

DOCKETED

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Project Title:	Energy System Reliability
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Files Provided

Sheet name	Source	Purpose
July, August, September	CEC staff	Hourly Supply Stack results
CED 2021 Hourly Forecast - PGE – mid_mid	California Energy Commission https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-IEPR-03	Demand
CED 2021 Hourly Forecast - SCE – mid_mid	California Energy Commission https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-IEPR-03	Demand
CED 2021 Hourly Forecast - SDGE – mid_mid	California Energy Commission https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-IEPR-03	Demand
SCE DR Allocations 2022 w. DLF	California Public Utility Commission https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/for-sce-to-complete----fy2021-dr-lip-allocations-for-py2022-2024---final---redacted.xlsx	Demand Response
SDGE DR Allocations 2022 w. DLF	California Public Utility Commission https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/for-sdge-to-complete----fy2021-dr-lip-allocations-for-py2022-2024_jun152021_sdge-response.xlsx	Demand Response
PG&E DR Allocations 2022 w. DLF	California Public Utility Commission https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/demandresponseoir-2013_dr_ed_158-q01atch01.xlsx	Demand Response
October 2021 NQC List	California ISO http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx	Existing Supply

CISO Master File 9.29.2021	California ISO http://www.aiso.com/planning/Pages/ReliabilityRequirements/Default.aspx	Existing Supply
Solar_2014-2020.csv	CEC staff	Renewable Profiles
Wind_2014-2020.csv	CEC staff	Renewable Profiles
Renewables Capacity Factors	CEC staff	Renewable Profiles

Explanations

Results file

The July, August, and September sheets contain the numbers in the charts of the supply stack.

Demand

The three demand files published by the CEC are added together and the coincident peak day for each month is used as the basis for the demand curves. Only the "MANAGED_NET_LOAD" column is considered.

Demand Response

These are the "DR Allocations for year 2022, Estimated According to PY20 Load Impact Protocols (LIPs) Final Reports" published by the CPUC. The demand response numbers in the supply stack are from the "2022 Total Event and Non Event-Based Programs" row of the "2022 DR Allocations with DLF" sheets (DLF stands for Distribution Loss Factor). Those numbers are then added together and multiplied by 1.06 to account for operating reserves.

Existing Supply

This is the final NQC list published in October 2021. The existing supply uses the NQC value for all resources except wind and solar, which uses the NDC value in the master file. The master file was retrieved September 29, 2021 and the NQC list in early November 2021.

Renewable Profiles

The "solar_2014-2020" and "wind_2014-2020" sheets have the total amount of solar and wind generation across the ISO for each hour of those seven years, normalized by installed capacity. These files were aggregated by CEC staff based on California ISO generation data provided on a confidential basis. These input files are used to create the hourly capacity factors contained in the "Renewable Capacity Factors" sheet.

Inputs Not Included

Imports

The CAISO provided monthly RA filings and POU liquidated damages data on a confidential basis. The total number can be found in the "Average RA Imports" column of the results tables.

New Supply

The CPUC provided expected new procurement on a confidential basis. The total number can be found in the "New Supply" column of the results table.

Adjustments

Approximately 700 MW of adjustments are added to the existing supply. This is based on various information about contracts provided on a confidential basis, as well as the 500 MW hydro derate.