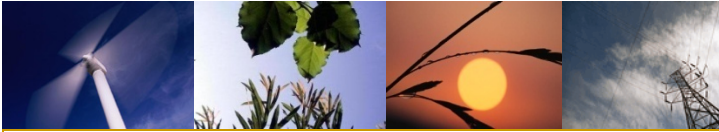

California's Renewable Energy Transmission Initiative

Anne Gillette

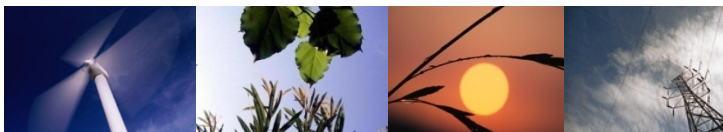
California Public Utilities Commission

July 20, 2008

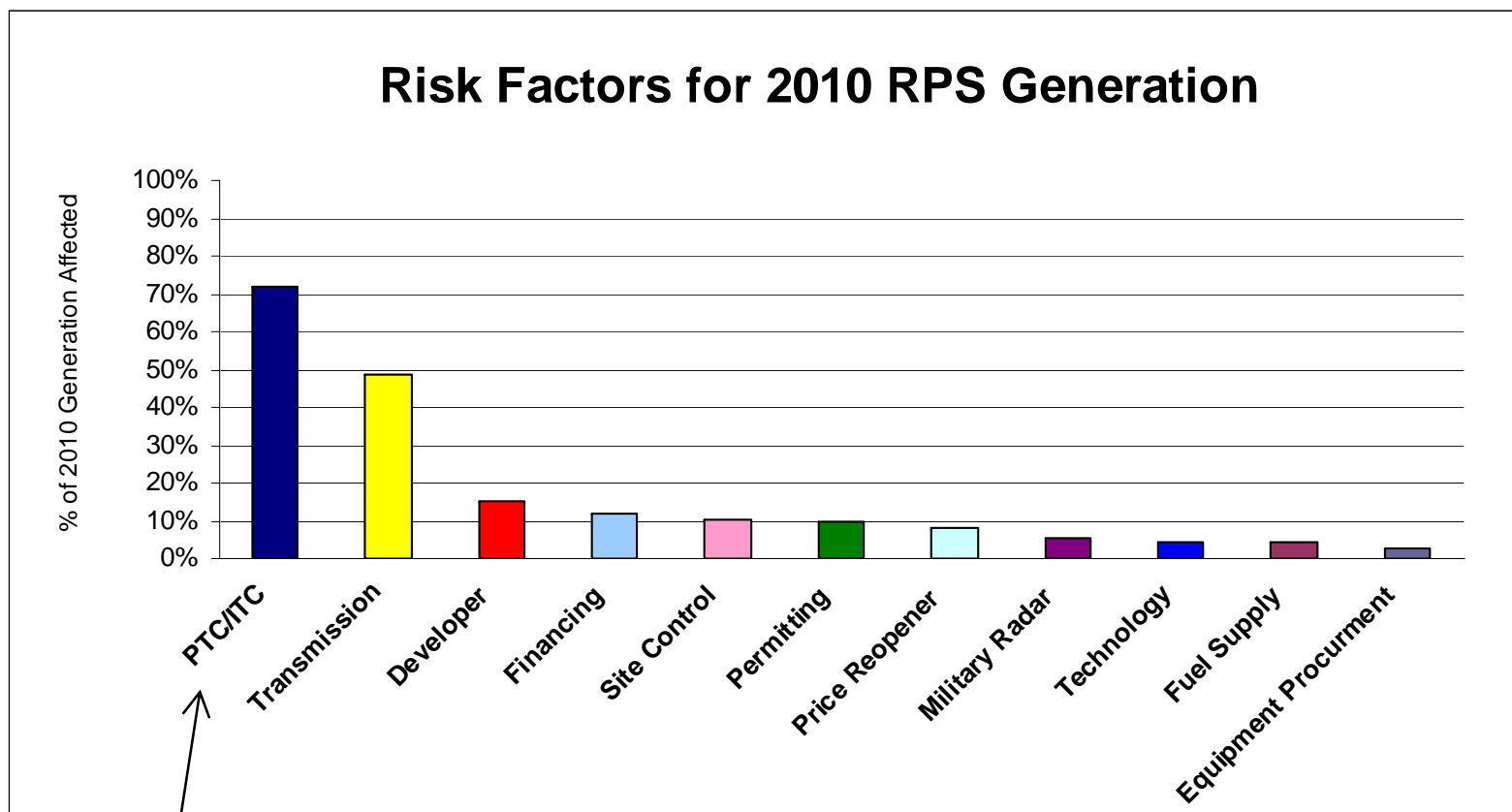


California's clean energy future

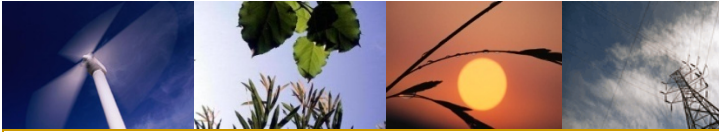
- Renewables Portfolio Standard:
 - Retail energy sellers must procure an additional 1% of their retail sales from renewables each year until they reach **20% by 2010**
 - California is considering a further renewable energy goal of **33% by 2020**
 - California Global Warming Solutions Act of 2006 (AB 32)
 - 2020: Emissions at 1990 levels
 - 2050: Emissions at 80% below 1990 levels
 - Draft Scoping Plan lists a 33% by 2020 RPS as one of 5 “key elements” needed in order to realize the 2020 emissions goal
-



Transmission a major barrier to RPS project development

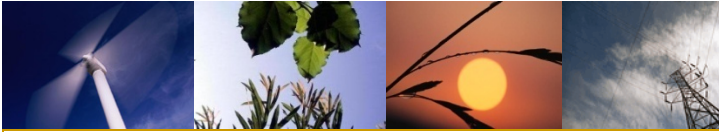


Note: California has little control over this barrier



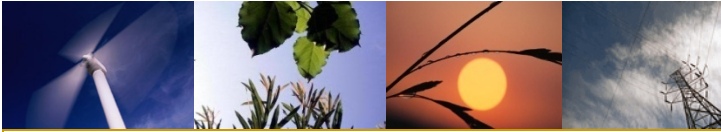
Why is transmission a barrier?

- Many of CA's most valuable renewable resources are far from load centers
 - Existing transmission lines often congested
 - Significant transmission expansion required to bring resources to market
 - Chicken-and-egg problem:
 - utilities don't want to build transmission until generation development is confirmed
 - generators don't want to commit to projects unless transmission access is confirmed
 - Permitting of transmission lines often contentious
-



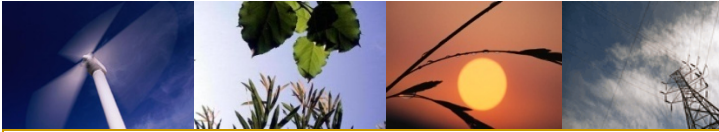
CPUC response to “The Transmission Problem”

- Streamlined transmission permitting process
 - Backstop rate recovery
 - Agency culture of proactive collaboration with California ISO, utilities, stakeholders, and federal land use agencies to minimize delays
 - New RPS Transmission investigation opened this year
 - Public education
 - Initiated the Renewable Energy Transmission Initiative
-



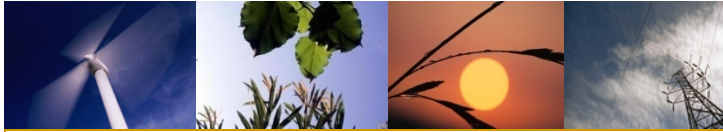
The Renewable Energy Transmission Initiative

- Statewide collaborative study effort to identify the transmission needed to access and deliver the most cost-effective renewable resources in CA and neighboring states
 - Participants: Investor-owned utilities, municipal utilities, CPUC, California Energy Commission, California Independent System Operator, developers, environmental advocates, other interested parties
 - Commitment to open, inclusive, transparent process **on an expedited schedule**
-



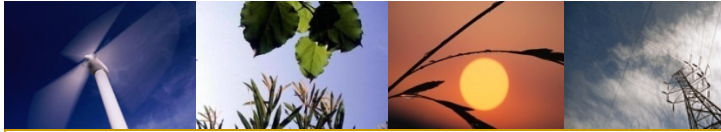
RETI is a 3-Phased Process

- Phase 1 – Identification and ranking of CREZs
 - Phase 2 – Refinement of CREZ analysis for priority zones and development of statewide conceptual transmission plan
 - Phase 3 – Detailed transmission planning for CREZs identified to be developed
-



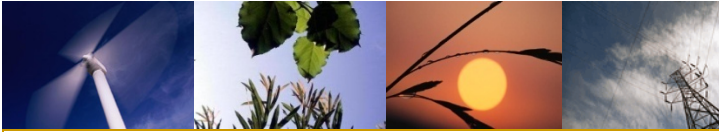
RETI Objectives

- Provide a common forum for permitting agencies, utilities, developers, and stakeholders to examine the location and timing of new generation/transmission projects;
 - Develop common information, tools and analytical methodologies to objectively evaluate renewable development potential; and
 - Support existing transmission planning institutions.
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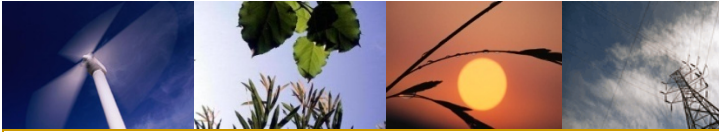
RETI Phase 1 – Scope of Work

- Identify renewable-rich resource areas in California and along its border
- Analyze the economics of development in each area, including:
 - Costs: Generation, Transmission and Integration
 - Value: Energy and Capacity
- Identify and rank high-value competitive renewable energy zones (CREZs) using cost analysis, engineering review (slope, road access, land use constraints, etc.), and high-level analysis of transmission constraints
- Evaluate environmental impact of development in each CREZ
- Issue Phase 1 Report – with list of preferred CREZs – in **September 2008**



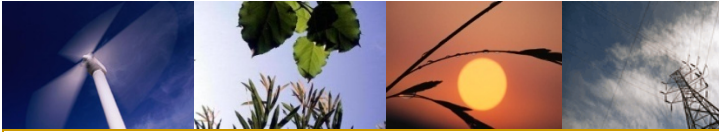
RETI Phase 1 – Environmental Working Group

- Significant and very positive development
 - For the first time, environmental organizations and generators representing all renewable technologies are working on project siting in a systematic, collaborative, proactive manner
 - EWG has:
 - Identified and mapped “black-out areas” where generation development precluded by law or policy
 - Identified and mapped “yellow areas” where generation development will be environmentally difficult.
 - Developed a methodology for rating CREZs according to their environmental impact and combining that rating with the economic CREZ ranking
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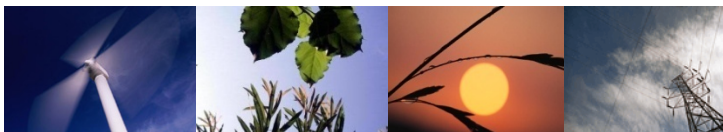
RETI Phase 1 - Important Points

- Not reinventing the wheel – pulling together and building on pre-existing work
 - Focusing on commercial potential – not another high level view
 - Applying consistent assumptions across the region
 - Stakeholders drive the process by validating the work of an independent consultant through consensus input
 - Goal is to rank CREZs through stakeholder consensus that reflects project economics and hard to quantify environmental, technological, and other concerns
-



RETI Scope of Work – Phases 2 and 3

- Phase 2
 - Transmission owners and other interested parties develop conceptual transmission plans for the highest ranking CREZs in collaboration with existing transmission planning organizations/institutions
 - ~ 8 month-long process; may be iterative
 - Phase 3
 - Existing transmission planning organizations collaboratively design transmission plans of service that result in applications to construct new transmission infrastructure to meet RPS goals
 - ~ 8 month-long process; may be iterative
-



RETI Organization / Roles

■ **Coordinating Committee**

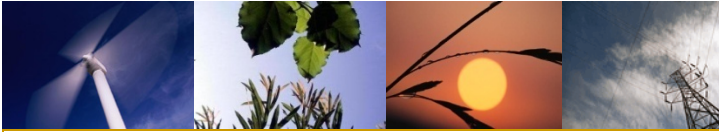
- ❑ California Energy Commission, CPUC, California ISO, reps of Publicly-Owned Utilities
- ❑ Oversees process and ensures development of needed info
- ❑ Keeps process on schedule and coordinates with other initiatives

■ **Stakeholder Steering Committee**

- ❑ Primary working group
- ❑ Key stakeholder representatives
- ❑ 29 Members

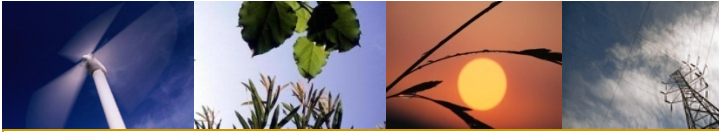
■ **Plenary Stakeholder Group**

- ❑ Reviews Steering Committee work
- ❑ Provides guidance, feedback, and “ground-truthing”
- ❑ All stakeholders and the public



Conclusion

- RETI, at this point, appears to be a success. Parties are working collaboratively to get the work done and we are on schedule for a resource assessment to be completed in September of this year.
 - Going forward, we continue to remind each other that the goal of RETI is “consensus”; this doesn’t mean that everyone agrees with everything that RETI is doing, but that we can all live with it.
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More information

- Mission Statement, Frequently Asked Questions, meeting minutes and presentations, etc. available at:
www.energy.ca.gov/reti/
 - Questions: Anne Gillette, aeg@cpuc.ca.gov, 415-703-5219
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