SERVICES

MAINTENANCE ADVANCED PLANNING SERVICES

MAPS

MAPS is designed for turbine-generator owners seeking guidance in planning and executing a turbine-generator outage. These services are provided to clients by MD&A's network of highly experienced consultants, project managers and technical directors. MAPS optimizes outage effectiveness, frees up plant personnel, and minimizes outage durations and frequencies. MAPS also helps identify and mitigate unforeseen issues occurring during an outage while helping clients maintain a planned outage schedule.

MAPS includes a non-biased, third-party evaluation of historic and planned outage activities while accounting for each customer's current operating needs and unit-specific maintenance issues. Unit performance, reliability, and availability objectives are reviewed and used as a basis for outage planning. Likewise, operating conditions, historical data, fleet data, and OEM recommendations (i.e., GEK, OMM, TIL) are compiled in report form and used to develop an outage planning document.

Pre-Outage Planning

- Engineer On-Site
- Review Past Outage Reports
- Compile Unit History
- Interview Personnel
- Review Outstanding TILs, etc.
- Conduct Parts Inventory
- List Equipment Needs
- List Service Needs
- Establish Flex-Schedule

Outage Planning

- Final Vendor List
- Final Parts List
- Potential Scope Additions
- Work Sequence
- Task Sub-Activities
- Pre-Bid Discussions
- Develop RFQs
- Identify Specialty Contractors

Post-Outage Review

- Outage Analysis
- Milestones Achieved
- Added / Deleted Items
- Parts Used
- Oustanding Issues
- Future To-Do List
- Final MAPS Report

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Pre-Outage Planning

Pre-outage planning can begin up to 18 months prior to an anticipated outage. This involves a review of the specific unit's outage and operating history using customer-provided documents. The review incorporates the anticipated outage dates, past outage reports, interviews with client personnel, as well as fleet and outstanding OEM maintenance recommendations. Currently available parts and materials are inventoried by either MD&A or the client and used in the outage planning process.

The objective of pre-outage planning is to develop a list of needed equipment, tasks, and parts to be included in the final outage plan. This review identifies services, such as safety orientations, steampath inspections, performance evaluations, vibration services, alignment services, and shop services that must later be incorporated into the outage plan. The result of this review becomes a draft document reflecting equipment and service needs, objectives to be accomplished, and the parts or materials available and needed. This information becomes a working document used in outage planning.

Outage Planning

Outage planning typically starts 6 to 8 months before the outage date and is a direct extension of pre-outage planning activites. The objective of outage planning activities is to establish a final list of known and potential outage activities, work scopes and a flexible schedule that includes verifying the availability of needed services, parts and materials. This work scope includes all major tasks broken down into sub-activities. The objective and sequence of work to be performed is defined and plotted. Activities not included but that may be added as circumstances dictate are identified and listed as potential additional work scope items. This document contains the full scope of the customer's outage needs and can be used to develop the bid package sent to vendors and/or is used in pre-bid discussions. Our MAPS engineer can also provide guidance in the development of proposal requests to specific service vendors.

Post-Outage Review

If desired, a post-outage review can be conducted. The review consists of a comprehensive analysis of the outage, identifying the achievement of milestones, added and deleted activities, parts used, and recommendations for the next planned outage. Open items and issues are identified and a resolution or action proposed. The result of this review becomes a key element in preparing the next pre-outage plan. The final MAPS report becomes not only an important list of recent and past outage activities but also a "future to-do working document" that is passed on reflecting both historical activities and anticipated future resources. MAPS will take much of the guesswork out of planning your next outage and save both time and funds.

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