

| Specification SR 5.3.12 - Steam Generator Tube Leaks  
| Surveillance

| Following each steam generator tube leak, specimens from  
| the accessible subheader tubes connected to the leaking  
| inaccessible tube(s) shall be metallographically examined.  
| The results of this examination shall be compared to the  
| results from the specimens of all previous tube leaks.

| A study shall be performed to evaluate the size and  
| elevation of all tube leaks to determine if a cause or  
| trend in the degradation of the tubes can be identified.

| Following each steam generator tube leak study, the  
| Nuclear Regulatory Commission shall be notified as to the  
| estimated size and elevation of the leaks as well as the  
| results of the metallographic and engineering analyses  
| performed that may identify the mechanism that caused the  
| leak to occur.

| Basis for Specification SR 5.3.12

| During the life time of the plant a certain number of  
| steam generator tube leaks are expected to occur, and the  
| steam generators have been designed to have these leaking  
| tube subheaders plugged without affecting the plant's  
| performance as shown in FSAR Table 4.2-5. The  
| consequences of steam generator tube leaks have been  
| analyzed in FSAR Section 14.5.

| It is important to identify the size and elevation of  
| steam generator tube leaks and to metallographically  
| examine the subheader tube material because this  
| information can be used to identify any trend or generic  
| cause of tube leaks. Conclusive identification of the  
| cause of a steam generator tube leak will enable  
| modifications and/or changes in operation to increase the  
| reliability and life of the steam generators and to  
| prevent tube failures in excess of those analyzed in the  
| FSAR.

| Because of the subheader designs leading to the steam  
| generator's tube bundles, in-situ internal or external  
| inspection and evaluation of a tube leak to establish a  
| conclusive cause is not practical. Metallographic  
| examination of the accessible connecting subheader tube  
| will show the condition of the internal subheader wall,  
| giving an indication of the conditions of the leaking tube  
| internal wall, thereby demonstrating the effectiveness of  
| water chemistry controls. Determining the exact size and  
| elevation of the tube leak will enable evaluation of other  
| possible leak causes such as tube/tube support plate  
| interface effects.

| The surveillance plan outlined above is considered  
| adequate to evaluate steam generator tube integrity and  
| assure that the consequences of postulated tube leaks  
| remain within the limits analyzed in the FSAR.



SUGGESS BOND  
COTTON FIBER

ATTACHMENT 2

SIGNIFICANT HAZARDS CONSIDERATIONS

## SIGNIFICANT HAZARDS CONSIDERATIONS

### I. EVALUATION

#### SR 5.3.12

The addition of this surveillance requirement will assure that the appropriate examination, analysis, and Nuclear Regulatory Commission notification requirements, as committed in P-84028, will be performed following any future tube leaks. The described program is considered adequate to evaluate steam generator tube integrity and maintain the consequences of postulated tube leaks within the limits analyzed in the FSAR.

### II. CONCLUSION

Based on the above evaluation, it is concluded that operation of Fort St. Vrain in accordance with the proposed changes will not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in any margin of safety.

Therefore, these changes will not increase the risk to the health and safety of the public nor do they involve any significant hazards considerations.