

Los Angeles Energy and Environment
Committee 09/09/13

Los Angeles City Council 09/11/2013

Items:

13-1061 13-1072 13-1074 13-1077

6 GWe Namplate Solar * 0.20 * 24 = 29 GWh solar/day

6 GWe Solar at 20% utilization = 1.2 GWE average solar

50 GWE California Average Power

LADWP load ~ California Total load/8

California Total 2020 Electrical load = 50 GWe + 15 GWe * SIN((pi/12) * (Hour - 10:00)) radians.

4:00 AM

35 GWe Minimum Power

35 GWe maximum nameplate wind

20% wind utilization: 7 GWe average wind

6 GWe maximum
nameplate solar

4:00 PM

Area Under Curve:
28 GWh solar/day

65 GWe peak Power

Date: 9/9/13

Submitted in E&E Committee

Council File No: 13-1061, 13-1074

Item No.: 13-1074, 13-1077

1-4
Communication
from the pub

59 GWE at sunset
7:30 PM sunset

12:30 PM solar startup

7 hours solar power

California In-state Power Situation Absent Energy Storage

Net Results:

(1.2 average solar + 7 GWe average wind)/50 GWe
= 0.164, roughly 1/6 of California Power requirement
AB32 will fail absent calling big hydro and nuclear
"renewable energy."

WES 09/09/2013

William Ernest Schenewerk P.E., PhD 5060 San Rafael Avenue Los Angeles CA 90042-3239

"Solar Energy Storage by Mixing and Separation of Water and Ammonia," Massive Energy Storage for the Broader Use of Renewable Energy Sources, ECI, www.engconfintl.org, June 23-26, 2013, Newport Beach CA, Poster Number 5.

Midnight

4:00 AM

10:00 Am

4:00 PM

Midnight

Noon