



ENERGY SAVINGS AND DESIGNED OUTPUT REPORT (ES&D) APS RENEWABLE ENERGY INCENTIVE PROGRAM

For required technologies, an **Energy Savings and Designed Output (“ES&D”) report** shall be provided as part of the reservation. The ES&D report must include either a testing certification for a substantially similar system prepared by a publicly funded laboratory, or an engineering report stamped by a registered professional engineer. The ES&D report shall provide a description of the system and major components, designed performance, system output and the report shall identify applicable standards and/or codes used in system design and a brief history of the components used in similar applications.

If the system design differs from the recognized industry best practices, as described in the equipment qualifications listed in the Plan for the qualifying technology, the ES&D report must contain a certification that the system design is at least as effective as the specified requirements. This documentation should be preceded by an executive summary outlining supporting documentation including, but not be limited to, the following:

- System Design (Electrical and/or Thermal), Process and Instrument Diagram(s) & One-line Diagram(s)
- Designed System/Component Life Expectancy and Maintenance Interval Requirements
- Resource / Fuel Source Content, Quality, Forecasted Availability of Supply
- Metering Sources & Locations by Physical location (Site plan, Site Elevation)
- Production and/or Savings Estimates (kW & kWhs and/or BTU conversions & assumptions)
- Native Load / Energy Usage Impact: Load Reduction / Savings and/ or Net Exporter to Utility
- Verification of Design Compliance to APS’s [Distributed Energy Administration Plan](#)’s Equipment Qualifications Specifications and, if applicable, APS’s [Interconnection Requirements for Distributed Generation](#)

APS may schedule a meeting to review and clarify any questions that arise after initial review of the report. APS may request copies of any documents to assure compliance with government, institutional, or DE program requirements that are either explicitly or implicitly described by this Plan. Upon final inspection of the installation, APS may request/require construction/as-built drawings of the system.