

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

# SAFETY EVALUATION REPORT WASHINGTON PUBLIC POWER SUPPLY SYSTEM WASHINGTON PUBLIC POWER SUPPLY SYSTEM, NUCLEAR PROJECT NO. 1 DOCKET NO. 50-460 CONFORMANCE TO REGULATORY GUIDE 1.97

### 1.0 INTRODUCTION

Washington Public Power Supply System was requested by Generic Letter 82-33 to provide a report to NRC describing how the post-accident monitoring instrumentation meets the guidelines of Regulatory Guide (R.G.) 1.97 as applied to emergency response facilities. The applicant's response to the generic letter was provided by letters dated April 15, 1983, and February 6, 1986.

A detailed review and technical evaluation of the applicant's submittals was performed by EG&G Idaho, Inc., under contract to the NRC, with general supervision by the NRC staff. This work was reported by EG&G in Technical Evaluation Report (TER), "Conformance to Regulatory Guide 1.97, Washington Public Power Supply System, Nuclear Project No. 1" dated May 1986 (attached). We have reviewed this report and concur with the conclusion that the applicant either conforms to, or has adequately justified deviations from, the guidance of R.G. 1.97 for each post-accident monitoring variable except for the variables a) pressurizer heater status, b) emergency ventilation damper position, c) condenser air removal system exhaust, and d) gland steam exhaust.

### 2.0 EVALUATION CRITERIA

Subsequent to the issuance of the generic letter, the NRC held regional meetings in February and March 1983 to answer licensee and applicant questions and concerns regarding the NRC policy on R.G. 1.97. At these meetings, it was established that the NRC review would only address exceptions taken to the guidance of R.G. 1.97. Further, where licensees

8806170132 880601 PDR ADOCK 05000460 PDR PDR or applicants explicitly state that instrument systems conform to provisions of the regulatory guide, no further staff review would be necessary for those items. Therefore, the review performed and reported by EG&G only addresses exceptions to the guidance of R.G. 1.97. This safety evaluation addresses the applicant's submittals based on the review policy described in the NRC regional meetings and the conclusions of the review as reported by EG&G.

#### 3.0 EVALUATION

We have reviewed the evaluation performed by EG&G contained in the enclosed TER and concur with its bases and findings. The applicant either conforms to, or has provided an acceptable justification for deviations from the guidance of R.G. 1.97 of each post-accident monitoring variable except for the variables a) pressurizer heater status, b) emergency ventilation damper position, c) condenser air removal system exhaust, and d) gland steam exhaust.

- (a) R.G. 1.97 recommends Category 2 instrumentation to monitor the pressurizer heater status. The applicant is providing instrumentation to monitor the pressurizer heater status. The range of this instrumentation is acceptable. However, the applicant has not identified the category of this instrumentation. A commitment to install Category 2 pressurizer heater status instrumentation is needed from the applicant.
- (b) R.G. 1.97 recommends Category 2 instrumentation to monitor the emergency ventilation damper position. The applicant has committed to install emergency ventilation damper position instrumentation, but, has not provided the required information necessary to evaluate the acceptability of the instrumentation. A commitment to install Category 2 emergency ventilation damper position instrumentation is needed from the applicant.

- (c) R.G. 1.97 recommends Category 2 instrumentation to monitor airborne radioactive materials released from the plant. The applicant has identified condenser air removal system exhaust as a release point. However, the applicant has not provided the required information necessary to evaluate the acceptability of condenser air removal system exhaust instrumentation. A commitment to install Category 2 condenser air removal system exhaust instrumentation is needed from the applicant.
- (d) R.G. 1.97 recommends Category 2 instrumentation to monitor airborne radioactive materials released from the plant. The applicant has identified gland steam exhaust as a release point. However, the applicant has not provided the required information necessary to evaluate the acceptability of gland steam exhaust instrumentation. A commitment to install Category 2 gland steam exhaust instrumentation is needed from the applicant.

## 4.0 CONCLUSION

1. 1

Based on the staff's review of the enclosed TER and the applicant's submittals, we find that the Washington Public Power Supply System, Nuclear Project No. 1, design is acceptable with respect to conformance to R.G. 1.97, Revision 3, with the exception of the variables a) pressurizer heater status, b) emergency ventilation damper position, c) condenser air removal system exhaust, and d) gland steam exhaust.

(a) It is the staff's position that information on pressurizer heater status is valuable to the operator in evaluation of proper primary coolant system operation. It is also the staff's position that the applicant shall install Category 2 pressurizer heater status instrumentation. The applicant shall provide within 60 days of the date of this report a commitment to install Category 2 pressurizer heater status instrumentation.

- (b) It is is the staff's position that information on emergency ventilation damper position will help the operator in evaluation of proper ventilation system operation. It is also the staff's position that the applicant shall install Category 2 emergency ventilation damper position instrumentation. The applicant shall provide within 60 days of the date of this report a commitment to install Category 2 emergency ventilation damper position instrumentation.
- (c) It is the staff's position that information on condenser air removal system exhaust is valuable to the operator in evaluation of airborne radioactive materials released from the plant. It is also the staff's position that the applicant shall install Category 2 condenser air removal system exhaust instrumentation. The applicant shall provide within 60 days of the date of this report a commitment to install Category 2 condenser air removal system exhaust instrumentation.
- (d) It is the staff's position that information on gland steam exhaust will help the operator in evaluation of airborne radioactive materials released form the plant. It is also the staff's position that the applicant shall install Category 2 gland steam exhaust instrumentation. The applicant shall provide within 60 days of the date of this report a commitment to install Category 2 gland steam exhaust instrumentation.

Since WNP-1 is currently in deferred status, WPPSS will be requested to establish an implementation schedule for installing such instrumentation when construction is restarted and to inform the Commission, in writing afterwards, of any subsequent changes in the schedule.

NRC Contributor: B. Marcus

1 . . .

- 4 -