

# **LEGISLATIVE CONCEPT**

Proposed to the Renewable Energy Working Group, August 14<sup>th</sup>, 2008

Title: **Solar PBI Pilot**

## **PURPOSE**

To develop and test an incentive structure for solar PV systems that provides financial support based on the amount of electricity produced. Production based incentives (when structured correctly) have been shown to be the most cost efficient way of transforming markets and increasing demand for new renewable energy resources. This concept would:

- Increase the overall incentives funds available to support continued strong growth in the development of Oregon's solar PV market.
- Reduce project cost and improve efficacy of financial incentives for solar PV projects.
- Provide project owners/developers with a clear and simple long term payment structure for energy produced by their solar PV system.
- Align the incentive payout schedule to coincide with available financing periods.
- Push the cost of the financial incentives into the future when, because of rising fossil fuel costs, the incremental cost of this incentive structure will be lower.
- Increase the long term value of the projects so that they are kept operational when a property is sold, and the value of the system is included in the sale transaction.

## **CONCEPT**

Authorize the OPUC to establish a pilot production based incentive program funded by electric utility ratepayers. This pilot would begin in 2010 with a limited scope and market. Incentives would be determined for one or more specific technologies (e.g. wind, solar). The incentive amount would be sufficient to provide a moderate rate of return for low cost, best of class project. Each incentive structure would set a fixed (inflation adjusted) rate per kWh produced over a 15 year period (or suitable long term).

ODOE administrative rule changes would be needed so that the target market for this incentive program would not be eligible for state tax credits. The ETO incentives may also need to be excluded or limited to only very small system sizes where the incremental cost is higher. This exclusion is important if the pilot program is to be able to compare its efficacy to a rebate + tax credit structure.

The scope of this pilot would be limited. How it should be best limited, would be determined by the OPUC. Possible limits include a cap on the total MW that is eligible at a given incentive level, a maximum system size per project, and/or a narrowly defined target audience.

**Example – Solar PV Pilot**

The following table shows the relative cost of a 5-year pilot PBI for solar PV. The PBI rate is assumed to be a 15 year incentive. Projects that are in place in the first year would get \$0.30 above the standard QF rate, and subsequent years would be offered a lower rate which declines to \$0.02 above the QF rate by 2025.

			Total MW			
			Year	Installed	BETC	PBI
2010 start	5	MW	2010	5	\$ 4	\$ 2
Growth rate	22%	per year	2011	11	\$ 8	\$ 4
PBI above QF rate	\$ 0.30		2012	19	\$ 13	\$ 6
State Contribution	0%		2013	28	\$ 19	\$ 9
Rate Increase	0.2%		2014	39	\$ 25	\$ 12
Installed Capacity	39	MW	2015	39	\$ 21	\$ 12
			2016	39	\$ 17	\$ 12
			2017	39	\$ 12	\$ 12
			2018	39	\$ 6	\$ 12
			2019	39	\$ -	\$ 12
			2020	39	\$ -	\$ 12
			2021	39	\$ -	\$ 12
			2022	39	\$ -	\$ 12
			2023	39	\$ -	\$ 12
			2024	39	\$ -	\$ 12
			2025	39	\$ -	\$ 10
			2026	39	\$ -	\$ 8
			2027	39	\$ -	\$ 6
			2028	39	\$ -	\$ 3

The following graph shows the cost of a PBI program if allowed to run through 2025.

**Approach Comparison - Cost as a Percent of Retail Rate**

