

OSART Good Practices
CORP. MAINTENANCE
Material condition

EDF corporate, France

Mission Date; 24 Nov.-5 Dec., 2014

Maintenance

Implementation of INPO AP913 Equipment Reliability at EDF

Description:

With strong leadership from the corporate organization EDF has implemented the INPO AP913 Equipment Reliability process at all its nuclear plants in a consistent manner. All requirements and aspects of the process are embedded in the maintenance process.

Advantages:

At the end of 2007, the DPN management decided to implement the AP 913 approach in order to reduce the rate of unavailable equipment for units in operation. This INPO methodology relies on the rigorous implementation of assessments, events analyses and a senior management decision making process for error reduction actions and modifications of the maintenance programmes. This approach was incorporated within the integrated management system (IMS) of EDF.

The roll-out of the method and the technical coordination by corporate provides EDF a system to meet the performance objectives in terms of nuclear safety and availability, and guarantee appropriate future planning stability.

The monitoring system was strongly implemented by corporate and implemented across the nuclear fleet. This system provides EDF better overview about the results and improvement in the NPP's of the fleet.

Regular analyses of system conditions and equipment conditions by corporate and units feature knowledge management about the level of error reduction.

The AP 913 process is supported by expert networks to improve the technical grade of the fleet (sharing of issues, development of common technical solutions, training of young engineers). With these groups, upcoming problems are better faced and relayed to the Corporate Error Reduction Committee.

Operating results:

Progress with the rate of unavailable equipment, strong increase of the Fleet Equipment Reliability index of the fleet, improved engineering skills, better control of the technical condition of equipment, provides the NPP's top management with more opportunities to modify corporate strategies.

Rework: Reduced by 50% from 2013 to 2014

Backlogs: Reduced by 50% from 2010 to 2014

Outage extension: fleet average reduced from 20 days to 8.3 days between 2013 and 2014