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Helping Utilities Make Smart Solar Decisions

## Designing Auction-Based PV Incentives

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# Presentation Agenda

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1. Definitions and Program Objectives
2. Implementation
3. Key Considerations



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# Program Design Objectives

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- Clear demonstration of support for PV development
- Predictability: cost vs. capacity
- Drive towards transparency
  - Near-term and program life cost
- Incenting successful operations and maintenance
- Efficient adjustment to market shifts and system cost changes



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# The Auction-Based PBI

**Production-based incentives (PBI):** incentives (\$s) for distributed generation owners which are paid in consideration of metered system production (kWh)

**Auction-based incentive programs:** incentive design where a fixed pool of funds is allocated to applicants based on incentive “bids,” from lowest to highest

**Nomination period:** predefined incentive bid application submittal date

**Lifetime incentive authorization:** notional value of all incentive payments to a project or group of projects over the full contract life



## Process Overview

### Lifetime incentive authorization established and allocated into nomination periods

- ✓ e.g. Lifetime incentive authorization of \$24 million is allocated into four nomination periods of \$6 million each
- ✓ Nomination periods are scheduled; e.g. first business day of each quarter

### Execute nomination period, review bids, allocate incentive awards

- ✓ Applicants complete bid/application forms, describe systems, expected production and desired incentive per kWh
- ✓ Bids are ranked based on incentive cost efficacy per kWh over the contract term
- ✓ Incentives are awarded from most cost effective to least until nomination funds are exhausted

### Project monitoring and development

- ✓ Development of each project is monitored against pre-established milestones, non-conforming projects removed
- ✓ Completed projects are reviewed against common operating/program criteria

### Operation, payment and reporting

- ✓ Operating projects are metering, production reported and incentives paid and recorded against contract and LIA
- ✓ Production and operations are used to forecast future year incentive debt; underperforming commitments adjusted



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# Program Strengths

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## Clarity and transparency

- Longer-term program commitments established at onset
- Market has a clear opportunity for development

## Cost Efficacy and efficiency

- Adjusts to rapid changes in market conditions, both up and down
  - Incentive declination is driven by competition, not forecasts
- Allows segregation of program by system sizes and/or customer type



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# Implementation and Controls

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## Increasing transaction certainty

- Establishing clear requirements for bid submittal
- Tracking financing and project development milestones
- Securitization of incentive award and removal of non-performers

## Forecasting and reporting

- Incentive payment, reporting and forecasting alignment
- Forecast of future year incentive payments challenged by project in-service dates and actual production



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# Operational Considerations

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## Administration

- Requires more substantive upfront design
- Monitoring multiple milestones
- Maintains dialogue with customers and developers

## Regulatory

- Cost clearly defined
- Customers (rate payers) insulated from performance variations
- Clear support for solar development
- Establishes PV transactions at the lowest available cost