

11/27/82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
OFFSHORE POWER SYSTEMS)	Docket No. STN 50-437
(Floating Nuclear Power Plants))	

NRC STAFF TESTIMONY REGARDING UPDATE OF
FINANCIAL QUALIFICATIONS ANALYSIS

by

Jim C. Petersen

Introduction

The Nuclear Regulatory Commission regulations relating to financial data and information required to establish financial qualifications for Applicants for manufacturing licenses appear in Section 50.33(f) of 10 C.F.R. Part 50 and Appendices C and M to 10 C.F.R. Part 50. The following is an update of the Staff's earlier review of the Applicant's financial qualifications.

The Applicant, Offshore Power Systems has applied for a license to manufacture eight floating nuclear power plants. The license is sought for a period of fourteen years such that manufacture of the eight floating nuclear plants will be completed during the period commencing no earlier than 1991 and ending no later than 1999, with manufacture of the first plant in the manufacturing facility to begin no earlier than 1985. The purchasers of the floating plants are responsible for obtaining the necessary NRC construction permits and operating licenses. Assuming each owner obtains the permits and licenses in a timely manner,

plant commercial operation should follow completion of manufacture by no more than eighteen months.

Offshore Power Systems (OPS) is an unincorporated joint venture of Westinghouse Electric Corporation (WEC) and its wholly-owned subsidiary, Westinghouse International Power System Company, Inc. (WIPSCO). WEC owns 99 percent of OPS and WIPSCO owns the remaining 1 percent. OPS indicates in its application that WEC has placed no limitations, legal or otherwise, on WEC's financial support of OPS. The following assessment of the financial qualifications of OPS to undertake the proposed manufacturing activity is essentially an assessment of the financial qualifications of WEC, since the one percent interest owned by WIPSCO does not include an obligation to contribute capital to the venture.

WEC is a large, diversified enterprise and is one of the largest producers of electrical equipment in the world. For the year ended December 31, 1980, WEC's consolidated sales and operating revenues were \$8.5 billion compared to \$4.6 billion for 1975. Net income for 1980 was \$403 million and for 1975 was \$165 million. Total assets at year-end 1980 were \$6.8 billion compared to \$4.9 billion at year-end 1975. WEC's liquid and other current assets including cash, marketable securities, notes, and accounts receivable increased from \$1.5 billion at year-end 1975 to \$2.3 billion at year-end 1980.

Manufacturing Facility Financing

The OPS manufacturing facility has been completed such that the first plant can be completed within approximately 8 years of receiving a

purchase contract. In order to manufacture all eight plants at a higher rate so that all may be completed within the time-frame of the license applied for, it will be necessary to make manufacturing facility improvements costing approximately \$300 million. OPS does not plan to undertake such improvements before orders are received for the first four plants. In this case customer progress payments would provide funds for the improvements. Such progress payments are also expected to provide the funds for final plant design and manufacturing planning expenses. In the event that initial working capital from customer progress payments is inadequate to fully cover these expenses, WEC would provide the balance required. It is expected that such direct WEC funding would be minimal, if any. WEC funds would come from the sale of securities including debt, preferred stock, and common stock and from internally-generated sources (from WEC operations).

Pricing Policy and Source of Funds for Manufacture

The Applicant has submitted a breakdown of FNP costs based on the most recent cost estimate update (1980):

	<u>Unit Cost</u> <u>(dollars in millions)</u>
Structures and improvements	\$ 157.7
Reactor plant equipment	272.2
Turbine generator plant	252.5
Accessory electric equipment	76.2
Miscellaneous power plant equipment	30.1
Transmission facilities	20.5
Platform structures and specifically related systems	36.7
Testing (multi-systems)	<u>4.1</u>
TOTAL COST PER UNIT	\$ 850.0

The \$850 million price per unit is a base estimate in 1980 dollars. OPS expects that plants will be sold at a firm base price subject to escalation as follows: (1) labor - use of labor rate indices such as the Average Hourly Earnings Rate in the Ship Building and Repair Industry (U.S. Dept. of Labor); and (2) materials - use of materials cost indices such as the Steel Mill Products Index (U.S. Dept. of Labor). The base price would also be subject to upward adjustments as follows: (1) costs of plant design changes requested by the customer or required by regulatory agencies; and (2) costs of delays beyond the control of OPS.

OPS expects that proceeds from sale of the floating nuclear units will cover the cost of manufacture of the units, amortization of the manufacturing facility, engineering costs, interest, and other applicable costs. It is planned that customer progress payments will cover the ongoing cash flow of OPS, with minimal or no funding from WEC. OPS does not plan to begin manufacture of a unit until an order has been received for the facility from a purchasing utility. There are no such orders at present.

Conclusion

Based on the above information and analysis we have concluded that OPS has presented a reasonable plan for financing the cost of manufacturing floating nuclear plants and has therefore demonstrated reasonable assurance that the funds for the activity can be obtained. Therefore, OPS is financially qualified to manufacture floating nuclear plants in accordance with the provisions of Section 50.33(f) of 10 C.F.R. Part 50 and Appendices C and M to 10 C.F.R. Part 50. This

conclusion is based substantially on (1) the Applicant's plan that customer progress payments will provide most, if not all, of OPS' ongoing cash requirements for the manufacturing activity; and (2) the sound financial status and sheer size in financial terms of WEC.

JIM C. PETERSEN

PROFESSIONAL QUALIFICATIONS

OFFICE OF STATE PROGRAMS

I am the Senior Financial Analyst in the Office of State Programs, U.S. Nuclear Regulatory Commission. I am responsible for the review and evaluation of the financial qualifications of nuclear facility license applicants to pursue proposed activities under a license, primarily the construction and operation of nuclear power plants. In this regard, I have prepared financial qualifications analyses for inclusion in the Staff's Safety Evaluations and for presentation as evidence on the record of the Atomic Safety and Licensing Board's safety hearings. I have served as a Staff witness before the Atomic Safety and Licensing Board in a number of proceedings. My work also involves keeping abreast of developments in the money and capital markets and in the electric utility industry.

I received a Bachelor of Science in Business Administration degree (awarded cum laude) with a major in Accounting from the University of Denver in 1968. I have continued my formal education through college and university courses in finance, math, economics and computer science and through several intensive short courses. I am a member of Beta Gamma Sigma, the national business administration honorary, and Beta Alpha Psi, the national accounting honorary. The latter organization presented me with its award for outstanding service.

From 1968 through 1973, I was employed in a number of assignments on the staff of the Controller of the Atomic Energy Commission. These assignments included reviewing, designing and implementing accounting systems and procedures for AEC offices and AEC contractors. I also assisted in the financial review of nuclear facility license applicants during the period when that function was performed by independent staff members of the AEC Office of the Controller. That function was subsequently transferred in its entirety to the NRC. In January of 1974, I joined the regulatory staff and assumed responsibilities in the financial qualifications review of nuclear facility license applicants. I have worked in NRC financial analysis since that time, except for a one-year assignment at the U.S. Department of Energy where I worked on the financing of emerging energy technologies.