

## **New Dimension Solutions Implements an Integrated SAP Works Management Solution for Nebraska Public Power District**

### **The Client**

Cooper Nuclear Station (CNS),  
Nebraska Public Power District (NPPD)



### **Benefits**

- The replacement of multiple niche legacy systems with little integration by one common integrated SAP solution.
- Clearer definition, visibility and standardization of business processes across departments.
- Standardized plan for introducing changes (justifying, testing and accepting) into the standard business processes in the future

NPPD is a major utility providing service in the state of Nebraska. The lines of business include power generation (fossil, gas and nuclear), power transmission, power distribution, power retail, fleet management and water resource management.

### **The Challenge**

The main challenge was to implement an integrated SAP solution in the highly structured and regulated environment of a nuclear power station. In the work management process the main requirements were:

- **Work Identification and Review:** in the nuclear industry there are stringent requirements for work identification and the subsequent review and tracking of the work.
- **Work Planning and Scheduling:** the nuclear industry has a well defined 12 week scheduling and planning process as required by the NRC (Nuclear Regulatory Committee).
- **Work Execution:** Within the nuclear environment there are stringent permit and tag out requirements as well as specific risk assessment activities that need to be performed before and during work execution.
- **Work Completion and Reporting:** Within the utility industry there are specific financial reporting requirements, which need to be met.
- **Preventive Maintenance:** within the nuclear industry there are stringent requirements for the execution of preventive maintenance and inspection tasks.
- **Outage Management:** Periodically plant outages need to be planned for and executed.
- **Update of procedures:** The nuclear environment is extremely structured and highly proceduralized. The identification and update of significant procedures to reflect new business processes is a significant effort.
- **Data Validation:** During the initial load of data special requirements exist for the verification of the data load activities.
- **Other challenges** involved managing the implementation in the overall multiple phase approach chosen by the corporation. These included:
- **Defining the multiple client architecture** required for multiple ongoing SAP initiatives.

- Managing the upgrade and application of notes/fixes/patches to this client architecture.
- Validation and testing of upgrades/notes/fixes/patches
- The development and acceptance of training material to nuclear specific requirements
- The development of security profiles which have the robustness for a nuclear environment.
- The training and development of a power user community for training, go-live and post go-live support
- The identification and development of custom reports

## **The Solution**

- The key to developing the solution was in utilizing all of SAP's strength in terms of integration points.
- **Work Identification and Review:** The PM Notification and Notification Tasks were used to identify and track work. The process of review made use of Task status to track progress.
- **Work Planning and Scheduling:** By using PM Work orders, Technical Object hierarchies, Bills of Material's, PM Task Lists, Networks and network activities the requirements for work planning and scheduling were met.
- **Work Execution:** Using the enhanced functionality for operation level permits, the requirements for permitting and risk assessments was met.
- **Work Completion and Reporting:** FERC accounting was accomplished through the use of PS WBS structures.
- **Preventive Maintenance:** The enhanced functionality provided by SAP allowed maintenance plans to be developed for the specific requirements of the Nuclear industry.
- **Outage Management:** Using the combination of PM Task Lists, PM orders, PS Networks and PS Network Activities, outage schedules were developed and implemented.
- **Update of procedures:** High profile procedures were allocated to procedure owners who updated them with the help of design team members.
- **Data Validation:** Data loads requiring full "V&V" (verification and validation) were identified and the data load programs designed in order to accomplish it.
- The other challenges were managed by firstly highlighting to the various groups the potential for conflict within the corporation if these various other initiatives were not coordinated. Representatives of all interested groups developed an overall integrated plan. This plan was used to manage the activities and highlighted the integrated nature of SAP.