



20/20

BUSINESS PROGRESS  
REPORT

NOVEMBER



Northern California Power Agency  
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# Generation Costs & Reliability

## Combustion Turbine Project

### Unit Operation for October 2020

Unit	Availability		Production			Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	295.8	MWh	CAISO / CAISO
	100.0%	100.0%	Unit 2	246.1	MWh	
Curtailments, Outages, and Comments:						
Unit 1: Normal operation.						
Unit 2: Normal operation.						
Unit	Availability		Production			Reason for Run
CT1 Lodi	98.2%		365.1 MWh			CAISO
Curtailments, Outages, and Comments:						
10/01 @ 00:00 - 08:00: Station Battery Trouble						
10/12 @ 12:18 - 17:23: Bleed Valve Trouble, OMS 9268636						
Unit	Availability		Production			Reason for Run
CT2 STIG	90.1%		7,384.2 MWh			CAISO
Curtailments, Outages, and Comments:						
10/12 @ 05:10 - 07:34: Lube Oil Temp Instrumentation						
10/12 @ 09:10 - 09:30: Lube Oil Temp Instrumentation						
10/14 @ 16:14 - 21:10: Nozzle Steam Issue, OMS 9279953						
10/17 @ 00:02 - 10/19 @ 15:54: PG&E Gas Supply Outage, OMS 9271929						
10/26 @ 06:29 - 07:57: Gas Compressor Trip, 9332421						
10/26 @ 09:02 - 09:51: Drum Level Controller, OMS 9333237						
Unit	Availability		Production			Reason for Run
LEC	88.4%		87,957 MWh			CAISO
Curtailments, Outages, and Comments:						
10/17 @ 00:13 - 10/19 @ 14:22: PG&E Gas Supply Outage, OMS 9271927 & 9271929						
10/28 @ 00:00 - 23:59: Steam Leak Repair, OMS 9335388						

**Maintenance Summary – Specific per asset above.**

## Geothermal Facilities

### Availability/Production for October 2020

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
<b>Unit 1</b>	77.69 %	16,107 MWh	U1 was off line until 0940 due to PG&E line outage U1 was off line 10/2 1130 until 10/6 1915 due to PG&E line outage U1 was off line 10/25 1200 until 10/28 1630 due to PG&E PSPS event
<b>Unit 2</b>	77.42 %	*16,260 MWh	U2 was off line until 1100 due to PG&E line outage U2 was off line 10/2 1130 until 10/6 1910 due to PG&E line outage U2 was off line 10/25 1200 until 10/28 1800 due to PG&E PSPS event
<b>Unit 3</b>	N/A %	N/A	Unit 3 remains out of service.
<b>Unit 4</b>	91.06 %	26,081 MWh	U4 was off line 10/25 1300 until 10/28 1630 due to PG&E PSPS event
<b>Southeast Geysers Effluent Pipeline</b>	57 %	101.3 mgallons	Average flow rate: 2,359 gpm
<b>Southeast Solar Plant</b>	N/A	74,012 KWh	Year-to-date KWh: 3,174,360
<b>Bear Canyon Pump Station Zero Solar</b>	N/A	54,463 KWh	Year-to-date KWh: 4,547,453

\* Accounts for an additional 2,103 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

## Hydroelectric Project

### Availability/Production for October 2020

Units	Availability	Net Electricity Generated	Out-of-Service
<b>Collierville Unit 1</b>	61.2%	3192 MWh	CV Unit 1 was out of service on 10/10/20 to 10/11 from 0616 to 1800 for dual unit maintenance and intake trash rack cleaning and on 10/11/20 to 10/22/20 from 1800 to 1632 for Annual Maintenance.
<b>Collierville Unit 2</b>	96%	12681 MWh	CV Unit 2 was out of service on 10/10/20 to 10/11/20 from 0616 to 2026 for Dual Unit maintenance and intake trash rack cleaning.
<b>Spicer Unit 1</b>	91%	407 MWh	NSM1 was out of service on 10/7/20 from 0739 to 1013 for transfer trip loss of guard signal, on 10/25/20 to 10/28/20 from 1505 to 1007 for PSPS.
<b>Spicer Unit 2</b>	90%	1152 MWh	NSM2 was out of service on 10/7/20 from 0739 to 1031 for transfer trip loss of guard signal, on 10/25/20 to 10/28/20 from 1505 to 1320 for PSPS.
<b>Spicer Unit 3</b>	91%	188 MWh	NSM3 was out of service on 10/7/20 from 0739 to 1017 for transfer trip loss of guard signal, on 10/25/20 to 10/28/20 from 1505 to 1011 for PSPS.

#### Operations & Maintenance Activities:

- CMMS work orders
- CV Intake Trash Rack Cleaning (McKays)
- CV Units 1 and 2 Dual Unit Outage
- CV Unit 1 Annual Maintenance
- NSM Campground Closure- Winterizing

## Environmental, Health & Safety (EH&S) Projects Incident Reports

- There were no Cal OSHA Recordable, Lost Time, or vehicle accidents in the month of October. There was one Cal OSHA Recordable incident which occurred at NCPA's Hydro facility. On October 11 while working at McKays Point Diversion Dam in support of the diving operation to remove debris from the Colleville power tunnel intake, a Hydro Technician punctured his hand on a frayed strand of wire rope as he was helping to lift a debris basket. Medical attention was given to the employee.
- Find below a Safety Report that highlights the following areas: recordable incidents and lost time accidents (LTAs) reported this period and this calendar year; the number of days since last recordable or LTA; the number of work hours since last recordable or LTA; and vehicle accidents reported this month and this calendar year. In September of 2012, Generation Services completed an internal audit of its records with the results reflected in this report and was updated through the payroll period ended October 24, 2020.
- The "CT Group" column reflects the combined safety numbers of all CT employees. Beginning with the November 2009 report, the CT Group Column also includes Lodi Energy Center staff.

### October 2020 Generation Services Safety Report

	Hydro	GEO	CT Group *	NCPA HQ **
Cal OSHA Recordable (this month)	1	0	0	0
Cal OSHA Recordable (calendar year)	1	0	0	0
Days since Recordable	13	823	2,028	3,012
Work Hours Since Last Recordable	1,534	172,180	303,888	2,598,277
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	4,762	1,891	9,932	6,025
Work Hours without LTA	434,105	389,155	714,432	2,220,295
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	1	0	1	0

\* CT Group: Combines CT-1, CT-2 and LEC Operations

\*\* NCPA HQ: Roseville employees at the Main Office

Data originates from OSHA logs, HR records and payroll information.  
Days and Hours are calculated through pay period ended October 24, 2020.

# Power Management/NCPA Market Results

## Dispatch and Schedule Coordination

- NCPA Dispatch and Schedule Coordination Center safely, reliably, and economically schedules, monitors, and manages NCPA and NCPA member power resources and loads 24 hours per day, 7 days per week on a continuous basis. This process includes balancing MSSA loads and resources on a 5-minute basis, optimizing NCPA resources and minimizing ISO costs.
- NCPA MSSA Load Data:

### **Current Year 2020 Data**

	<b>October 2020</b>		<b>Calendar Year 2020</b>	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	379.27 10/01 @1700	190,636	467.45 8/14 @ 1700	1,899,534
SVP	544.52 10/01 @1600	338,754	586.3 8/14 @ 1700	3,204,188
MSSA	922.07 10/01 @ 1700	529,390	1053.75 8/14 @ 1700	5,103,722

### **Last Year 2019 Data\***

	<b>October 2019</b>		<b>Calendar Year 2019</b>	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	339.83 10/24 @ 1700	187,135	478.77 8/15 @ 1700	1,950,814
SVP	515.82 10/24 @ 1600	319,577	587.78 6/11 @1600	3,110,262
MSSA	854.06 10/24 @ 1700	506,712	1057.99 8/15 @ 1700	5,061,076

\* Last year's data added for comparison purposes only

### **System Peak Data**

	<b>All Time Peak Demand</b>	<b>2020 Peak Demand</b>
NCPA Pool	517.83 MW on 7/24/06 @ 1500	467.45 8/14 @ 1700
SVP	587.78 MW on 6/11/19 @ 1600	586.3 8/14 @ 1700
MSSA	1070.79 MW on 9/1/17 @ 1700	1053.75 8/14 @ 1700

- NCPA MSSA has a Deviation Band with the CAISO, which is used as a performance measure by the CAISO. The ability to stay within this Deviation Band is a measure of NCPA Dispatch's ability to balance the MSSA Loads and Resources on a 5-minute basis. The following NCPA Deviation Band Performance table includes all deviations, including deviations from unit forced outages, metering and load outages, COTP, Western, and WECC curtailments.

<b>NCPA Deviation Band Performance</b>		
	<b>October 2020</b>	<b>Calendar Year 2020</b>
MSSA % Within the Band	98.68%	98.56%

- NCPA continues to operate in a split operation with the SC's working out of the backup control center and the system dispatchers working out of the primary control center due to COVID-19.
- CAISO issued a Restricted Maintenance Operations (RMO #2020002497) notification for 10/15/2020, 0600-2200 hours.
- CAISO issued a Restricted Maintenance Operations (RMO #2020002498) notification for 10/16/2020, 0600-2200 hours.
- NCPA issued an Everbridge PG&E Public Safety Power Shutoff (PSPS) notification on the following dates:
  - 10/12/2020, zones 2-5,8
  - 10/14/2020, zones 1-6,8
  - 10/21/2020, zones 1-5
  - 10/23/2020, zones 1-6,8
  - 10/25/2020, zones 1-5,8

### **Pooling, Portfolio Planning & Forecasting**

- NCPA Pool load during October 2020 was 190,507 MWh, or 100.0% of forecast despite extreme temperature variations as well as uneven demand due to Covid restrictions. Pool load during November may continue above normal compared to the same period a year ago, as weather-related heating demand increased early in the month and is now forecasted to continue.
- Lodi Energy Center (LEC) produced 15,816 MWh for the pool during October, reduced in part by two outages during the month. Despite the current volatile market pricing structure, LEC was projected to generate 24,287 MWh for the pool during November, though rising gas prices may serve to reduce economic generation from this earlier forecast.
- During October 2020, 0.00" of rain was recorded at the Big Trees gauge. Average October Big Trees precipitation is 3.38".
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been maintained at \$90/MWh.
- NSMR storage as of October 31, 2020 was at 82,381 acre feet. The historical average NSMR storage at the end of October is 92,103 acre feet. As of November 16, 2020 NSMR storage is 79,380 acre feet. The current NCPA Pool share of NSMR storage is 40,705 acre feet.
- Combined Calaveras Project generation for the Pool in October 2020 totaled 9.1 GWh, slightly up from 8.5 GWh in September 2020. The Pool's 9.1 GWh in October 2020 was less than the pre-month forecast of 12.7 GWh.
- Western Base Resource (BR) deliveries for the Pool during October 2020 were 22,596 MWh, including Displacement energy totaling 4,446 MWh. Energy received was nearly 150% of the pre-month forecast, with hydro resources once again critical

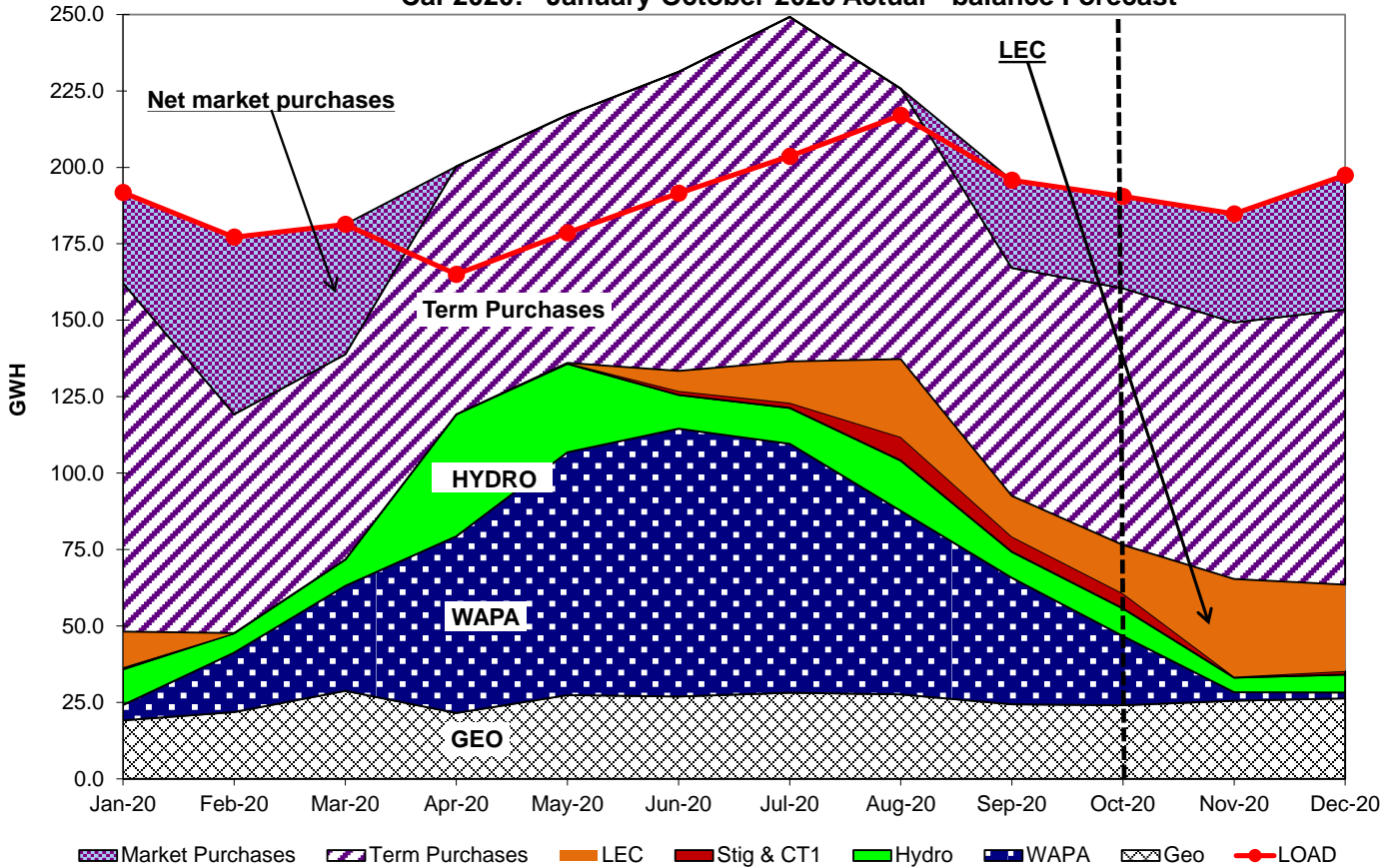


during the month's weather events. Western's forecast for the pool's share of November generation drops to 1,886 MWh.

- The PG&E Citygate gas index averaged \$3.885/MMBtu for delivery on November 12, 2020, dropping below the average PG&E gas price during October of \$3.992/MMBtu. Gas prices have generally increased this year as production curtailments cut into storage additions while power burn and LNG feed gas demand increase. The November 2020 PG&E Citygate Bidweek price is \$4.005/MMBtu, up 2.5 cents over the October Bidweek price and far different from March's \$2.335 as the era of gas oversupply appears to be over.
- Day-Ahead NP15 electricity prices averaged \$49.04/MWh (HLH) and \$34.80 (LLH) during October 2020, with evening ramp hour prices reaching as high as \$496 at TH\_NP15 on October 16.

## NCPA POOL RESOURCES

### Cal-2020: January-October 2020 Actual - balance Forecast



NCPA Pool Loads & Resources Value Summary									
	Peak and Energy Summary				Estimated Production Costs			Cost of Serving Demand	
	Oct-20				NCPA Pool				
	Coincident Peak (MW)	Total MWh	Pre-Month Forecast Values	Avg. MW	Cost/Revenue (Estimate)	Variable Cost (\$/MWh)	Totals	Avg (\$/MWh)	
<b>Demand</b>	379.3	190,507	190,439	256.1	N/A	N/A			
<b>WAPA</b>	-	22,596	15,103	30.4	\$ 902,345	\$ 39.93	<b>at Market Clearing Price</b>		
<b>Geothermal</b>	-	24,122	26,433	32.4	458,320	19.00	\$ 8,904,211	\$ 46.74	
<b>Hydro</b>	-	8,983	6,464	12.1	53,895	6.00	<b>at Variable Cost of Pool Generation</b>		
<b>Stig &amp; CTs</b>	-	4,940	55	6.6	307,294	62.21			
<b>LEC</b>	-	15,816	13,906	21.3	512,112	32.38			
<b>Contracts</b>	-	83,997	101,860	112.9	4,811,330	57.28	\$ 8,364,927	\$ 43.91	
<b>Market - Net</b> <small>(Net Sales = Negative)</small>	379.3	30,054	26,618	40.4	1,325,754	44.11			
<b>Net Total</b>	379.3	190,507	190,439	256.1	\$ 8,371,051	\$ 43.91			

Monthly Market Summary						
	Pool Energy (MWh)	HLH Avg MCP (\$/MWh)	Avg Variable Cost of Pool Generation (\$/MWh)	Forward Prices (EOX NP15 HLH Ask Prices)		
				NP15 10/1/2020 (\$/MWh)	11/12/2020 (\$/MWh)	
Jan-20	191,771	\$ 32.76	\$ 39.71	Nov-20	\$ 42.66	\$ 47.84
Feb-20	177,169	\$ 27.58	\$ 46.65	Dec-20	49.52	51.37
Mar-20	181,339	\$ 27.90	\$ 40.59	Jan-21	49.45	50.89
Apr-20	165,033	\$ 22.78	\$ 35.05	Q1 2021	\$ 41.38	\$ 43.73
May-20	178,601	\$ 20.85	\$ 37.53	Q2 2021	31.64	32.55
Jun-20	191,530	\$ 26.29	\$ 36.98	Q3 2021	50.22	52.59
Jul-20	203,610	\$ 27.80	\$ 37.25	CY2021	\$ 41.96	\$ 43.90
Aug-20	216,986	\$ 59.74	\$ 41.08	CY2022	38.60	41.20
Sep-20	195,756	\$ 46.66	\$ 45.40	CY2023	36.99	36.82
Oct-20	190,507	\$ 46.74	\$ 43.91	CY2024	36.94	36.17
Nov-20				CY2025	36.71	35.30
Dec-20				CY2026	36.57	35.16

**NOTES TO SUMMARY TABLE:**

- Peak and Energy Summary:**
- \* Monthly generation summary of Coincidental Peak (hour in which pool demand peaked), total MWh for the month, and pre-month forecasted values for report period.
  - \* Generation totals are for POOL SHARE of the projects.
  - \* Hydro totals include Collierville and Spicer generation.
- Estimated Production Costs:**
- \* Fixed project costs not included except for WAPA, where total month's project costs are used to calculate the average unit cost.
  - \* STIG and CT costs include forward natural gas and basis hedge transactions.
  - \* STIG & CT costs reflect \$2.60 and \$1.62/MWh variable O&M costs per 6-12-06 GSCA.
- Cost of Serving Demand:**
- \* Compares price of meeting total monthly demand with (1) Hourly pool market clearing price;
  - (2) Variable cost of pool gen. Pool Gen is sum of estimated costs divided by sum of generation

## **Industry Restructuring, Contracts and Interconnection Affairs**

### **Resource Adequacy Compliance Filings**

- NCPA made the following Resource Adequacy compliance filings with the CAISO for the compliance period January 2021:
  - Monthly System Resource Adequacy Demonstration (filed November 17, 2020)
  - Monthly Supply Plan (November 17, 2020)
  - Annual System Resource Adequacy Demonstration (Filed October 30, 2020)
  - Annual Supply Plan (Filed October 30, 2020)

### **Industry Restructuring**

NCPA is actively participating in a number of CAISO stakeholder initiatives on behalf of the members. The following is a brief description of key active initiatives:

#### **Extended Day-Ahead Market**

- Straw proposal comments due November 12, 2020. NCPA focused on transmission cost allocation equity.
- CAISO published Bundle 1 Straw Proposal and held stakeholder meeting. Bundle consists of Resource Sufficiency Evaluations (RSE), Congestion and Transfer revenue allocation, and Transmission cost allocation.
- RSE is relatively uncontroversial and is similar in concept to ISO/CPUC RA program in that it is intended to ensure that EDAM participants have sufficient capacity, transmission, flexibility, and reserves to serve own loads and prevent leaning on other participants. RSE is currently active in EIM. Congestion and Transfer revenue allocations relatively uncontroversial as well. Congestion is intra-BAA and allocated to load that pays for transmission. Transfers occur inter-BAA and will be allocated to transmission owners. The controversial topic is transmission cost allocation. CAISO proposes to declare most transmission costs as sunk and only apply usage fee to incremental exports and EIM wheeling transfers. NCPA and others are concerned that those paying for transmission will not be fairly compensated.
- This initiative will develop an approach to extend participation in the Day-Ahead market to the Western Energy Imbalance Market (EIM) entities in a framework similar to the existing EIM approach for the real-time market, rather than requiring full integration into the California ISO balancing area. The extended Day-Ahead market (EDAM) will improve market efficiency by integrating renewable resources using Day-Ahead unit commitment and scheduling across a larger area.

#### **Resource Adequacy Enhancements**

- Draft final proposal due November 3, 2020 has been pushed out to December 14, 2020.
- CAISO held a working group meeting on November 12, 2020 to review a supplement to the 5<sup>th</sup> revised straw proposal that focuses on the portfolio assessment.
  - The CAISO will conduct a monthly portfolio deficiency test of the shown RA fleet.

- The CAISO objective is to provide insight and transparency into the assessment model, methods, and initial findings that inform the portfolio assessment.
  - The study results and recent reliability events confirm the need to take interim measures that focus on net-load peak and the hours immediately following.
  - Deficiency is defined as any hour in which the production simulation shows the CASIO would have to call a Stage Two Emergency. This means the model shows the CAISO would have inadequate capacity to meet the aggregate of non-spin, spin, regulation, and load.
  - In addition to the current gross peak requirements, a secondary net-load peak requirement is needed. The two requirements would stay in place until there is a more comprehensive measure for resource adequacy.
  - To establish procurement obligations it is necessary determine if some level of load shedding is acceptable.
  - Two core challenges that must be addressed are:
    - Establishing a defined reliability criteria or loss-of-load expectation that determines procurement targets and backstop procurement trigger.
      - Annual, Seasonal, or Monthly RA program granularity? CAISO leaning towards annual as that is ISO/RTO standard.
      - The application of an annualized planning standard.
      - The desired service level reliability target.
        - Must be uniform across LRAs. LRAs planning to lower reserve margin are leaning on other LRAs since the CAISO manages the reliability of the grid uniformly.
    - Determining the quantity and attributes of capacity needed to address a portfolio deficiency.
  - Final proposal and presentation to CAISO Board scheduled for Q1 2021.
- Due to the rapid transformation of the resource mix in California, the CAISO is currently re-examining the CAISO Resource Adequacy requirements and rules. This initiative will explore changes to the CAISO's Resource Adequacy requirements and rules to ensure the resources providing reserve services are effectively supporting reliable operations of the grid.
  - CAISO is proposing massive overhauls to its RA program in conjunction with CPUC changes. Specific areas the CAISO is looking at are termination of the Resource Adequacy Availability Mechanism for System capacity and replacing it with "less complicated" counting rules similar to eastern RTOs, import eligibility, exemptions, and redefining Planned and Forced outages.
  - NCPA will continue to advocate for must offer obligation exemption due to existing LF-MSS balancing requirements.

#### Day-Ahead Market Enhancements

- CAISO delayed publication of next straw proposal and announced that it will propose enhancements to RUC. NCPA seeking clarity for if new Reliability Capacity product remains.
- CAISO responded to NCPA's proposed redlines regarding Load Following Metered Sub-system treatment but we will need to see how they fit in with the next proposal which is due for publication on Dec. 7, 2020.

- Rejected language exempting LFMSS from reliability cost allocations
  - Accepted IRP Tier 1 proposal to base cost on LFMSS net portfolio deviations
  - Rejected IRP Tier 2 proposal to base cost on LFMSS net portfolio deviations and countered by proposing to base cost on net metered demand
  - Rejected NCPA tariff redlines.
- This initiative will explore new Day-Ahead products that will address ramping needs between intervals and uncertainty that can occur between the Day-Ahead and real-time markets.
- CAISO reviewed the need for new products along with data supporting uncertainty concerns:
    - Uncertainty between Day-Ahead and real-time market has increased from 2017 to 2019 and CAISO operators are addressing this development with out of market actions which disrupts market efficiency
    - Historically, generators had higher certainty to know if they would be scheduled in real-time
    - Due to uncertainty and changing resource fleet, commitment decisions are no longer necessarily known
    - Gas, hydro, storage, and imports need to cover costs to be available for dispatch in real-time – this will be accomplished with imbalance reserves
- Two new products:
    - Imbalance Reserve Product (IRP) will be designed to address granularity and uncertainty between Day-Ahead and real-time markets:
      - Hourly product; 15-minute dispatchable; Biddable; Covers granularity difference and uncertainty between DAM and FMM; All awards are co-optimized and settled simultaneously; DAM has no energy price formation issue because the market solves all hours in a single optimization; Stepped relaxation parameters (proposed)
    - Reliability Capacity: replaces RUC process used to address gaps between bid in demand and forecast demand.
- Implementation is set to fall 2022.

### Transmission Access Charge Structure Enhancements

- CAISO has pushed the initiative back to Q4 2022 in the latest Policy Roadmap and Annual Plan. NCPA is drafting comments to request that it be brought back into 2021.
- Initiative is currently on hold pending developments from EDAM initiative.
- This initiative considers changes to the CAISO's current volumetric Transmission Access Charge (TAC) structure for recovering participating transmission owners' costs of owning, operating and maintaining transmission facilities under CAISO operational control. The CAISO will consider stakeholder input on the initiative scope, which will include possible changes to reflect the benefits of distributed resources in reducing future transmission needs.

- CAISO's draft final proposal includes a hybrid billing determinant consisting of volumetric and peak demand functions at an approximately 50/50 split in order to address costs shifts as well as the full impact of high coincident peak demand, low load factor UCD areas that have relatively lower volumetric use compared to high load factor areas. It received general support from the market and will be presented to the CAISO Board in 2021 and will be implemented at a to-be-determined point thereafter. The CAISO is working to align the TAC Board consideration with the Extended Day-Ahead Market (EDAM) process so they are aligned to the extent possible. The TAC proposal may possibly need to be updated if the EDAM proposal aspects related to transmission issues drive changes to the TAC initiative.
- NCPA performed an impact analysis and determined that NCPA members would mostly benefit or be indifferent to the new billing determinant so long as certain LFMSS benefits remain in place.

## Western

### Western Base Resource Tracking (NCPA Pool)

Western Base Resource Tracking - NCPA Pool							
	Actual			Costs & Rates			
	BR Forecast <sup>1</sup> (MWh)	BR Delivered (MWh)	Difference (MWh)	Base Resource & Restoration Fund (\$)	Monthly Cost of BR <sup>2</sup> (\$/MWh)	CAISO LMP Differential <sup>3</sup> (\$/MWh)	12-Mo Rolling Avg. Cost of BR <sup>4</sup> (\$/MWh)
Jul-20	83,801	81,392	(2,409)	\$1,825,459	\$ 22.43	\$ 0.13	\$ 27.37
Aug-20	61,985	59,998	(1,987)	\$1,826,020	\$ 30.43	\$ (0.23)	\$ 27.68
Sep-20	41,023	41,391	368	\$1,811,655	\$ 43.77	\$ 0.60	\$ 27.62
Oct-20	30,317	22,596	(7,721)	\$909,162	\$ 40.24	\$ 11.76	\$ 29.62
Nov-20	14,598	-	(14,598)	\$909,162	\$ 62.28	\$ -	\$ 30.39
Dec-20	13,128	-	(13,128)	\$909,162	\$ 69.26	\$ -	\$ 31.48
Jan-21	6,278	-	(6,278)	\$909,162	\$ 144.83	\$ -	\$ 32.21
Feb-21	16,372	-	(16,372)	\$909,162	\$ 55.53	\$ -	\$ 32.71
Mar-21	26,497	-	(26,497)	\$909,162	\$ 34.31	\$ -	\$ 33.17
Apr-21	41,629	-	(41,629)	\$1,982,665	\$ 47.63	\$ -	\$ 34.65
May-21	74,036	-	(74,036)	\$1,982,665	\$ 26.78	\$ -	\$ 35.43
Jun-21	93,177	-	(93,177)	\$1,982,665	\$ 21.28	\$ -	\$ 35.51
1/ As forecasted in NCPA 20/21 Budget							
2/ = (Western Cost + Restoration Fund)/BR Delivered, for Pool Participants only.							
3/ = (MEEA LMP - PG&E LAP LMP) using public market information (i.e. not settlement quality).							
4/ Based on BR Delivered (Actual) when available and BR Forecast in all other cases. Includes CAISO LMP impact.							

- NCPA Pool received 22,596 MWh Base Resource (BR) energy in October 2020. This includes 4,446 MWh of Displacement Energy for an estimated savings of \$26,052 or about \$5.85/MWh.
- Pool Members' total savings under Market Efficiency Enhancement Agreement (MEEA) for Pool Members was approximately \$213,490 in October 2020. The cumulative net MEEA savings for FY 2021 (July 2020 through October 2020) is about \$228,550.

## 2025 Base Resource Contract

- The contract service period begins January 1, 2025 and shall remain in effect through December 31, 2054, subject to prior termination. WAPA sent out the BR Contract electronically on September 15, 2020. Each entity will have six months to execute and return to WAPA by March 16, 2021.
- WAPA published their 10-Year Power Revenue Requirement (PRR) forecast (FY 2021 – FY 2030) on 11/10 to aid Base Resource Customer’s contract signing efforts. The PRR Forecast includes the Energy Imbalance Market (EIM) 10-Year forecast. The following is the summary table:

<b>FY</b>	<b>Forecasted CVP PRR</b>
2021(current PRR)	\$72,758,210
2022	\$74,575,170
2023	\$72,290,956
2024	\$76,056,179
2025	\$80,167,568
2026	\$82,182,216
2027	\$85,382,078
2028	\$87,565,157
2029	\$89,685,202
2030	\$93,370,577

\*The EIM forecasted information is included in the overall CVP 10-year PRR forecast.

## Interconnection Affairs

### PG&E Update

#### TO-18 Rate Case

- On October 15, 2020 FERC issued a ruling on the PG&E Transmission Owner Tariff 18 Filing.
- The ruling came over four years after the initial filing and over two years from an initial favorable decision back in 2018.
- The ruling is not the end of TO-18 as FERC has requested further testimony and briefs on ROE matters. The initial decision reduced ROE from 10.40% to 9.13%.
- Once ROE is decided, TO-18 rates will be effective for a 12 month period from March 1, 2017 – Feb 28, 2018.
- TO-19, which was settled at a TRR of 98.85% of TO-18 will be effective for a 14 month period from March 1, 2018 – April 30, 2019.
- TANC estimates (without ROE adjustment) a decrease in the HV TAC of \$0.3494/MWh and a decrease in PG&E’s LV access charge of \$1.167/MWh for the period March 1, 2017 through February 28, 2018.

- Request for rehearing on ruling is due by Nov 16 and by Dec 14 supplemental initial briefs/testimony on ROE is due.

#### Permanent Inter-Tie switch Between Geo Plants 1 and 2

- The permanent no load intertie switch has been approved by the CAISO. The switch can be used when either the Fulton or Lakeville line is out of service to combine the outputs of Geo Plant 1 and Plant 2.
- NCPA and PG&E are currently working on an operating procedure. ISO is implementing a full network model change which is scheduled to be complete the second week in December.

#### TO-20 Rate Case

- Partial settlement was filed at FERC towards the end of March 2020. Key items not settled are ROE, Capital Structure, and Depreciation.
- Joint Interveners have reached a settlement in principle on all remaining issues. PG&E is aiming to file settlement on October 15.

#### Cotenancy Agreement

- PG&E with support from NCPA and SVP filed an amendment that acknowledged CDWR's request for termination. The amendment rejected CDWR's request, pending resolution of the Cost of Removal dispute. All other matters have been delayed until this issue is resolved.
- On September 27, 2019 FERC rejected PG&E's amendment stating PG&E cannot unilaterally extend the term of the Agreement. FERC did not address the cost of removal aspect and the calculation methodology. NCPA has initiated discussions with members as to how much capacity from CDWR's share should NCPA take. Pending the outcome of the capacity discussion, NCPA and SVP will look at next steps. More updates will be provided to members as they become available.

#### Transmission Planning BPM Updated Modeling Data Submittal

- CAISO is requiring Generators to submit updated modeling data to ensure CASIO has current and accurate system information.
- NCPA has submitted updated data and power flow models for all Hydro, Geo, and CT units. The Alameda CTs have been deemed compliant by the ISO, however CAISO pointed out a few quality issues which NCPA is working to address. Hydro units have been deemed compliant and complete. ISO identified new deficiencies with the Geo Units, NCPA has submitted cured data and is awaiting CAISO review of the Geo Units.

#### Stakeholder Transmission Asset Review (STAR) Process

- NCPA's objective in PG&E's Stakeholder Transmission Asset Review process is to participate and influence lower cost alternatives where possible, identify projects which may benefit members, and introduce Member Specific Projects.



- On June 1, PG&E submitted a 10-year capital plan to all stakeholders. The list included 1,209 total projects (equal to or greater than \$1M), 989 total Non-ISO Approved/Self Approved Projects, 120 total Self Approved Projects that have not started construction, and over 600 supporting documents (Project Authorizations/Business Cases).
- NCPA filtered self-approved member specific projects and sent to all UD's for review and feedback, drafted stakeholders comments with more emphasis on projects which are in planning (i.e. not in construction phase), projects which fall under the "work requested by others" category, and projects which might be related to non-CAISO controlled facilities.
- PG&E held a stakeholder meeting on September 30<sup>th</sup>. Notable topics discussed was the accuracy of data, wildfire related cost especially in Tier 1 zones, network vs non-network upgrades, and breaker and half schemes across PG&E's territory. Next step is for PG&E to submit updated project data by December 1, 2020.

#### PG&E Annual Formula Rate Update

- The following is a comparison of 2020 and the new proposed rates for 2021:

	Calculation of PG&E Wholesale Rates	Rate Year 2021	Rate Year 2020
<u>Line</u>	<u>Description</u>	<u>Values</u>	<u>Values</u>
	<b>Calculation of High Voltage Access Charge</b>		
100	High Voltage TRR	\$1,020,007,111	\$788,444,596
101	Gross Load (MWh)	83,846,544	85,012,937
102	<b>High Voltage Access Charge (\$/MWh)</b>	<b>\$12.17</b>	<b>\$9.27</b>
	<b>Calculation of Low Voltage Access Charge</b>		
200	Low Voltage TRR	\$1,527,679,602	\$1,199,254,803
201	Gross Load (MWh)	83,846,544	85,012,937
202	<b>Low Voltage Access Charge (\$/MWh)</b>	<b>\$18.22</b>	<b>\$14.11</b>

- 2021 increase is mostly due to forecasted capital additions, O&M expenses, ROE, and Depreciation.
- We expect the 2021 rates to be lower by January 1 as a result of TO-20 settlement (especially on ROE) and negotiations between PG&E and the Joint Interveners from now until Nov 1st, 2020 on amounts that are excessive or unsupported. NCPA will monitor this and present final rates for 2021 to Members.

## **Debt and Financial Management**

- At the November Federal Open Market Committee meeting, members voted to keep short-term borrowing rates anchored in a range of 0 - 0.25%, where it has been since an emergency cut seven months ago in the early days of the coronavirus pandemic. Chairman Powell summarized the economy is growing but not near where it was before the pandemic hit. He also quoted, "I think that we're strongly committed to using these powerful tools that we have to support the economy during this difficult time for as long as needed and no one should have any doubt about that."
- The markets reacted little to the Fed news with the bond markets remaining relatively stable. However, the financial markets reacted favorably to the election outcome and largely discounted the pandemic surge. Democrats failed to win an overwhelming mandate, reducing the likelihood of extreme tax or fiscal policy changes. The S&P 500 (S&P) rose 7.3% during election week, its best weekly gain since April.
- The Finance Committee met on November 10<sup>th</sup> and provided an update to the committee of the long-term funding plan and status of NCPA's Other Post Employment Benefit program. The funding percentage continues to improve and reflected a 94% funded status as of June 2019. The Committee affirmed the continuation of funding at the 15-year amortization schedule. In addition, the committee directed staff to begin drafting a Pension Funding Policy designed to create budget stability and minimize risks associated with market volatility. The goal is to have a policy ready for Commission review and approval next year.

## **Schedule Coordination Goals**

### **Software Development**

- New applications and enhancements under development
  - ABISS (Accounting, Budget, Information and Settlements System) is under development. It is a new Business Intelligence Reporting tool to provide financial information to both NCPA and members.
  - Renewable Portfolio Standard Reporting app to be added as an enhancement to the Risk Management app. The report will provide members an automated RPS Balance Sheet of their RECs in a Compliance Period. Anticipated release first week of December 2020.
  - Enhancements to Pre-scheduler with MSG projected completion by Q2, 2021
- New Integrations into the Scheduling Suite
  - Wind Resource for East Bay Community Energy
  - Santa Clara's Central 40 Solar Resource
  - Sonoma Clean Power with its Wind and Solar Resources. Configuration of core applications on-going

- IS is facilitating PCWA's transition into NCPA Deal Manager and Risk Manager System scheduled to rollout in January 2021
- IS is also engaged in working with Accounting and its software consultant to enhance the financial reporting. Stakeholder sessions scheduled between Q4/2020 and Q1/2021.

## **Network**

- Progress continues to be made upgrading staff to Windows 10 with over 94% of the Agency on the new Operating System. IS staff are working with individual departments to upgrade the few remaining Windows 7 machines and anticipate to be completed in the coming weeks.
- IS and Dispatch met with NID staff to review the remote shutdown procedures for South Combie Powerhouse. The procedures were then updated and sent to NID staff for further review and plans to walk through them in the coming weeks.
- Operations and Support staff are working to migrate from the HQ Cisco core switch to a new Aruba stack for better performance and support. The project is expected to be completed by the end of the calendar year.
- IS continues working with EBCE and technical contractors to begin discussions on the upcoming Altamont Wind integration project, which is expected to Go Live by end of 2020.
- With the anticipation of the CAISO's new launch of ADS October 1<sup>st</sup>, both SCADA and System Administration staff worked with Developers and Dispatchers to deploy the new Market Instruction Dispatch System (MIDS) successfully. This is an automated process to help streamline dispatch instructions from the CAISO.
- Network upgrades for the business infrastructure has been 50% completed at Geo. This was an effort to replace aging equipment that was no longer supported.

## **NCPA Bills & Settlements**

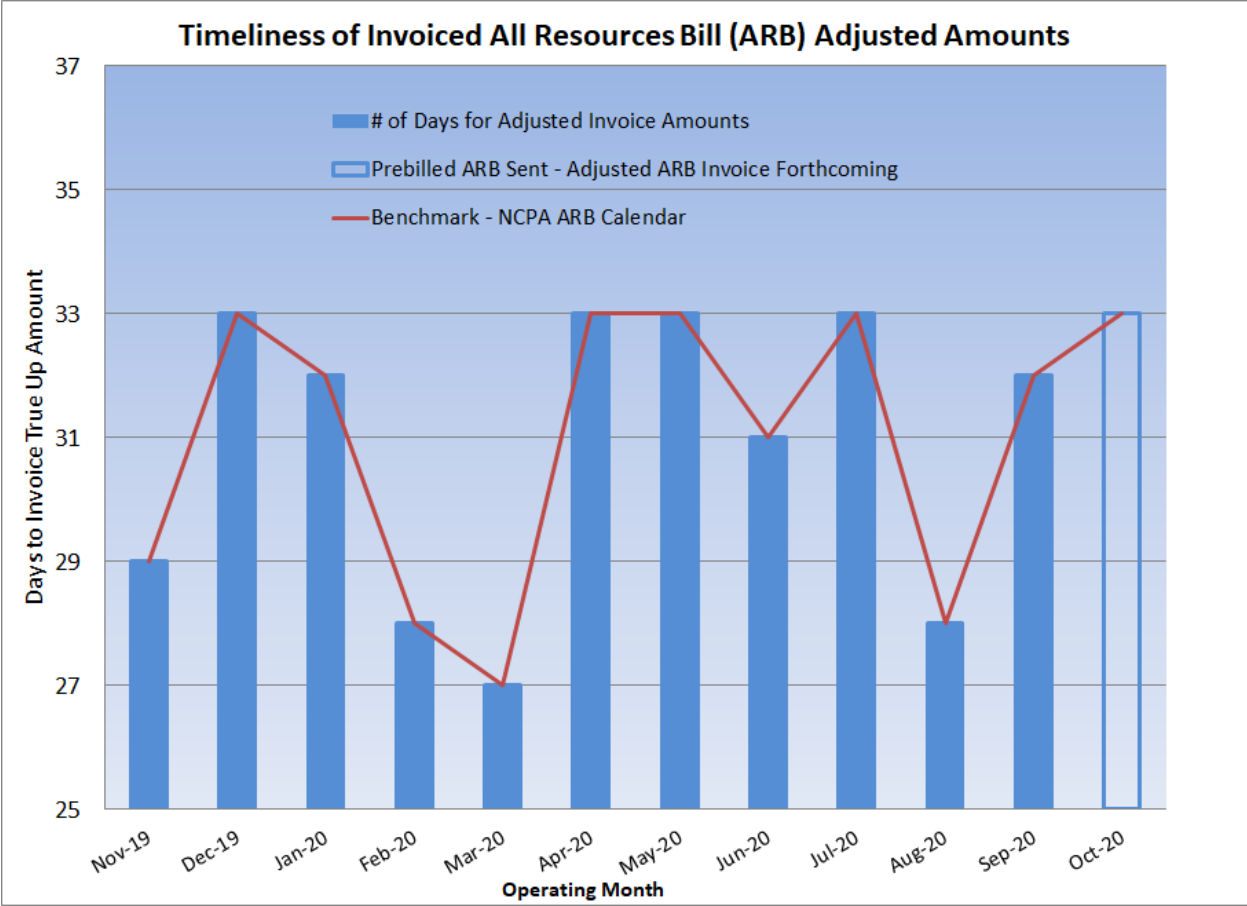
### **Progress Against the Strategic Plan**

*Adjusted Power bills, which include CAISO transactions, invoiced to members the following month subsequent to the monthly pre-billed ARB month. Timely ARB settlements adjustments help improve members' cash flow and reconciliation of their budget performance.*

The October 2020 NCPA All Resources Bill (ARB) monthly invoice sent to members on September 22, 2020 contains:

- October 2020 monthly pre-billed budget/forecast amounts;
- August 2020 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- July 2020 (2nd Adjustment) NCPA Project settlement true-up and T+12 business day recalculated CAISO settlement true-up allocations;
- May 2020 (3rd Adjustment) T+55 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- November 2019 (4th Adjustment) T+9 month recalculated CAISO settlement true-up allocations;

- January 2019 (5th Adjustment) T+18 month recalculated CAISO settlement true-up allocations;
- October 2017 (6th Adjustment) T+33 month recalculated CAISO settlement true-up;
- July 2017 (7th Adjustment) T+36 month CAISO settlement true-up;



**Legislative & Regulatory**

**Political Arena State/Federal/Western Programs**

**Customer Programs Update**

- NCPA Customer Programs selected 8 successful respondents to its RFP for electrification education and outreach services, and expects to take the 8 enabling agreements to the December 3<sup>rd</sup> Commission meeting for approval. The RFP was issued in response to requests from members participating in the Customer Programs working groups. The contracts will support Member efforts to enhance or develop electrification programs, and virtual offerings will bolster Members’ ability to reach their customers while unable to provide in-person events.
- The California Clean Fuel Reward (CCFR) launched on November 17, a point-of-sale price reduction of up to \$1,500 for the purchase or lease of any eligible new Battery Electric or Plug-in Hybrid vehicle from a participating automotive retailer. Consumers are now able to purchase an eligible vehicle from any enrolled retailer in

California and receive an instant reduction in the purchase price. The incentive is funded by California electric utilities participating in the Low Carbon Fuel Standard (LCFS), including nine NCPA members.

#### State Legislative Update

- NCPA L&R staff has been participating in discussions with the California Municipal Utilities Association and legislative offices regarding the importance of the Cap-and-Trade Program for supporting publicly owned utilities' local GHG emissions reduction initiatives. The program is expected to be an important topic of discussion in the coming legislative year.
- As part of its external affairs function, L&R staff issued a press release in October announcing the NCPA Power Management team's new partnership with Sonoma Clean Power to provide scheduling coordinator services.

#### Federal Legislative Update

- The NCPA L&R team hosted a virtual Speakers Forum to recognize this year's Public Power Week. Over 100 participants joined the event, including members of the broader public power and industry community who have regularly attended and supported our agency events. Both nationally-recognized pollster Frank Luntz, and Daniel Hartman, Managing Director at PFM Financial Advisors, LLC, offered their insights on the impacts of the COVID-19 pandemic on politics and the economy—and highlighted issues of particular interest to public power systems.

## **Human Resources**

### **Hires:**

None

### **Intern Hires:**

None

### **Promotions/Position Changes:**

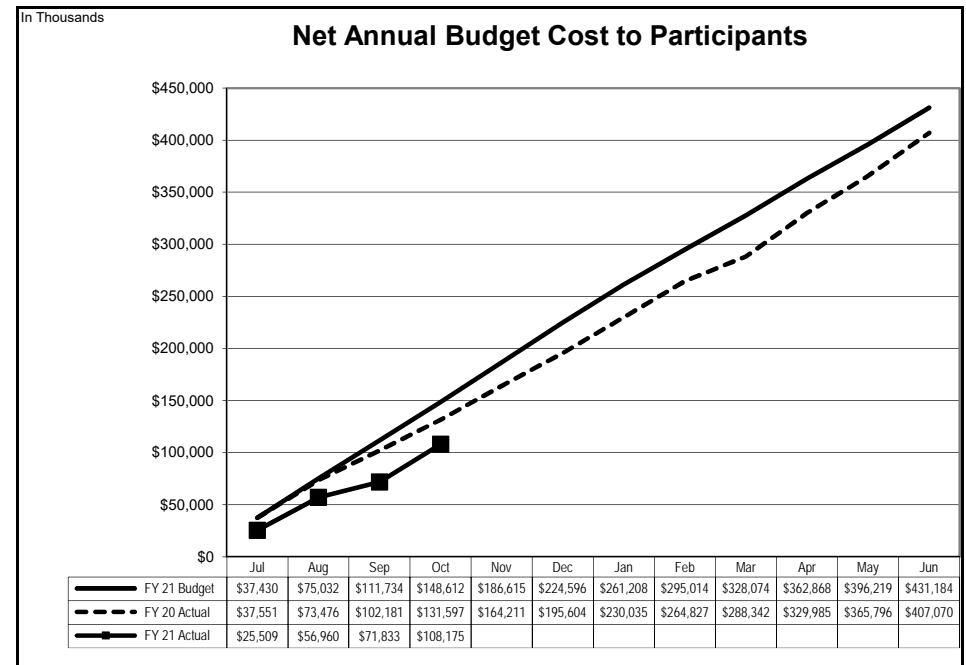
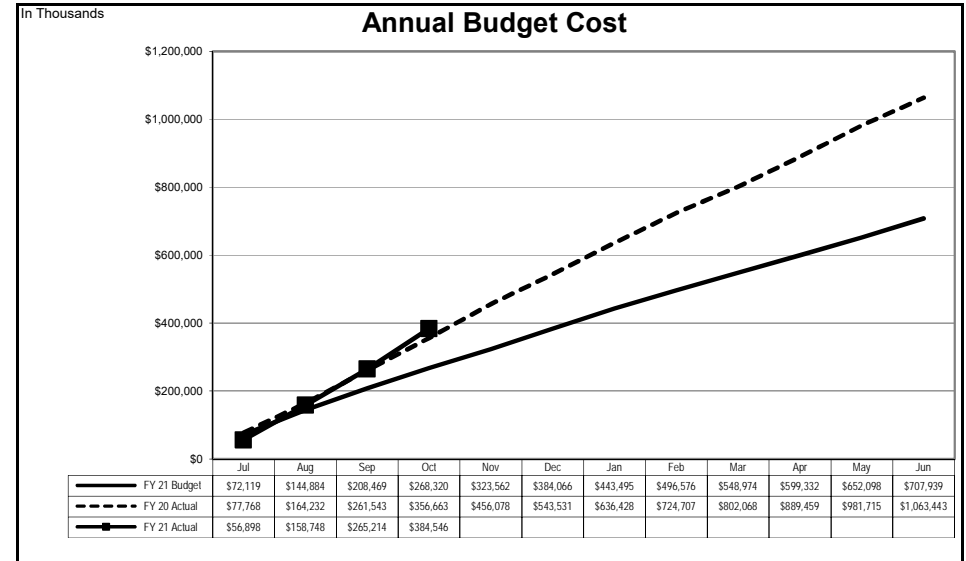
None

### **Separations:**

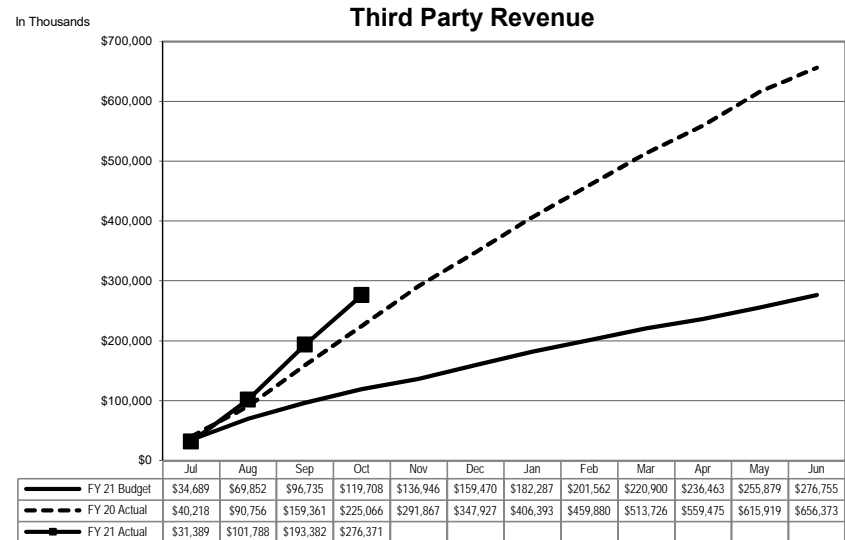
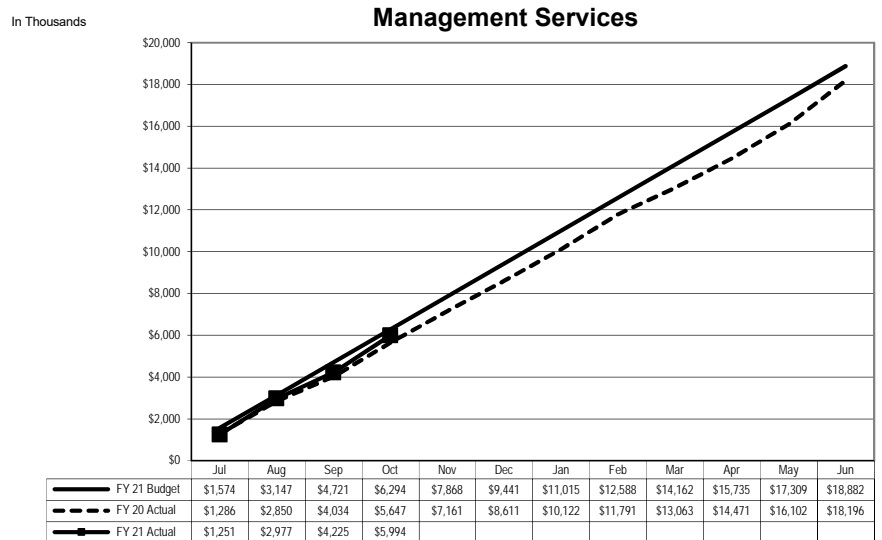
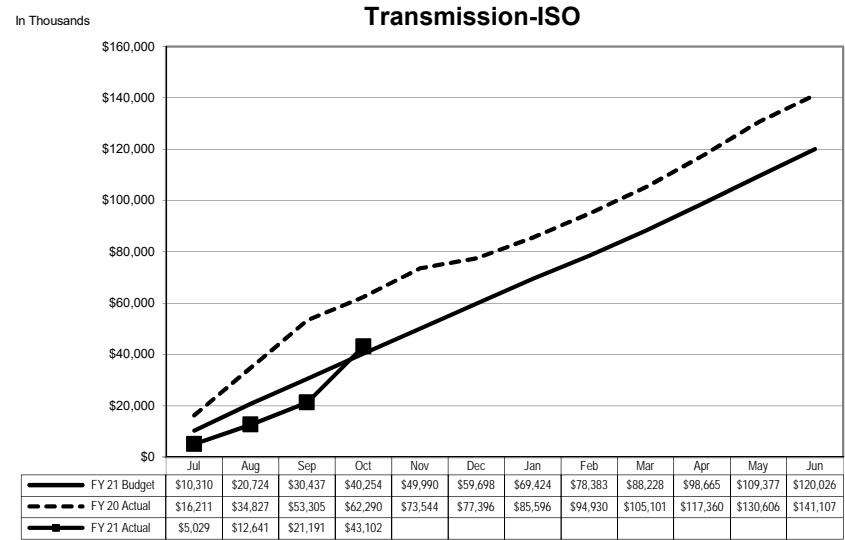
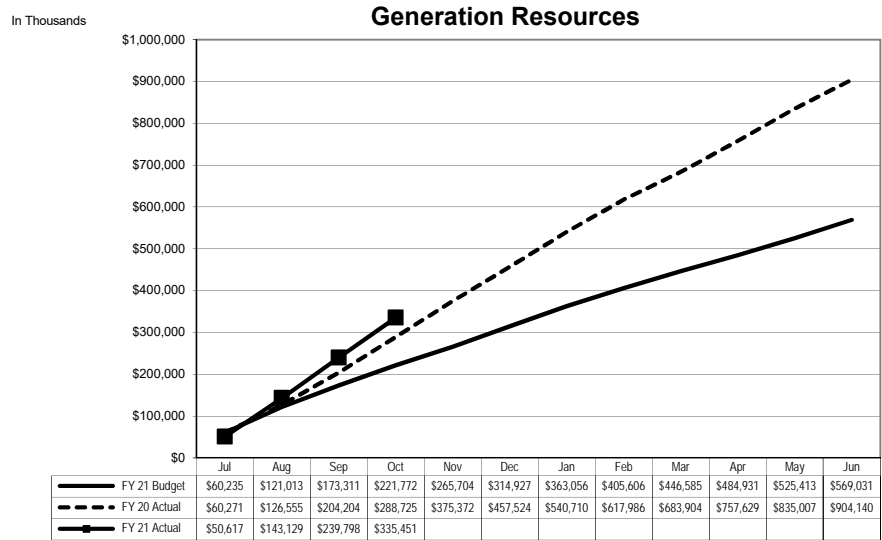
None

**Annual Budget  
2020-2021 Fiscal Year To Date  
As of October 31, 2020**

In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
<b>GENERATION RESOURCES</b>				
<b>NCPA Plants</b>				
Hydroelectric	54,260	17,078	\$ 37,182	69%
Geothermal Plant	35,561	12,212	23,350	66%
Combustion Turbine No. 1	7,884	2,318	5,565	71%
Combustion Turbine No. 2 (STIG)	7,989	3,557	4,432	55%
Lodi Energy Center	92,551	25,244	67,307	73%
	198,246	60,409	137,837	70%
<b>Member Resources - Energy</b>	60,056	21,395	38,661	64%
<b>Member Resources - Natural Gas</b>	2,442	1,355	1,087	45%
<b>Western Resource</b>	29,870	11,093	18,776	63%
<b>Market Power Purchases</b>	27,423	11,430	15,992	58%
<b>Load Aggregation Costs - ISO</b>	250,995	229,636	21,360	9%
<b>Net GHG Obligations</b>	-	133	(133)	
	569,031	335,451	233,580	41%
<b>TRANSMISSION</b>				
Independent System Operator	120,026	43,102	76,925	64%
<b>MANAGEMENT SERVICES</b>				
<b>Legislative &amp; Regulatory</b>				
Legislative Representation	2,180	502	1,678	77%
Regulatory Representation	715	231	485	68%
Western Representation	716	186	530	74%
Customer Programs	477	98	379	80%
	4,088	1,017	3,071	75%
<b>Judicial Action</b>	460	153	307	67%
<b>Power Management</b>				
System Control & Load Dispatch	6,766	2,030	4,736	70%
Forecasting & Prescheduling	2,934	892	2,043	70%
Industry Restructuring	425	137	288	68%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,000	330	670	67%
Gas Purchase Program	82	21	60	74%
Market Purchase Project	117	29	88	75%
	11,324	3,439	7,885	70%
<b>Energy Risk Management</b>	230	72	158	69%
<b>Settlements</b>	924	229	695	75%
<b>Integrated System Support</b>	266	84	182	68%
<b>Participant Pass Through Costs</b>	1,591	332	1,259	79%
<b>Support Services</b>	-	668	(668)	
	18,882	5,994	12,889	68%
<b>TOTAL ANNUAL BUDGET COST</b>	707,939	384,546	323,393	46%
<b>LESS: THIRD PARTY REVENUE</b>				
Plant ISO Energy Sales	105,258	46,364	58,894	56%
Member Resource ISO Energy Sales	26,422	11,744	14,677	56%
Member Owned Generation ISO Energy Sales	69,679	34,347	35,332	51%
Customer Owned Generation ISO Energy Sales	-	24	(24)	
NCPA Contracts ISO Energy Sales	18,915	7,185	11,730	62%
Western Resource ISO Energy Sales	17,481	14,839	2,641	15%
Load Aggregation Energy Sales	-	99,945	(99,945)	
Ancillary Services Sales	3,988	2,042	1,946	49%
Transmission Sales	110	37	74	67%
Western Credits, Interest & Other Income	34,902	59,845	(24,943)	-71%
	276,755	276,371	383	0%
<b>NET ANNUAL BUDGET COST TO PARTICIPANTS</b>	431,185	108,175	\$ 323,010	75%

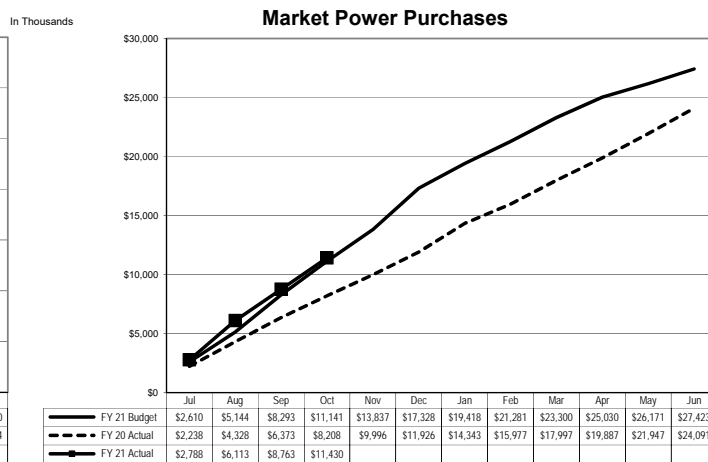
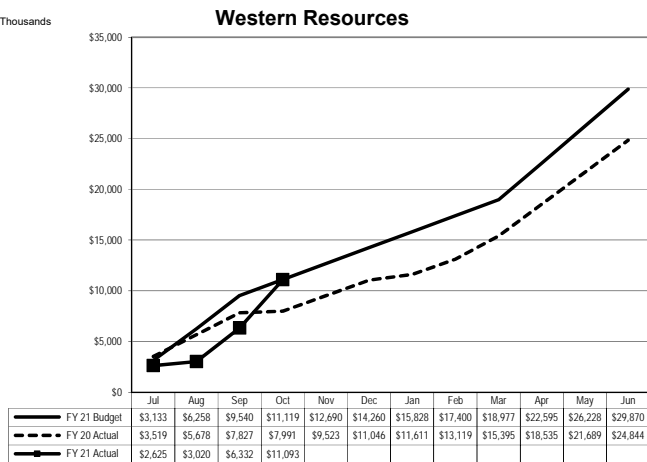
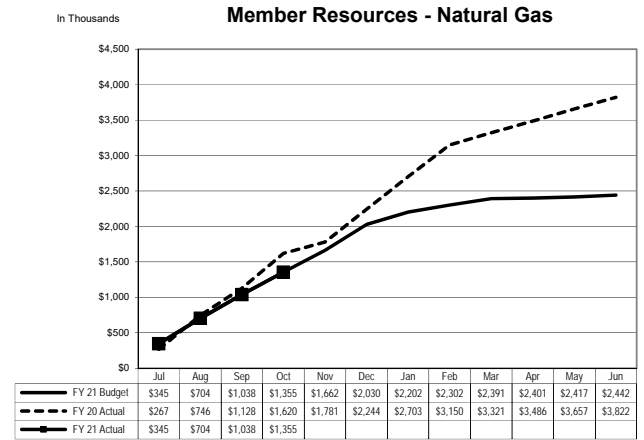
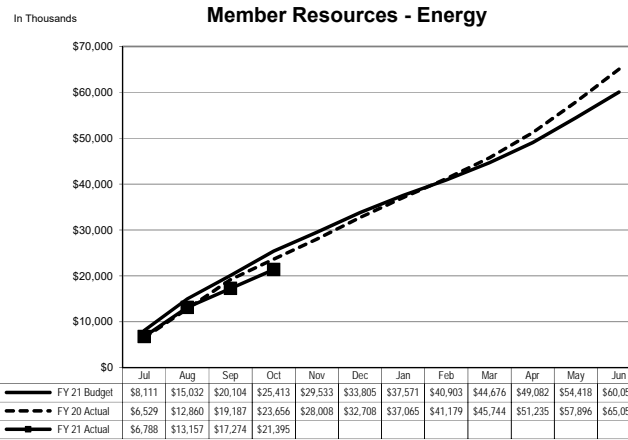
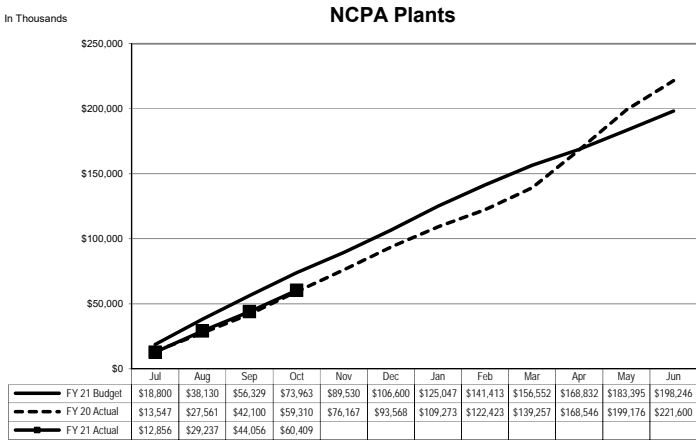


## Annual Budget Budget vs. Actual By Major Area As of October 31, 2020



Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

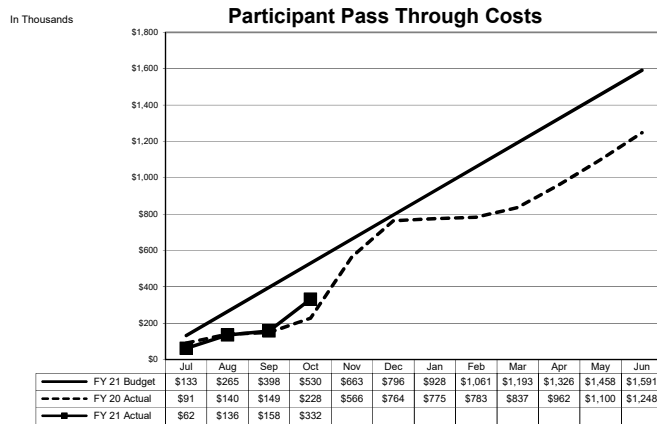
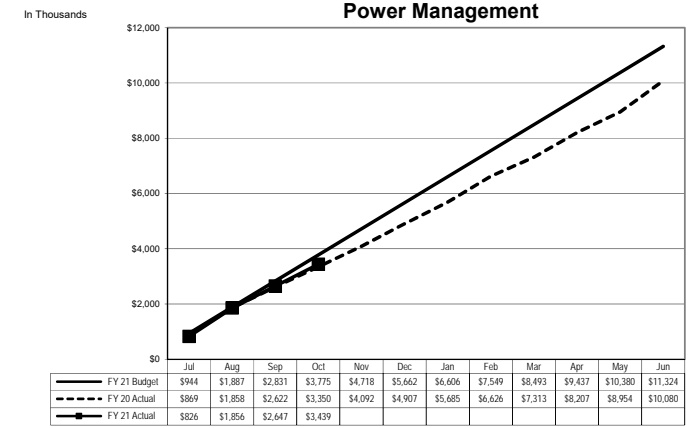
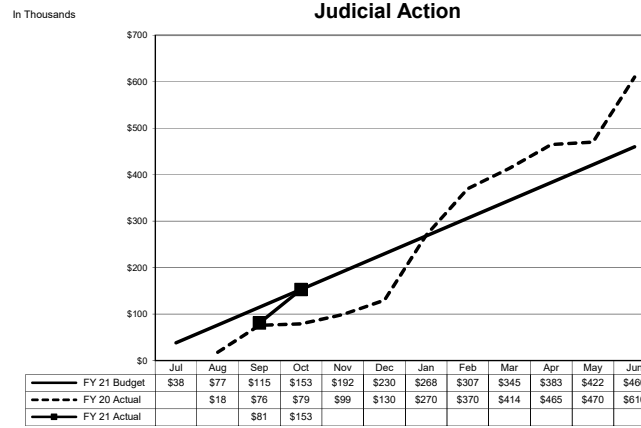
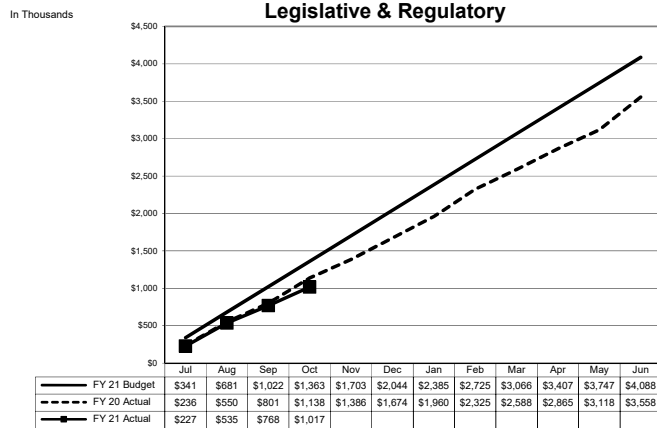
**Annual Budget Cost  
Generation Resources Analysis By Source  
As of October 31, 2020**



Footnote: Other Resources (Graeagle, BART PV, Gridley PV) are included in Market Power Purchases



**Annual Budget Cost  
Management Services Analysis By Source  
As of October 31, 2020**



**Annual Budget Cost  
Management Services Analysis By Source  
As of October 31, 2020**

In Thousands

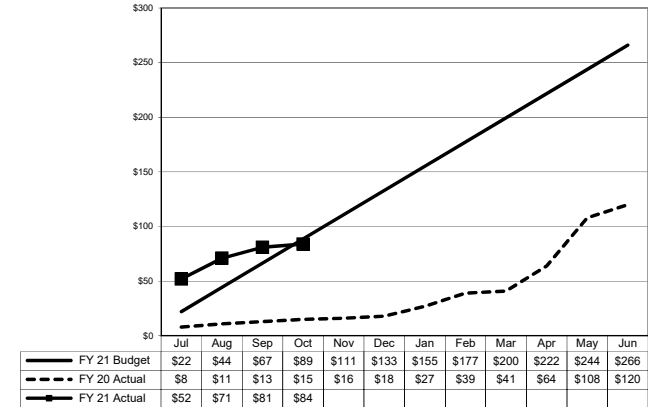
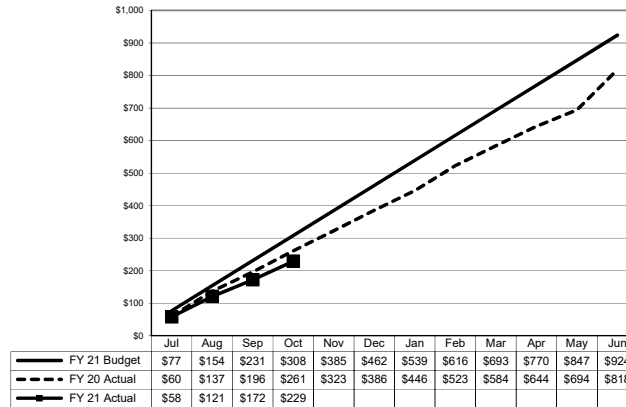
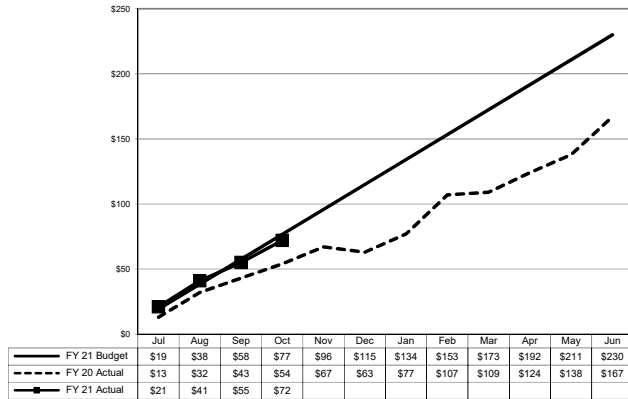
**Energy Risk Management**

In Thousands

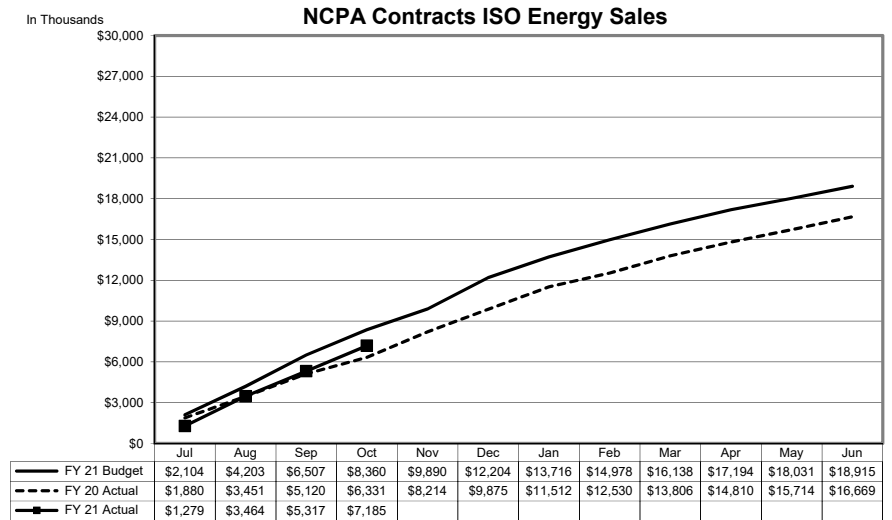
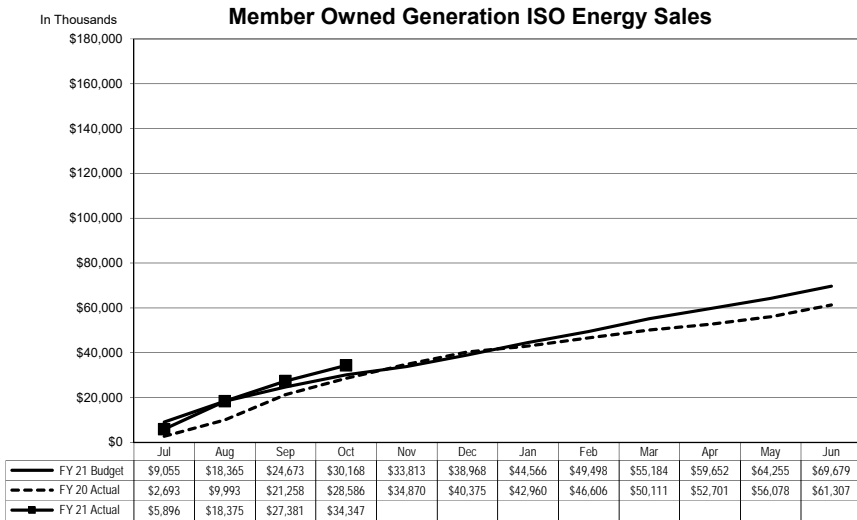
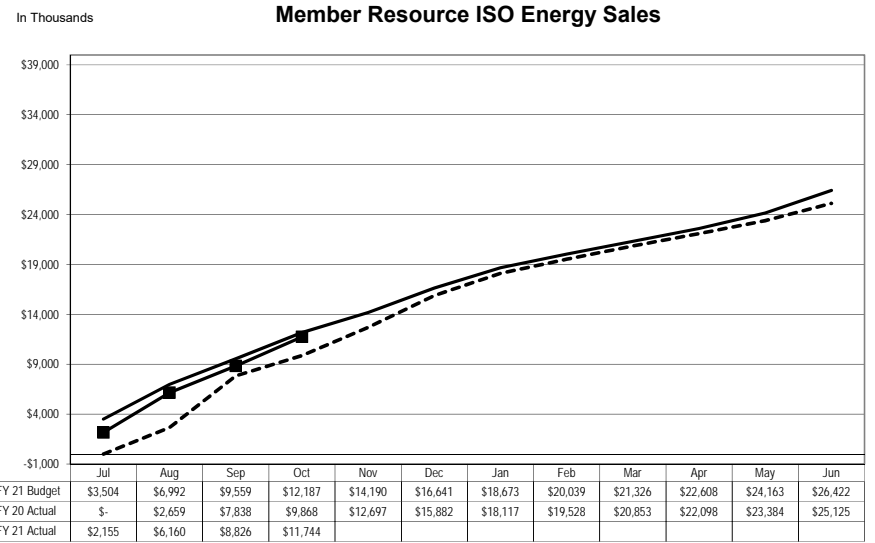
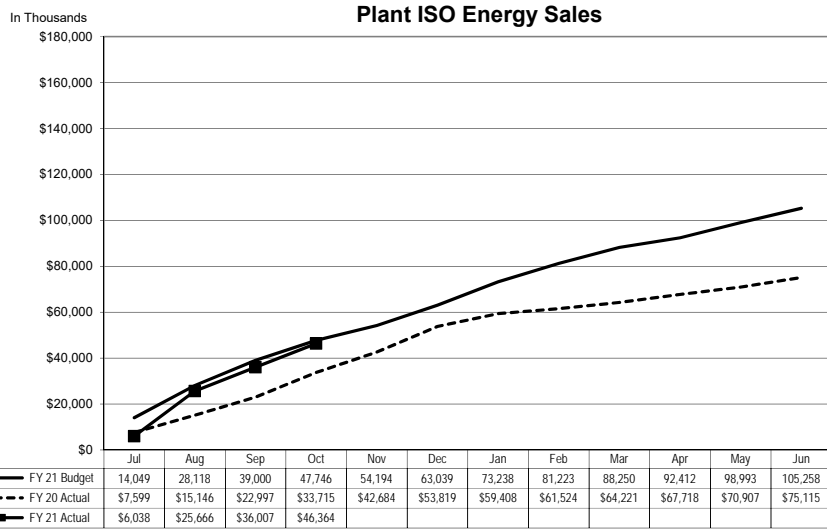
**Settlements**

In Thousands

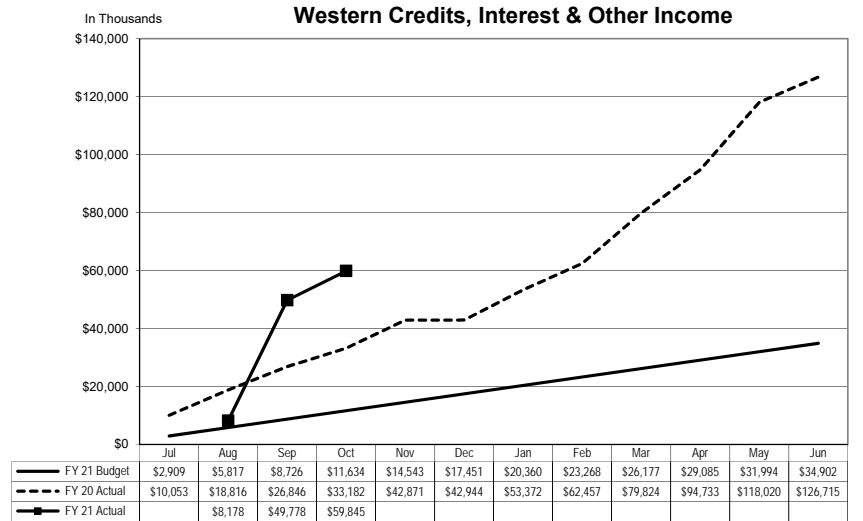
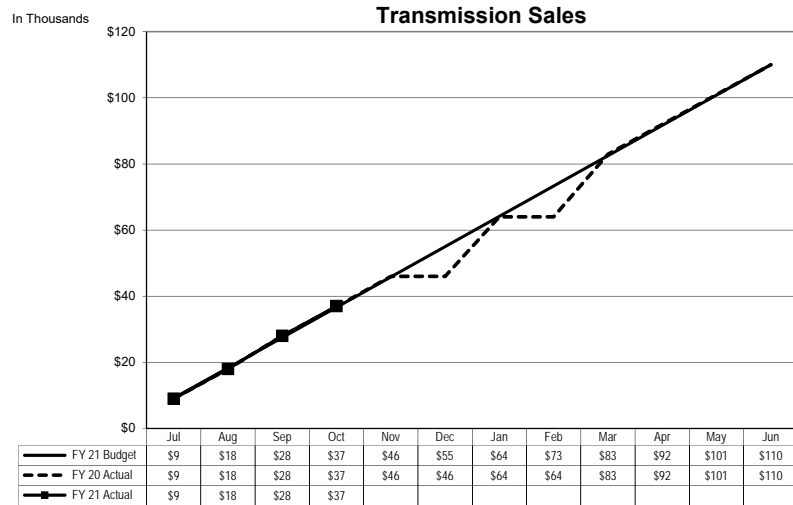
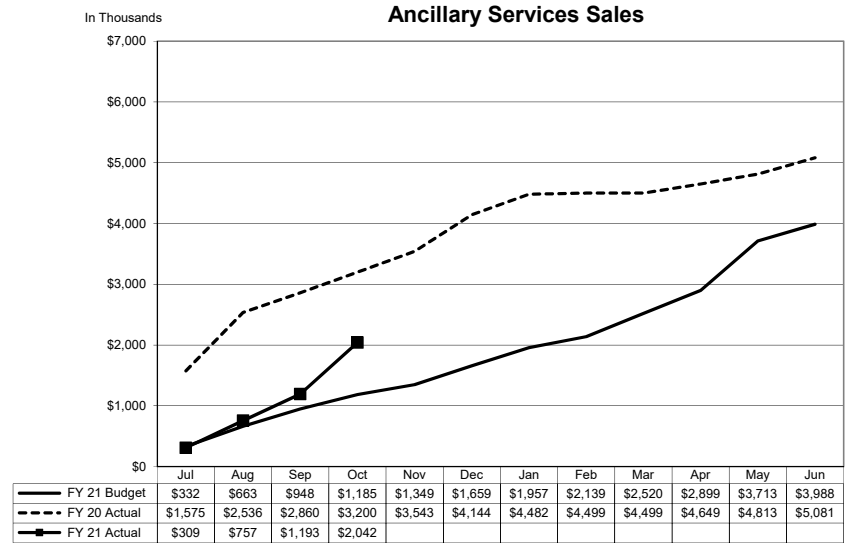
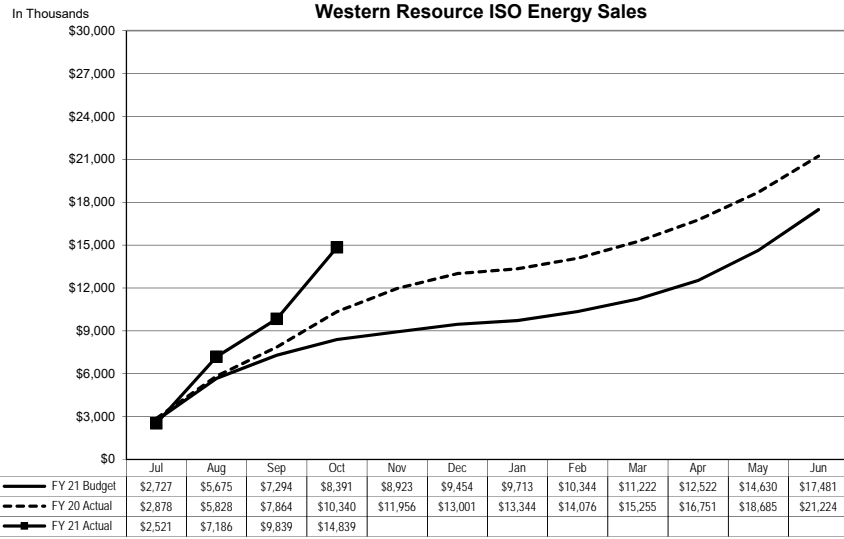
**Integrated Systems Support**



**Annual Budget Cost  
Third Party Revenue Analysis By Source  
As of October 31, 2020**



**Annual Budget Cost  
Third Party Revenue Analysis By Source  
As of October 31, 2020**



**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of October 31, 2020**

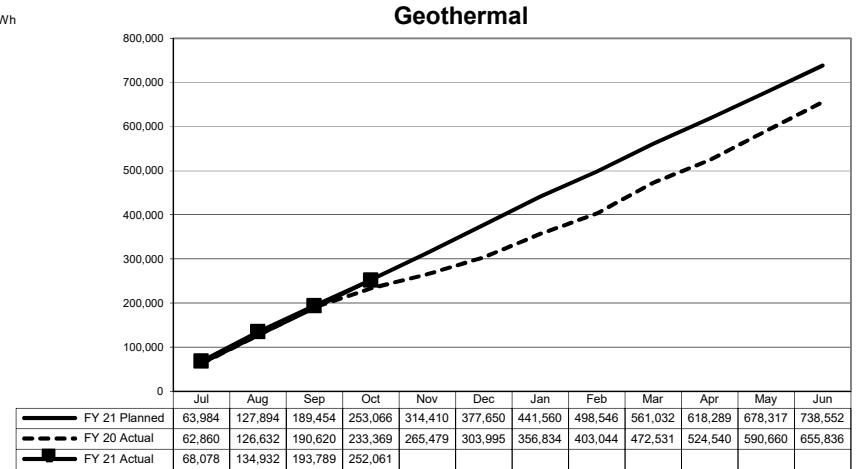
**Generation Cost Analysis**

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 19,252	\$ 6,547	\$ 25.97	\$ 12,705
Capital Assets/Spare Parts Inventories	2,585	860	3.41	1,725	67%
Other Costs	8,239	2,499	9.91	5,741	70%
CA ISO Charges	534	656	2.60	(122)	-23%
Debt Service	4,950	1,650	6.55	3,300	67%
Annual Budget	35,561	12,212	48.45	23,350	66%
Less: Third Party Revenue					
Interest Income	382	49	0.19	333	87%
ISO Energy Sales	25,811	10,802	42.85	15,009	58%
Ancillary Services Sales	-	-	-	-	-
Effluent Revenues	750	(27)	(0.11)	777	104%
Misc	113	38	0.15	75	67%
	27,056	10,861	43.09	16,194	60%
Net Annual Budget Cost to Participants	\$ 8,506	\$ 1,350	\$ 5.36	\$ 7,155	84%
Net Generation--MWh @ Meter	738,552	252,061			
\$/MWh (A)	\$ 4.81	\$ (1.19)			

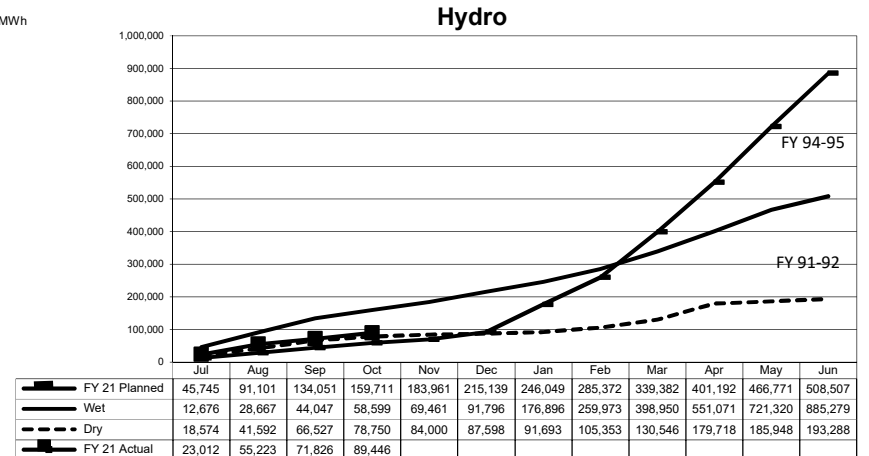
**MWhs Generated**

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
	Routine O & M	\$ 9,570	\$ 2,276	\$ 25.45	\$ 7,293
Capital Assets/Spare Parts Inventories	365	1,698	18.98	(1,333)	-366%
Other Costs	8,323	1,017	11.37	7,306	88%
CA ISO Charges	2,615	958	10.71	1,658	63%
Debt Service	33,388	11,129	124.43	22,259	67%
Annual Budget	54,260	17,078	190.93	37,182	69%
Less: Third Party Revenue					
Interest Income	670	69	0.77	601	90%
ISO Energy Sales	22,147	9,225	103.14	12,922	58%
Ancillary Services Sales	2,276	1,228	13.72	1,049	46%
Misc	-	-	-	-	-
	25,094	10,522	117.63	14,572	58%
Net Annual Budget Cost to Participants	\$ 29,167	\$ 6,556	\$ 73.30	\$ 22,611	
Net Generation--MWh @ Meter	508,507	89,446			
\$/MWh (A)	\$ (8.30)	\$ (51.13)			

In MWh



Footnotes:

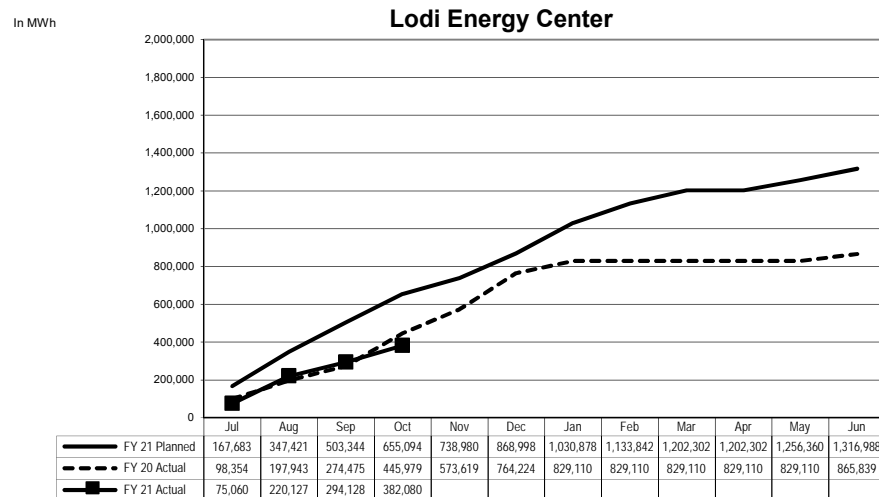
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of October 31, 2020**

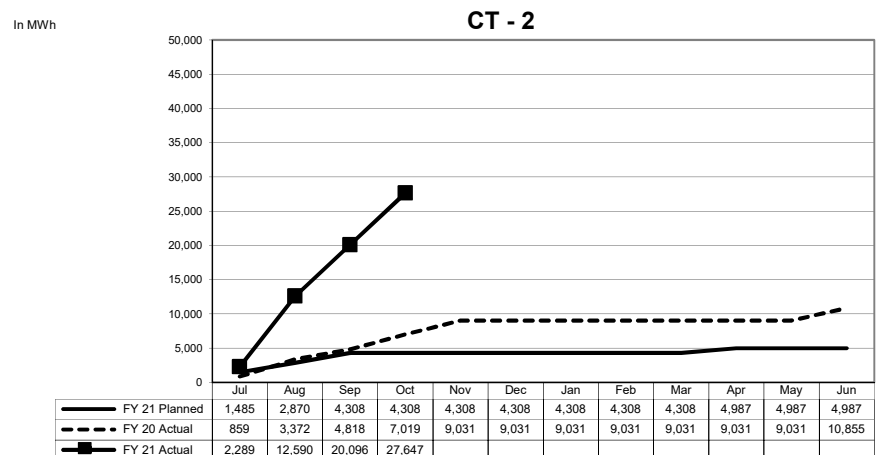
**Generation Cost Analysis**

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 14,463	\$ 3,924	\$ 10.27	\$ 10,539	73%
Fuel	32,956	9,694	25.37	23,262	71%
CA ISO Charges and Energy Purchases	3,831	938	2.46	2,893	76%
Capital Assets/Spare Parts Inventories	2,906	945	2.47	1,961	67%
Other Costs	12,372	1,069	2.80	11,303	91%
Debt Service	26,024	8,675	22.70	17,349	67%
<b>Annual Budget</b>	<b>92,551</b>	<b>25,244</b>	<b>66.07</b>	<b>67,307</b>	<b>73%</b>
Less: Third Party Revenue					
Interest Income	386	89	0.23	297	77%
ISO Energy Sales	55,590	21,550	56.40	34,040	61%
Ancillary Services Sales	1,712	459	1.20	1,253	73%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	8,463	-	-	8,463	100%
Misc	-	10	0.03	(10)	0%
	<b>66,151</b>	<b>22,108</b>	<b>57.86</b>	<b>44,043</b>	<b>67%</b>
<b>Net Annual Budget Cost to Participants</b>	<b>\$ 26,400</b>	<b>\$ 3,136</b>	<b>\$ 8.21</b>	<b>\$ 23,263</b>	<b>88%</b>
<b>Net Generation--MWh @ Meter</b>	<b>1,316,988</b>	<b>382,080</b>			
<b>\$/MWh (A)</b>	<b>\$ 0.29</b>	<b>\$ (14.49)</b>			

**MWhs Generated**



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,584	\$ 64	\$ 2.30	\$ 1,520	96%
Fuel and Pipeline Transport Charges	910	882	31.90	28	3%
Capital Assets/Spare Parts Inventories	37	4	0.13	33	90%
Other Costs	593	725	26.23	(133)	-22%
CA ISO Charges	40	273	9.89	(233)	-577%
Debt Service	4,826	1,609	58.19	3,217	67%
<b>Annual Budget</b>	<b>7,989</b>	<b>3,557</b>	<b>128.65</b>	<b>4,432</b>	<b>55%</b>
Less: Third Party Revenue					
Interest Income	109	15	0.56	93	86%
ISO Energy Sales	399	2,469	89.30	(2,070)	-519%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,821	341	12.35	1,479	81%
GHG Allowance Credits	43	-	-	43	100%
Misc	-	-	-	-	0%
	<b>2,371</b>	<b>2,826</b>	<b>102.21</b>	<b>(454)</b>	<b>-19%</b>
<b>Net Annual Budget Cost to Participants</b>	<b>\$ 5,618</b>	<b>\$ 731</b>	<b>\$ 26.44</b>	<b>\$ 4,887</b>	<b>87%</b>
<b>Net Generation--MWh @ Meter</b>	<b>4,987</b>	<b>27,647</b>			
<b>\$/MWh (A)</b>	<b>\$ 158.75</b>	<b>\$ (31.75)</b>			



Footnotes:

**Annual Budget  
NCPA Generation Detail Analysis By Plant  
As of October 31, 2020**

**Generation Cost Analysis**

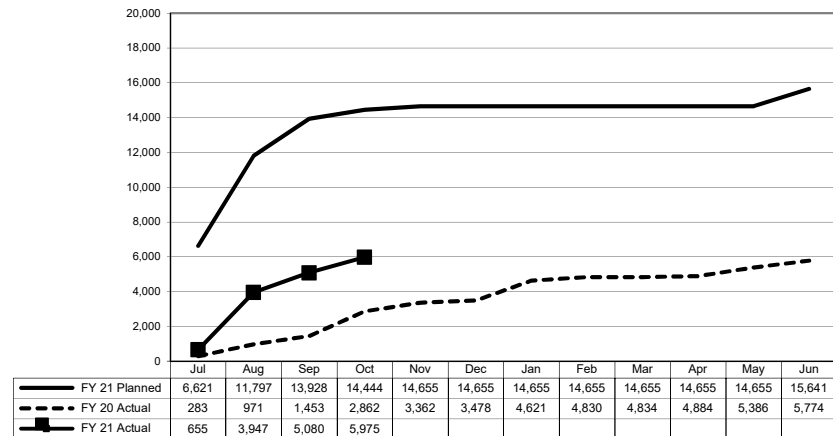
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,320	\$ 833	\$ 139.34	\$ 1,488	64%
Fuel and Pipeline Transport Charges	937	394	66.01	542	58%
Capital Assets/Spare Parts Inventories	3,667	504	84.28	3,163	86%
Other Costs	866	240	40.13	626	72%
CA ISO Charges	94	348	58.23	(254)	-270%
Debt Service	-	-	-	-	-
Annual Budget	7,884	2,318	388.00	5,565	71%
Less: Third Party Revenue					
Interest Income	-	14	-	(14)	-
ISO Energy Sales	1,311	2,318	388.02	(1,007)	-77%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	16	2.62	(16)	0%
	1,311	2,348	390.64	(1,036)	-79%
Net Annual Budget Cost to Participants	\$ 6,572	\$ (30)	\$ (4.96)	\$ 6,602	100%
Net Generation--MWh @ Meter	15,641	5,975			
\$/MWh (A)	\$ 420.19	\$ (4.96)			

**MWhs Generated**

In MWh

**CT - 1**



Footnotes: