



T/C

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION V  
1990 N. CALIFORNIA BOULEVARD  
SUITE 202, WALNUT CREEK PLAZA  
WALNUT CREEK, CALIFORNIA 94596

SEP 4 1980

Docket Nos. 50-508  
50-509

Washington Public Power Supply System  
P. O. Box 968  
3000 George Washington Way  
Richland, Washington 99352

Attention: Mr. R. L. Ferguson  
Managing Director

- Reference: 1) Ltr. G. S. Spencer to N. O. Strand dated December 14, 1979,  
Subject: NRC Inspection WNP-3 & 5  
2) Ltr. No. G03-80-91, D. L. Renberger to G. S. Spencer  
dated January 18, 1980, same subject, Response to Notice of  
Violation  
3) Ltr. G. S. Spencer to N. O. Strand dated January 31, 1980,  
same subject

Gentlemen:

In Reference 2, you took exception to Item C of our Notice of Violation concerning requalification of a CBI weld procedure. In Reference 3, we indicated that your response to Item C was being forwarded to IE:HQ for further technical evaluation. As a result of this evaluation the NRC position is unchanged. Our position and the basis for that position is set forth below.

Welding procedure specifications for use in applications requiring impact testing for notch toughness should be qualified using the maximum anticipated amperage and voltage settings to be used in production welding. An increase in the amperage or voltage is an essential variable, and the welding procedure should be requalified in accordance with the requirements of the Section IX of the Code whenever such increase occurs. In addition to the above, the welding procedure to be used in production welding should be qualified using the maximum interpass temperature allowed.

The purpose of the welding procedure specification and the procedure qualification record is to determine that the weldment proposed for construction is capable of having the required properties for its intended application. The welding procedure specification provides guidance to the welders and welding operators engaged in production so that the properties of the weldment obtained in the procedure qualification are reproduced in production welding. Each welding process consists

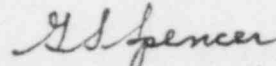
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of essential and nonessential variables (Section IX of the ASME Code) which should be included in the written welding procedure specification. A change of an essential variable requires a new welding procedure qualification. A change of a nonessential variable does not require a new welding procedure qualification. For applications involving the welding of steels requiring notch toughness testing, an increase of amperage or voltage is an essential variable and, therefore, the welding procedure should be requalified (Paragraph QW-409.1 of Section IX of the Code). In addition to the requirement for qualification with the maximum amperage and voltage, the welding procedure should be also qualified with the maximum anticipated interpass temperature to be used in production welding. The requirements for qualification with maximum heat input (e.g., amperage, voltage) and interpass temperature are needed because if the weld metal transforms at too high a temperature the required mechanical property requirements for the metal may not be met. This is especially valid for steels having notch toughness requirements.

Members of your staff at the WNP-3 & 5 site have been informed of our position. If you require future clarification, please contact us.

Sincerely,



G. S. Spencer, Chief  
Reactor Construction and  
Engineering Support Branch