



**Power Trip Energy Corp**

83 Denny Ave

Port Townsend, WA 98368

(360) 643-3080

[www.powertripenergy.com](http://www.powertripenergy.com)

Lic # POWERTE964JN

Basis for Amending the International Fire Code  
And  
Are State Amendment Criteria Satisfied?

**A. PRIMARY REASON FOR AMENDMENT: (Describe how the amendment meets one of the criteria listed below):**

**NOTE: State-wide and emergency state-wide amendments to the state building code must be based on one of the following criteria; please indicate the pertinent rationale for the proposed amendment by selecting from the list below:**

- (1) The amendment is needed to address a critical life/safety need.**
- (2) The amendment is needed to address a specific state policy or statute.**
- (3) The amendment is needed for consistency with state or federal regulations.**
- (4) The amendment is needed to address a unique character of the state.**
- (5) The amendment corrects errors and omissions.**

**(2) The amendment is needed to address a specific state policy or statute.**

Renewable Energy is a key part of State energy goals. The state offers incentives for the manufacture and development of renewables. State law requires utilities to acquire renewable resources. The State Energy Strategy and economic development strategies encourage renewable energy development. The 2012 IFC would unnecessarily hinder the implementation of these goals by reducing the available roof space that could otherwise be used for solar PV installations. The 2012 IFC solar provisions are also complicated, not well designed for our state's conditions, and will burden local jurisdictions charged with their administration. Washington State is one of 22 Solar Rooftop Challenge participants in the nation seeking ways to improve the permitting process for solar PV installations.

**Renewable Portfolio Standard – I-937 – requires new renewables**

Washington was the second state in the nation to pass a renewable energy standard by ballot initiative. The Energy Independence Act, commonly known as I-937, calls for state electric utilities serving more than 25,000 customers to obtain 15% of their electricity from new renewable resources by 2020 and to undertake all cost-effective energy conservation. Small solar PV systems located on utility customer's property (or roof tops) are given double credit in meeting the Renewable Portfolio Standard. The 2012 IFC provisions will hamper our ability to use rooftops to help meet these goals.

**Production and tax incentives – encourages renewable deployment through incentives**

The Washington legislature has adopted production incentives and tax incentives to encourage the manufacture and installation of renewable energy. These tax incentives include reduced B&O taxes for in-state manufacturing of solar equipment, sales tax exemptions for those who purchase solar PV systems prior to June 30, 2013, and an annual cost recovery incentive program for grid-tied solar PV systems (through June 30, 2020). Encouraging the installation of customer owned solar PV systems is part of a coordinated state strategy to stimulate investment in the local economy and in renewable energy.

Washington State also requires major utilities to offer Green Power programs and to file annual reports.

### **2012 Washington State Energy Strategy**

The new 2012 Washington State Energy Strategy-<http://www.commerce.wa.gov/site/1327/default.aspx> was released earlier this year. The legislation guiding the development of the strategy emphasized that the energy strategy should be clean, competitive and build Washington State's innovation economy.

The legislation declares that a successful Energy Strategy will balance three goals in order to:

1. Maintain competitive energy prices that are fair and reasonable for consumers and businesses and support Washington's continued economic success;
2. Increase competitiveness by fostering a clean energy economy and jobs through business and workforce development; and
3. Meet the state's obligations to reduce greenhouse gas emissions. This goal refers to a 2008 state law that established the goal of reducing statewide greenhouse gas emissions to 1990 levels by 2020, to 25 percent below 1990 levels by 2035, and to 50 percent below by 2050.

These three goals have served as the primary guidelines for work done on the 2012 Energy Strategy the past 18 months.

In addition to the three goals, the legislation provides nine guiding principles:

1. Pursue all cost-effective energy efficiency and conservation as the state's preferred energy resource, consistent with state law;
2. Ensure that the state's energy system meets the health, welfare, and economic needs of its citizens with particular emphasis on meeting the needs of low-income and vulnerable populations;
3. Maintain and enhance economic competitiveness by ensuring an affordable and reliable supply of energy resources and by supporting clean energy technology innovation, access to clean energy markets worldwide, and clean energy business and workforce development;
4. Reduce dependence on fossil fuel energy sources through improved efficiency and development of cleaner energy sources, such as bioenergy, low carbon energy sources and natural gas, and leveraging the indigenous resources of the state for the production of clean energy;
5. Improve efficiency of transportation energy use through advances in vehicle technology, increased system efficiencies, development of electricity, biofuels and other clean fuels, and regional transportation planning to improve transportation choices;
6. Meet the state's statutory greenhouse gas limits and environmental requirements as the state develops and uses energy resources;
7. Build on the advantage provided by the state's clean, regional electrical grid by expanding and integrating additional carbon-free and carbon-neutral generation, and improving the transmission capacity serving the state;
8. Make state government a model for energy efficiency, use of clean and renewable energy, and greenhouse gas-neutral operations; and

## 9. Maintain and enhance the state's existing energy infrastructure.

The use of our state's roof tops for generating solar electricity is an important method of helping to achieve many of these state-wide renewable energy goals.

### **Rooftop Solar Challenge**

The Department of Commerce is working with 4 local governments, 4 utilities and non-profit organizations to develop a standardized approach to permitting, zoning and interconnection through a grant from the U.S. Department of Energy. The Washington State project is one of 22 in the nation. Improving permitting procedures for solar PV systems is one part of the broader SunShot Initiative to make solar installations more competitive with traditional energy resources.

### **State law provisions protecting solar access**

The Washington state legislature has gone to efforts to identify the protection of access to direct sunlight for solar energy systems as a legitimate public interest. The TAG and the State Building Code Council should acknowledge these legitimate state interests during the 2012 IFC process:

A basic statement of support for maintaining solar access to properties is contained in **RCW 64.04.140** - *The legislature declares that the potential economic and environmental benefits of solar energy use are considered to be in the public interest; therefore, local governments are authorized to encourage and protect access to direct sunlight for solar energy systems.*

State law regarding comprehensive plans puts access to direct sunlight on a par with fire regulations: **RCW 35.63.090** - *All regulations shall be worked out as parts of a comprehensive plan which each commission shall prepare for the physical and other generally advantageous development of the municipality and shall be designed, among other things, to encourage the most appropriate use of land throughout the municipality; to lessen traffic congestion and accidents; to secure safety from fire; ... to encourage and protect access to direct sunlight for solar energy systems; ...*

An additional state law regarding municipal authority puts solar access on an equal footing with all the other things that city and county land use ordinances regulate: **RCW 35A.63.100** - *Such ordinances or other action may provide for: ... (2) Dividing the municipality, or portions thereof, into appropriate zones within which specific standards, requirements, and conditions may be provided for regulating the use of public and private land, buildings, and structures, and the location, height, bulk, number of stories, and size of buildings and structures, size of yards, courts, open spaces, density of population, ratio of land area to the area of buildings and structures, setbacks, area required for off-street parking, protection of access to direct sunlight for solar energy systems, and such other standards, requirements, regulations, and procedures as are appropriately related thereto. (Note - emphasis added).*

### **Approval criteria (4) The amendment is needed to address a unique character of the state:**

The 2012 IFC contains provisions requiring a three foot "ventilation setback" from the peak of pitched roofs for one and two family homes and greater width for multifamily and commercial buildings. Many parts of the state receive significant snow accumulation during the winter months. The ventilation setback may result in snow and ice accumulation above the PV array potentially creating ice dams. Ice dams can result in roof leaks and building damage. This issue should be carefully reviewed and addressed during the adoption process. The 2012 IFC is based upon southern California solar guidelines where snow accumulation is not an issue. This is a significant oversight of the 2012 IFC and should be corrected in any version of the code adopted in Washington.

## **B. TYPE OF BENEFITS PROJECTED:**

Desired benefits of the proposed amendment are:

1. Simpler permit process for solar PV installations;
2. Clearer standards for local jurisdiction permit authorities;
3. Fewer impacts to home and business owners seeking to maximize the solar potential of their property;
4. Keeping solar PV system costs as low as possible in order to generate the maximum power possible;
5. Accommodating both the needs of firefighters (based upon local firefighting practices and policies) and the state's goals of generating renewable energy on sunny rooftops;
6. Avoiding snow damage to sloping building roofs potentially caused by ventilation setbacks.

Please see the discussion above for more details.