

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 115 TO FACILITY OPERATING LICENSE NO. NPF-21

## WASHINGTON PUBLIC POWER SUPPLY SYSTEM

#### **NUCLEAR PROJECT NO. 2**

#### **DOCKET NO. 50-397**

#### 1.0 INTRODUCTION

By letter dated March 15, 1993, Washington Public Power Supply System submitted a request for changes to the Technical Specifications (TS) for Nuclear Project No. 2. The proposed changes would modify the Design Features section of the TS to incorporate replacement control rod blades. The new blades are GE Duralife 215 control blades. The Duralife 215 control blades are made of boron carbide and hafnium.

#### 2.0 EVALUATION

The licensee proposed to use GE Duralife 215 control blades to replace the old control blades. The old control blades contained only boron carbide. The Duralife 215 control blades have control materials of boron carbide and hafnium. Duralife 215 also has greater corrosion resistance and structural integrity than the original rods. The Duralife 215 mechanical design is bounded by the approved Duralife 190 (Ref 1) the Duralife 230 (Ref 2) mechanical analyses. Based on the GE test results, the mechanical and nuclear performance of Duralife 215 is compatible with the Duralife 215 and 230. Inasmuch as the Duralife 215 control blade design and composition is similar to the approved Duralife 190 and 230 designs in mechanical and rod worth aspects, we approve the use of GE Duralife 215 control blades for WNP-2. Based on the above, the proposed change is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Washington State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types,

of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (58 FR 16874). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 5.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

#### 6.0 REFERENCES

- 1. DURALIFE 190 previously called (Advanced Longlife Control Rod Assembly) SER dated July 1, 1985 from Cecil O. Thomas to J. F. Klapproth "Acceptance for Licensing Topical Report NEDE-22290, Supplement 2, entitled "Safety Evaluation of GE Advanced Longlife Control Rod Assembly."
- 2. DURALIFE 230
  SER dated May 5, 1988 from A. C. Thadani To J. F. Klapproth "Acceptance as a Referencing Document of Licensing Topical Report NEDE-22290-P Supplement 3, "Safety Evaluation of GE DURALIFE 230 Control Rod Assembly (August 1987."

Principal Contributor: S. Wu

Date: May 12, 1993.

