

ADRES Automated Demand Response and Energy Savings
**BUILDING AUTOMATION SYSTEM
INFORMATION RESPONSE**

**OPERATIONS AND MAINTENANCE
DEPARTMENT
ADVANTAGES AND CONSIDERATIONS**

Prepared by:



2637 Ariane Drive
San Diego, California 92117

Operations and Maintenance Management Considerations

During the initial commissioning and acceptance to the transition of the ADRES Controller system the facility operations center will have a seamless integration into the new system. Contractor notes, comments and pictures of ADRES Controller units can be uploaded and cataloged into the ADRESpro website for historical review and pertinent information for every individual unit.

During the commissioning of the ADRES Controllers a new clean baseline for each HVAC unit system performance will be recorded by the ADRESpro website software for a baseline of current utilization of the system. This baseline of data will be used for future evaluation to determine any system deterioration in efficiency and performance as well serve as a baseline for savings once the ADRES Controller system is turned on and implemented.

The ADRES Controller has built-in measurement and verification reporting which establishes a baseline of energy consumption versus ambient temperature conditions for trending and then maintaining optimum unit efficiency once the ADRES Controller is implemented.

Detailed ADRES Administrator User Guides are available on line along with video tutorials on how to setup, configure and manage buildings, units, and users.

The ADRESpro website allows authorized users the ability to monitor, configure, and record service notes directly from the website. The authorized user may view real time system performance and settings along with configuring and controlling the unit directly from the website. The authorized user can see the historical alarm logs and historical services logs for every ADRES Controller unit they are authorized to view.

The ADRESpro website integrates the Google Map API with alarm color coding of the ADRES Controllers which allows a user a quick overview of units that are in alarm, have a warning, or are in a normal working condition. All alarms remain active on the map and the alarm log until the user has acknowledged the alarm.

Many alarms and alerts can be resolved through the interface without dispatching personnel saving money by not having to have a technician come on-site. The Alarms also facilitate timely coordination and scheduling of maintenance activities by contractors and service technicians.

The ADRESpro website provides a service and maintenance log for contractors and maintenance techs to facilitate quality control and optimal time management for maintenance service requests. The maintenance log has the added feature of uploading photographs and descriptions of the maintenance performed for quality control by corporate personnel.

Service and Maintenance Advantages:

- The ADRESpro website has the ability to give granular permissions to specific HVAC, Lighting, and other ADRES Controller units to corporate users, regional users, store personal, third party personal and contractors
- Authorized users have full control over alarms, monitoring and historical trending through the web interface.

- Corporate Administrators or assigned Administrators can receive alarms and alerts by SMS or by Email. Different contractors and users can receive alarms specific to the equipment that they provide service.
- The Alarm Log and Service Log provide clear communication between end customers and contractors on alarm condition and current action being taken to resolve the alarm or alert.
- All HVAC, Lighting, Generator, Solar PV, Wind Turbine, and other ADRES Controller types automatically provide 15-minute historical performance trending.
- The ADRES Controller has built in Measurement and Verification reports that are available for Utility Rebate and Incentive Programs.
- The ADRES Controller can be setup and configured on a unit-by-unit to participate in Demand Response programs.
- The ADRESpro website allows the customer and corporate office to track preventative and unscheduled service maintenance by the contractor. The website allows you to enter in maintenance notes with data, time, description, and before and after pictures of unit being serviced.

ADRES Control Series

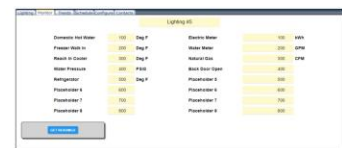
Control System Solution

ADRES Control Unit Types Available

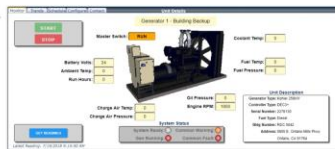
Lighting Control



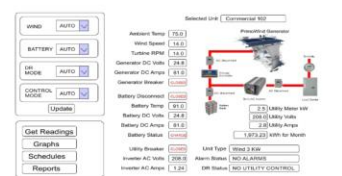
Monitor



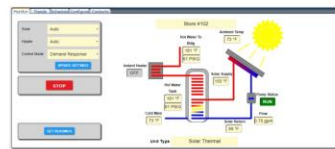
Backup Generator



Wind Turbine



Solar Thermal



Solar PV with Battery



HVAC Package

