

DOCKET

09-IEP-10

DATE 9/24/2009

RECD. 9/25/2009

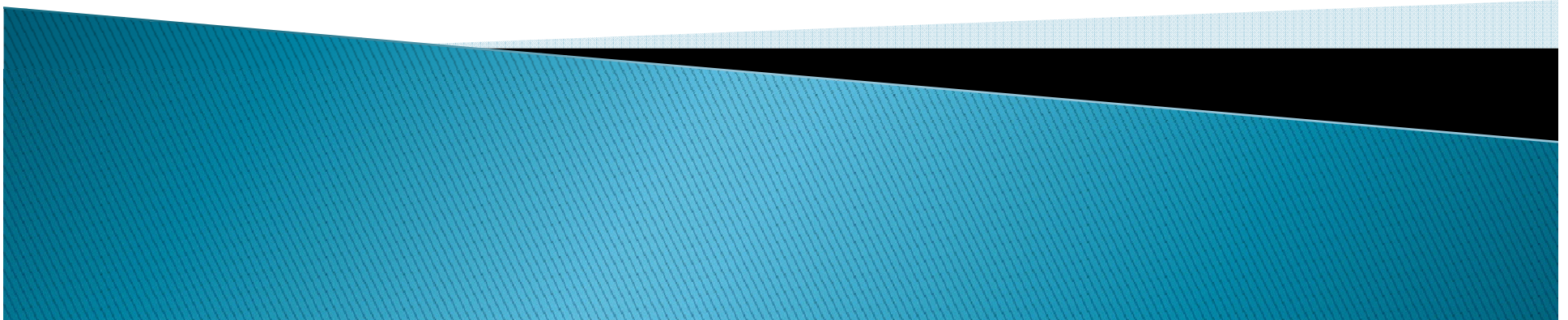
CEC ERC WORKSHOP

September 24, 2009

Steve Sciortino

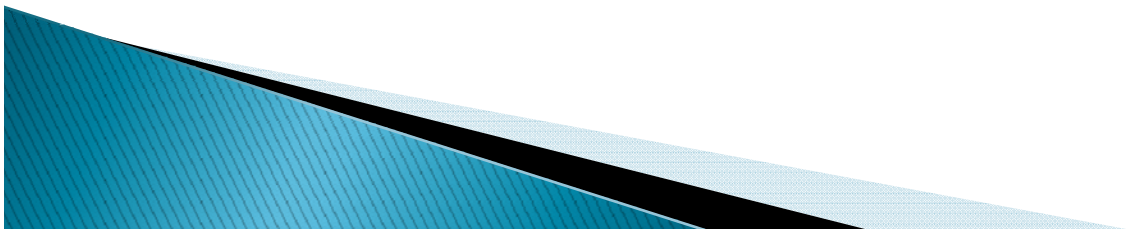
Integrated Resource Planning Manager

Anaheim Public Utilities



Anaheim's Need for Peaking Capacity

- Current resource portfolio is 500 MW with system; 80% of capacity is must-take/base load
- Customer demand: peak of 550 MW – 590 MW; capacity deficit of 50 MW – 90 MW
- CAISO RA requires 15% planning reserve margin; additional 80 – 100 MW required
- Need quick start for bidding into CAISO/back-up for intermittent renewable projects



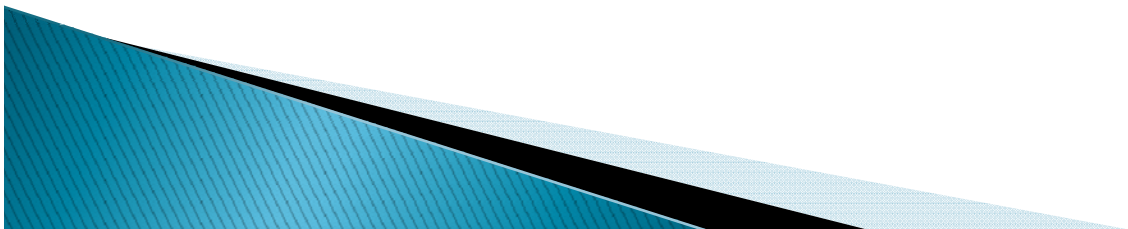
Project Description

- 200 MW peaking facility
- 4 GE LM6000 simple cycle units
- Reclaim water used for operations
- Standard SCR equipment ; Designed to attain Nox target of 2.3 ppm
- 10 acre site in the center of industrial zone
- Limited to peaking and reliability needs



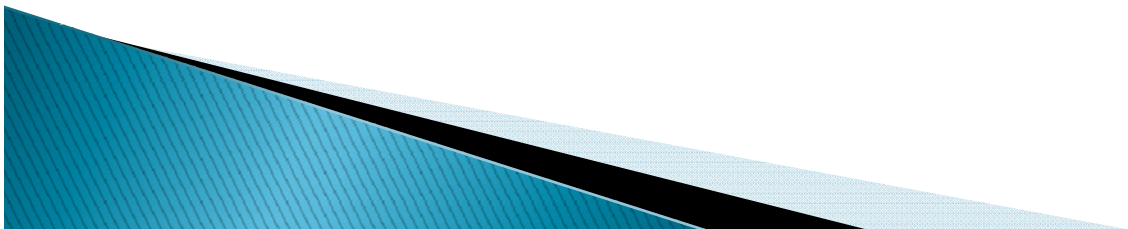
ERC Procurement Trail ; First Attempt

- ▶ Prior to Judge's initial Court Order
- ▶ Determining PM10 ERC's utilizing Section 1309.1 from AQMD Rules
- ▶ Determined highest month usage (Converted to lb/day)
 - Based on long-term outlook, 90 hours of operation/turbine per month with 11 start-ups per turbine/month
 - Extrapolated for the rest of the year
 - Resulting in about 4000 hours of operation
 - ERC estimated cost: \$5 million to AQMD
- ▶ Filed as part of initial AQMD Permit to Construct application in 12/2007



ERC Procurement Trail ; Second Attempt

- ▶ Following Judge's initial Court Order 7/28/08, vacating use of 1309.1
- ▶ Utilizing AQMD's Rule 1304
- ▶ Reduced hours of operation to fit under 4 ton threshold
 - Backed into the operation based on limited PM10 to threshold
 - Resulting in 2,400 hours of operation (reduces operations by almost half)
 - No offsets required; 0 cost for ERCs
- ▶ Filed revised AQMD application in September, 2008



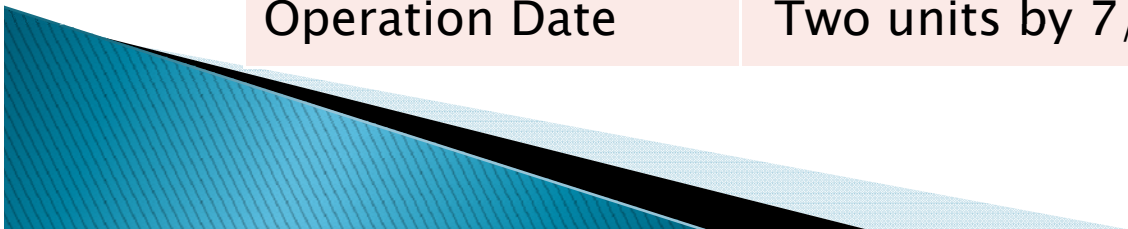
ERC Procurement Trail ; Final Attempt

- ▶ Following Judge's Clarification Court Order 11/5/08 eliminating ability for offset exemptions under Rule 1304.
- ▶ Purchased ERC's from the market
 - Very thin market, with few suppliers
 - No ability to negotiate price
 - ERCs needed were not immediately available
 - Total purchase cost: \$15.5 million to private investor
- ▶ Calculation based on
 - Based on long-term outlook, 90 hours of operation per turbine with 20 start-ups per month
 - Extrapolated for the rest of the year
 - Resulting in 4320 hours of operation, total ERCs needed
- ▶ Filed second revision to AQMD application 12/08



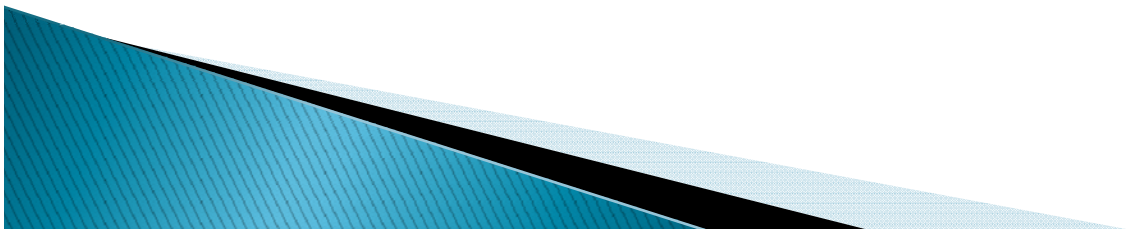
Impact on Schedule: Applications file 12/2007

	CEC Timeline	Actual Timeline
Data Adequacy		3/2008
AQMD's PDOC	6/2008	2/25/09
CEC's PSA	45 days from PDOC or 3/10/09	4/21/09
Joint Workshop		5/21/09
AQMD's FDOC	45 days from PDOC or 3/10/09	6/24/09
CEC FSA	60 days from Public Workshop or 7/24/09	10/01/09 ?
CEC License	Based on Initial Application : 1/09 Based on PDOC: 9/09	Minimum of 4 month delay: best guess 2/2010
Operation Date	Two units by 7/11	?



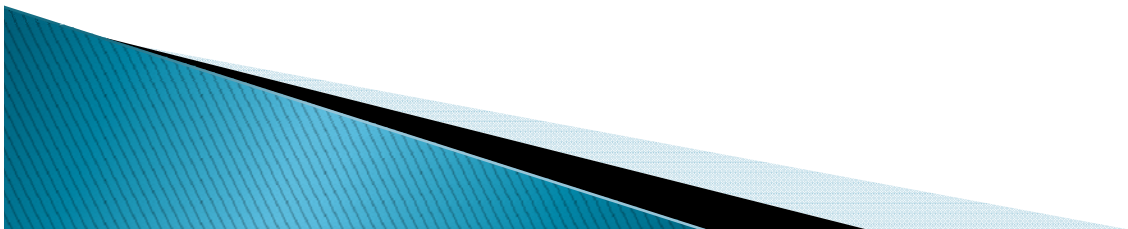
Problems with ERC Methodology

- Highest month determination is problematic, particularly for peaking facilities
- Current methodology requires purchasing more ERCs than needed
 - Higher cost to the utility
 - Takes away from other potential buyers ; scarce ERCs to begin with
 - Purchasing thru the market does not guarantee additional mitigation
- Bought for 4230 hours; use is likely not to exceed 2000 hours
- Typical use is concentrated during the summer months
- Current methodology is punitive
 - Monthly extrapolation
 - 1.2 multiplier increasing the need for higher ERC determination
 - Limits multiple unit facility operations
- Current methodology requires purchasing more ERCs than needed



Recommendation: Use annual determination

- Determine expected needs on an annual basis
 - Allows for concentration for peaking units during summer months without the need to purchase the same monthly amount where not needed
 - Provides operational flexibility; “bank” credits over the year
 - Reduces the need for ERCs ; leaves more ERCs available for other project
 - Reduces costs for the project
 - Concept works for combined cycle projects
- Calculate on the basis of facility rather than per turbine for multiple unit project
 - Greatest Flexibility ; allows operator to dispatch any turbine based on circumstances
 - Bank credits between months and between turbines



Questions

- What is the rationale for the 1.2 multiplier after determining total pounds required based on assumed operations?
- Why does the applicant have to demonstrate securing of credits so early in the process?
 - FDOC not issued until credits secured
 - FSA held up until FDOC is issued
- Is the 12 month licensing process for large projects realistic?
 - How should Utilities/developers plan in advance and in parallel with the process
 - Some equipment must be purchased in advance for vendor guarantees
 - Financial risks associated with uncertainty/delays in the process

