington Water Power Company's separately filed answer dated June 13, 1979.

INTERROGATORY NO. 9. Please describe all geologic, seismologic, and geophysical studies, reports, or investigations, pertaining to the Skagit site or any location in the State of Washington, undertaken by, commissioned by, or received by you since January 1, 1978.

ANSWER: The studies pertaining to the Skagit site are in the Bechtel report. Information on the alternative sites of Goshen, Cherry Point and Ryderwood is presented in the document entitled "A Comparative Analysis of Geologic and Seismologic Conditions of the Alternative Sites to the Skagit Nuclear Power Project", by Bechtel (December 1978). This document was previously distributed to SCANP.

Since January 1, 1978, Puget has received the following geologic reports from WPPSS, (all of which are publicly available through WPPSS). The documents are listed according to their title, author and date.

1. Magnetic Properties of Basalts from the Columbia Plateau-- Part I by Weston Geophysical (March 1978).
2. Magnetic Properties of Basalts from the Columbia Plateau-- Part II by Weston Geophysical (March 1978).
3. Stress, Gravity Anomalies, and the Location of Earthquakes in Washington State -- Two-Dimensional Models by Weston Geophysical (March 1978).
4. Magnetic Modelling -- Columbia plateau area by Weston Geophysical (March 1978).

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5. British Columbia Microearthquake Survey -- May through October 1977 by Weston Geophysical (March 1978).
6. Ground Geophysical Studies -- Columbia Plateau and Adjacent Cascade Mountains by Weston Geophysical (March 1978).
7. Qualitative Aeromagnetic Evaluation of Structures in the Columbia Plateau and Adjacent Cascade Mountain Area by Weston Geophysical (March 1978).
8. Investigation of the Ribbon Cliff Landslide, Entiat, Washington by Shannon & Wilson (February 1978).
9. Straight Creek Fault Zone Study by Woodward-Clyde Consultants (April 1978).
10. Geologic Reconnaissance of the Cle-Elum-Wallula lineament and Related Structures by Shannon and Wilson (June 1978).
11. Geologic Studies of the Southern Continuation of the Straight Creek Fault, Snoqualmie area, Washington by Shannon and Wilson (December 1977).
12. Studies of the Hope and Yale Faults in Southern British Columbia by Shannon and Wilson (December 1977).
13. Earthquake Monitoring of the Hanford Region, Eastern Washington including Quarterly Technical Report 78-B by the Geophysical Program of the University of Washington (August 1978).
14. Quarterly Technical Report 78-A, by the Geophysics Program of the University of Washington (April 1978).
15. Paleomagnetism and Age Dating, WPPSS 1 and 4 (July 1978).
16. Microearthquake Studies, WPPSS 1 and 4 by Woodward-Clyde Consultants (July 1978).

INTERROGATORY NO. 10. Please give all available information regarding every detectible earthquake which has occurred within 25 miles of the plant site since 1976. You should furnish the location of epicenters, magnitude, and fault plane solutions, if available. Also state where you obtained the information which you are furnishing in answer to this interrogatory, and whether you know of any source of information which you did not consult. Also state whether, to your knowledge, any person is analyzing such data to determine possible correlations between such events, and if so who.

ANSWER: Please see the PSAR and answers to Interrogatory No. 1 of December 16, 1977 and Interrogatory No. 10 of January 20, 1978. The requested data, (to the extent not contained in the PSAR and the interrogatory answers) are available from the Geophysics Department at the University of Washington. Their network of seismographs, with which they monitor seismicity in the region, is considered to produce the most reliable data. Additional sources of information are the U. S. Geological Survey and the Dominion Observatory in Victoria, B. C. Also, Puget has since July 1975 maintained a strong-motion accelerometer at the site and another one in the valley near the site. Neither instrument has been triggered by seismic events since it was installed. Both are set to be triggered by a ground acceleration of $1/2$ of $1g$ of acceleration due to gravity.

To our knowledge, no one is analyzing the data requested. As indicated in the PSAR, Bechtel and its consultants have analyzed data on earthquakes in the plant site region.

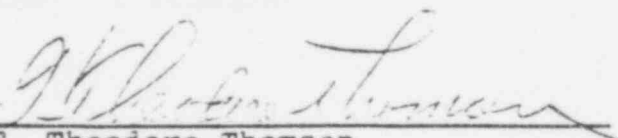
INTERROGATORY NO. 11. Have you at any time requested or commissioned a study to attempt to correlate the fault plane solutions for any earthquakes which have occurred, since 1973, in the Skagit Valley? If so, please state when you commissioned such study, who is conducting such study, and identify all documents which reflect the fact of such study, and its results. Also, please provide a list showing all available data regarding every known earthquake which has occurred in the Skagit Valley since 1973.

ANSWER: Puget commissioned Dr. Stewart Smith of the University of Washington to study the December 1974 earthquake and its aftershocks. Dr. Smith's report is in the PSAR. As indicated in the answer to the preceding interrogatory, Bechtel and its consultants have analyzed data on earthquakes in the plant site region. Also see the preceding answer regarding a list of earthquakes.

DATED: June 19, 1979

Respectfully submitted,

PERKINS, COIE, STONE,
OLSEN & WILLIAMS

By 
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STATE OF WASHINGTON))
COUNTY OF KING) ss.

JAMES E. MECCA, being duly sworn, on oath deposes and says: That he is Manager - Nuclear Licensing and Safety of PUGET SOUND POWER & LIGHT COMPANY: that he has read the foregoing Puget Sound Power & Light Company's Response to Intervenor SCANP'S Interrogatories and Requests for Production to Applicants of May 24, 1979, and is informed and believes that the answers stated therein are true.

James E. Mecca

SUBSCRIBED AND SWORN to before me this 19th day of June, 1979.

Notary Public in and for the State
of Washington, residing at Seattle