



# Peaks, Solar, & Storage Panel

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# Overview of Energy Storage Uses Cases



## Deferral of Grid Investments

- Transmission
- Distribution



## Integration of Renewable Generation

- Locally/Project Level
- System/Grid Level



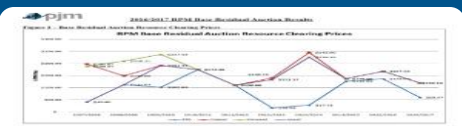
## Energy Resilience

- Standalone Uses
- Integration with other Electricity Security Assets



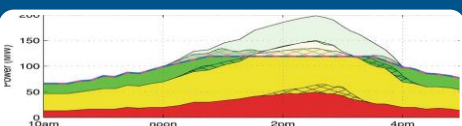
## Capacity Markets

- Front-of-the-meter and bulk power system
- Reducing capacity charges for end-use customers (e.g., peak load contribution in deregulated markets)



## Other Wholesale and Distribution System Markets

- Ancillary Services
- Demand Response



## Peak Demand Charge Reduction

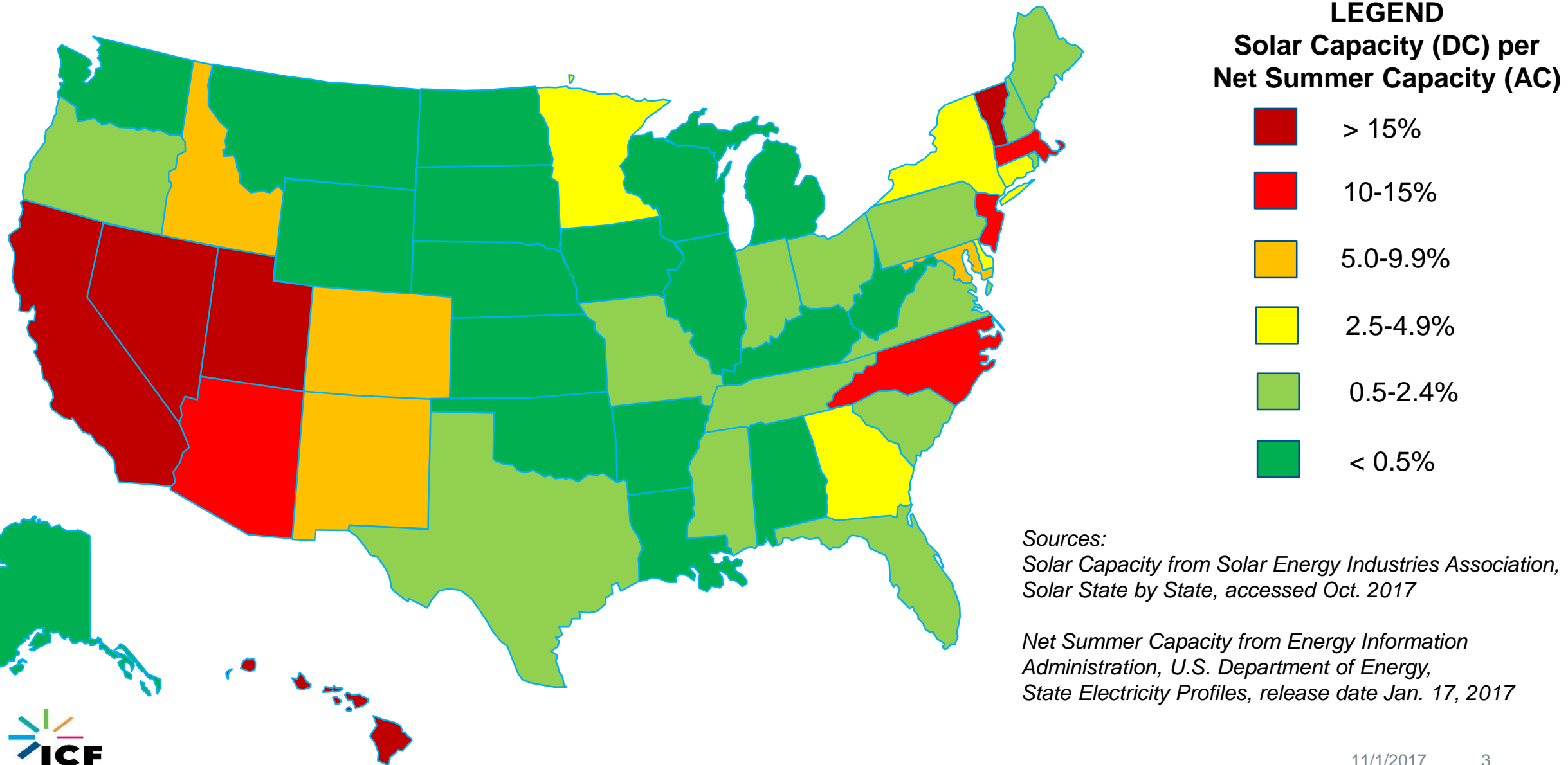
- Existing customers
- Lowering requirements for new customers



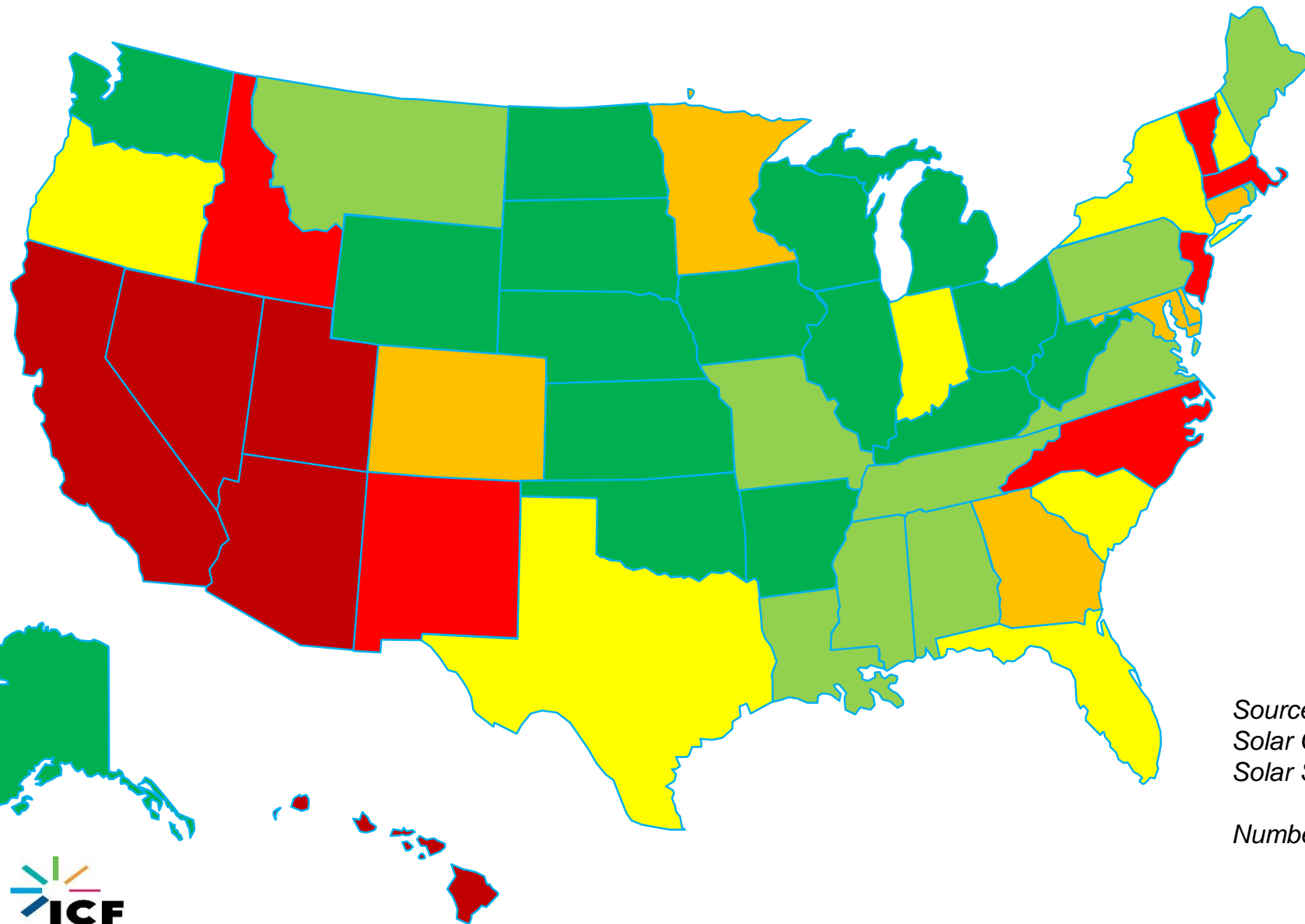
## Time-of-Use (TOU) Energy Charge Reduction

- Existing market opportunities
- Markets where TOU rates are being introduced

# State-Level View of Solar Prevalence: Solar Capacity per Overall Net Summer Capacity



# State-Level View of Solar Prevalence: Solar Capacity per Thousand Households



## LEGEND Solar Capacity (DC) per 1,000 Households

- > 1,000 kW
- 500-1,000 kW
- 250-499 kW
- 100-249 kW
- 50-99 kW
- < 50 kW

Sources:  
*Solar Capacity from Solar Energy Industries Association,  
Solar State by State, accessed Oct. 2017*

*Number of Households from U.S. Census, 2010*