

EME's Perspective

- Walnut Creek Energy Park (500 MW fast-start peaker)
 - Resuming work with the Legislature to restore Priority Reserve access to enable construction to meet our PPA COD in 2013
 - Priority Reserve offsets have previously been through rigorous review by EPA & CEC Staff
- Sun Valley Energy Project (500 MW fast-start peaker)
 - Continuing development to compete to meet additional future need for quick start, fast ramp peaking power to back up renewables & replace aging coastal plants
- Multiple permitted generation options – ready to build to meet evolving needs – supports LA Basin electric reliability & competitive cost
 - Scarcity of PM10 & SOx market ERCs requires re-thinking policies to enable meeting LA Basin peak power demands & reducing GHG emissions

Market context

- Peakers for RA-only can deeply limit permitted operation, but efficient ones need more hours to capture energy option value
- ERCs for efficient 500 MW peaker would theoretically cost \$50-80 million due to scarcity
 - Adds >10% to capital cost
 - Obtaining ERCs prior to SCAQMD / CEC certification is now prohibitively expensive & would exacerbate shortage
- Rule 1304 (ERC exemption for electric utility steam boiler replacement) is available only to AES, NRG & Reliant
 - Insufficient competition to assure least cost to ratepayers
- Powerplant shutdown credits not viable because:
 - New plants must be built before aging ones retire
 - Rules for shutdown credits minimize supply, but offset rules for new plants maximize need
 - Oligopoly

SCAQMD's proposed solutions

Examples of Future NSR Actions*

*Existing
CAA*

*New
Policies*

*CAA
Amendments*

Daily to
Annual ERCs

Leasing
Option

Offset
Replacements

Credit Calculation

BACT Discount at Use vs.
BARCT Discount at Issuance

Mobile
Source
Credits

Fee
Options

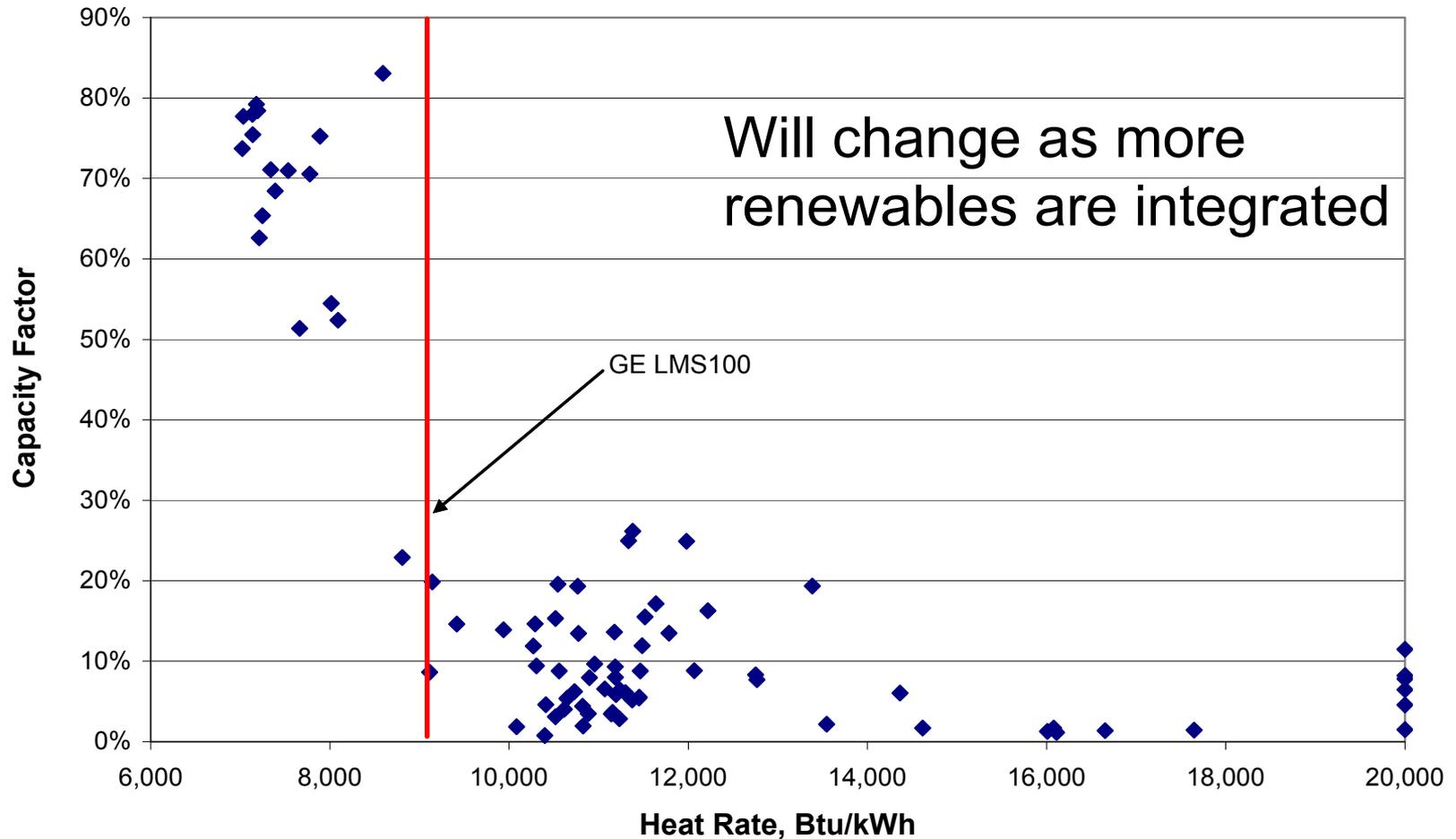
2009

2020

* AQMD rule amendments needed and subject to state and federal approval 21

Peaker operation is cyclic; varies with weather & hydro conditions – must permit for extreme

2007 Capacity Factors of SoCal Gas-Fueled Generation



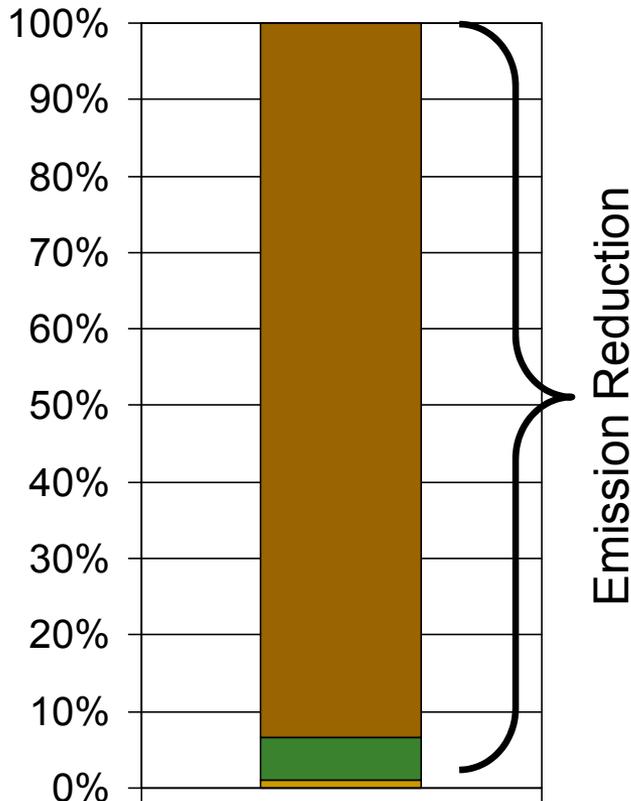
ERC calculation vastly exceeds Sun Valley's actual PM10 emissions

	Emission Rate	Capacity Factor	Averaging Period	Emission lb/day	ERC Req'd lb/day x 1.2
Expected, 1-in-2	4 lb/hr	20%	annual	102	122
Guarantee, 1-in-2	6 lb/hr	20%	annual	152	183
Guarantee, 1-in-10	6 lb/hr	35%	annual	260	313
Guar., max month	6 lb/hr	[59%]	max month	438	525
Start duration, 30/31	6 lb/hr	[59%]	max month	456	555

■ Solutions:

- ❑ Return excess ERCs when actual emission rate < permit
- ❑ Offset for typical year with running average, not 1-in-10
- ❑ Offset based on capacity factor, not operating hours (may be part-load)
- ❑ Offset for annual average, not maximum month
- ❑ Avoid assuming artificial start duration, 30 day max month

“BACT discount” decimates ERC creation



- “BACT discount” eliminates most opportunities to create ERCs
 - Control cost spread over tiny certifiable amount is usually too expensive
 - Missed opportunity for real air quality improvements
- Solutions:
 - Facilitate ERC creation
 - Certify powerplants conditioned on demonstrating ERCs prior to construction
 - Allow new generators to opt into SO_x RECLAIM

■ Remaining ■ Certifiable ■ BACT discount

Rule change is needed to allow stationary sources to use ERCs from other sources

