Transmission Investment: Competitive Market Platform – or Regulation Trojan Horse

Laura J. Manz
Vice President, Market & Infrastructure Development
CAISO

Harvard Electricity Policy Group
October 1, 2008

What are the Latest Ideas?

- It's all about Going Green:
- Renewable Energy Transmission Initiative – (RETI)
  - Identify areas most suited for renewable development and build "backbone" transmission to facilitate access.
- Location Constrained Resource Interconnection (LCRI)
  - Provides up-front financing through a socialized tariff charge for renewables once certain target thresholds are met.
  - These are repaid as generators interconnect.

How do these new approaches distinguish between where costs should be socialized vs. those where the beneficiary pays?

- It is common practice to socialize transmission costs in California.
- The RETI model assumes all ratepayers benefit from renewable power, especially with legislative mandate for 20% renewable power.
- LCRI presumes interconnection and network upgrade costs are prohibitive.
- Will there be shifting between LCRI & traditional financing?
- Who decides when a single entity wants to build a line that has little benefit to others?
- Without “beneficiaries pay” there is little/no discipline in proposals which burdens the ISO as the central decision-maker.

How do these innovations address uncertainty or disagreement about the costs and benefits of alternative investments:

- Need non-market methods to rationalize costs and benefits of alternative investments.
- Order 890 forces a comparability test among 29 CREZ trying to achieve rationality.
- Disagreement in an open forum, resolved by third-party consultants using economic models.
- Cost hasn't been in the conversation due to a government mandate.

How do these infrastructure investments interact with other investment decisions?

- Delay in generation while waiting to see where lines will be built.
- Transmission suggestions present themselves with no finding of need or commercial partners.
- We have little transparency in locational market signals, which may alleviate over time, but everyone already knows renewables are generally not in load centers.
- Those trying to leverage market prices could be thwarted by socialized, regulated alternatives, shifting risk back to customers.

Which problems do the innovative transmission investment protocols solve?

- Solves delays in permitting and siting new transmission.
- Eases potential high cost of delivery by gathering business interests.
- Lowers financial hurdles through LCRI.
- Potentially reduces utility “self-build” for “emergencies” because it can shorten the development/planning window.

What new problems arrive, or old problems remain?

- Since transmission is socialized, CRR choices are compromised.
- Unclear as to entitlements on an LCRI facility as financial obligations shift.
- Operationally challenging – injecting power where it is not needed over long lines which are already stressful to the power grid.
- Poor choices create new stranded costs.
- 90,000 MW of renewables to study.

How will the evolution of transmission investment tariffs affect the course of electricity restructuring?

- Looks more and more like integrated resource planning.
- Predetermines commercial decisions and biases technology, potentially stifling innovation.
- CAISO remains optimistic that markets will inform the process.