Solar Energy in Washington State and Executive Order 14-04

Summary of Progress and Proposed Framework

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Expanding Solar in Washington: Meeting Executive Order 14-04 Goal

• Improve the current support program
  – Extend production incentives beyond 2020 end date
  – Broaden access to more people and businesses
  – Open the program to new markets through leasing and other new business models

• Develop new initiatives
  – Create opportunities for low-income participation
  – Catalyze at least one utility-scale development
  – Encourage solar in new construction

• Recommend new effort supporting advanced solar and energy storage integration
Growth of Solar Installations: New Systems per Year

Solar PV Systems Approved by WA Department of Revenue/WSU Energy Program

- 2005: Low number
- 2006: Increase
- 2007: Moderate increase
- 2008: Further increase
- 2009: Steady growth
- 2010: Significant increase
- 2011: Continuation of growth
- 2012: Spike
- 2013: Peak

24 April 2014
Where Solar Activity is Occurring
Customer Benefit Over 10 years under Current Incentive

Total 10 Year Customer Benefits for 5kW Residential System installed in 2015: Current Incentive

- In-State ($0.54 / kWh)
- Standard Base ($0.15 / kWh)

- Federal Tax Credit
- WA Sales Tax Exemption
- WA Cost Recovery Incentive
- Net metering
Opportunity for Improvement

- Program end date, sales tax exemption expiration and reduction in federal incentive will dampen market in future years
- Market is ripe for expansion, but a range of solutions is needed to reduce costs, ensure market stability, and expand participation
Creating the Next Generation Program

Five Principles/Objectives developed from the stakeholder engagement process

– Define and establish specific targets and metrics for solar expansion
– Broaden access in the solar marketplace to a greater range of participants
– Increase cost-effectiveness of incentives
– Provide predictability for participants and state budget
– Promote fairness and transparency for customers and administrators
# Key Program Improvements

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<tr>
<th>Issues</th>
<th>Solutions</th>
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<tr>
<td>Incentive program end dates create market problem</td>
<td>Change to rolling fixed number of years production incentive with stepped decrease over time</td>
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<td>In-State Manufacturing incentive too large and not working appropriately</td>
<td>Phase incentive out over time, find more effective mechanisms to motivate manufacturing</td>
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<td>Limited opportunity outside residential solar market</td>
<td>Expand program to larger commercial systems at reduced rates and higher caps. Reduce community solar rates and eligibility restrictions</td>
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<td>Financing options limited</td>
<td>Enable third-party financing and leases</td>
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<td>Program benefits primarily higher income participants</td>
<td>Create low-income multi-family solar initiative</td>
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Future Potential Production Incentive Model
2014 Stakeholder Process Timeline

- **June 30**: First All Stakeholder Meeting
- **August 14**: Framework Workgroup Meeting
- **August 26**: Framework Workgroup Meeting
- **October 3**: Second All-Stakeholder Meeting
- **October 8**: Program Design Workgroup Meeting
- **October 13**: Program Design and Utility -Centered Workgroup Meetings
## Next Steps: Stakeholder Workgroups

### Program Design Workgroup
1. **Sales Tax Exemption**
2. Incentive levels and duration
   a) In-State rates
   b) Standard-Offer rates
3. Commercial and Community Solar
4. Eligibility and Caps
5. Third-Party incentives
6. Low-Income Program design

### Utility-Centered Workgroup
1. Administrative Issues
   a) Annual kWh certification
   b) Metering true-up dates
   c) Utility reporting to State
2. Net-Metering issues
3. Consumer Protection
4. Utility-Scale Demonstration Projects
5. REC ownership
Next Steps: State Agency Discussions

State Agency Work Topics

1. Promotion of In-State Manufacturing
2. New Construction Solar Incentives
3. Energy Storage / Advanced Solar Deployment
4. Electric Vehicles/ Solar Integration
Solar Sales Tax Exemption Discussion 10/3
Less than 10kW = Full exemption – Ends 2018
Over 10kW = 75% refund – Ends 2020

Reasons to keep
• Impacts payback period
• Current incentive is not fully utilized – may reduce market uptake and impact future sales
• Is available to broadest array of participants
• Benefit to reducing up front costs – operates as quasi-rebate
• Off-grid systems don’t qualify for production incentive

Reasons to let expire
• Creates some red tape/ admin burden
• Could be eliminated if simpler incentive provided
• State gets revenue at time of install
• Impacts local government
• Single mechanism could be more effective

Additional Considerations
• Exemptions should be considered in context of full package of incentive
• Consider potential for differences between project size in extension
• Both production incentive and exemption hit state budget, through different pathways
• Need to determine scale of benefit in terms of annual costs and total net economic impact
Contacts and Additional Information

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