

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
BEFORE THE COMMISSION

In the Matter of )  
 )  
PORTLAND GENERAL ELECTRIC COMPANY, ) Docket No. 50-344  
 et al. )  
 )  
(Trojan Nuclear Plant) )

PETITION FOR LEAVE TO INTERVENE

I.

On May 26, 1978, the Nuclear Regulatory Commission issued an Order for Modification of License. This Order modifies Facility Operating License No. NPF-1 and provides that, upon the effective date of the Order, the Trojan Nuclear Plant may be operated in accordance with certain conditions, including completion of certain design modifications on or before June 1, 1979.

II.

With respect to operation of the Trojan Nuclear Plant pending completion of design modifications, this Order states, "[t]he NRC Staff has determined that the facility may be operated during the interim period without endangering the health and safety of the public provided that certain conditions are imposed."

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III.

The effective date of the Order is the expiration of the period during which a hearing may be requested or, in the event that a hearing is requested and held, the date specified in an order following the hearing.

IV.

On July 7, 1978, in response to requests for a hearing, the Atomic Safety and Licensing Board issued a Notice and Order for Special Prehearing Conference to take place on July 24 and 25, 1978, at which time the Board will consider petitions for leave to intervene in this matter.

V.

The Bonneville Power Administration (BPA) respectfully petitions the Commission and the Board for leave to intervene in this matter.

PETITIONER'S INTEREST

VI.

BPA is a regional marketing agency within the Department of Energy that markets energy produced by projects in the Pacific Northwest and transmits this energy primarily to Oregon, Washington, Idaho, and the portion of Montana that is west of the Continental Divide. In addition, BPA has contractual arrangements with utilities in Canada

and the Pacific Southwest providing for the acquisition and sale of surplus energy.

VII.

BPA has acquired the capability of the City of Eugene, Oregon's 30 percent ownership share of the Trojan Nuclear Plant and is obligated to pay Eugene's share of all of the annual costs of the Trojan Nuclear Plant, whether or not the Plant is completed, operable, or operating and notwithstanding the suspension, reduction, or curtailment of the Plant's output. BPA's projected share of these costs is approximately \$25 million per year.

MANNER IN WHICH PETITIONER'S INTEREST MAY BE AFFECTED

VIII.

If the Trojan Plant is not permitted to operate until after design modifications are completed, BPA's interest will be adversely affected in the following ways:

1. BPA will be deprived of 30 percent of the energy that could be produced by the Trojan Nuclear Plant.
2. BPA is obligated to pay 30 percent of the annual costs of the Trojan Nuclear Plant, whether or not the Plant is completed, operable, or operating and notwithstanding the suspension, reduction, or curtailment of the Plant's output.
3. To satisfy its firm power commitments throughout the Pacific Northwest, BPA will have to acquire more expensive

energy from another plant to replace that which is not produced by the Trojan Nuclear Plant.

4. To obtain energy not produced by the Trojan Nuclear Project, BPA will have to withdraw from its industrial customers energy produced by another plant.
5. The additional costs associated with acquisition of power to replace Trojan Nuclear Plant generation will be borne through BPA rates by its customers throughout the Pacific Northwest.

REASONS WHY PETITIONER SHOULD BE PERMITTED TO INTERVENE

IX.

Petitioner should be permitted to intervene for the following reasons:

1. BPA's interest in the Trojan Project and in supplying energy to the Pacific Northwest may be adversely affected in the manners set forth in paragraph VIII above.--
2. None of the present parties in this matter are regional entities that can represent the energy needs of the entire Pacific Northwest.
3. As owner of 30 percent of the capacity of the Trojan Project and as an entity obligated to pay its portion of the annual costs of the Trojan Project, BPA is an indispensable party to this matter, as referred to in Rule 19 of the Federal Rules of Civil Procedure.

X.

This petition is supported by the affidavit of Hector J. Durocher which is attached hereto and incorporated herein as thought fully set forth.

Dated this 24 day of July, 1978.

Steeley Munro

Bonneville Power Administrator

Subscribed and sworn to before me this 24 day of July, 1978.

W. W. [Signature]

Notary in and for the State of Oregon

(SEAL)

My commission expires: 1/16/79

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(Trojan Nuclear Plant)	)	

AFFIDAVIT OF HECTOR J. DUROCHER

STATE OF OREGON	)	
	)	ss.
County of Multnomah	)	

I, HECTOR J. DUROCHER, being first duly sworn, depose and say: I am the Assistant Administrator for Power Management of the Bonneville Power Administration (BPA) and as such I am responsible for or personally familiar with the administration of BPA obligations relating to the marketing, exchange, and delivery of electric power and energy from the Federal Columbia River Power System and the resources available to the Federal Columbia River

1 Power System to serve those obligations in accordance with the Bonneville  
2 Project Act as amended (16 U.S.C. § 832), the Flood Control Act of 1944 (16  
3 U.S.C. § 825(a)), and the Federal Columbia River Transmission System Act (16  
4 U.S.C. § 838).

5 Background

6 BPA is a Bureau of the Department of Energy (DOE). Formed in 1937, BPA  
7 now markets the electric power output of 30 Federal hydroelectric projects in  
8 the Pacific Northwest. In addition, BPA has acquired the capability of the  
9 City of Eugene, Oregon's 30 percent ownership share of the Trojan Project and  
10 ~~50 percent of the capability of the Washington Public Power Supply System's~~  
11 Hanford Project, which uses byproduct steam from the New Production Reactor  
12 operated by DOE for national defense purposes.

13 All of BPA's power is marketed at wholesale rates to: (1) publicly and  
14 cooperatively owned utilities; (2) investor-owned utilities; (3) large  
15 industries; and (4) others including Federal agencies. BPA's publicly and  
16 cooperatively owned utility customers depend upon BPA to meet all or a portion  
17 of their power requirements. The power that BPA markets serves approximately  
18 50 percent of the Pacific Northwest's firm power requirements.

19 BPA's industrial customers include ten aluminum reduction plants with  
20 about one-third of the nation's aluminum reduction capacity. In addition, BPA  
21 serves the only nickel plant within the U.S. and eight other plants which  
22 produce wood products and chemicals. These industries employ over 13,000  
23 people with annual wages and salaries of over \$285 million. Their Pacific  
24 Northwest expenditures exceeded \$762 million in 1977.

1                   Kinds of Power Sold by BPA

2           BPA markets different kinds of power. Firm power is supplied by BPA to  
3 customers under contracts which obligate BPA to make deliveries without regard  
4 to streamflow conditions on its system, the operating capabilities of its  
5 generating plants, or other factors except major natural forces.

6           In addition, BPA markets nonfirm power. The availability of nonfirm power  
7 is dependent upon streamflow conditions being sufficiently high to enable  
8 generation of more electric power at Federal hydroelectric projects than such  
9 projects are able to supply under the lowest recorded sequential streamflow  
10 conditions. BPA may reduce or restrict delivery of nonfirm power to a  
11 purchaser any time for any reason without notice of reduction or  
12 interruption. BPA's power sales contracts with its industrial customers  
13 provide that approximately one-fourth of the power BPA supplies to its  
14 industrial customers is nonfirm power.

15                   Conditions Affecting Power Supply

16           Electric power generating resources of the Pacific Northwest are about 30  
17 percent hydro resources and about 20 percent thermal resources. The most  
18 important single factor affecting the availability of electric power supply in  
19 the Pacific Northwest is the level of streamflows on Pacific Northwest rivers,  
20 especially the Columbia River and its tributaries. Other important factors  
21 include the operation of thermal resources and the response of loads  
22 (customers' electric power demands) to temperatures and economic conditions.

23           The firm power BPA has available to meet its contractual obligations  
24 consists of firm power from Federal hydroelectric projects and 30 percent of



2 the Trojan Project's generation. Trojan Project generation acquired by BPA in  
3 the 12 month operating year beginning July 1, 1978, included as a firm  
4 resource, is 2.0 billion kilowatthours. This is 269 average megawatts for the  
5 July 1978 through April 1979 period of expected operation.

6 As indicated, BPA has acquired the capability of the Hanford Project. BPA  
7 had sold this capability to its industrial customers and five investor-owned  
8 utilities, the former subject to BPA's right to withdraw. Because of the  
9 current delays in returning the Trojan Project to service and the possibility  
10 that the Trojan Project could remain out of service during this operating  
11 year, BPA has exercised its option to withdraw from sale the 1978-1979 shares  
12 of the Hanford Project generation contracted to its industrial customers. BPA  
13 will start to receive Hanford Project capability on about August 1, 1978.

14 Economic Impact on BPA

15 BPA's purchase of 30 percent of the capability of the Trojan Project  
16 includes the provision that BPA must pay its share of all of the annual costs  
17 of the Trojan Project, regardless of whether the project is operating. —  
18 Therefore, BPA will pay its share of Trojan Project costs as planned, even if  
19 generation is not available from the project. We estimate that the fixed  
20 charges relating to Trojan under non-operating conditions would be  
21 approximately \$25 million per year. This would be a net cost to BPA's  
22 customers through BPA rates.

23 Unavailability of Trojan Project generation after August 1, 1978, will not  
24 substantially affect the total amount of BPA's firm power supply since BPA has  
25 withdrawn the 1978-1979 Hanford Project generation from its industrial  
26

1 customers. However, the unavailability of Trojan Project generation from its  
2 originally projected restart on May 21 until August 1, 1978, will reduce the  
3 amount of nonfirm power BPA has available for sale during the spring and  
4 summer. The amount of reduction will be equivalent to BPA's share of Trojan  
5 Project output. Current studies indicate that all of the nonfirm power  
6 thereby lost could be marketed. This nonfirm power of approximately 470  
7 million kilowatthours has a value at the applicable BPA rate of approximately  
8 \$1.4 million. The total amount of energy that will be available to BPA from  
9 the Hanford Project in the operating year commencing July 1, 1978, is 2.25  
10 billion kilowatthours. This is slightly more than the firm energy capability  
11 BPA expected from its share of the Trojan Project. The estimated cost of this  
12 energy is 9 to 11 mills per kilowatthour greater than the incremental cost to  
13 BPA of Trojan Project generation. Therefore, the estimated cost of acquiring  
14 its portion of the Hanford Project to replace unavailable Trojan Project  
15 generation will be \$20 to \$25 million for BPA.

16 Economic Impact on Utilities

17 The power available to BPA from Trojan Project between May 21 and August 1  
18 would be purchased by utilities to displace higher cost generation from other  
19 sources. The incremental cost of Trojan generation is about 3 mills per  
20 kilowatthours. If this nonfirm power were surplus to the requirements of  
21 Pacific Northwest utilities, it could be marketed to utilities in California,  
22 thereby displacing oil fired thermal generation costing approximately 25 mills  
23 per kilowatthour and providing a net incremental savings to the California  
24 utilities of approximately \$10.3 million.

1                   Economic Impacts on Industrial Customers

2           The contracts under which BPA supplies power to its large industrial  
3 customers provide that approximately one-fourth of the power, currently about  
4 800 average megawatts, is nonfirm power. BPA's industrial customers had  
5 acquired a portion of BPA's Hanford Project generation to assure an available  
6 power supply for operation of their plants if BPA were forced to curtail  
7 delivery of this nonfirm portion of their power supply. This replacement, or  
8 back-up, power supply is not now available to the industrial customers  
9 because, as indicated previously, BPA has withdrawn the sale. In the event  
10 that Trojan Project generation is available to BPA, BPA intends to rescind its  
11 withdrawal of sale of Hanford Project generation.

12           If nonfirm power is not available to BPA's industrial customers from BPA,  
13 they have the option of purchasing higher cost replacement power, if  
14 available, or curtailing plant production and employment. Our studies  
15 indicate an approximate 40 percent probability that no BPA nonfirm power will  
16 be available for BPA's industrial customers during the period August 16  
17 through December 31, 1978. Assuming that replacement power were available,  
18 BPA estimates that it would cost 25 mills per kilowatthour. After reducing  
19 the replacement power cost of 25 mills per kilowatthour by the cost of the  
20 Hanford generation withdrawn by BPA, estimated at 12-14 mills per  
21 kilowatthour, the net cost to the industrial customers for the replacement of  
22 2.25 billion kilowatthours attributable to the unavailability of Trojan  
23 Project generation would be \$25 to \$29 million.

1 If replacement energy is not available, loss of the Hanford energy would  
2 cause the industrial customers to curtail production about 13-1/2 weeks  
3 earlier than would otherwise be necessary. We estimate that this would result  
4 in loss of some 600 to 800 jobs in direct employment and perhaps up to 2,000  
5 jobs in related services and industries. In addition, loss of production and  
6 shutdown and startup costs could result in further costs and losses in the  
7 tens of millions of dollars.

8 Summary


9 The economic costs of the unavailability of BPA's 30 percent share of the  
10 capability of the Trojan Project are as follows:

11  
12 1. BPA:

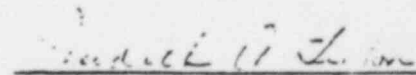
- 13 a. Loss of nonfirm power sales from May 21 to August 1, 1978, would  
14 be approximately \$1.4 million.
- 15 b. Additional cost to BPA for a portion of the Hanford Project  
16 generation would be \$20 to \$25 million, depending on the actual  
17 operating costs for the year.
- 18 c. The cost to BPA of approximately \$25 million for the fixed and  
19 standby cost of Trojan in a non-operating mode for 1 year.

- 20 2. Utilities will not be able to purchase approximately 470 million  
21 kilowatthours nonfirm power from BPA that would otherwise be  
22 available if the Trojan Project operates. These purchases would be  
23 displaced with oil fired thermal generation and at a net incremental  
24 cost to California utilities of approximately \$10.3 million.

1 3. Industrial customers, if nonfirm power is not available, would have  
2 replacement power costs of between \$25 and \$29 million greater than  
3 the cost for the Hanford Project withdrawn from them. If replacement  
4 power is not available, they would reduce operations and employment  
5 with attendant costs and losses.  
6

7  
8   
9 HECTOR J. DUROCHER  
10 Assistant Administrator  
for Power Management  
Bonneville Power Administration

11 Subscribed and Sworn to before me this 4<sup>th</sup> day of Jan, 1978.  
12  
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14   
15 Notary Public for Oregon  
16 My Commission expires 11-15-80  
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