

## Plan Review, Permit, Inspection Criteria for Energy Systems

The purpose of this document is to provide the construction permit process, the solar photovoltaic alternating current nameplate rating (AC) and battery energy storage capacity thresholds, for Energy Systems per the 2018 Phoenix Fire Code. This process is designed to provide efficiency without compromising the safety of the public and emergency responders including firefighters. This document identifies the plan review, permitting and inspection criteria for Energy Systems required by the 2018 Phoenix Fire Code, Chapters 1 and 12. A separate permit is also required from the Planning & Development Department for all photovoltaic and/or energy storage systems per the Phoenix Building Construction Code.

### **Permitting Process**

The over-the-counter permit process establishes the solar photovoltaic AC nameplate rating threshold and battery capacity, for Residential one- and two- family dwellings, R3 and R4 occupancies, that allows the customer to be issued a fire construction permit to install an Energy System without a plans submittal. Energy Systems over the established AC nameplate rating thresholds or energy storage capacities will require a plans submittal in accordance with the 2018 Phoenix Fire Code; and a construction permit will only be issued once the plans are reviewed and approved. The Fire Department will not schedule an inspection until construction plans have been submitted to the Planning and Development Department for review.

The AC nameplate rating thresholds and energy capacities are as follows:

#### **Residential Solar Photovoltaic Systems**

3 kW – 12 kW alternating current nameplate rating	Over-the-Counter Permit
In excess of 12 kW alternating current nameplate rating	Plans submittal required
30 kWth or less system size water heater	Over-the-Counter Permit
In excess of 30 kWth system size water heater	Plans submittal required

#### **Residential Battery Energy Storage Systems**

3 kWh – 20 kWh capacity	Over-the-Counter Permit
Capacity in excess of 20 kWh	. Plans submittal required

An Energy System containing both a solar photovoltaic and a battery energy storage system will be considered an over-the-counter construction permit as long as both systems do not exceed the over-the-counter threshold or capacity. If either energy system is in excess of the over-the-counter threshold or capacity, a plans submittal is required for that system.

To obtain an over the counter permit, email a completed copy of the permit application to <a href="mailto:pfd.energy.systems@phoenix.gov">pfd.energy.systems@phoenix.gov</a>. After processing, Fire Prevention staff will email the applicant a copy of the permit and a receipt. To request a fillable application and credit card form, please email: <a href="mailto:pfd.energy.systems@phoenix.gov">pfd.energy.systems@phoenix.gov</a>.

Installations over the above thresholds and any commercial installation requires plans to be submitted. The fire department accepts pdf plans submittal through email. A complete set of accurate plans and the permit application shall be emailed to <a href="mailto:pfd.energy.systems@phoenix.gov">pfd.energy.systems@phoenix.gov</a>. A Fire Department Plans Reviewer will review the plans for code compliance. Once the plans are approved, Fire Department staff will email the stamped approved plans, a receipt and the permit. To request a fillable application and credit card form, please email: <a href="mailto:pfd.energy.systems@phoenix.gov">pfd.energy.systems@phoenix.gov</a>.

#### **Inspection Process**

The customer/permit holder will be responsible to schedule a fire inspection once the installation is complete, and before connecting to the utility grid. The inspection must be completed by a Phoenix Fire Department Fire Inspector

Once the fire inspector approves the installation, a green tag will be provided, and the permit will be closed out in our permitting system. The next step, after system approval (green tag) by the Phoenix Fire Department, is to contact the Planning & Development Department (PDD) to request an inspection at 602-495-0800 or 602-262-7811 for questions.

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Please contact the Phoenix Fire Department's Fire Prevention Section at <a href="mailto:pfd.energy.systems@phoenix.gov">pfd.energy.systems@phoenix.gov</a> or at 602-262-6711 with questions regarding the Phoenix Fire Department's permit and/or fire code requirements.