Application No.: 14-11-016
Exhibit No.:
Witness: Nebiyu Yimer

Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area.	Application 14-11-016

TESTIMONY OF NEBIYU YIMER
ON BEHALF OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Southern California Edison Company (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area.	Application 14-11-016

TESTIMONY OF NEBIYU YIMER ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Q. What is your name and by whom are you employed?

A. My name is Nebiyu Yimer. I am employed by the California Independent System Operator Corporation (CAISO), 250 Outcropping Way, Folsom, California as a Regional Transmission Engineer Lead.

Q. Please describe your educational and professional background.

A. I hold a Master of Science degree in Renewable Energy from University of Oldenburg, Germany and a Bachelor of Science degree in Electrical Engineering from Addis Ababa University, Ethiopia. I have 20 years of Transmission Planning experience in California, Canada and Ethiopia. I am a licensed Professional Electrical Engineer in the province of Alberta, Canada.

Q. What are your job responsibilities?

A. I am one of a group of engineers responsible for planning the CAISO controlled transmission system in southern California to ensure compliance with North American Electric Reliability Corporation (NERC) reliability standards, Western Electricity Coordinating Council (WECC) regional criteria, and CAISO Transmission Planning Standards in the most cost effective manner. I performed the most recent CAISO local capacity requirements (LCR) technical analysis for the Moorpark sub-area for the 2017 local capacity technical study process.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the results of CAISO's analysis regarding the Moorpark sub-area need identified in Rulemaking (R.) 12-03-014 and addressed through Decision (D.) 16-05-050. Specifically, my testimony addresses whether there is a residual unmet LCR need in the Moorpark sub-area area and whether the 54 MW Ellwood refurbishment contract and the associated 0.5 MW energy storage contract with NRG California South LP address any residual need.

Q. Please provide an overview of the results of your analysis.

A. The CAISO's analysis indicates that absent generation at the Ellwood or Mandalay 3 facilities, there is a residual unmet LCR need in the Moorpark sub-area in the amount of 29.6 MW as shown in Table 1 below. Together, the 54 MW Ellwood Refurbishment contract and the associated 0.5 MW energy storage contract with NRG California South LP would adequately address this residual need.

Table 1

Available local resources in 2021 that are not netted with load excluding Ellwood and Mandalay 3 (MW)	462.4
2021 LCR need (MW)	492
Deficiency (MW)	29.6

Consistent with the CAISO's previous analysis in this proceeding and the assumptions and scenarios developed by the Commission, the Mandalay 3 facility is considered to be offline due to the age of the facility.[1]

[1] The Commission develops assumptions and scenarios for generation resources in the long-term procurement planning process. The 2016 assumptions and scenarios can be found here at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M162/K005/162005377.PDF. The "mid" level retirement

Q. Please explain the results of the CAISO's LCR analysis for the Moorpark sub-area conducted for the 2017 local capacity technical study process.

A. The CAISO identified the most critical contingency in the Moorpark sub-area as the loss of the Moorpark-Pardee 230 kV #3 line followed by the loss of the Moorpark-Pardee 230 kV #1 and #2 lines, which would cause voltage collapse. The contingency established a 2021 LCR of 492 MW.[2] The LCR amount does not count several small generators and Commission-authorized preferred resources in the area as generation resources. Instead, these resources (which have an aggregate capacity of 22.2 MW) were used to reduce load, and hence LCR, in the studies.

Q. Please briefly summarize the CAISO's generation assumptions for the Moorpark sub-area.

A. The CAISO analysis assumes there is a total of about 462 MW of local capacity that can be used to meet the 2021 LCR need for the Moorpark sub-area not counting Ellwood (54 MW) and Mandalay 3 (130 MW). Attachment 1 summarizes the CAISO's assumptions regarding the available local capacity. As noted above, 22.2 MW of local capacity comprised of small generators and authorized preferred resources were used to lower load (and hence the LCR) and, therefore, to avoid double-counting, they are not counted towards meeting the available capacity amount. Existing once-through-cooled generators are excluded because they are expected to retire prior to 2021 in compliance with existing regulations.

Q. Please summarize your testimony.

A. Absent generation at the Ellwood or Mandalay 3 facility, the CAISO found a Moorpark sub-area LCR need of 29.6 MW. The 54 MW Ellwood Refurbishment contract and related 0.5 MW energy storage contract would meet the identified LCR needs. The CAISO understands no other resources are available to meet this need.

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scenario assumes that non-renewable facilities will retire at 40 years of age. See page 43 of the linked assumptions and scenarios.

[2] http://www.caiso.com/Documents/Presentation-Final2017LCRBigCreekVenturaLocalArea.pdf (slide 6)

As a result, the CAISO recommends that the Commission approve these contracts at this time.

Q. Does this conclude your testimony?

A. Yes, it does.

ATTACHMENT 1

Available resources in the Moorpark area to meet 2021 LCR[3]

Resource ID	Generator name	August NQC	Remarks	Available capacity (MW)	Explanation regarding available capacity
GOLETA_6_ELLWOD	Ellwood Energy Support Facility	54.0		0.0	Facility assumed to be unavailable
MNDALY_7_UNIT 3	Mandalay Gen Sta. Unit 3	130.0		0.0	Facility assumed to be unavailable
GOLETA_6_EXGEN30	Exxon Company USA Unit 1	0.3		0.3	
GOLETA_6_EXGEN	Exxon Company USA Unit 2	0.5		0.5	
MNDALY_6_MCGRTH	McGrath Beach Peaker	47.2		47.2	
SNCLRA_6_OXGEN	E.F. Oxnard Incorporated	34.6		34.6	
SNCLRA_6_PROCGN	Procter And Gamble Oxnard II	44.2		44.2	
SNCLRA_6_WILLMT	Williamette	13.6		13.6	
N/A	CHARMIN	15.0	No NQC	15.0	
MOORPK_6_QF	Moorpark QFS	26.8	Not modeled	26.8	Same unit appears twice. Unit counted once to avoid double counting.
N/A	CAMGEN (O.L.S. ENERGY - CAMARILLO STATE HOSPITAL)	26.2	No NQC	0.0	
N/A	Demand response	18.1		18.1	
GOLETA_2_QF	Goleta QFS	0.1	Not explicitly modeled (netted with load)	0.0	These resources were already used to reduce load when establishing the 2021 LCR and are not counted to meet the residual need to avoid double counting.
GOLETA_6_GAVOTA	Point Arguello Pipeline Company	0.7		0.0	
GOLETA_6_TAJIGS	Tajiguas - Unit #1	2.9		0.0	
MOORPK_2_CALABS	Calabasas Gas-to-Energy Facility	4.2		0.0	
MOORPK_7_UNITA1	WEME- Simi Valley Landfill	2.1		0.0	
SNCLRA_6_QF	Santa Clara QFS	0.0		0.0	
N/A	LTPP 2012 Track 1 preferred resources	12.2	Modeled as negative load	0.0	
N/A	Puente	262.0		262.0	
			Total	**462.4**	

[3] Based on the local capacity resources list included in the ISO 2017 Local Capacity Technical Analysis Report which is available at http://www.caiso.com/Documents/Final2017LocalCapacityTechnicalReportApril292016.pdf. See pages 93-97 of the linked document.