



Issues on Air Quality Permitting of Power Plants in SCAQMD

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**California Energy Commission
IEPR Committee Workshop**

**Implications of Proposals for Mitigation of Once-through
Cooling of Existing Electric Generating Facilities on Electric
Reliability**

*Monday, May 11, 2009
Sacramento, California*

Mohsen Nazemi, P.E.
Deputy Executive Officer
South Coast Air Quality Management District



New Source Review SCAQMD NSR Rules

- Emission Offsets are required for new facilities, Relocations and **Modification of existing facilities**
- SCAQMD NSR Rules provide exemptions from offsets for certain specific sources
 - Rule 1309.1 (Priority Reserve) – Essential Public Services & **Limited Power Plants**
 - Rule 1304 (Exemptions) – **Repowering & Replacements**, etc.
- SCAQMD provides offsets for the Priority Reserve and exempt sources from its Offset Credit Bank



Environmental Organizations' Lawsuits

- NRDC, CBE, CSE and others filed two lawsuits against SCAQMD:
 - Aug. '07 in State Court challenging SCAQMD's Adoption of Rules 1309.1 and 1315. In July and Nov. '08, Judge Ann Jones ruled in favor of Environmental Groups invalidating the rules.
 - Aug. '08 in Federal Court challenging validity of SCAQMD's Offsets. Judge's decision on SCAQMD's motion to dismiss is still pending.



As A Result of the State Court Decision

- Without SCAQMD's bank of offset credits:
 - No essential public service projects can be permitted
 - No other local government & business permits can be issued
 - **No new or Re-powered power plants can be permitted**
- The only remaining option for **power plants**, local government and business is to purchase ERCs in Open Market
 - Not enough ERCs in the open market
 - ERCs are expensive and potentially unaffordable



Electrical Generation Projects Proposed in the South Coast & Mojave Areas

Project	Applicant	Location	Megawatts	Total
El Segundo Power Redevelopment Project* +	El Segundo Power, LLC	301 Vista Del Mar Blvd, El Segundo	563	1913
Sentinel Energy Project*	Competitive Power Venture, Inc.	62575 Power Line Road, Desert Hot Springs	850	
Walnut Creek Energy Project*	Edison Mission Energy	911 Bixby Drive, Industry	500	
Southeast Region Energy Project**	City of Vernon	3200 Fruitland Ave, Vernon	943	1243
AES Highgrove Project**	AES Highgrove, LLC	12700 Taylor Street, Grand Terrace	300	
San Gabriel Generating Station	Reliant Energy, LLC	8996 Etiwanda Ave, Rancho Cucamonga	656	2156
LADWP Haynes Repower Project +	Los Angeles DWP	6801 2 nd Street, Long Beach	616	
Valle Del Sol Energy Project	Edison Mission Energy	29500 Rouse Road, Romoland	500	
Canyon Power Plant	City of Anaheim	3071 East Mira Loma Ave, Anaheim	200	
Riverside Energy Resources Units 3 & 4	City of Riverside	5901 Peyton Ave, Riverside	99	
Watson Expansion Project	Watson Cogeneration Company	22850 South Wilmington Ave, Carson	85	
Victorville 2 Solar-Gas Hybrid***	City of Victorville/ Inland Energy	Victorville	563	
Palmdale Solar Gas-Hybrid***	City of Palmdale/ Inland Energy	Palmdale	573	1136

• Have obtained long term power sales contract with SCE for sale in 2011

** SCAQMD denied the Permits to Construct in March and April 2009

*** Located in Antelope Valley & Mojave Desert Air Districts

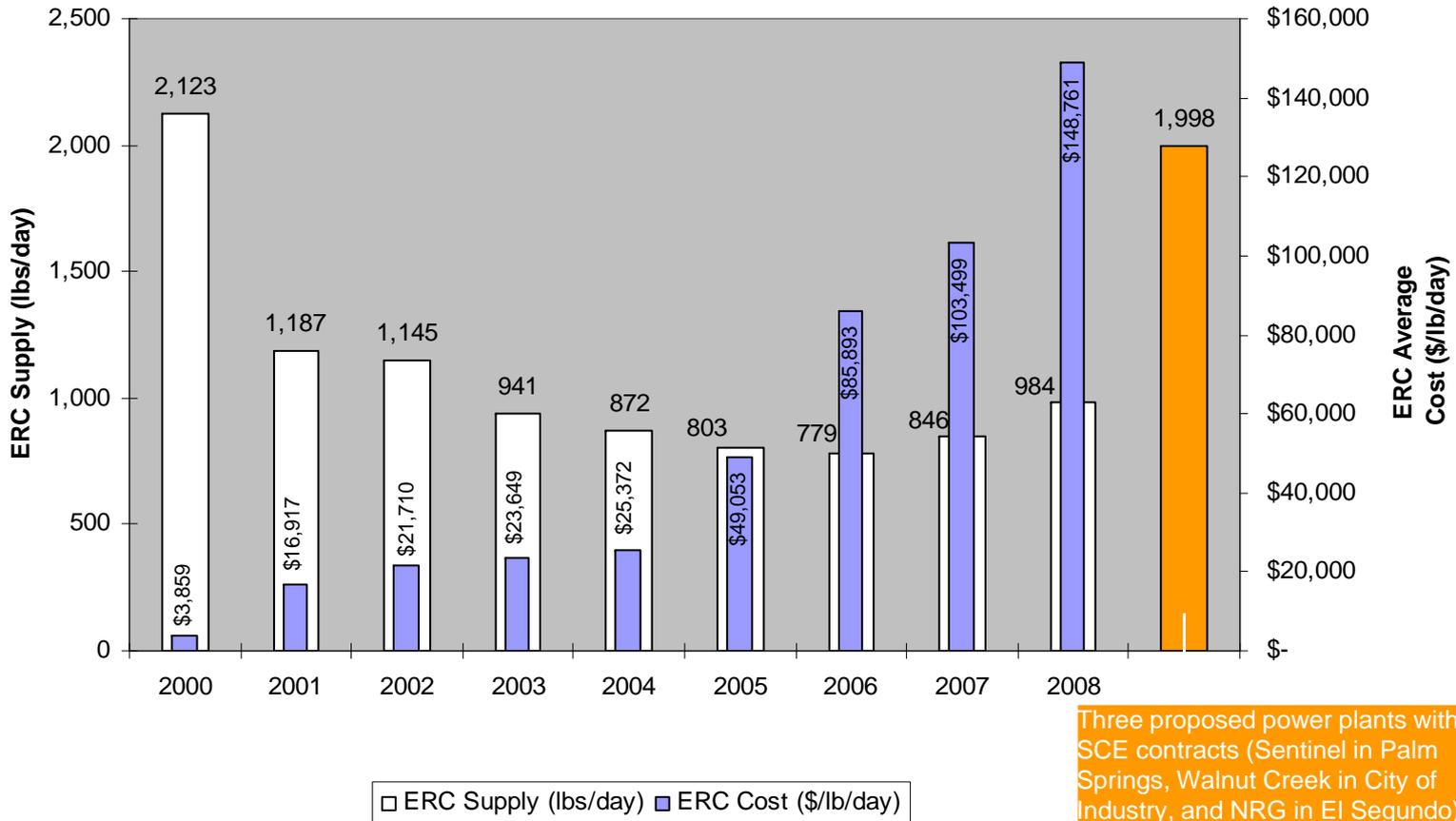
+ Once Through Cooling (OTC)



PM10 ERC Supply & Average Cost Trends (2000-2008)

Supply dropped by 54% since 2000
Cost increased by 3,755% since 2000

Highest Price of PM10 ERC sold in 2008 was \$247,000 per lb/day





SCAQMD's Internal Offset Bank Account

Bank Balances (Tons/day)	VOC	NOx	SOx	CO	PM10
Total Pre-1990 Credits Prior to Adoption of NSR Tracking Rule (R-1315)	92.4	25.8	18.4	34.9	34.5
Total Revised Pre-1990 Credits After Adoption of R-1315	38.5	23.9	8.0	8.5	2.7
% Reductions in Pre-1990 credits	58%	7%	57%	76%	92%



Power Plants Use of SCAQMD's Internal Offset Bank

Time Frame	Total MW	SCAQMD Credits Used	% of SCAQMD Bank Balance
2000-2001 (Used)	4,900	PM10 (0.75 Ton/day)	< 2%
2008-2009 (Proposed)	4,069 (Within SCAQMD)	PM10 (1.5 Tons/day)	< 14%
	1,136 (Outside SCAQMD)	SOx (0.2 Ton/day) VOCs (0.5 Ton/day)	< 8% < 1%



Actions Taken by SCAQMD

- Appealed the State Court Decision
- Initiate Rule Development to Re-adopt Rule 1315 (NSR Tracking Rule)
- Participated in Mediation with litigants
- Proposed Legislation – SB 696 sponsored by Senator Rodney Wright:
 - Reinstates Rules 1309.1 & 1315
 - Requires Power Plants to meet more stringent emission standards specified in Rule 1309.1
 - Requires power plants to pay mitigation fees which will in turn be used for emission reduction projects in the nearby areas
 - Requires CEC to conduct a Needs Analysis for Power Plants