Public Discussion—CAC

April 8, 2022

Recommendations:

Four Changes/Additions to the “Example Evaluation Summery” Chart
Reference: Page 17, February A11, 2022, CAC Presentation

The Plan also needs to identify the SDCP/CAISO interface responsibilities

361 Words

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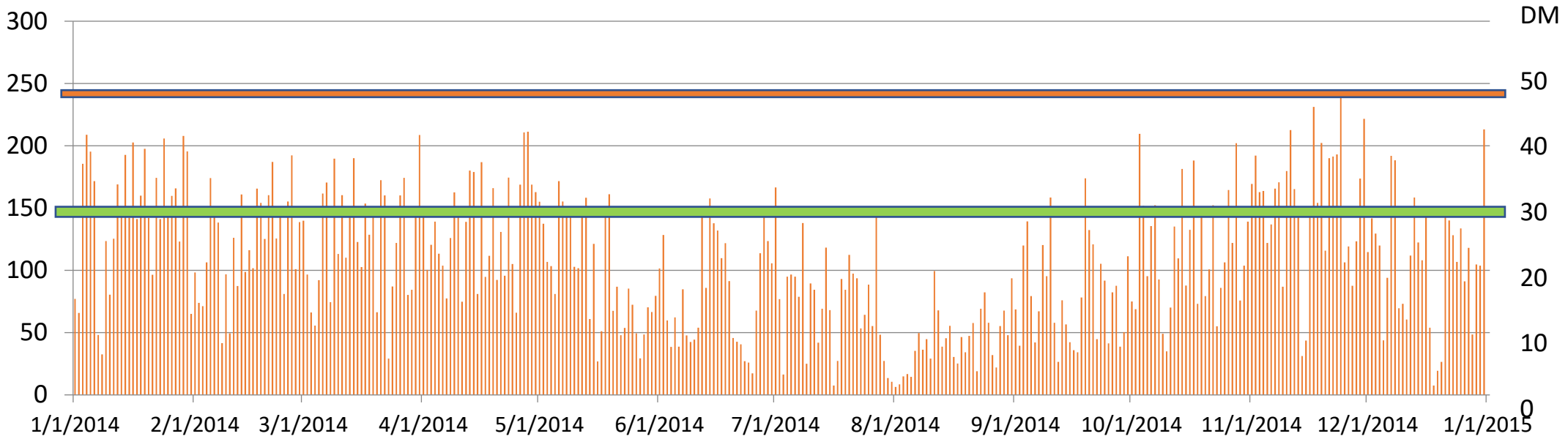
Planning Chart: Four Recommended Changes

- Change Column 4 heading to “MW(?) and MWh”
  - Identifies the Energy source and energy storage parameters
  - Example : Viking project entry would be: 100(S) and 150/600
- Add a column for percent of major components Made in the USA/Not China
- Add numerical weight for each column and sum the weights for total value
- Add a new Column 5 with a heading of “MTCO2”
  - The entry would be the value of metric tons of CO2 that will be emitted annually for Natural Gas Make Up
  - See Next Chart page 3

Midcontinent Independent System Operator (MISO) Wind Production (GWh)



- MISO allocates power in 15 Midcontinent States, has a CF of 0.44 @ 240 GWh
- Assume Duran Mesa (DM) will have a similar profile and Capacity Factor (CF)
- 30 MW Cutoff (Green Bar/Right Axis) would lose about 6% of the energy.
- Filling In the energy required below 30 MW with natural gas electricity would have a CF of 0.29, and generate 54,000 mtCO2 annually for Duran Mesa

	ROM Estimate of Metric Tons of CO2 (mtCO2) for Duran Mesa Natural Gas Makup			
	Item	**Reference**	**Result**	**Units**
A	B	C	D	E
	Wind Electrical Energy Data from MISO 2014 Excel Spreadsheet			
1	Peak Daily 11-20-2014	2014 MISO data	240.00	GWh
2	Total Annual MISO Wind MWh	2014 MISO data	38920	MWh
3	MISO Average Daily Output	38290/365	106.63	GWh
4	MISO Wind Capacity Factor	106.6/240	0.44	CF
5	MISO 2014 less than 150 MWh	Sheet Calculaion	36508	MWh
6	Capacity Factor for 150 MWh	106.6/150	0.71	CF
7	Capacity Factor of Make up	1-.071	0.29	CF
	Duran Mesa (DM) Equivalence Calculations			
8	Annual 30 MW DM output	30*24*365*.71	186,588	MWh
9	Make up needed for .29 CF	30*24*365*.29	76,212	MWh
10	Convert to mtCO2-EPA factor	0.709 mt/MWh	54,034	mtCO2

San Diegans need visibility into the SDCP/CAISO interface

- Recommend that the Power Requirement “look ahead” chart list all the **existing** major SDCP wind, solar and natural gas PPA’s, as well as the remaining power that is the CAISO responsibility
- Chart Type 1 would list SDCP projects going forward
- Chart Type 2 (Peaking Power) would list the worst-case renewable peaking power amount to be supplied as well as the maximum non-renewable power to be supplied by SDG&E and CAISO
- Without the CAISO interface definition, how do San Diegans know what amount of power/energy storage is required?