

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
NRC DOCKET NO. 50-261/LICENSE NO. DPR-23  
REQUEST FOR LICENSE AMENDMENT

TECHNICAL SPECIFICATION PAGES



Class 2 and Class 3 components were chosen based on Regulatory Guide 1.26 and ANSI N18.2 and N18.2a "Nuclear Safety Criteria for the Design of stationary Pressurized Water Reactor Plants."

The Surveillance Requirements for inspection of the steam generator tubes ensure that the structural integrity of this portion of the RCS will be maintained. The program for inservice inspection of steam generator tubes is based on a modification of Regulatory Guide 1.83, Revision 1. Inservice inspection of steam generator tubing is essential in order to maintain surveillance of the conditions of the tubes for evidence of mechanical damage or progressive degradation. Inservice inspection of steam generator tubing also provides a means of characterizing the nature and cause of any tube degradation so that corrective measures can be taken.

Wastage-type defects will be minimized with proper chemistry treatment of the secondary coolant. If defects or significant degradations should develop in service, this condition is expected to be detected during inservice steam generator tube examinations. Plugging will be required for all tubes with imperfections exceeding the plugging limit. Steam generator tube inspections by means of eddy current testing have demonstrated the capability to reliably detect degradation that has penetrated 20% of the original tube wall thickness.

Whenever the results of any steam generator tubing inservice inspection fall into Category C-3, these results will be reported to the Commission prior to resumption of plant operation. Such cases will be considered by the Commission on a case-by-case basis and may result in a requirement for analysis, laboratory examinations, tests, additional eddy-current inspection, and revision of the Technical Specifications.

#### 4.2.2

#### Materials Irradiation Surveillance Specimens

The reactor vessel surveillance program includes eight specimen capsules to evaluate radiation damage based on pre-irradiation and post-irradiation testing of specimens. The specimens are located about three inches from the vessel wall at the axial midplane and are spaced radially at 0°, 10°, 20°, 30°, and 40°. (1)

Capsule No. 1 is scheduled to be removed at the first region replacement. The exposure of this capsule leads the vessel maximum exposure by a factor of 2.1. Thus, this capsule provides information for approximately a four-year exposure to the vessel.

Capsule No. 2 is scheduled to be removed at the fourth region replacement. This capsule leads the vessel maximum exposure by a factor of 0.8 and thus will provide data for a four-year exposure to the vessel. This sample also contains weld metal which is not present in Capsule No. 1.

The reactor vessel material surveillance specimens shall be removed and examined to determine changes in their material properties, as required by Appendix H to 10CFR50.

Capsule No. 3 leads the vessel maximum exposure by a factor of 2.2 and is scheduled to be removed after twenty years. Thus, sample No. 3 will provide data for an exposure to the vessel of approximately forty years.

Capsule Nos. 4 and 5 lag the maximum vessel exposure by factors of 0.7 and 0.5, respectively. Thus, Capsule No. 4, which is scheduled to be removed after thirty years, provides data for a vessel exposure of twenty-one years and Capsule No. 5, which is scheduled to be removed at forty years, provides data for a vessel exposure of twenty years.

In addition to the capsules discussed above, there are three spares. Two are located at the same location as Capsule No. 5 and one is located at the same location as Capsule No. 4.

#### 4.2.3

##### Primary Pump Flywheels

The flywheels shall be visually examined at the first refueling after each ten year inspection. At the fourth refueling after each ten year inspection and at each fourth refueling thereafter, the outside surfaces shall be examined by ultrasonic methods.

##### References

- (1) FSAR, Section 4.4
- (2) FSAR, Volume 4, Tab VII, Question VI.C

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Note: (Page 4.2-7 has been deleted)

## Remaining Surveillance Capsule Removal Schedule (Reactor Vessel Materials)

The following tabulates the remaining schedule for removal of the surveillance capsules located in the reactor vessel at the H. B. Robinson Nuclear Plant. This schedule will be included in a revision to the H. B. Robinson Updated Final Safety Analysis Report (UFSAR):

### H. B. ROBINSON UNIT 2

Capsule	Calendar Years <sup>1</sup>
X <sup>2</sup>	30
U <sup>3</sup>	40
V <sup>4</sup>	55
W <sup>4</sup>	70

- <sup>1</sup> Capsules are to be removed during the Refueling Outage immediately after or prior to the end of the designated calendar year.
- <sup>2</sup> The projected amount of irradiation exposure (fluence) on Capsule X will represent predicted reactor vessel plate and weld fluence values beyond the End of the Current License (EOL) of 40 calendar years.
- <sup>3</sup> The projected amount of irradiation exposure (fluence) on Capsule U will represent predicted reactor vessel plate and weld fluence values well beyond EOL to support extension of the current operating license.
- <sup>4</sup> Capsules V and W will be repositioned after 40 calendar years to accelerated flux positions to provide additional support for license extension.