SunShot Prize
Race to 7-Day Solar

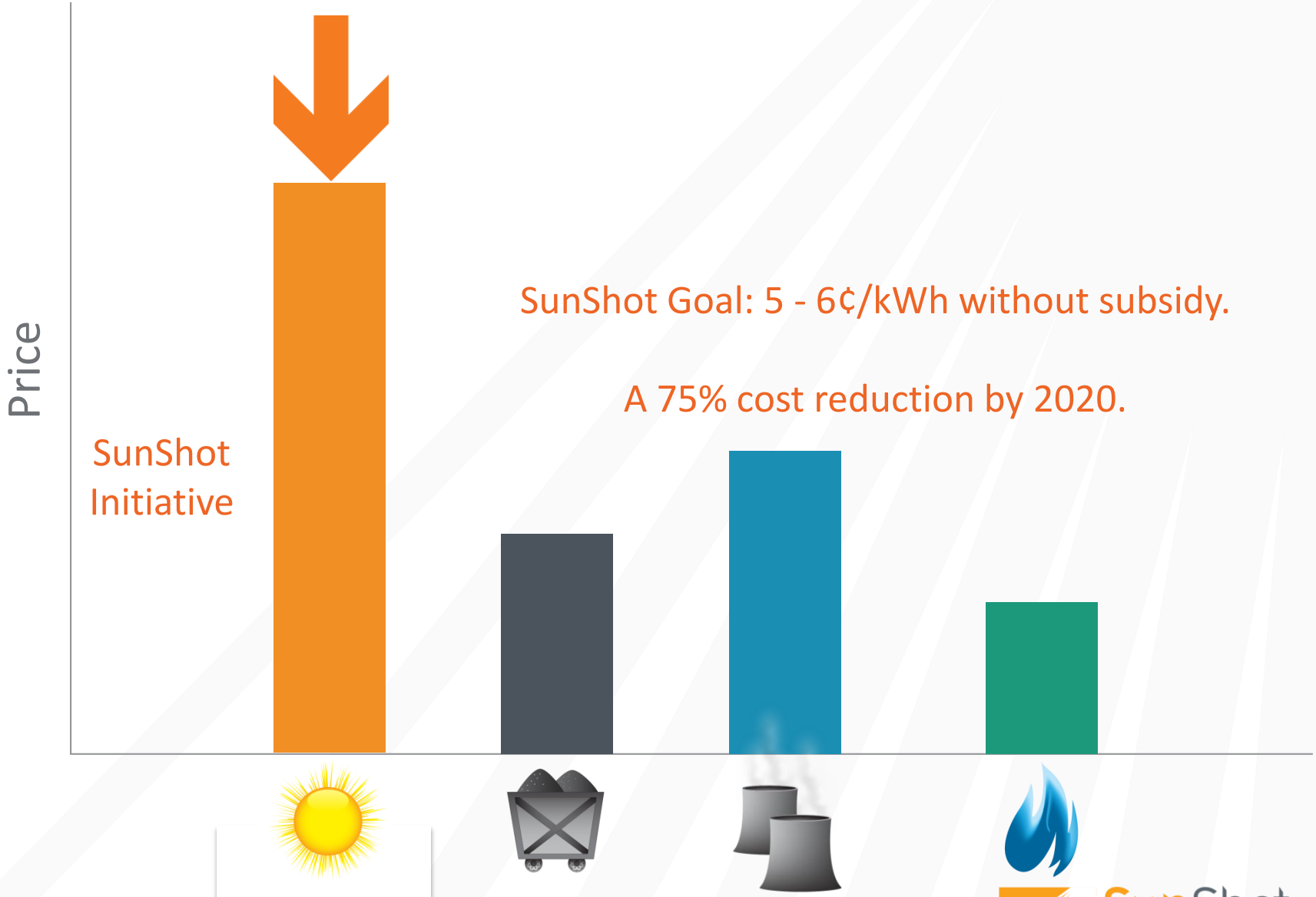
Official Competition Rules
Informational Briefing
April 2015

U.S. DEPARTMENT OF ENERGY

Disclaimer: The information presented in this webinar is not intended to amend, modify or substitute details provided in the SunShot Prize official rules document released on March 4, 2015. Information presented in this webinar should be used in conjunction with the provided rules and guidance located at: http://energy.gov/eere/sunshot/sunshot-prize-race-7-day-solar

Inspired by SunShot
U.S. Department of Energy

SunShot



SunShot Goal: 5 - 6¢/kWh without subsidy.

A 75% cost reduction by 2020.

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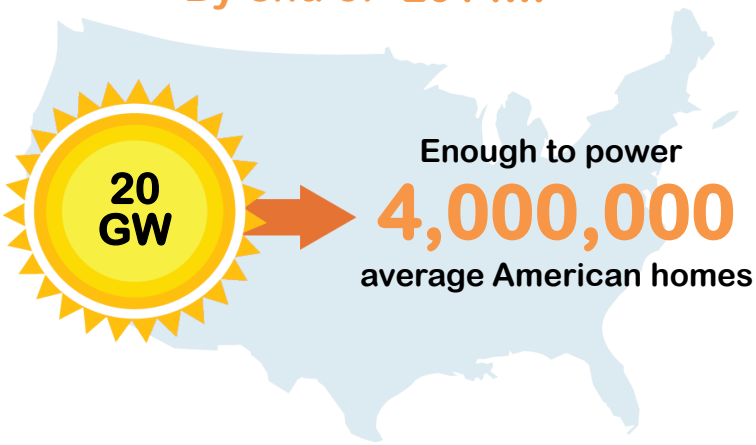
State of Solar Energy in the U.S.

Increasing capacity, lowering costs

By end of 2014...



Enough to power

4,000,000

average American homes

Creating jobs, economic growth

Nearly **174,000** workers

Strong **22%** in 2014

86,122 workers	142,177 workers	53,459 workers
STEEL MANUFACTURING	AUTOMOBILE & LIGHT TRUCK MANUFACTURING	OILSEED & GRAIN FARMING

SunShot Initiative – Solar Grid Parity by 2020

68% progress towards 2020 goals

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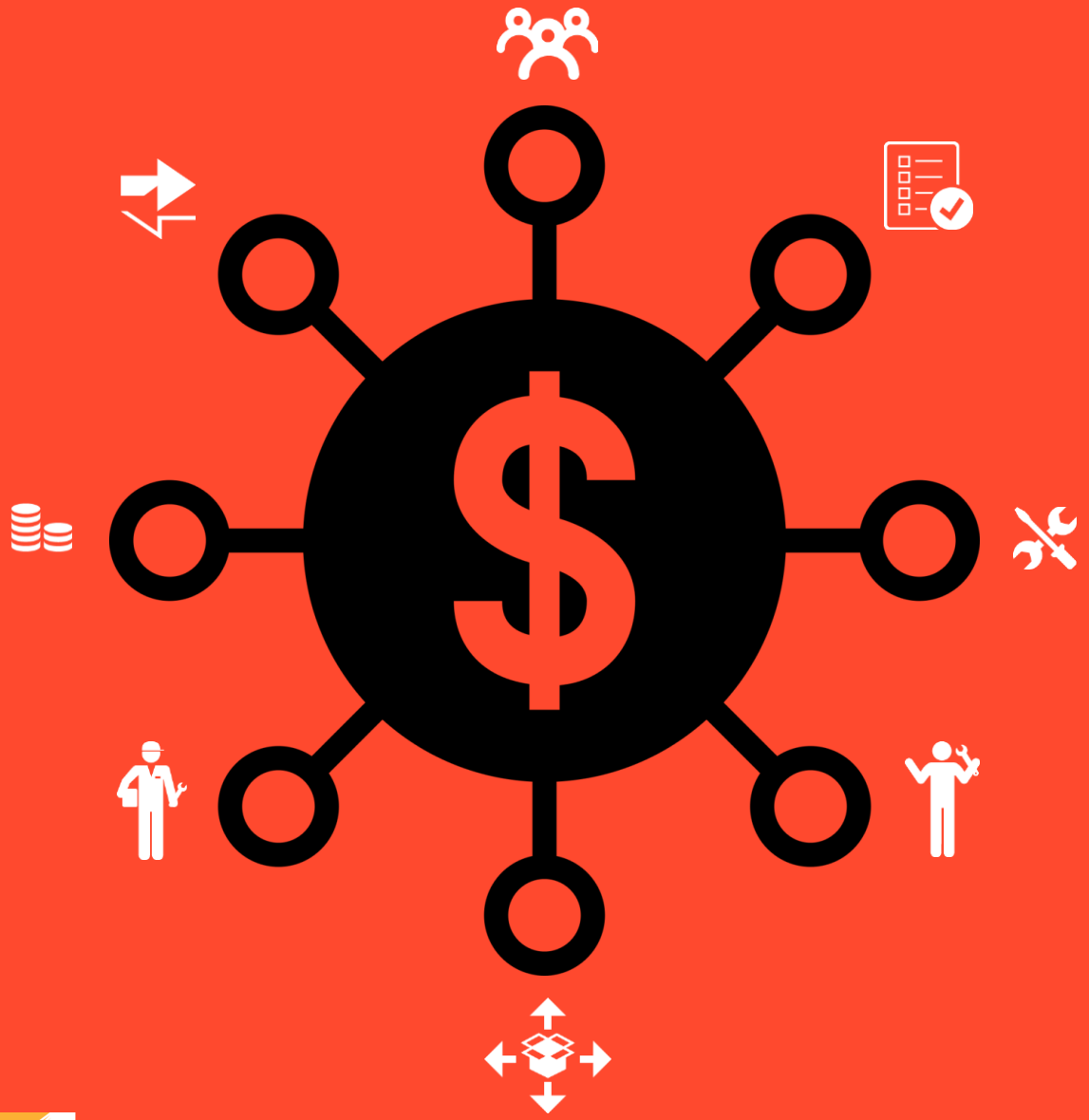


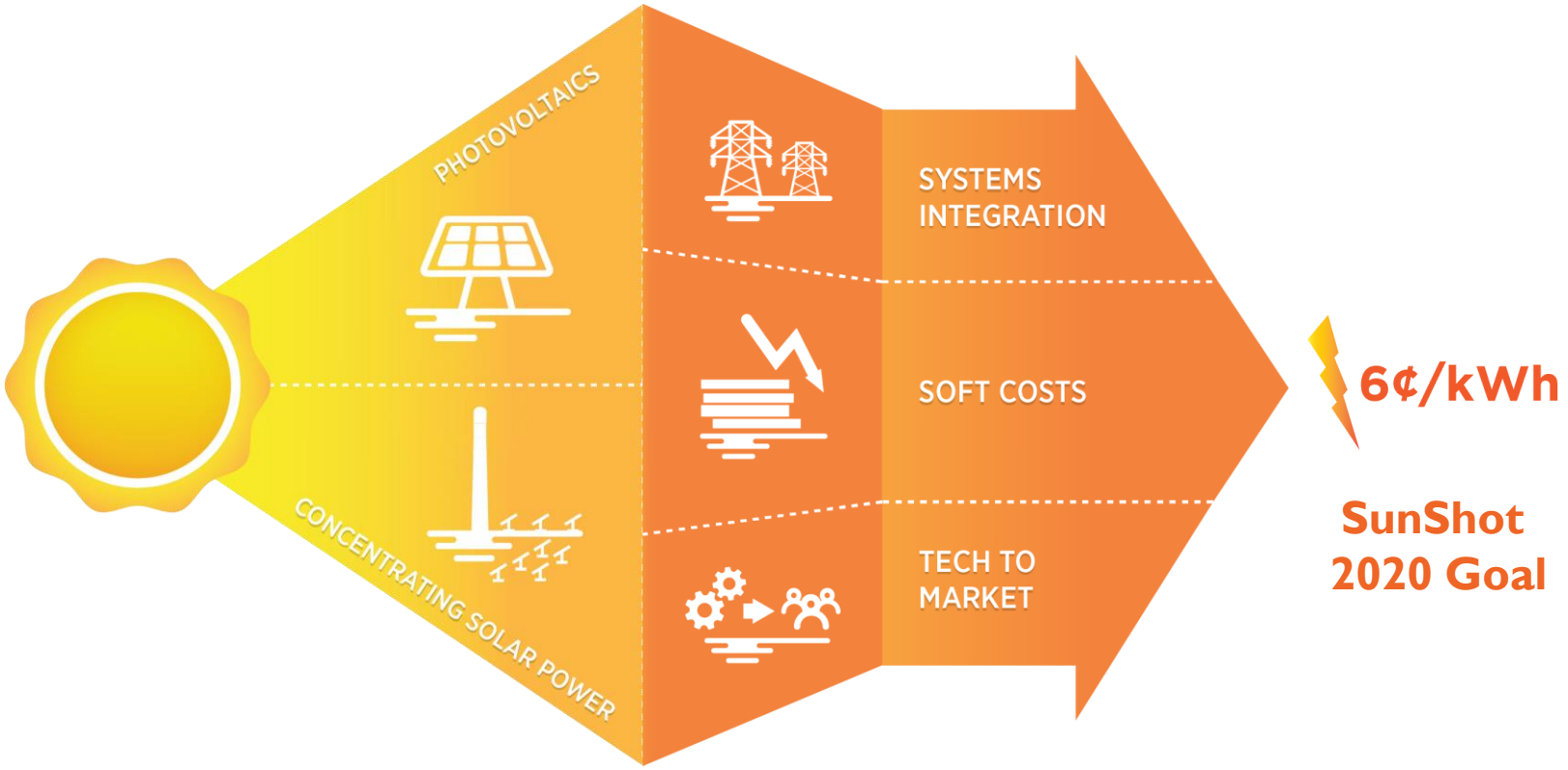
Soft costs make up

64%

of total price of residential system

Inspired by SunShot U.S. Department of Energy

SunShot Program Structure



Balance of Systems (Soft Costs)

Dr. Elaine Ulrich, Program Manager

NETWORKING AND TECHNICAL ASSISTANCE

Empowering state and local decision-makers through timely and actionable resources, peer networks, and technical assistance

BUSINESS INNOVATION

Developing solar finance and business solutions to expand access to capital and accelerate market growth

DATA ANALYSIS

Harnessing big data analysis and technical solutions to support the many stakeholders involved in solar deployment

TRAINING

Training an innovative solar workforce to enable the solar industry to meet growing demand

Balance of Systems (Soft Costs) Portfolio

Funding: ~ $115m *Awards:* ~70 *nation wide*

Empowering Leaders & Decision Makers

- **Rooftop Solar Challenge 1&2:** 8 Regional Teams, 150M Residents
- **Solar Outreach Partnership :** Nationwide Technical Assistance
- **National Lab Analysis and Assistance:** Strategy and in-depth reports
- **Solar Market Pathways:** Community Solar, finance and deployment innovations
- **Solar** Powering America by Recognizing Communities
- **SunShot Prize:** Race to 7-Day Solar

Harnessing Data

- **Solar Energy Evolution and Diffusion Studies:** Big Data, analytics and real-world pilot programs, University, Private and Lab developed tools: Making data accessible
- **SunShot Incubator :** Software start-ups in GIS, customer acquisition, finance and more
- **CATALYST:** Innovation ecosystem for rapid prototyping and launch of IT and automation solutions

Training Innovators

- **Solar Instructor Training Network:** 400 Community Colleges training installers and code officials
- **Grid Engineers for Accelerated Renewable Energy Deployment:** Utility Power System Engineering network
- **Solar Utility Networks Replicable Innovations in Solar Energy:** Replicable solutions for electric coops and rural communities

Finance & Business Innovation

- **Advanced Financing :** Loans, MLPs, and new streams of capital for solar finance
- **Solar Access to Public Capital:** 350+ finance, ratings agency, developer and installer partners developing standards contracts and templates
- **Real Estate Valuation:** Linking appraisal and finance best practices
- **Community & Shared Solar:** Expanding solar beyond residential rooftops to multi-family, commercial and community based projects

ARE YOU THE NEXT TOP SOLAR INNOVATOR?

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Registration to Compete is

Open

Important Dates

04/02/15
Letter of Intent
(Optional)

5/24/15
Initial Registration
(Optional)

7/22/15
Official Entrance Application

03/04/15
Official Rules Announced

Going Solar: Arduous Experience

The value of delays is $4 million/day
for 2015 PV deployment

Pre-Contract

1st Hurdle

Permitting

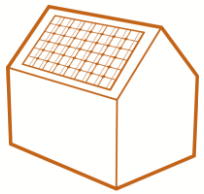
Installation

Inspection

Interconnection

2nd Hurdle

Post-Integration



Total Time

Best Practices
Many examples around the nation

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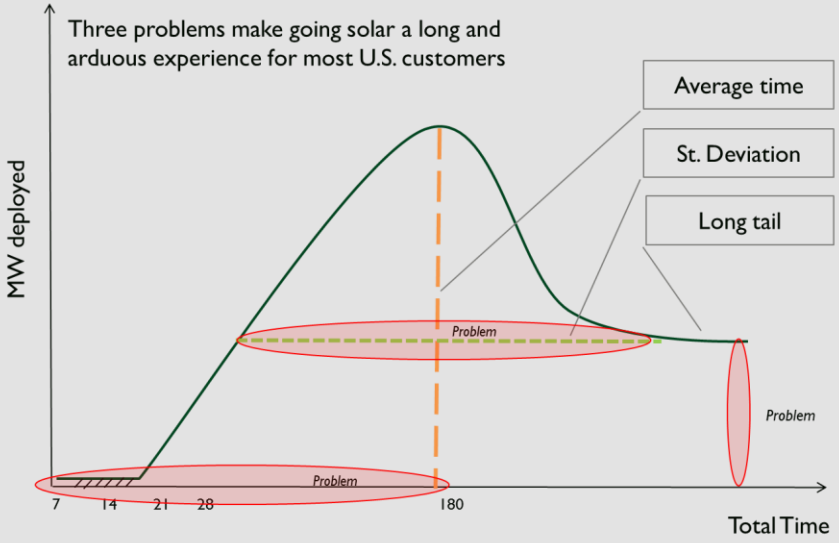
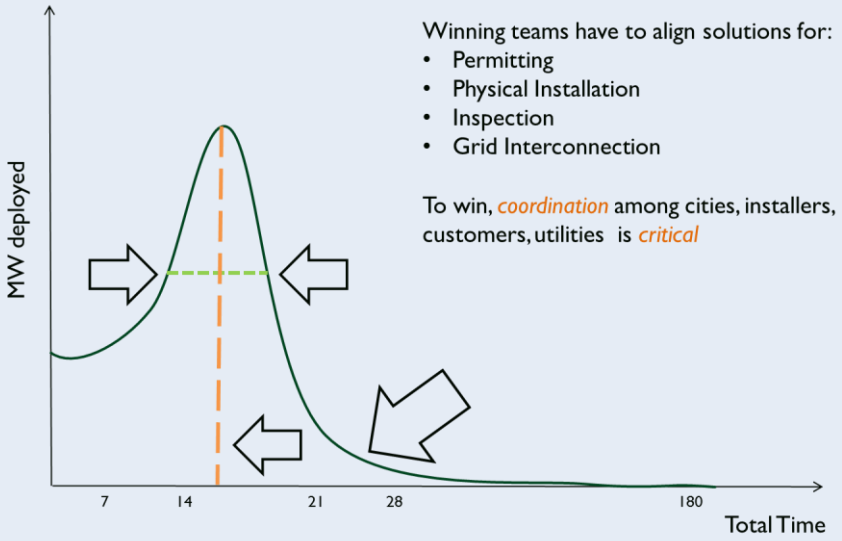
The Problem



The Goal



charts provided are for illustration purposes only

Race to 7-day Solar

Small System Contest

Large System Contest

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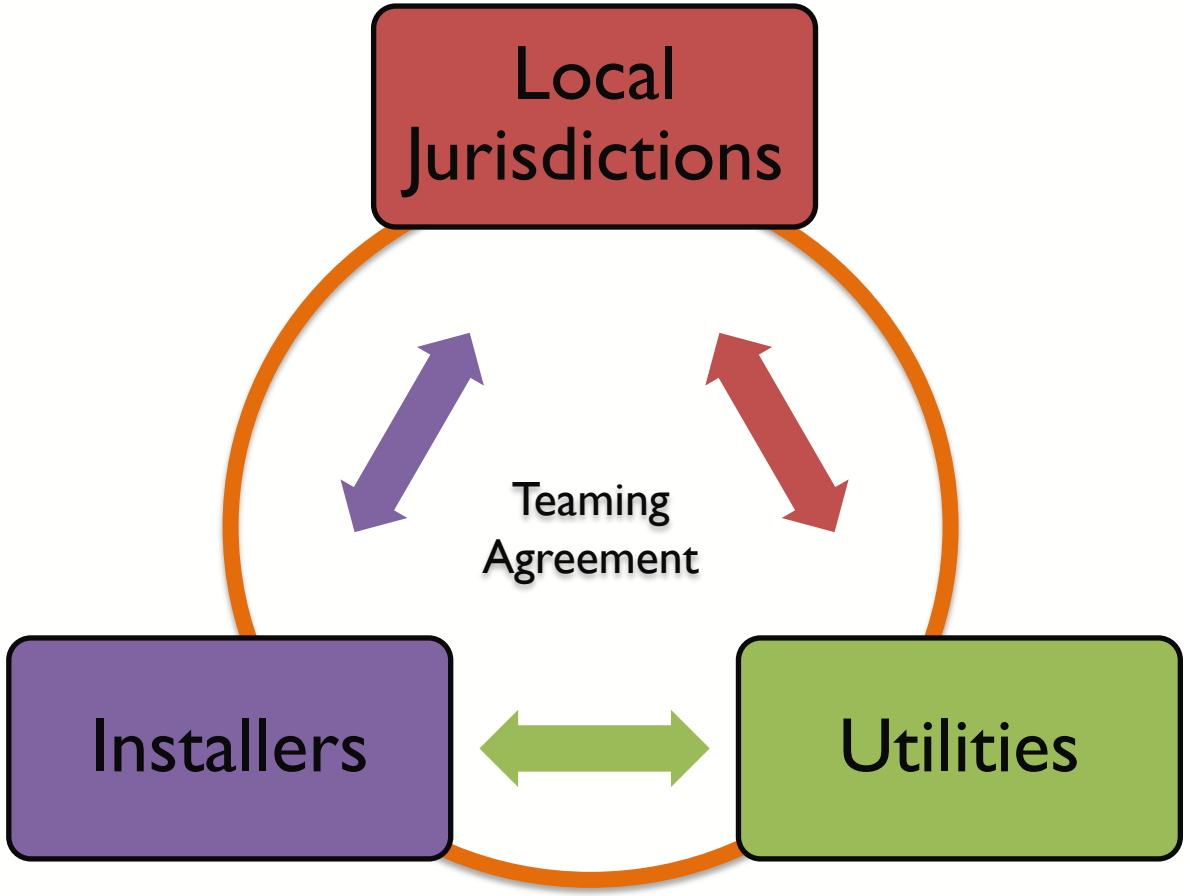
Teams & Eligibility

Opportunity for Collaboration



SunShot Prize: *Race to 7-Day Solar*

THE GOAL	Increase process certainty and reduce the time of permit-to-plugin	
	Small System Contest (≤100kW)	Large System Contest (≤1MW)
	7 days	7 weeks
THE CHALLENGE	Time efficiency and process certain deployments in set 18 months	
	Min 10MW	Min 15 MW
THE PRIZE	1st Place: $3 million 2nd Place: $1 million	1st Place: $3 million 2nd Place: $1 million
THE PROCESS	• DOE provides seed funding (up to $100k) for 20 teams to compete. • Teams deploy and accumulate points during a set18 month period. • Teams with highest total points above a minimum threshold win.	
THE EVALUATION	Team's performance is evaluated according to quantitative metrics in three criteria (Repeatability, Time Performance, Replicability). Values of metrics convert to points. Teams with highest points win	
THE TIMELINE	Start Date: 03/04/2015 Performance Period: 09/2015 – 03/2017 Winner Announcements: 06/2017	

Grand Prize
Small System Contest

1. Small PV Systems: New PV systems between 1 kW and 100 kW installed and grid interconnected in the U.S.
2. Total Time in Performance Period: Permitting, installation, inspection, and grid interconnection should have started and ended during a set 18-month performance period. (Fall 2015 – Winter 2017)
3. Maximum Total Time: 85% of all new small PV systems (in MW) completed should have individual project's Total Time less or equal 56 days. (85% Rule)
4. Qualifying Minimum: Minimum total capacity of completed PV systems is 10 MW
5. Agonistic: No restrictions on mounting, location or business model provided that PV systems are co-located in the same service area of the customers' utility company.

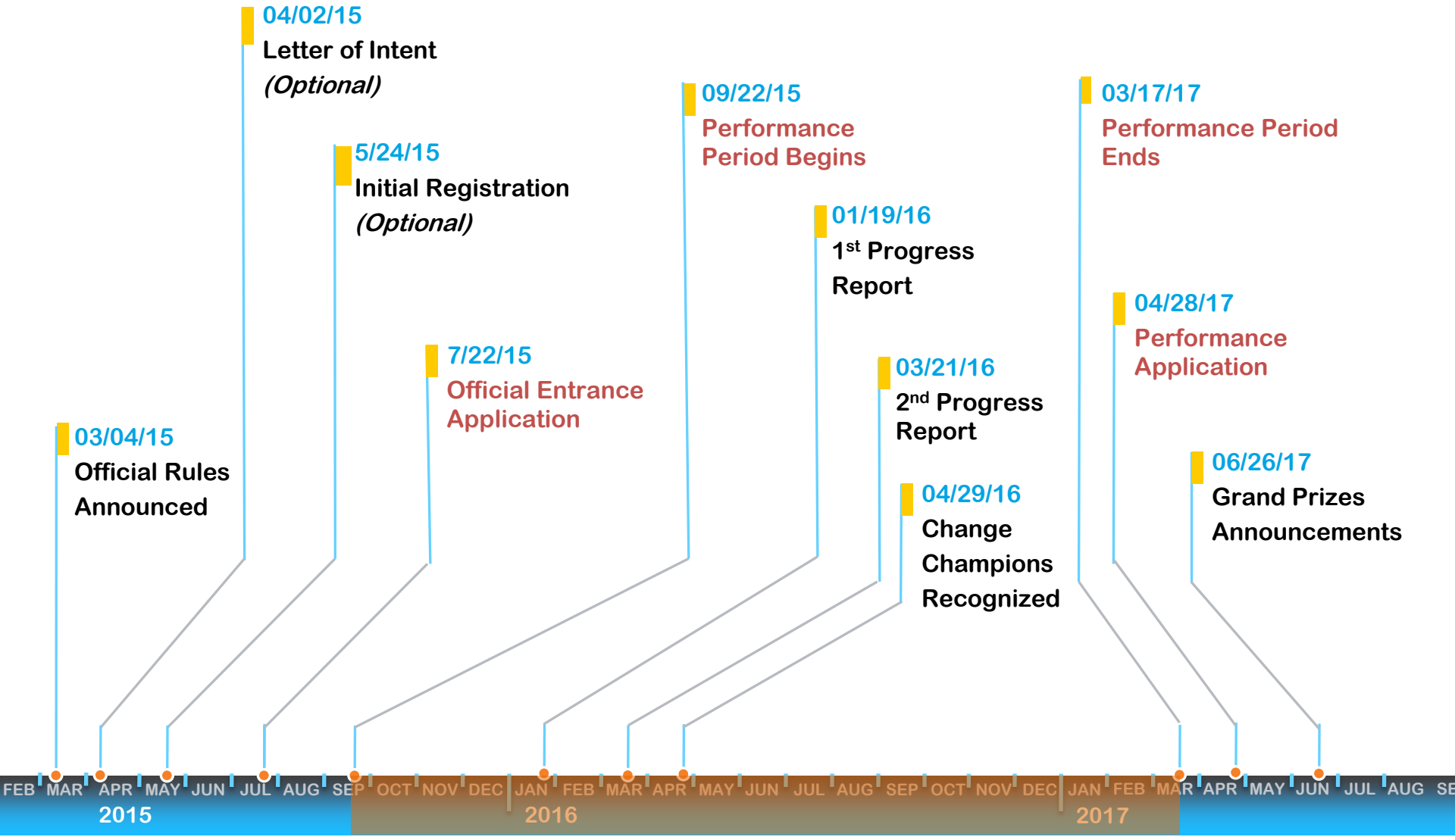
$3 million dollars for 1st place winner
$1 million dollars for 2nd place winner
Determined based on highest total points during 18 months
Must exceed 2,250 points out of total 3,000 points

Grad Prize
Large System Contest

1. Large PV Systems: New PV systems between 101 kW and 1000 kW installed and grid interconnected in the U.S.
2. Total Time in Performance Period: Permitting, installation, inspection, and grid interconnection should have started and ended during a set 18-month performance period. (Fall 2015 – Winter 2017)
3. Maximum Total Time: 85% of all new large PV systems (in MW) completed should have individual project's Total Time less or equal 98 days. (85% Rule)
4. Qualifying Minimum: Minimum total capacity of completed PV systems is 15 MW
5. Agonistic: No restrictions on mounting, location or business model provided that PV systems are co-located in the same service area of the customers' utility company.

$3 million dollars for 1st place winner
$1 million dollars for 2nd place winner
Determined based on highest total points during 18 months
Must exceed 2,250 points out of total 3,000 points

Process & Timeline



Change Prize Evaluation (Pages:12-14)

Small System Contest & Large System Contest

A. Evaluation of Entrance Application

- Process Innovation and Strategy
- Team and Execution Plan
- Plan Feasibly and Resources

B. Evaluation of Performance Progress Reports

- The team is on track, still committed and has the right resources
- Team has fully deployed the required minimum per round:
  - *Progress Round I:*
    - Mini. 1 MW of eligible systems (Small System Contest)
    - Mini. 1.5 MW of eligible systems (Large System Contest)
  - *Progress Round II:*
    - Mini. 3 MW of eligible systems (Small System Contest)
    - Mini. 4.5 MW of eligible systems (Large System Contest)

See pages 20-22 for the required documents for evaluating submissions

Grand Prize: Evaluation Criteria

Small System Contest & Large System Contest

Repeatability: The repeatability criteria measure a team's ability to complete PV systems in set time durations repeatedly. Shorter time durations translate to higher points.

Time Performance: The time performance criteria measure a team's ability to consistently reduce the Total Time for PV system and increase the certainty of going solar.

Replicability: Replicability criteria measures a team's ability to apply their innovation for time reduction and increased process certainty across wide geographical areas in the U.S.

Criteria	Metric	Value in	Points (Max)
Repeatability	Time-adjusted capacity	MW	250
	Normalized time-adjusted capacity	%	1000
Time Performance	Total Time expected value	Days	250
	Total Time variability	Days	1000
Replicability	Diversity of Jurisdictions	%	500

See pages 14-18 for how these metrics are calculated

Evaluation Criteria

Small System Contest - Example

Small System Contest - Point Evaluation

Deployment Time Period (t)	Total Time - Small Systems (days)	Total Deployments for Each Time Period (MW)
0	0 - 7	9
1	8 - 14	0
2	15 - 21	0
3	22 - 28	0
4	29 - 35	0
5	36 - 42	2
6	43 - 49	0
7	50 - 56	0
	Capacity Deployed in ≤ 56 days	11
Other	More than 56 Days (input here)	1.5
	TOTAL CAPACITY:	12.5
	85% Rule Satisfied? (green means yes)	88.00%

Input total deployment for each time period in MW in these boxes

Jurisdiction No.	Total Deployments for Each Jurisdiction (MW)	Metric #5 Diversity of Jurisdictions
1	1.5	88.84%
2	0.5	
3	1	*points*
4	2	
5	1	
6	1	490
7	1	
8	1	
9	1	
10	1	
Capacity Deployed in ≤ 56 days	11	(red = something is wrong)
	TOTAL CAPACITY:	12.5

Metric #1 Time-Adjusted Capacity (in MW)	Metric #2 Normalized Time-Adjusted Capacity	Metric #3 Total Time Expected Value (in Days)	Metric #4 Total Time Variability (in Days)
10.24	93%	13.36	13.50
points			
90	930	205	560

1785

Total Point Score

2275

Important Dates

04/02/15
Letter of Intent
(Optional)

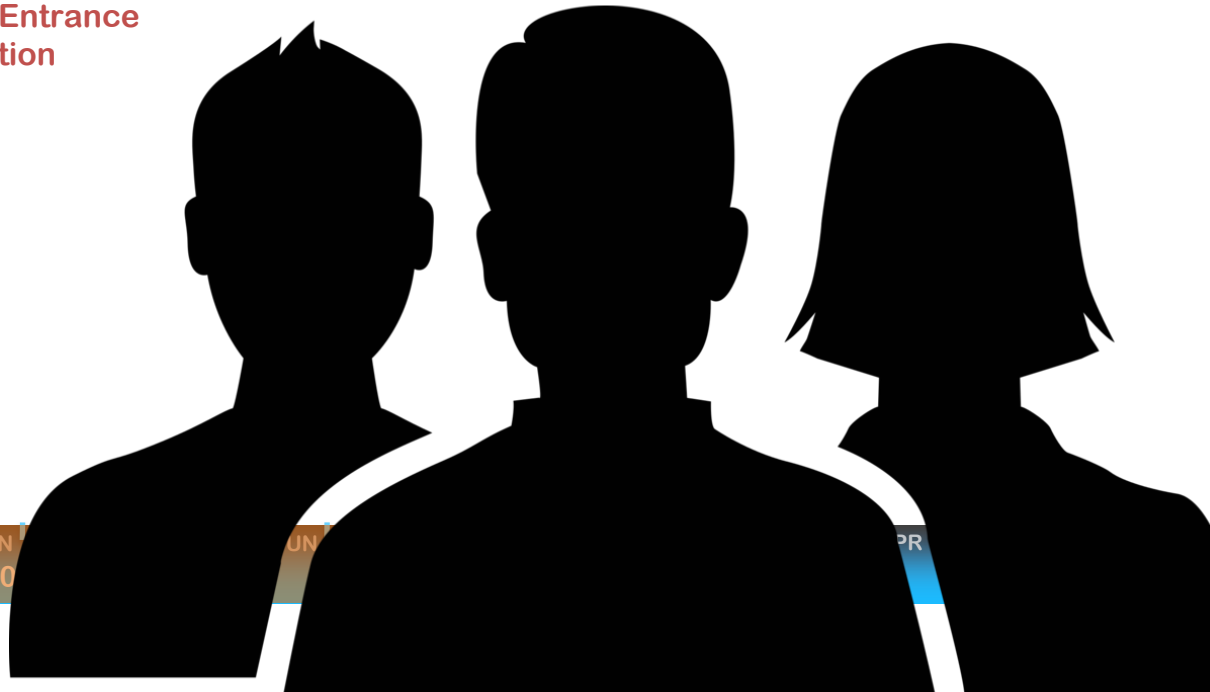
5/24/15
Initial Registration
(Optional)

7/22/15
Official Entrance Application

03/04/15
Official Rules Announced

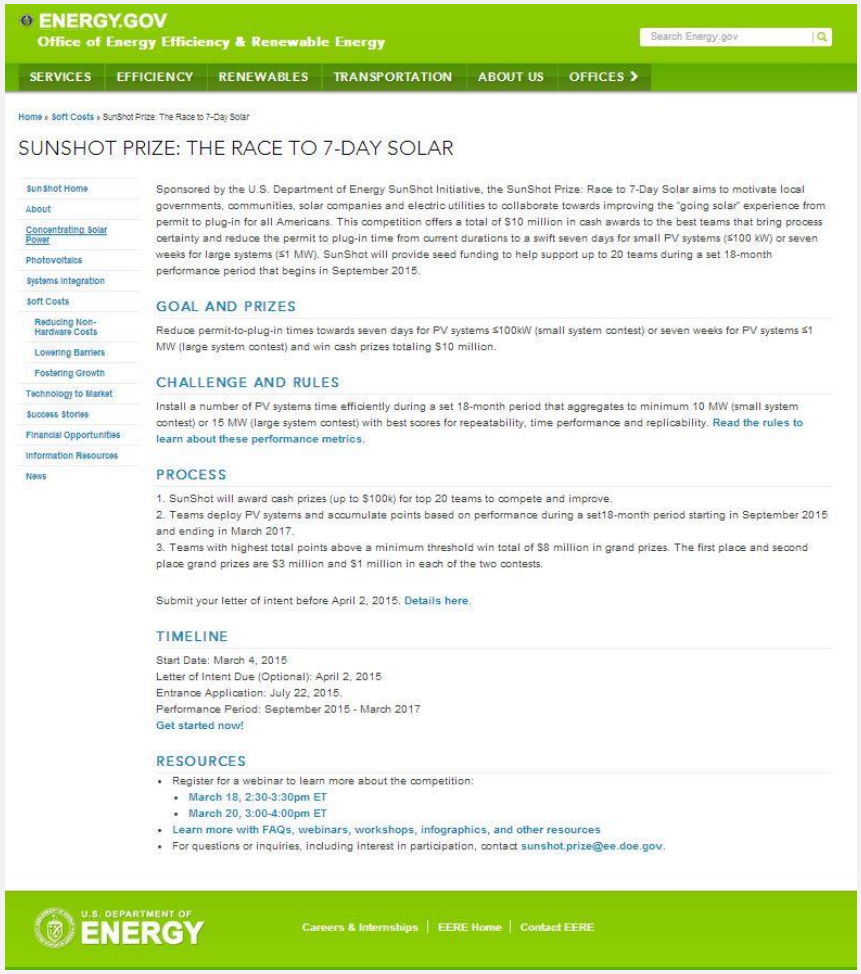
FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC JAN
2015

ARE YOU THE NEXT TOP SOLAR INNOVATOR?



The Prize Webpage

http://energy.gov/eere/sunshot/sunshot-prize-race-7-day-solar



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SUNSHOT PRIZE: THE RACE TO 7-DAY SOLAR

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- Financial Opportunities
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- News

Sponsored by the U.S. Department of Energy SunShot Initiative, the SunShot Prize: Race to 7-Day Solar aims to motivate local governments, communities, solar companies and electric utilities to collaborate towards improving the "going solar" experience from permit to plug-in for all Americans. This competition offers a total of $10 million in cash awards to the best teams that bring process certainty and reduce the permit to plug-in time from current durations to a swift seven days for small PV systems (≤100 kW) or seven weeks for large systems (≤1 MW). SunShot will provide seed funding to help support up to 20 teams during a set 18-month performance period that begins in September 2015.

GOAL AND PRIZES

Reduce permit-to-plug-in times towards seven days for PV systems ≤100kW (small system contest) or seven weeks for PV systems ≤1 MW (large system contest) and win cash prizes totaling $10 million.

CHALLENGE AND RULES

Install a number of PV systems time efficiently during a set 18-month period that aggregates to minimum 10 MW (small system contest) or 15 MW (large system contest) with best scores for repeatability, time performance and replicability. Read the rules to learn about these performance metrics.

PROCESS

1. SunShot will award cash prizes (up to $100k) for top 20 teams to compete and improve.
2. Teams deploy PV systems and accumulate points based on performance during a set18-month period starting in September 2015 and ending in March 2017.
3. Teams with highest total points above a minimum threshold win total of $8 million in grand prizes. The first place and second place grand prizes are $3 million and $1 million in each of the two contests.

Submit your letter of intent before April 2, 2015. Details here.

TIMELINE

Start Date: March 4, 2015
Letter of Intent Due (Optional): April 2, 2015
Entrance Application: July 22, 2015.
Performance Period: September 2015 - March 2017
Get started now!

RESOURCES

- Register for a webinar to learn more about the competition:
  - March 18, 2:30-3:30pm ET
  - March 20, 3:00-4:00pm ET
- Learn more with FAQs, webinars, workshops, infographics, and other resources
- For questions or inquiries, including interest in participation, contact sunshot.prize@ee.doe.gov.

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The Official Rules

SunShot
U.S. Department of Energy

SunShot Prize
RACE TO 7-DAY SOLAR

OFFICIAL RULES

COMPETITION TIMELINE

Release of Official Rules	*Wednesday, March 4, 2015*
Letter of Intent Due (Optional)	*Thursday, April 2, 2015*
Initial Registration Due (Optional)	*Monday, May 24, 2015*
Entrance Application Due	*Wednesday, July 22, 2015*
Announcement of Teams	*Tuesday, September 22, 2015*
Performance Period Begins	*Tuesday, September 22, 2015*
First Progress Report Due	*Tuesday, January 19, 2016*
Second Progress Report Due	*Monday, March 21, 2016*
Announcement of Change Champions	*Friday, April 29, 2016*
Performance Period Ends	*Friday, March 17, 2017*
Performance Application Due	*Friday, April 28, 2017*
Announcements of Competition Prize Winners	*Monday, June 26, 2017*

All submissions are due no later than 11:59 PM ET
DOE reserves the right to modify any submission period or due date at any time for any reason

QUESTIONS

Official email: sunshot.prize@ee.doe.gov
Official website: eere.energy.gov/solar/sunshot/prize.html

February 27, 2015

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Grand Prizes Score Sheet

Disclaimer: The U.S. Department of Energy (DOE) is providing this sample draft template as is and without warranty or liability for usage. The sample is provided for the convenience of the public who are interested in learning about the suggested evaluation criteria provided in the draft rules document of the SunShot Prize: Race to 7-Day Solar. Details necessary to compete in this prize competition program can be found online. The information provided in this template is not intended to amend, modify or substitute details provided in the draft rules document. Information presented should be used in conjunction with the draft rules. Should you have questions, please email: sunshot.prize@ee.doe.gov. Warning: Although DOE has taken reasonable precautions to ensure no viruses are present in this file, DOE cannot accept responsibility for any loss or damage arising from the use of this file.

Visit SunShot Prize: Race to 7- Day Solar

Small System Contest - Point Evaluation

Deployment Time Period (t)	Total Time - Small Systems (days)	Total Deployments for Each Time Period (MW)
0	0 - 7	8
1	8 - 14	0
2	15 - 21	0
3	22 - 28	0
4	29 - 35	0
5	36 - 42	2
6	43 - 49	0
7	50 - 56	0
	Capacity Deployed in ≤ 56 days	10
Other	More than 56 Days (input here)	1.5
	TOTAL CAPACITY:	11.5
	85% Rule Satisfied? (green means yes)	86.96%

Input total deployment for each time period in MW in these boxes

Jurisdiction No.	Total Deployments for Each Jurisdiction (MW)	Metric #5 Diversity of Jurisdictions
1	1.5	89.50%
2	0.5	*points*
3	1	
4	1	495
5	1	
6	1	
7	1	
8	1	
9	1	
10	1	
Capacity Deployed in ≤ 56 days	10	(red = something is wrong)
	TOTAL CAPACITY:	11.5

Metric #1 Time-Adjusted Capacity (in MW)	Metric #2 Normalized Time-Adjusted Capacity	Metric #3 Total Time Expected Value (in Days)	Metric #4 Total Time Variability (in Days)
9.24	92%	14.00	14.00
points			
58	920	200	550

1728

Total Point Score

2223

Thank You

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