AB 1318 Project Overview and Status Report

South Coast Air Basin Electric Reliability and Offset Needs Assessment

Integrated Energy Policy Report
Lead Commissioner Workshop
Electricity Infrastructure Issues in California
Los Angeles
June 22, 2012

Today's Presentation

- ARB project overview and update
- CAISO status report on analyses for AB1318
- LADWP status report on analyses for AB1318

AB 1318 Directs ARB

(in consultation with: **CAISO**, **CEC**, **CPUC**, and **SWRCB**)
to:

1) Determine capacity required in South Coast to meet long-term grid reliability

2) If additional fossil power is needed:
   - Estimate required offsets
   - Propose options for addressing required offsets (per SCAQMD rules)

3) Report findings to Governor and Legislature

Roles and Responsibilities

- **ARB**: Project manager; liaison with SCAQMD; offset estimates and strategies
- **CAISO**: Builds power flow study cases and performs studies to determine capacity needed for local, zonal, and system grid reliability in CAISO BAA and residual capacity needs for renewables integration
  - **LADWP** ran own models for their BAA
- **CEC and CPUC**: Technical advisors; data support for CAISO models; ensure models reflect State policies and goals
- **SWRCB**: Monitoring effort as relates to OTC Policy

Activities to Date

- Nov. 2010: Project kick-off meeting
- Jan. 2011: Released Draft Work Plan outlining project schedule and responsibilities
- Feb. 2011: Joint CEC-ARB workshop on offset challenges at SCAQMD
- Feb. 2011 to present: Perform modeling, run power flow studies, and translate study results into offset estimates

Challenges Getting to This Point

- High level of inter-agency coordination required
- Need to coordinate reliability studies between two BAAs
- Major changes in electricity industry (OTC, 33% RPS, AB 32) increase uncertainty and complicate long-term planning
- Methodology needed for local capacity requirements never implemented for 10-year horizon
- Resources already committed to several other important planning and policy forums

Project Scope

- Determine capacity needs in LA Basin for grid reliability at 10-year horizon (2021)
  - Examine various 33% RPS scenarios and additional DSM programs to produce range of MWs
  - Local and zonal assessments
- Determine how much OTC capacity must be repowered to satisfy LCR standards
- Determine if additional fossil capacity (beyond that identified for local reliability) is needed to meet flexibility/ramping needs of renewables
- Outline plan to close demand/supply offset gap

Reliability Studies Needed to Complete Project

Type	Description	AB1318 Studies	Status
Local capacity area requirements	Capacity within a constrained area that needs to be available to respond when 1-in-10 peak loads occur, with transmission imports at the maximum, under various contingencies	1-in-10 peak load conditions with different RPS futures •CAISO = 4 portfolios •LADWP = 1 portfolio	Results under review
		Reduced peak load due to continuing or expanding DSM programs •CAISO = 1 portfolio •LADWP = 1 portfolio	Results under review
Regional requirements	Capacity at zonal or system level that needs to be online and synchronized to address broad regional concerns	1-in-10 and 1-in-2 peak load conditions for one future scenario	Results under review
Renewables integration	Highly flexible resources that provide regulation or intra-hour ramping to complement intermittent renewable production patterns	1-in-2 peak load + 10% conditions for one future scenario	Pending

What We've Learned So Far

- A range of OTC capacity must be repowered or replaced to meet reliability on local and zonal levels
- Demand-side management programs help reduce amount of OTC repowers needed if committed and proven to be available as dependable resources
- Highly integrated and complex transmission/ generation system means results strongly dependent on assumptions (e.g., transmission projects, OTC repowers)

Offset Assessment

- Translate local, zonal, and renewables integration study results into MW needs
  - Repowers of existing OTC units versus:
  - New
- Work with SCAQMD and stakeholders to develop recommendations

Tentative Schedule

Project Milestone	Target Timeframe
Public workshop on complete study results (local and zonal capacity requirements, renewables integration) and offset projections/strategy	July/August 2012
Issue public notice and Draft Report for 30-day comment	Fall 2012
Public workshop on Draft Report	Fall 2012
Final Report to Governor's Office and Legislature	Late Fall 2012

How to Participate

- Subscribe to project list serve: http://www.arb.ca.gov/energy/esr-sc/esr-sc.htm
- Attend upcoming public workshops
- Submit written comments during public comment period
- Request meeting with agency staff on individual basis (in-person, conference call, etc.)

Questions?