DOCKETED	
Docket Number:	16-IEPR-05
Project Title:	Electricity Demand Forecast
TN #:	211948
Document Title:	Presentation - California ISO Load Forecast
Description:	Jeff Billinton, California Independent System Operator
Filer:	Raquel Kravitz
Organization:	California ISO
Submitter Role:	Public Agency
Submission Date:	6/22/2016 4:06:27 PM
Docketed Date:	6/22/2016



California ISO Load Forecast

Jeff Billinton Manager, Regional Transmission - North

CEC IEPR Commissioner Workshop on Methodological Improvements to the Energy Demand Forecast for 2017 and Beyond

June 23, 2016

2016-2017 Transmission Planning Process Load Forecast Assumptions

- California Energy Demand Updated Final Forecast 2016-2026 adopted by California Energy Commission (CEC) on January 27, 2016 will be used:
 - Using the Mid Case LSE and Balancing Authority Forecast spreadsheet of January 27, 2016
 - Additional Achievable Energy Efficiency (AAEE)
 - Consistent with CEC 2015 IEPR
 - Mid AAEE will be used for system-wide studies
 - Low-Mid AAEE will be used for local studies

 CEC forecast information is available on the CEC website at: <u>http://www.energy.ca.gov/2015_energypolicy/documents/index.html#adoptedfor</u> <u>ecast</u>



2016-2017 Transmission Planning Process Load Forecast Assumptions (continued)

- The CEC Energy and Demand Forecast states the following with respect to the impact of PV at the time of the forecast peak load:
- •
- "At some point, continued growth in PV adoption will likely reduce demand for utilitygenerated power at traditional peak hours to the point where the hour of peak utility demand is pushed back to later in the day. This means that future PV peak impacts could decline significantly as system performance drops in the later hours. This possibility has not been incorporated into the demand forecast through CED 2015, since staff has not yet developed models to forecast hourly loads in the long term. Staff expects to develop this capability for the 2017 Integrated Energy Policy Report (2017 IEPR), and such an adjustment to PV peak impacts could significantly affect future peak forecasts."



PV Impact at Peak Demand



Figure B-8: PG&E System Load vs PV Production

Source: California Energy Commission, Demand Analysis Office, 2015

Appendix B, California Energy Demand 2016-2026, Revised Electricity Forecast - Volume 1

http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439 20160115T152221 California Energy Demand 20162026 Revised Electricity Forecast.odf



Impact of Peak Shift on Peak Demand



Based on data from California Energy Demand 2016-2026, Revised Electricity Forecast - Volume 1



Peak Shift Impact

- NERC Reliability Standard TPL-001-4
 - One of the requirements is to assess the system under peak loading conditions in the Planning Assessment
- Experiencing today peak shift in local areas with high penetrations of behind the meter PV (i.e. Fresno area)

