



CALIFORNIA ENERGY COMMISSION

New Solar Homes Partnership

Committee Workshop
October 5, 2006

Sanford Miller

Renewable Energy Program



Presentation Overview

- SB 1/CPUC/NSHP Interface
- Draft Guidebook
- Guidebook Issues/Comments



Senate Bill 1

- 3000 MW goal, combined POU/IOU effort
- **Solar** Industry self-sufficient in 10 years
- Solar on 50% of new homes in 13 years
- January 2011: home builders must offer PV as option on developments of 50+ homes
- CEC to develop 'offset' procedure to **permit builders alternative** of installing **20%** equivalent solar on other projects



Senate Bill 1

- Solar system definition: 1 kW to 5 MW, AC
- Net metering cap raised to 2.5% of utility's demand
- POU and IOU programs to use CEC adopted guidelines and criteria (once established)
- 10 year warranty



CPUC CSI Program

Eligible Customers

- Existing residential
- All non-residential, new and existing
- Existing Affordable Housing



New Solar Homes Partnership

- 400 MW **Goal** by 2016
- New residential only: -New homes/developments, affordable housing
- Partnership with builders, solar industry, affordable housing experts to design program
- Advisory Committees formed to recommend direction and provide comments



New Solar Homes Partnership

- Emphasizing energy efficiency
- Incentives
 - Up-front performance-based rebate
 - Longer reservation period
 - Higher incentives for affordable housing
 - Incentives decline over 10 year period



Draft Guidebook Basics

- Draft is initial proposal
- Committee and staff are interested in comments and suggestions
- NSHP Guidebook is similar in content and format to ERP Guidebook



Eligibility:

- All new residential in PG&E, SCE, SDG&E and Bear Valley Electric service areas
 - New homes – production and custom
 - Affordable Housing
- Minimum efficiency
 - Tier 1 -15% more efficient than 2005 Title 24
 - Tier 2 -35% more efficient than 2005 Title 24 encouraged and incentivized
- Other criteria similar to ERP Guidebook



Additional Requirements:

- PV system warranty of 10 years
- System sized to no more than 100% of expected load.
- Systems 5 kW or less are presumed in compliance with on-site load limitation



Incentive Level

- Initially \$2.50/watt for reference case
- Depends on geographic location, orientation/tilt, and shading, paid when system has been installed, operational, interconnected, and verified
- MW trigger mechanism
 - Incentive expected to decline 25¢/watt as market volume is achieved
 - Ensures Budget For Goal
 - Provides Automatic Response to Market Growth
- No cost to reserve



Reservation Process

- First-Come, First-Served
- Up to 36-month reservation period
- General approval
 - Tentative subdivision map required
 - Estimate only of equipment/installation cost
 - # Homes with solar



- 18 month checkpoint (designed to avoid reserving substantial funds without clear progress)
 - Equipment must be financially committed
 - Expected Performance Based Incentive calculations
 - Build-out schedule
- Rebate claim forms to be issued for each home in development once equipment is committed



Payment Process

About the same as ERP Guidebook:

- Final invoices
- Title 24 -15%+ compliance
- Proof of interconnection to utility
- Building permit signoff
- **Field verification prior to payment**



Comments/suggestions we are particularly interested in:

- Incentive level
- Volumetric (MW) trigger
 - Over-reserving by some %?
- General reservation application without financial commitment or with specific homes to receive PV systems
- If builders offer solar as an option, as opposed to a standard feature, should the number of units with a reservation in a development be limited (i.e., 50% of total units)? If so, how much lower?

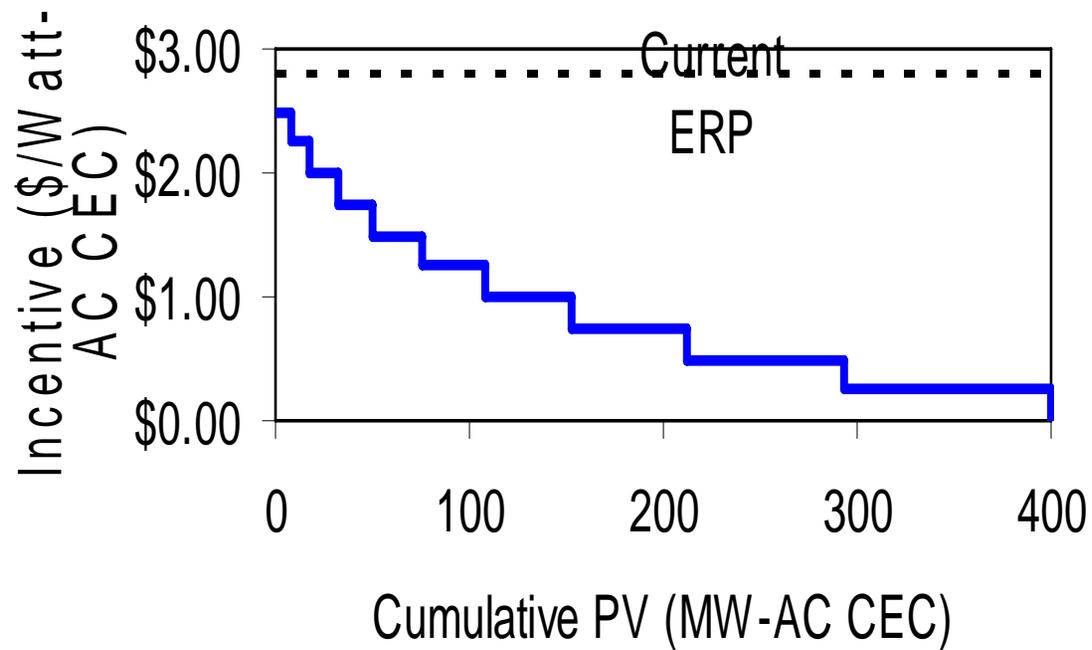


18 month checkpoint, financial commitment must be proven to lock-in reservation.

- No progress by 18 months- reservation is cancelled.
- 12/18 month checkpoint?
- 12/24 month checkpoint?



Incentive Structure (Volume Trigger)





Timeline

- Comments on draft guidebook due Oct. 12
- Revise guidebook
- Possible committee workshop on or around Nov 6
 - Affordable Housing
 - Other technologies Guidebook
 - Proposed Final NSHP Guidebook
- Guidebook adoption Scheduled November 29
- Implement programs January 2007