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EASTERN INTERCONNECTION STATES' PLANNING COUNCIL

Eastern Interconnection States' Planning Council: Formation and Future

Marya M. White
Director

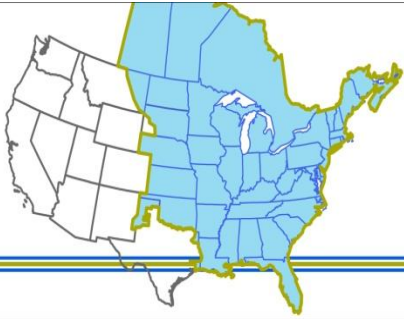
EPA Webinar

January 31, 2011



Why do this now?

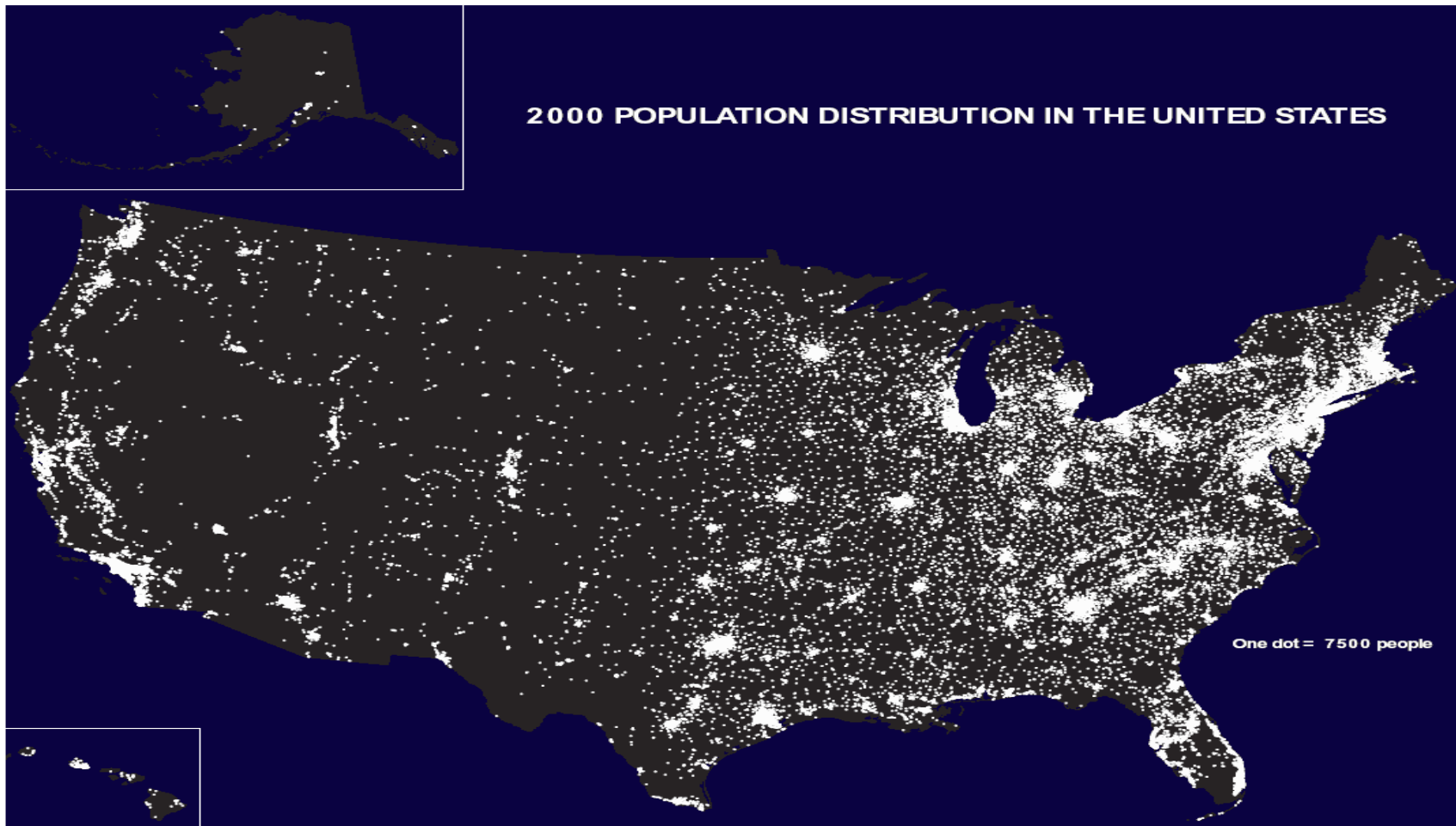
The United States operates on electricity.



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Population distribution in the US.





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Why do this now?

ELECTRICITY MUST BE:

--RELIABLE

--AFFORDABLE

--ENVIRONMENTALLY SENSITIVE

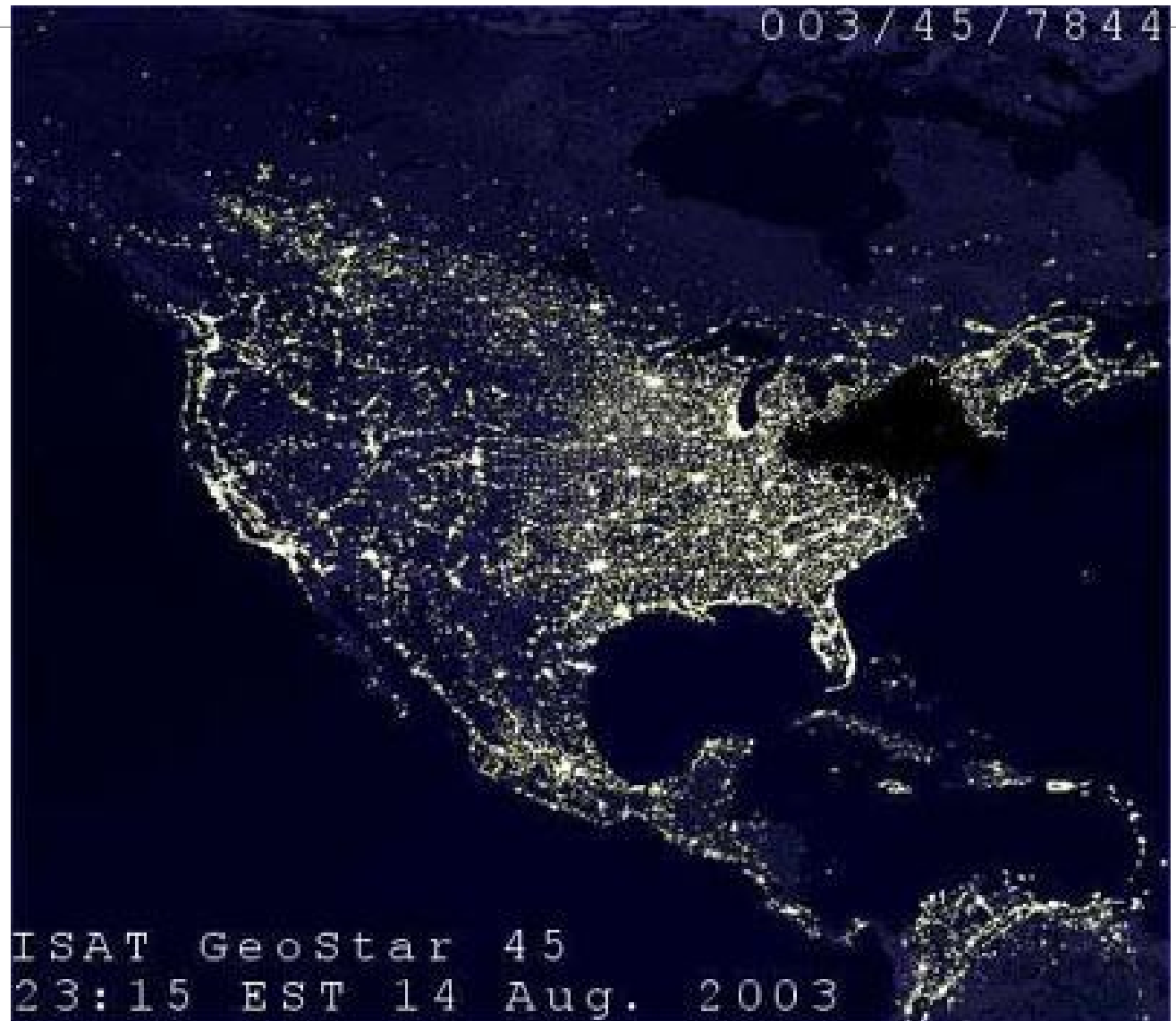


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Interdependence

Artist Rendition
of 14.8.2003
blackout,
at time of voltage
collapse





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In addition to the demands placed on electricity, the construction of the electricity delivery system – the “power line grid” – has not kept pace with today’s demands for electricity.

Public policies regarding renewable energy use and renewable energy located far from major population centers exacerbate the issue.



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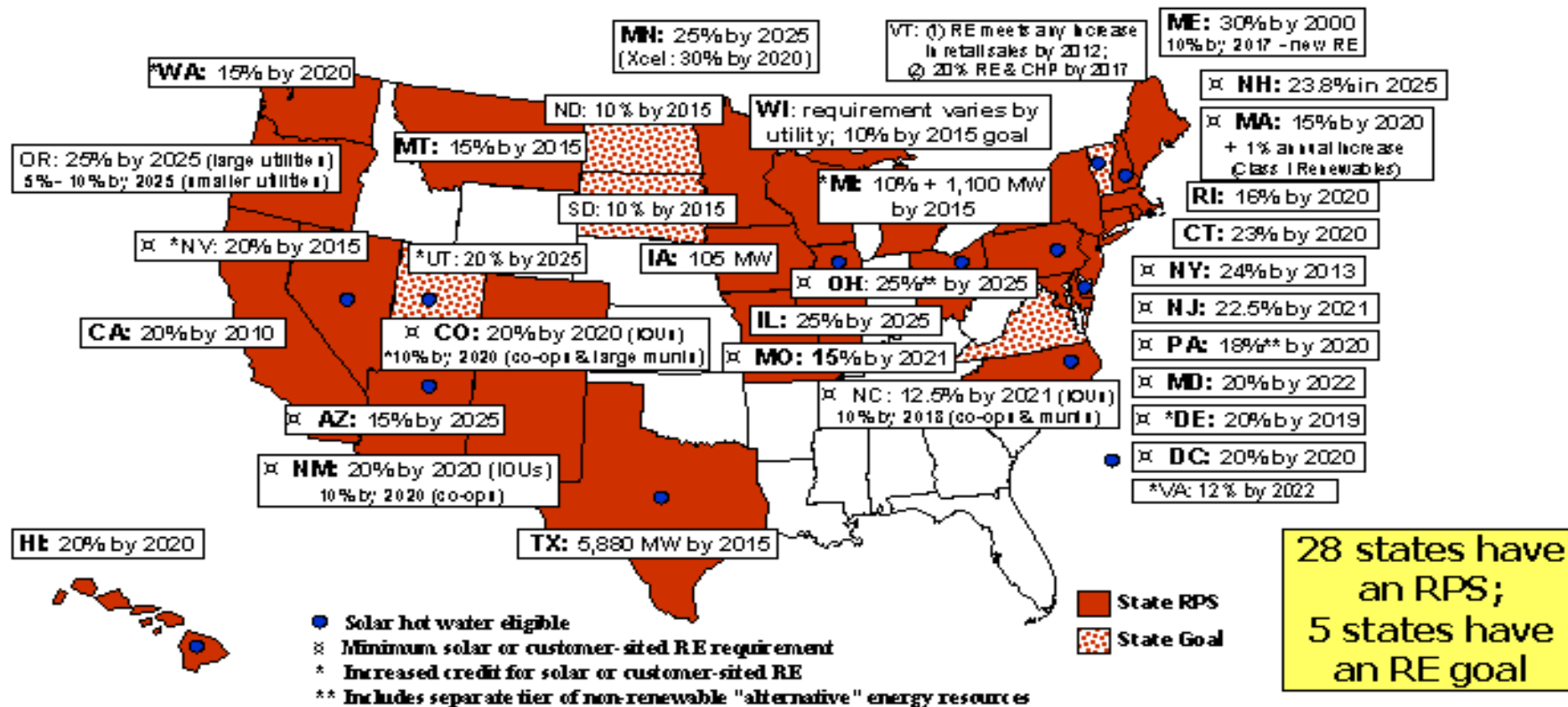
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Renewable Requirements in the States – NOT A UNIFORM REQUIREMENT!

DSIRE: www.dsireusa.org

January 2009

Renewables Portfolio Standards

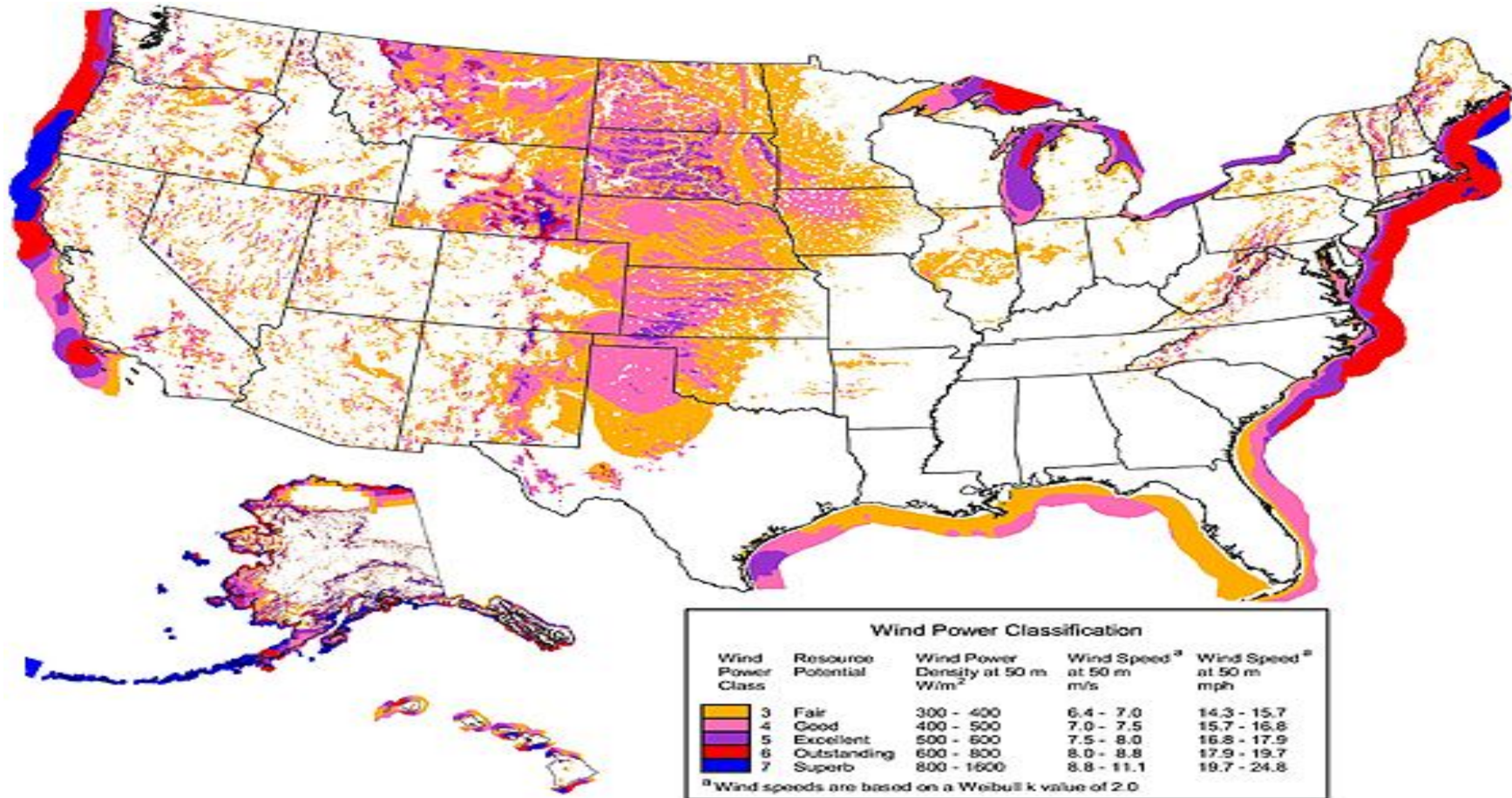




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Wind Resources in the U.S.





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The first of its kind...

“The objective of this Funding Opportunity Announcement is to facilitate the development or strengthening of capabilities in each of the three interconnections in the lower 48 states of the United States, to prepare analyses of transmission requirements under a broad range of alternative futures and develop long-term interconnection-wide transmission expansion plans.”

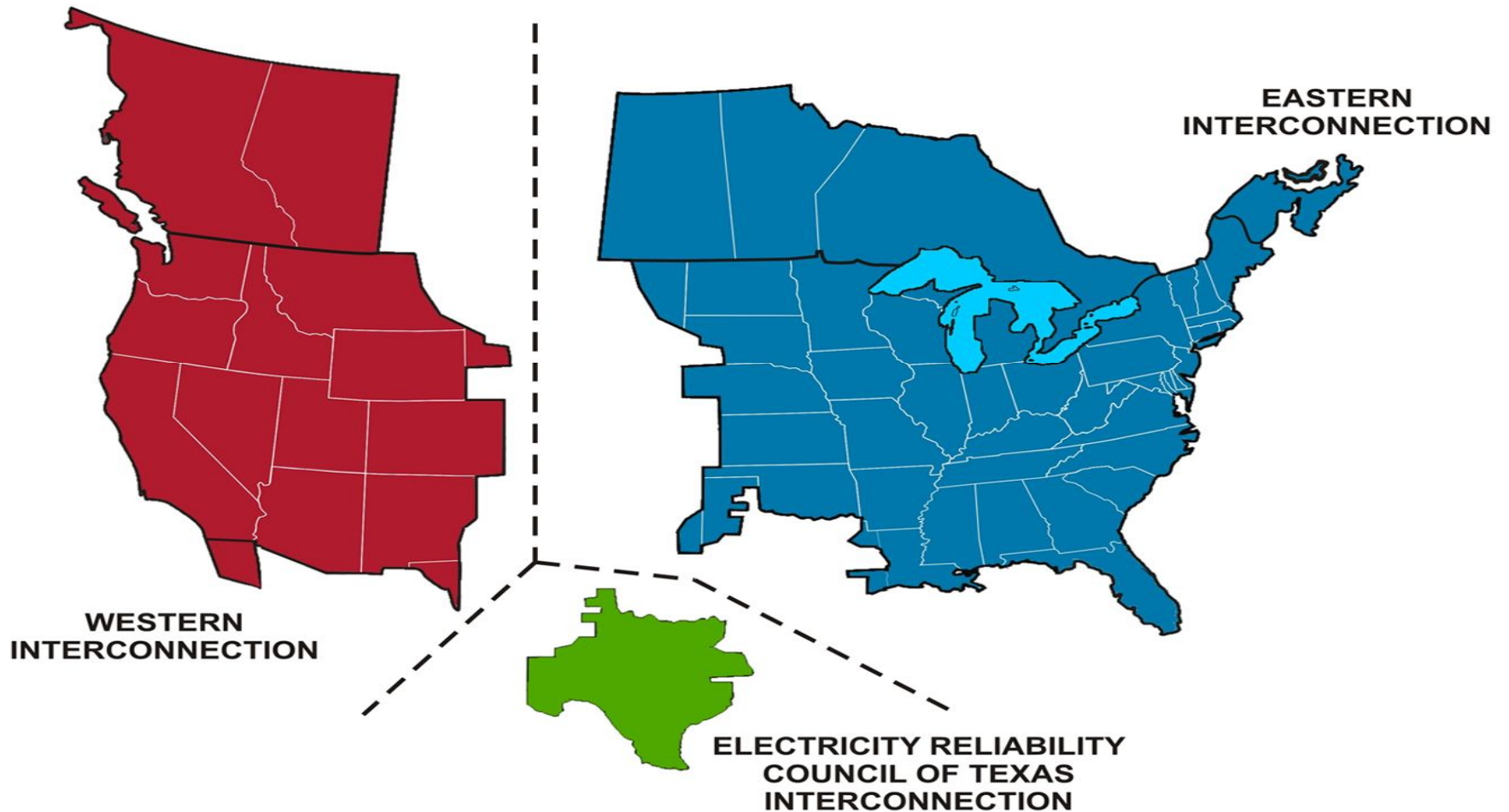
Department of Energy, Funding Opportunity
Announcement DE-FOA0000068



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North American Electric Reliability Corporation Interconnections





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TWO TEAMS IN PLANNING EFFORT

Engineering Team (EIPC)

- Planning Authorities =
 - Regional Transmission Organizations (RTO)
 - Transmission Owners
- Run models and prepare the transmission plans
- Stakeholder Committee – provides strategic advice

Policymakers Team (EISPC)

- State representatives—Commissioners, Governors' Reps., SEOs, Environmental Agencies
- Provide inputs to modelers through Stakeholder Committee
- Conduct Studies
- Prepare Whitepapers



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EISPC TASKS

- 1. Coordinate with SSC and EIPC Engineering Team:**
 - Identify 8 hypothetical futures/72 Sensitivities
 - Select 3 hypothetical futures for grid design
 - Provide input on grid design
 - Participate in the Stakeholder Steering Committee.
- 2. Conduct Studies to Inform Future Transmission Actions and State Decision-Making (including a study of Energy Zones in the States in the EI)**
- 3. Prepare Whitepapers to Inform Decision-Making**



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Eight Futures

1. **Business as Usual**
2. **Carbon Capture –Top-Down Implementation**
3. **Carbon Capture –State/Local Implementation**
4. **Aggressive EE/DR/DG/Smart Grid**
5. **Federal RPS – National Implementation**
6. **Federal RPS – State/Regional Implementation**
7. **Nuclear Resurgence**
8. **Combined Federal Climate and Energy Policy**

All Futures contain environmental components, including the EPA Rulemaking



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Studies

1. **Energy Zones—State-by-State Potential**
2. **State-by-State Potential for DSM**
3. **State-by-State Potential for Energy Storage**
4. **State-by-State Potential for DG**
5. **Identify Locations for New/Upgraded Nuclear**
6. **State-by-State Assessment of Sm. Generation**
7. **Assessment for Coal Development with CCS**
8. **State-by-State Potential for Fast-Start Gen.**
9. **Assessment of Other Carbon Reduction Steps**
10. **Assessment of Gas/Other Fuel Prices**



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Whitepapers

- 1. Energy Values Impacted Resource Selection**
- 2. Market Structures Impacting Resource Choice**
- 3. Financial Implications of PPAs**
- 4. Inventory Gov. Policies Impacting Transm.**
- 5. Incentives/Disincentives for Energy Develop.**
- 6. PHEV: Identify Potentials and Implications**
- 7. Evaluate Local vs. Remote Generation**
- 8. Economic Uncertainties for emerging tech.**
- 9. Smart Grid: Identify Potential and Impacts**
- 10.Aspects of existing RPSs—"off ramps"**
- 11.RPS Fuels/ Technologies Inclusions**



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TIMELINE FOR EISPC TASKS:

- COMPLETE MODELING INPUTS – MARCH 2011**
- BEGIN ENERGY ZONES AND OTHER STUDIES AND WHITEPAPERS – MARCH 2011**
- BEGIN TRANSMISSION “BUILD OUT” STUDIES – LATER IN 2011 INTO 2012**
- EXAMINE MODELING, STUDY AND WHITEPAPER RESULTS—END OF 2012 INTO 2013**



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Questions?