

4.0 FIRE PROTECTION PROGRAM

The fire protection program at Byron and Braidwood is implemented through station administrative procedures, which specifically address all aspects of the fire protection program, ranging from establishing and training of the fire brigade, to surveillance and testing of fire protection systems, and remedial actions for systems or equipment out of service.

The following fire protection features will be subjected to periodic tests and inspections:

- a. Fire alarm and detection systems
- b. Wet pipe sprinkler systems
- c. Deluge systems
- d. Halon 1301 system
- e. Carbon dioxide system
- f. Foam application system
- g. Fire pumps
- h. Fire barriers (walls, fire doors, penetration seals, fire dampers)
- i. Manual suppression (fire hoses, extinguishers, hydrants)

Equipment out of service including fire suppression, detection, and barriers will be controlled through the administrative program and appropriate remedial actions taken. The program requires all impairments to fire protection system to be identified and appropriate notification given to the Fire Marshall for evaluation. Based on the condition, engineering analysis may be required to determine the extent of the fire hazard to safe plant operations. As conditions warrant remedial actions would include compensatory measures to ensure equivalent level of fire protection in addition to timely efforts to effect repairs and restore equipment to service.

Inspection, testing and maintenance surveillance/predefine activities for the fire protection systems are controlled by the Company's Predefine Program, as described by administrative procedure. This program utilizes an electronic predefine database designed to prompt the scheduling and performance of all predefine activities entered into the system.

Fire protection surveillance/predefine activities conform to the following general requirements:

Crediting Predefines

Unplanned events may satisfy the testing requirement for a given surveillance/predefine activity. In this case, the unplanned event may be credited as fulfilling the performance of the surveillance/predefine activity, provided it meets all the requirements of the activity being credited.

Inoperable/Unavailable Equipment

Surveillance/predefine activities do not have to be performed on inoperable/unavailable equipment as long as the equipment is administratively controlled, with compensatory measures implemented as appropriate. Applicable surveillance/predefine activities have to be performed, with the specified requirements of the surveillance/predefine activity being met, prior to returning equipment to operable/available status.

Post Maintenance Testing

Upon completion of maintenance appropriate post maintenance testing is required to declare the equipment operable/available. This includes ensuring applicable surveillance/predefine activities are current, with their most recent performance meeting all the applicable requirements.

Grace period

A 25% extension of the frequency interval specified for the surveillance/predefine activity is permitted to facilitate scheduling of the activity and to provide consideration for unit operating conditions that may not be suitable for conducting the surveillance/predefine activity (e.g. transient conditions or other ongoing surveillance maintenance activities). This 25% extension does not significantly degrade the reliability that results from performing the surveillance/predefine activity at its specified frequency. This is based on the recognition that the most probable result of any particular surveillance/predefine activity being performed is the verification of conformance with the requirements for the surveillance/predefine activity.

The 25% surveillance/predefine activity frequency interval extension is not intended to be used repeatedly merely as an operational convenience to extend surveillance/predefine activity frequency intervals.

The fire protection program is covered by Exelon Generation Company, LLC Quality Assurance Topical Report (QATR). Fire protection activities are thus subject to audit under the applicable portions of the QA program to ensure proper implementation and compliance with commitments.