

# Overview of the 50% Special Study

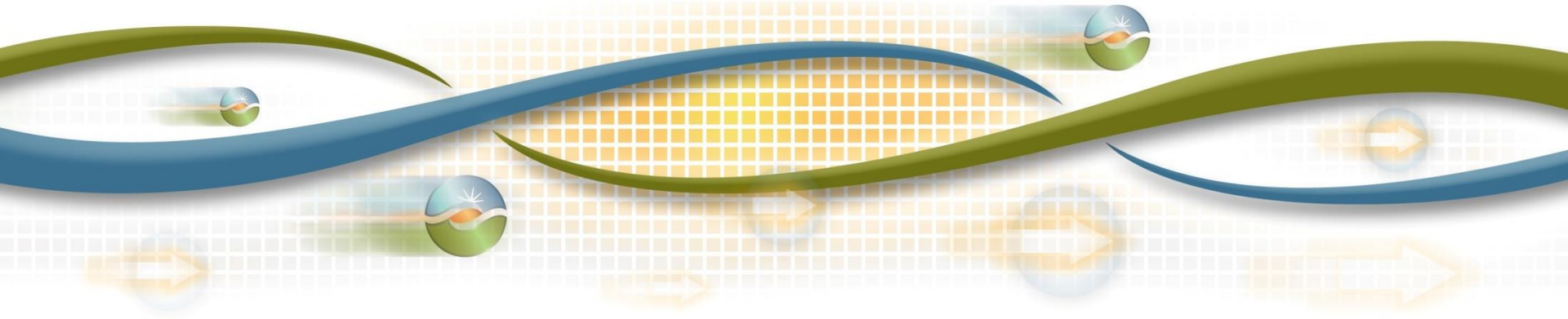
*Performed as part of 2015-2016 Transmission Planning Process*

Source:

<http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/RPS+Calculator+Home.htm>

50% RPS Energy Only Special Study

Public Teleconference (6/29/2015)



# Objective

- ❑ Investigate the feasibility and implications of moving beyond 33% using Energy Only (EO) procurement
- ❑ Test the transmission capability numbers used in RPS calculator v6 and update these inputs for future use
- ❑ Informational effort –
  - will not provide basis for procurement/build decisions in 2015-16 TPP cycle
  - Will be used to develop portfolios for consideration by CAISO in future TPP cycles

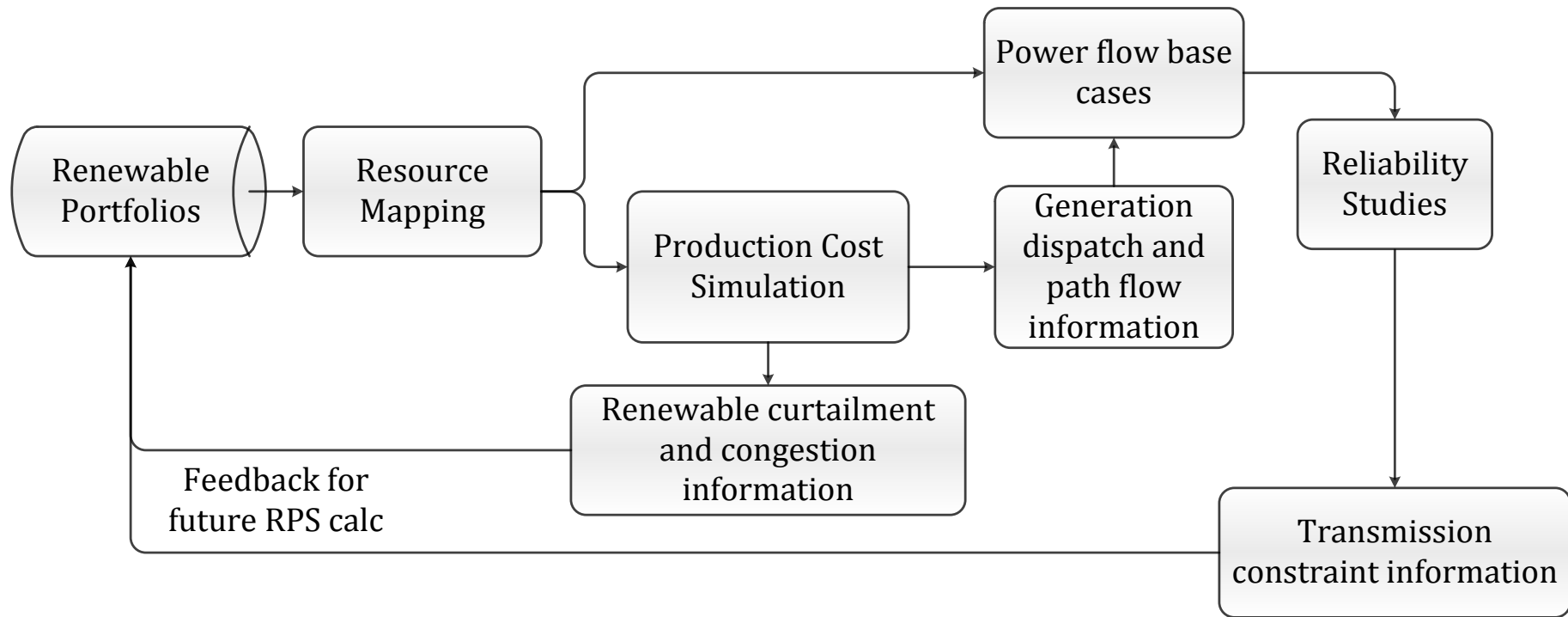
# Study Scope

- Two portfolios will be studied
  - In-state Energy Only
  - Out-of-state Energy Only
  
- Resource mapping
  
- Production cost simulation
  
- Reliability studies (Power flow, post-transient, transient stability)
  
- Identification of renewable curtailment, congestion and transmission constraints that may limit renewable generation development

# Study Approach

- ❑ Resource mapping will use information from the existing ISO queue and geographical information provided by CPUC
- ❑ Renewable generation incremental to 33% RPS will be assumed to be EO
- ❑ Production cost simulation output is expected to
  - Inform power flow cases (generation dispatch and major path flows)
  - Inform us about overall renewable curtailment in the in-state and out-of-state portfolio
- ❑ Reliability assessment will involve identification of constraints that
  - May limit considerable amount of generation
  - Would need expensive upgrades
- ❑ Such constraints will form the basis for the transmission inputs to the RPS calculator for future use

# Special Study Overview



Questions?