

County of Multnomah)
) ss.
State of Oregon)

AFFIDAVIT OF ROBERT H. SHORT
PRESIDENT
PORTLAND GENERAL ELECTRIC COMPANY

POOR ORIGINAL

1607 275

My name is Robert H. Short, President of Portland General Electric Company, Portland, Oregon. The purpose of my Affidavit is to explain the unique circumstances facing Portland General Electric Company and the Pacific Northwest region over the next two to three months, as those circumstances affect public need for the operation of the Trojan Nuclear Power Plant. I conclude and firmly believe that the public interest requires its operation as soon as possible and through the months of January and February, 1980, to the fullest extent that reasoned discretion allows.

In order to appreciate the immediacy and degree of our dependency on this plant, overall regional load and resource characteristics must be considered. The Pacific Northwest is still a hydro-based electric power system. Seventy-two percent of the energy produced in the Pacific Northwest in a "normal" year comes from hydroelectric generation. Hydro energy is most available as the snow pack begins to melt and run off in the spring of each year. During the summer, reservoirs are filled in order to store hydro energy for use during the fall and winter. Under normal operations the region draws down its hydro storage through the fall and into the winter, with reservoirs reaching a low point shortly before the anticipated spring runoff. Therefore, because of the seasonal characteristics of their hydro resources, Portland General Electric

Company and the Pacific Northwest as a region are most dependent upon thermal plants during the months of December, January and February.

Loads in the Pacific Northwest also exhibit significant seasonal characteristics. A substantial portion of energy requirements are for residential and commercial space heating uses. These uses dramatically increase power loads during cold weather, particularly in the months of December, January and February. For example, the average usage for one of our residential customers, adjusted for normal seasonal weather, in July and August of last year was about 800 kilowatt hours. In December of last year and January and February of this year, the average use was between 1500 and 2000 kilowatt hours. Even these differences are subject to enormous magnification due to weather extremes.

As a result, Portland General Electric Company and the Pacific Northwest, as a whole, experience greatest system energy and peak demands during the months of December, January and February. Instantaneous or short duration peaks can usually be met by short-term use of hydro facilities with subsequent thermal "make-up" of the energy used for peaking. The real threat to PGE's system integrity and the region's ability to meet loads comes from the Company and regional

energy shortage. This shortage can be greatly aggravated by cold winter weather.

Normally at this time of year, the region's thermal resources are operated at their maximum continuous ability to meet energy needs, while hydro and turbine operations are used to cover load peaks. Normally, Trojan would be operated at full capacity during these months. This year, two other factors have combined to make our dependency on Trojan output during these months greater than it has ever been in the past or is likely to be in the future.

First, the region's reservoirs did not fill as planned during this summer. The Columbia River natural flow has been near the lowest on record since October, 1979. The region is now deficit 7.5 billion kWh, 21 percent less than its normal hydro capability. As early as August 1979, Portland General Electric Company began using gas and oil turbines as base-load plants. We are today burning 600,000 gallons of oil per day in combustion turbines, partly because Trojan is not operating, and partly because of the regional hydro energy shortage. Regional thermal capability, already under strain, recently experienced another significant decline when the Centralia Coal Plant, a 1,300 megawatt facility, sustained turbine damage which reduced its output by about one-half for the duration of the winter.

POOR ORIGINAL

The second circumstance which makes timing of the present Trojan outage especially onerous is that our Company is expecting to bring a 550 megawatt coal plant on line in August of next year. This places Portland General Electric Company at a planned low point in its ability to meet loads with its own resources. Even with normal operation of Trojan, PGE anticipated purchasing substantial amounts of power this winter from other utilities, as well as using its turbines heavily for energy, as opposed to peak, requirement. In anticipation of this winter's burden, we have borrowed heavily from other utilities in anticipation of repayment with power to be generated next fall by the Boardman coal plant. We have also borrowed heavily this fall and during prior thermal outages such that we have obligations to provide energy to other Northwest utilities, who may well need to depend upon us this winter.

PGE has exhausted its ability to purchase energy from the usual sources and has made substantial high-cost purchases from Canada, California, Nevada, New Mexico, Texas and Arizona. Recently, these extraordinary sources have diminished drastically.

All these circumstances combine to produce a high degree of immediate dependency on all of our thermal resources. PGE serves about 14 billion kilowatt-hours per year, of which its share of Trojan would normally contribute about 4-1/2 billion

kilowatt-hours. Trojan is not a small resource in the regional energy picture. For PGE, this winter, its failure to operate will, without question, cause our Company to default on its obligations either to other utilities or to serve its own loads. We are now preparing to enact mandatory curtailment in January, 1980 in the event Trojan is not allowed to operate.

The foregoing Affidavit is true.

Robert H. Short
Robert H. Short, President
Portland General Electric Company

Subscribed and sworn to before me this 7th day of December,
1979.

Joan J. Homer
Notary Public for Oregon
My Commission Expires: 4-11-80

POOR ORIGINAL