



DISTRIBUTED GENERATION POLICY PRIORITIES 2016 & BEYOND

**Solar Powering Iowa
March 24, 2016**

Who is TASC?

- The only national trade association that focuses solely on defending fundamental DG policies.
- Successful campaigns in **over 40 states**
- Work alongside advocacy orgs
- Diverse membership; National level firms & local installers

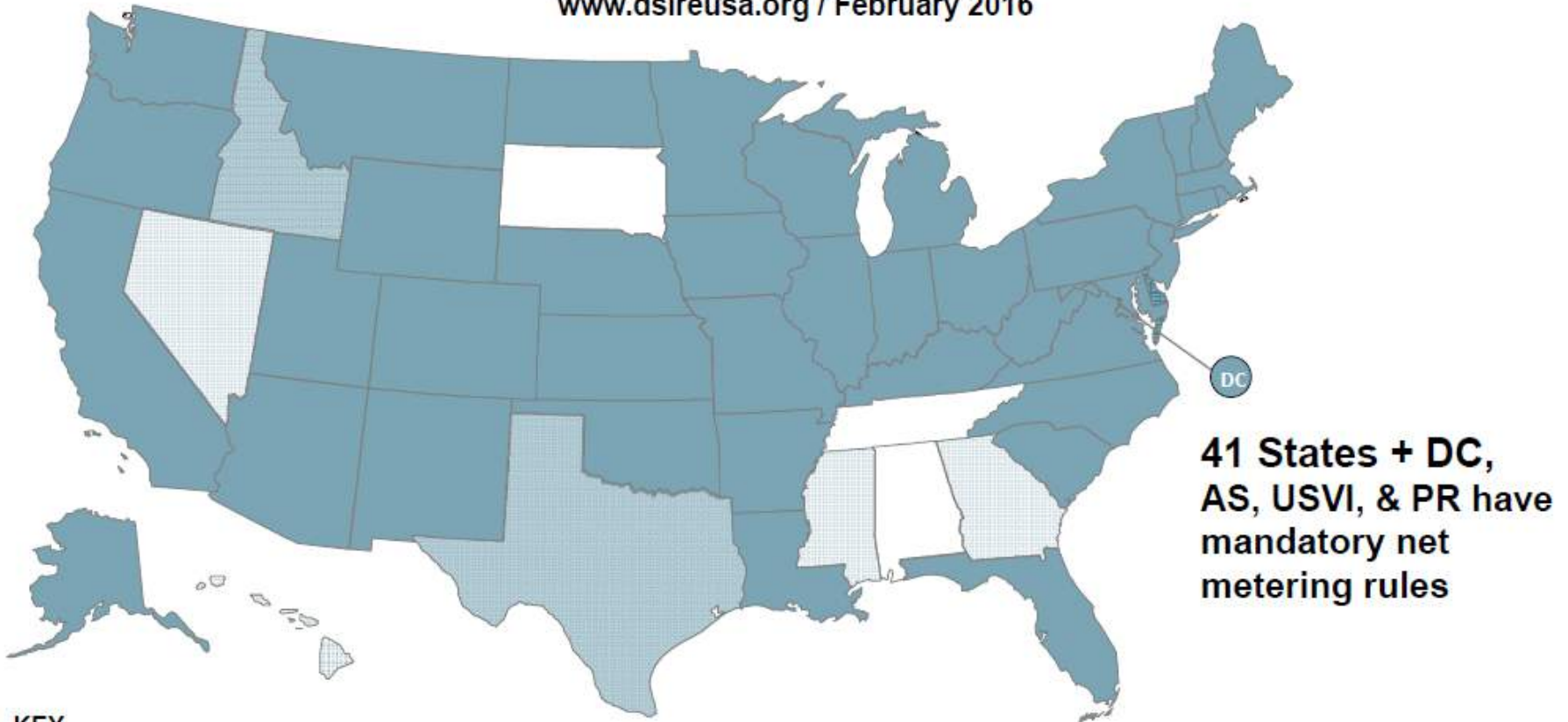


A large array of solar panels is installed on a residential roof. The panels are dark blue with a grid pattern of silver lines. They are mounted on a metal frame that is attached to the roof. The roof itself is covered in grey asphalt shingles. In the background, there are bare trees and a clear blue sky with a few wispy clouds. The text is overlaid in the center of the image.

**Creating a framework that provides
reliable and affordable power;
allowing innovation & competition
to best serve public interest.**

Net Metering

www.dsireusa.org / February 2016



KEY

- State-developed mandatory rules for certain utilities (41 states + DC+ 3 territories)
- No statewide mandatory rules, but some utilities allow net metering (2 states)
- Statewide distributed generation compensation rules other than net metering (4 states + 1 territory)

U.S. Territories:

- | | |
|----|----|
| AS | PR |
| VI | GU |

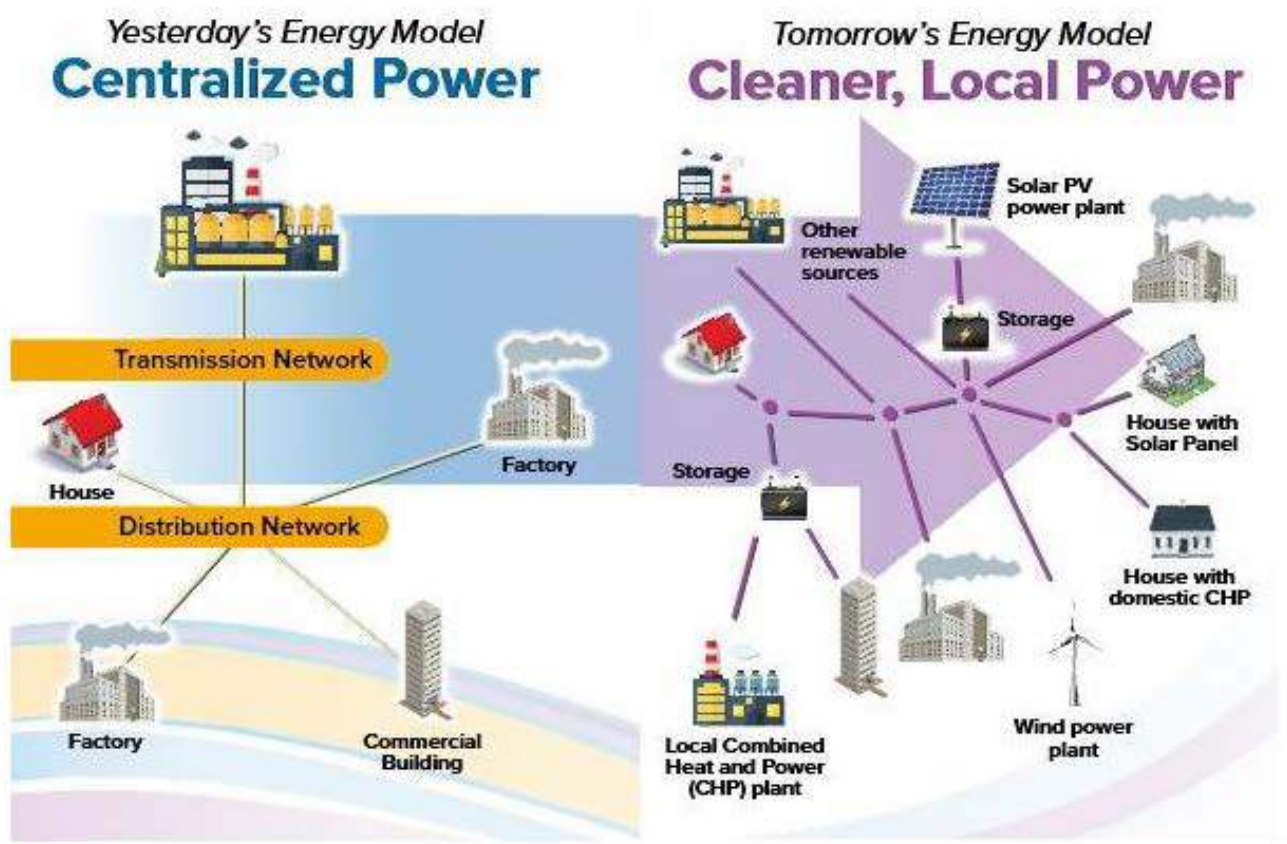
Recent Case Studies

- **CO:** Commission maintained NEM
 - 25,000+ NEM customers
 - “fair outcome”
- **CA:** CPUC maintained NEM
 - Signaled future planning Rate design (TOU)
- **AZ:** Commission “paused” on solar-charges
 - Need valuation process



Recent Case Studies:

- NY: Reforming the Energy Vision
 - Set aside changes to NEM, encourage pilot projects



Recent Case Studies



Policy in Iowa

- 2016 Leg: NEM, VOST, community solar, incentives
- Distributed Generation “Notice of Inquiry” 2014
 - Order Issued: October 2015
- Rate Design & Pilot Projects: 2016



DG Policy in Iowa

- **IUB Order on DG: No changes needed to NEM in Iowa**
 - Given current status of DG development and NEM more info needed
- **Option 1 Costs & benefit study**
 - But a study would be premature because of relatively low DG penetration levels in Iowa
- **Option 2 Pilot projects to explore/promote DG**
 - Utilities to conduct pilot projects exploring NEM and DG issues.

DG Policy in Iowa

- Pilot projects encouraged to expand renewables
 - March 28, expected filing
- Informal Discussion on Alternative Rate Design
 - IOUs pushing residential demand charges
 - not even used in NV
 - Stakeholders encourage **study first**



Iowa: Study Costs & Benefits of Solar

Main Value of Solar Study

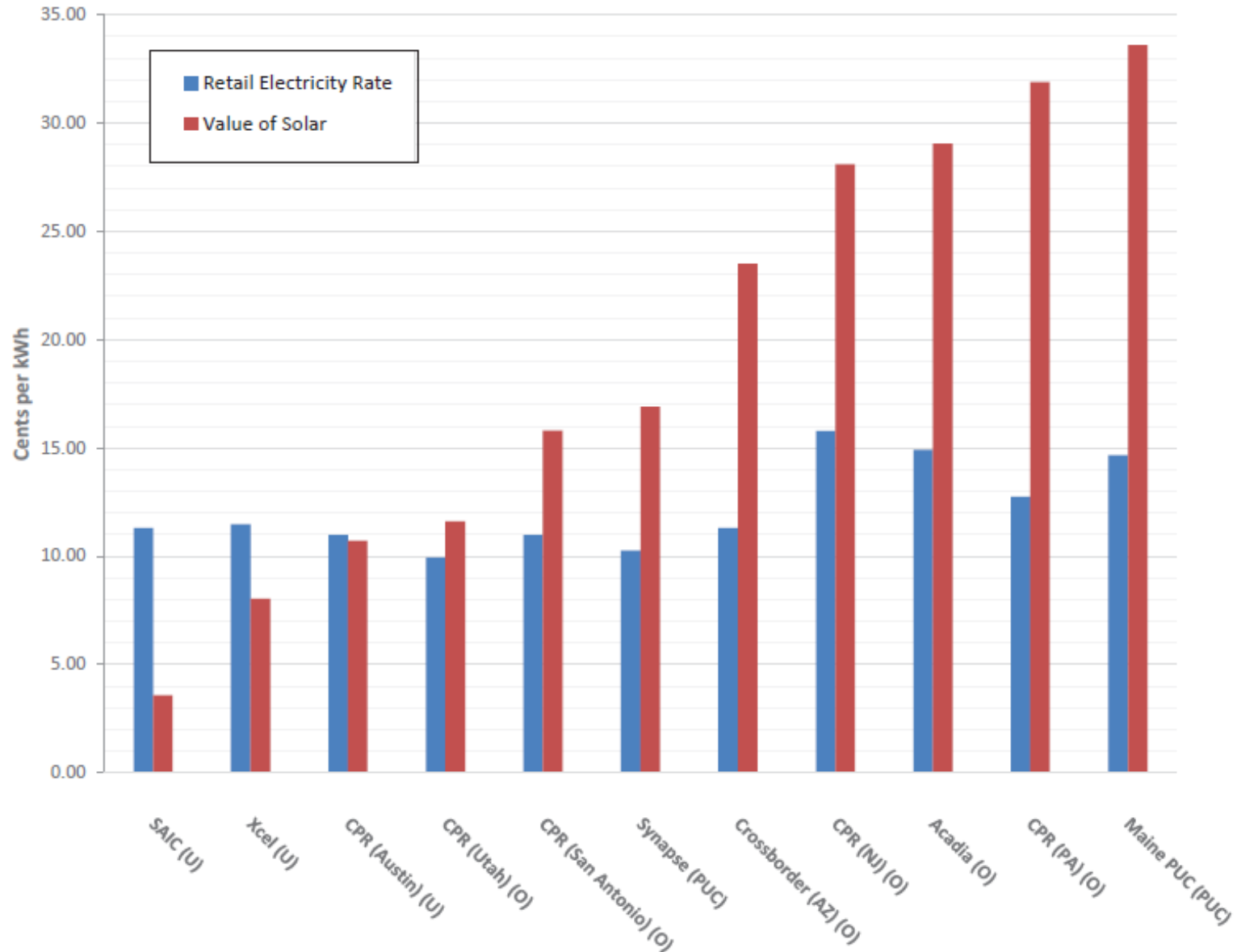
Figure ES- 2. CMP Distributed Value – 25 Year Levelized (\$ per kWh)

		25 Year Levelized				Distr. PV Value (\$/kWh)		
		Gross Value (\$/kWh)	Load Match Factor (%)	Loss Savings Factor (%)				
		A	×	B	×	(1+C)	=	D
Energy Supply	Avoided Energy Cost	\$0.076				6.2%		\$0.081
	Avoided Gen. Capacity Cost	\$0.068		54.4%		9.3%		\$0.040
	Avoided Res. Gen. Capacity Cost	\$0.009		54.4%		9.3%		\$0.005
	Avoided NG Pipeline Cost							
	Solar Integration Cost	(\$0.005)				6.2%		(\$0.005)
Transmission Delivery Service	Avoided Trans. Capacity Cost	\$0.063		23.9%		9.3%		\$0.016
Distribution Delivery Service	Avoided Dist. Capacity Cost	Placeholder, Utility Data Not Available, or No Planned System Investments						
	Voltage Regulation	Placeholder, Utility Data Not Available, or No Planned System Investments						
Environmental	Net Social Cost of Carbon	\$0.020				6.2%		\$0.021
	Net Social Cost of SO ₂	\$0.058				6.2%		\$0.062
	Net Social Cost of NO _x	\$0.012				6.2%		\$0.013
Other	Market Price Response	\$0.062				6.2%		\$0.066
	Avoided Fuel Price Uncertainty	\$0.035				6.2%		\$0.037
								\$0.337

} **Avoided Market Costs**
} **\$0.138**
} **Societal Benefits**
} **\$0.199**

Iowa: Study Costs & Benefits of Solar

Figure ES-1: Retail Electricity Rates and the Values of Solar Energy In 11 Cost-Benefit Analyses.



Iowa: Study Costs & Benefits of Solar

PV Valuation Methodology

Recommendations for
Regulated Utilities in Iowa



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Midwest Renewable Energy Association

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Thank You!

- **Engage in DG proceeding, engage customers**
 - ISETA, IEC, ELPC, TASC
 - Encourage data-driven approach
- **Host tours, solar social events**

