2019 & 23 Final LCR Study Results
Big Creek/Ventura Local Area

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Stakeholder Call

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Big Creek/Ventura Area Loads & Resources

Load

Year	Bus Load (MW)	Pump Load (MW)	Transmission Losses (MW)	Total (MW)
2019	4704	379	79	5162
2023	4708	379	82	5169

- The above load values include:
  - Saugus substation load which is located in the BCV LCA
  - The impact of baseline BTM PV, AAPV and AAEE included in the CEC managed forecast

Available Generation

Year	QF (MW)	Muni (MW)	Pref. Res. & ES	Market (MW)	Max. Qualifying Capacity (MW)
2019	52	372	104	4587	5115
2023	52	372	108	2974	3506

- Available generation values for 2019 includes Ellwood and Ormond
- Available generation values for 2023 excludes Ellwood and Ormond

Key Resource Assumptions

- All Mandalay units unavailable since they were retired as of 02/06/2018.
- NRG has announced Ormond Beach and Ellwood will be retired by the end of the year. The units were used as needed in the 2019 case but not in the 2023 case.
- The Las Flores Canyon Cogeneration Facility (EXGEN) is OOS since 2015 due to a pipeline rupture and is assumed to be unavailable in both cases.

New Transmission Projects Included

- Big Creek Corridor Rating Increase Project (ISD - 12/31/2018) was modeled in both 2019 and 2023 cases.

- Pardee-Moorpark No. 4 230 kV Transmission Circuit (ISD – 12/31/2020) was modeled in the 2023 case.

Rector Sub-Area

Category B

LCR need is satisfied by the need in the larger Vestal sub-area.

Category C

LCR need is satisfied by the need in the larger Vestal sub-area.

Vestal Sub-Area

Category B

Contingency: Magunden-Vestal #1 or #2 230 kV line with Eastwood out of service.

Limiting component: Remaining Magunden-Vestal 230 kV line

or

Contingency: Magunden-Springville #1 230 kV line with Eastwood out of service.

Limiting component: Magunden-Springville #2 230 kV line.

2019 LCR need: 621 MW

2023 LCR need: 621 MW

Category C

Same as above.

Santa Clara Sub-Area

Category C

Contingency: Pardee-Santa Clara 230 kV line followed by
Moorpark-Santa Clara #1 and #2 230 kV DCTL.

Limiting component: Voltage collapse

2019 LCR need: 237 MW.

2023 LCR need: Varies depending on location and reactive power capability of new resources

Location of new resource(s)	Reactive power capability of new resource(s)	
	0.95 lead/lag power factor range	Unity power factor
Goleta	295 MW	316 MW
Santa Clara	322 MW	358 MW

Santa Clara Sub-Area – cont'd

- Ellwood will be needed to meet the LCR (until new resources become available)

- Approximately 102-164 MW of new capacity will be needed by 2023 (assuming Ellwood and EXGEN will be unavailable)

Category B

No requirement.

Moorpark Sub-Area

Category C

Contingency: Pardee-Moorpark #1 230 kV line followed by
Pardee-Moorpark #2 and #3 230 kV DCTL.

Limiting component: Voltage collapse

2019 LCR need: 433 MW.

2023 LCR need: No requirement.

- One unit of Ormond Beach will be needed to meet the LCR (until Moorpark-Pardee #4 transmission project is in service).

Category B

No requirement.

Big Creek/Ventura Overall

Category C

Contingency: Sylmar-Pardee #1 or #2 230 kV line followed by Lugo-Victorville 500 kV or vice versa.

Limiting component: Remaining Sylmar-Pardee 230 kV line.

2019 LCR need: 2,614 MW.

2023 LCR need: 2,690 MW.

Category B

Contingency: Sylmar-Pardee #1 or #2 230 kV line with Ormond #2 (2019 case) or Pastoria combined cycle module (2023 case) out of service.

Limiting component: Remaining Sylmar-Pardee 230 kV line.

2019 LCR need: 2,333 MW.

2023 LCR need: 2,212 MW.

Changes

Since last year:

1) Updated NQC
2) 2019 load forecast is up by 360 MW vs. 2018. Overall LCR is up by 293 MW.
3) 2023 load forecast is up by 149 MW vs. 2022. Overall LCR is up by 195 MW of which 102 MW is due to increase deficiency triggered by resource retirements in the area.

Since last stakeholder meting:

1) Updated NQC
2) Updated the 2023 LCR for the Santa Clara Sub-area to include sensitivity to location and reactive power capability of new resources.

THANK YOU

Your comments and questions are welcome.

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