DOCKETED	
Docket Number:	24-IEPR-03
Project Title:	Electricity Demand Forecast
TN #:	260496
Document Title:	The City of Santa Clara dba Silicon Valley Power (SVP) Comments - The City of Santa Clara dba Silicon Valley Power (SVP) Comments on the California Energy Commission Docket No 24-IEPR-03
Description:	N/A
Filer:	System
Organization:	The City of Santa Clara dba Silicon Valley Power (SVP)
Submitter Role:	Public
Submission Date:	12/5/2024 3:10:53 PM
Docketed Date:	12/5/2024

Comment Received From: The City of Santa Clara dba Silicon Valley Power (SVP)
Submitted On: 12/5/2024
Docket Number: 24-IEPR-03

The City of Santa Clara dba Silicon Valley Power (SVP) Comments on the California Energy Commission Docket No 24-IEPR-03

Additional submitted attachment is included below.

December 5, 2024

California Energy Commission
Docket Office, MS-4
Re: Docket No. 24-IEPR-03
1516 Ninth Street
Sacramento, CA 95814-5512
docket@energy.ca.gov

Re: The City of Santa Clara *dba* Silicon Valley Power (SVP) Comments on the California Energy Commission Docket No. 24-IEPR-03: Commissioner Workshop on the California Energy Demand Forecast Results

Dear Commissioners:

The City of Santa Clara *dba* Silicon Valley Power (SVP) appreciates the opportunity to submit comments for consideration by the CEC as it updates the 24-IEPR Forecast, which will guide policy and planning efforts across state agencies and at electric utilities. SVP's comments are summarized here and expanded on further below:

- The CEC should continue to work with other state agencies to develop a process for mid-cycle updates to the IEPR Forecast to better inform short-term planning and the California Independent System Operator (CAISO) Transmission Planning Process (TPP).
- SVP requests that the CEC adopt SVP's updated demand forecast to ensure the rapid load growth being experienced by SVP can be reliably served by the CAISO Controlled Grid which surrounds the SVP transmission system.

I. The CEC should continue to work with other state agencies to develop a process for mid-cycle updates to the IEPR Forecast to better inform short-term planning and the CAISO TPP. While annual updates to the IEPR Forecast drive most long-term planning efforts, the IEPR Forecast is also used to inform short-term planning efforts such as year-ahead Resource Adequacy (RA) planning where mid-cycle updates can provide additional relevant insights. SVP continues to see significant load growth from large scale data center and urban development within its service territory and has regularly engaged the CEC to provide updates regarding these projects as they continue to energize and ramp. The impacts of this rapid growth are continued to be closely tracked, studied, and mitigated through projects both internally within SVP's system, and externally through the CAISO TPP process to ensure overall system reliability. SVP applauds CEC staff for continuing to proactively engage with stakeholders to ensure forecasts are accurate and current in a rapidly changing environment.

II. SVP requests that the CEC adopt SVP's updated demand forecast to ensure the rapid load growth being experienced by SVP can be reliably served by the CAISO Controlled Grid which surrounds the SVP transmission system. SVP has continued to remain steadfast in our commitment to providing the CEC and other statewide planning agencies with the latest information regarding our loads and electric system in alignment with statewide planning studies and processes[1]. SVP has realigned its internal forecasting schedules to better align with CEC's forecasting initiatives and have continued to refine and improve our internal assessments of existing, permitted, and planned commercial activity within its service territory. The predominant commercial activity is related to data center development that SVP has broken down into the following four (4) Groups for included in our load forecast.

- Group 1 – Customer facilities which have active building permits with the City of Santa Clara and have an agreement with the City of Santa Clara for SVP to build electric infrastructure to connect the Customers facilities to the electric grid. Customer facilities with backup generation exceeding 49 MW's also have received a Small Power Plant Exemption (SPPE) from the CEC.
- Group 2 – Customer facility plans which have been approved by the City of Santa Clara's Project Clearance Committee to proceed to receiving building permits, are in the process of completing an EIR/CEQA that includes the SPPE from the CEC for facilities with backup generation greater than 49MW's and have a funding agreement with the City of Santa Clara allowing SVP to work with the customer on designing the electric infrastructure required to serve the new load.
- Group 3 – Customers which are in the initial stages of planning their development and are working with City of Santa Clara departments. This can include involvement in the City of Santa Clara's Project Clearance Committee (PCC), initiating system impact studies with the City of Santa Clara's storm, sewer, traffic, and electric systems.
- Group 4 – Customers which are engaging with SVP, working with engineers to determine the general site layout, and own the land to be developed but are not in PCC yet.

These four project groups are incorporated into SVP's demand forecast through continuous customer outreach and monitoring. In support of ongoing statewide planning initiatives, for SVP's 24-IEPR-03 update[2] we have provided the full 15-year horizon (2025-2040) in alignment with SVP's CAISO TPP 25/26 base case model submission per FERC Order 980. Please see the attachment which describes how these groups are incorporated into SVP's updated demand forecast.

[1] ISO CEC and CPUC Memorandum of Understanding, Posted 01/19/2023
[2] Update to TN#253528, Docketed 12/05/2023 in 23-IEPR-03

III. Conclusion

SVP wants to thank the California Energy Commission staff for working with us to gain understanding of the unique situation SVP is experiencing resulting from the load growth caused primarily by new Data Centers. SVP appreciates the CEC for considering the above comments and we look forward to continuing our partnership with stakeholders in the development of the 2024 IEPR Update. Please do not hesitate to contact me at (408) 315-8528 with any questions or concerns you may have. I am available to discuss these matters further at your convenience.

Sincerely,

Eric Shum, P.E.
Electric Utility Engineer
Silicon Valley Power

Attachments:

Attachment 1 – SVP Updated Load Forecast Separated by Project Groups

Attachment 1- SVP Updated Load Forecast Separated by Project Groups

Form 1.5b - SVP

California Energy Demand SVP 1-in-2

SVP Total Load (MW)

Balancing Authority	Agency	2023	2024*	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Silicon Valley Power 1-in-2 Forecast**	**670**	**717**	**801**	**846**	**895**	**948**	**1,005**	**1,047**	**1,140**	**1,205**	**1,264**	**1,316**	**1,359**	**1,403**	**1,431**	**1,457**	**1,482**	**1,505**
	Total Group #1 + #2 + #3 + #4 + 12kV Distribution Projects**			**61**	**99**	**152**	**206**	**266**	**310**	**402**	**466**	**528**	**568**	**607**	**650**	**679**	**705**	**729**	**753**
	Total Group #1 + #2 + #3 + #4			**24**	**52**	**82**	**115**	**142**	**164**	**232**	**279**	**325**	**364**	**403**	**446**	**475**	**501**	**525**	**549**
	Total Group #1* **			**20**	**45**	**71**	**95**	**114**	**135**	**155**	**177**	**197**	**210**	**223**	**242**	**245**	**245**	**245**	**245**
	Total Group #2* **			**4**	**7**	**12**	**20**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**	**22**
	Total Group #3			**0**	**0**	**0**	**0**	**0**	**0**	**15**	**25**	**35**	**45**	**54**	**64**	**74**	**84**	**94**	**104**
	DC15			0	0	0	0	0	0	5	8	11	14	17	20	23	26	29	32
	DC16			0	0	0	0	0	0	5	7	9	11	13	15	17	20	22	24
	DC21			0	0	0	0	0	0	5	10	14	19	24	29	33	38	43	48
	Total Group #4			**0**	**0**	**0**	**0**	**5**	**7**	**39**	**55**	**71**	**86**	**102**	**118**	**134**	**150**	**164**	**178**
	DC17			0	0	0	0	0	0	5	7	9	12	14	16	18	21	23	25
	DC22			0	0	0	0	5	7	9	12	14	16	18	20	23	25	26	26
	DC27			0	0	0	0	0	0	5	7	8	10	12	13	15	17	18	20
	DC32			0	0	0	0	0	0	5	9	13	17	21	25	29	32	36	40
	DC34			0	0	0	0	0	0	5	7	8	10	12	14	15	17	19	20
	DC36			0	0	0	0	0	0	5	7	9	12	14	16	18	20	23	25
	DC38			0	0	0	0	0	0	5	7	9	10	12	14	16	17	19	21
	Total 12kV Distribution Projects			**37**	**46**	**69**	**91**	**125**	**146**	**170**	**187**	**203**	**204**	**204**	**204**	**204**	**204**	**204**	**204**
	Data Center			20	19	27	33	46	46	50	50	50	50	50	50	50	50	50	50
	Non-Data Center			17	27	42	59	79	100	120	137	153	154	154	154	154	154	154	154

*Actual recorded Instantanous System Peak 10/07/2024 (~1-in-20 weather) 716.5MW at SVP's CAISO NCP1 Meter.

**No Electrification Load Modifiers applied. Additional known active/upcoming load-adding projects with schedules currently under scoping are not included and will be updated for 25-IEPR.

***Group 1 & 2 projects energized and/or scheduled to energize within SVP's near-term operations horizon are presented in aggregate for customer confidentiality.

Form 1.5a - SVP

California Energy Demand SVP 1-in-2

SVP Total Energy to Serve Load (GWh)

Balancing Authority	Agency	2023	2024*	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Silicon Valley Power 1-in-2 Forecast**	**4,588**	**4,688**	**5,719**	**6,082**	**6,457**	**6,879**	**7,287**	**7,601**	**8,294**	**8,798**	**9,202**	**9,580**	**9,896**	**10,243**	**10,423**	**10,610**	**10,788**	**10,989**
	Total Group* #1 + #2 + #3 + #4 + 12kV Distribution Projects**			**434**	**708**	**1,095**	**1,495**	**1,931**	**2,255**	**2,927**	**3,401**	**3,841**	**4,135**	**4,418**	**4,750**	**4,945**	**5,132**	**5,310**	**5,496**
	Total Group* #1 + #2 + #3 + #4**			**169**	**377**	**595**	**832**	**1,028**	**1,193**	**1,687**	**2,036**	**2,365**	**2,648**	**2,932**	**3,259**	**3,459**	**3,645**	**3,823**	**4,005**
	Total Group #1			**140**	**324**	**511**	**686**	**829**	**978**	**1,130**	**1,290**	**1,434**	**1,531**	**1,627**	**1,764**	**1,780**	**1,780**	**1,780**	**1,785**
	Total Group #2			**29**	**52**	**83**	**146**	**163**	**163**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**	**164**
	Total Group #3			**0**	**0**	**0**	**0**	**0**	**0**	**108**	**181**	**252**	**324**	**396**	**469**	**540**	**612**	**684**	**758**
	DC15			0	0	0	0	0	0	36	59	81	103	125	148	169	192	214	237
	DC16			0	0	0	0	0	0	36	51	67	82	97	112	127	142	158	173
	DC21			0	0	0	0	0	0	36	71	105	140	174	209	243	278	313	348
	Total Group #4			**0**	**0**	**0**	**0**	**36**	**52**	**285**	**401**	**515**	**630**	**745**	**862**	**974**	**1,089**	**1,195**	**1,298**
	DC17			0	0	0	0	0	0	36	53	69	85	102	118	134	151	167	184
	DC22			0	0	0	0	36	52	68	85	101	117	133	149	165	181	189	189
	DC27			0	0	0	0	0	0	36	49	61	73	85	98	110	122	134	147
	DC32			0	0	0	0	0	0	36	65	93	122	150	180	208	236	265	294
	DC34			0	0	0	0	0	0	36	49	61	74	86	99	111	124	136	149
	DC36			0	0	0	0	0	0	36	52	68	84	101	117	133	149	165	181
	DC38			0	0	0	0	0	0	36	49	62	75	88	101	113	126	139	152
	Total 12kV Distribution Projects			**191**	**209**	**305**	**391**	**540**	**602**	**690**	**739**	**781**	**785**	**785**	**787**	**785**	**785**	**785**	**787**
	Data Center			144	138	197	238	331	332	365	366	365	365	365	366	365	365	365	366
	Non-Data Center			47	71	108	153	209	270	325	373	416	420	420	421	420	420	420	421

*Estimated- billing and adjustments have not been completed or reported for CY2024.

**2023 are actual recorded retail sales. 2023 & 2024 include distribution losses. 2025-2040 do not include distribution losses (historically 2-3% for SVP).

***Average weighted load factor by customer rate schedule class applied to each Group. No Electrification Load Modifiers applied.