

## INFORMATION FOR PARTICIPANTS

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All participants will receive free of charge:

- A final report that summarizes the reliability and maintenance data of their facility equipment.
- Maintenance data analyses that include equipment time to failure and failure mode metrics.
- Electronic files of all scanned work orders, nameplate data, and associated maintenance documentation.
- Certificate of Appreciation.

## SITE VISIT

PREP personnel will perform site visits to collect data and information at your facility. Site visits are limited to one or two days.

Objectives of the visit are to:

- Interview personnel to obtain required information
- Review, copy and/or record data from maintenance logs
- Review copies of blueprints (when possible)
- Maintenance data collected includes:
  - Equipment nameplate data
  - Scheduled and unscheduled maintenance information
  - Number of occurrences
  - Length of time to perform actions

Facility personnel involvement required is typically limited to 1-3 hours.

**For more information regarding the Power Reliability Enhancement Program and its database expansion effort, contact PREP or North Point Defense via phone or email:**

**Specialized Power and Reliability Consulting (SPARC)  
North Point Defense  
Attn: Mark Bunal (PREP Technical Lead)  
1300B Floyd Ave  
Rome, NY 13440  
Phone: (703) 424-0723  
Email: [mbunal@northpointdefense.com](mailto:mbunal@northpointdefense.com)**

Or

**U.S. Army Corps of Engineers  
Special Missions Office,  
Power Reliability Enhancement Program  
Fort Belvoir, VA 22060  
Phone: (703) 704-2887  
Email: [Andrew.D.Stringer2.civ@mail.mil](mailto:Andrew.D.Stringer2.civ@mail.mil)**



**US Army Corps  
of Engineers®**

**United States Army Corps  
of Engineers, Power  
Reliability Enhancement  
Program (PREP)**

**Specialized Power and  
Reliability Consulting  
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# Specialized Power and Reliability Consulting (SPARC)



## BACKGROUND

United States Army Corps of Engineers (USACE) Power Reliability Enhancement Program (PREP) maintains a one-of-a-kind, comprehensive database of reliability and maintenance information related to the components that make up power generation, power distribution, and mechanical cooling systems. PREP is collecting equipment failure and maintenance data at facilities across the country to improve the quality of data and reflect modern changes in technology.

Information collected at facilities will be combined with information collected from other sources. PREP will strictly adhere to any confidentiality and proprietary restrictions imposed on the information provided. The results of this effort will be used to support DoD facility managers in their effort to establish reliable facilities to meet mission critical requirements.

The PREP database is documented in both Technical Manual (TM) 5-698-5 and by the Institute of Electrical and Electronics Engineers (IEEE) in the IEEE Standard 3006.8, Design of Reliable Industrial and Commercial Power Systems.

## FACILITY TYPES

Historical data which includes maintenance records are being obtained from a variety of sources which include but are not limited to:

- Communication Companies
- Military Installations
- Hospitals
- Mass Transit Authorities
- Airports
- State and Federal Facilities
- Industrial Plants
- College & Universities
- Shopping Malls
- Stadiums
- Hydroelectric Plants
- Utilities
- Computer Facilities (24 x 7)
- Amusement Parks
- Sewage Treatment Plants
- Banking Institutions

At least 5 years of maintenance data must be available at a site to participate in the program.

The intent of the program is to collect reliability and maintainability (R&M) information for Power Generation, Power Distribution, and HVAC components in a variety of locations and applications to determine statistical R&M metrics that most closely exhibit the true reliability/ maintainability of a component.

## EQUIPMENT TYPES

The PREP database encompasses of over 280 different types of Power Generation, Power Distribution, and HVAC components. We are looking for a data on a wide range of equipment, old and new, to strengthen the data on legacy equipment and to reflect newer changes in technology. The program is interested in continuously operating as well as standby equipment.

## MAINTENANCE ANALYSIS

PREP intends to include a representative range of maintenance policies and procedures by collecting data from a variety of locations having various maintenance policies. PREP personnel will assess the maintenance performed at a participating facility and benchmark their maintenance against industry practices. The results of this assessment will be made available to you.

## MAINTENANCE DATA FORMATS

Data is extracted from hardcopy maintenance logbooks, files or documentation as well as from computerized maintenance systems. Logbooks and paper files are scanned on-site into electronic Adobe PDF files and returned to the participant on electronic media. Equipment nameplate information is obtained from documentation or from reviews of actual equipment. An electronic file of equipment nameplate information is also provided to each participating facility. Your data will be combined with that from many facilities, and any facility-specific information will be removed prior distribution.