



651 Commerce Drive
Roseville, California 95678
(916) 781-3636
www.ncpa.com



BUSINESS PROGRESS REPORT

MARCH 2021

Table of Contents

Generation Costs & Reliability	1
Environmental, Health & Safety Projects	4
Power Management/NCPA Market Results.....	5
Debt & Financial Management	15
NCPA Bills & Settlements.....	16
Political Arena State/Federal/Western Programs	17
Human Resources.....	19
Annual Budget FY to Date	20
Budget vs. Actual by Major Area	21
Generation Resources Analysis by Source	22
Management Services Analysis by Source	23
Third Party Revenue Analysis by Source	25
Generation Detail Analysis by Plant	27

Generation Costs & Reliability

Combustion Turbine Project

Unit Operation for February 2021

Unit	Availability		Production		Reason for Run
CT1 Alameda	Unit 1	Unit 2	Unit 1	504.5 MWh	CAISO / CAISO
	100.0%	100.0%	Unit 2	661.0 MWh	
Curtailements, Outages, and Comments:					
Unit 1: Normal operation.					
Unit 2: Normal operation.					
Unit	Availability		Production		Reason for Run
CT1 Lodi	19.2%		32.3 MWh		CAISO
Curtailements, Outages, and Comments:					
2/01 @ 00:00 - 2/17 @ 23:59; Annual Maintenance, OMS 9128222 2/18 @ 00:00 - 18:00; Generator Breaker Trouble, OMS 9799282, 9803671 2/18 @ 18:28 - 2/23 @ 18:00; Seal Leak, OMS 9804409					
Unit	Availability		Production		Reason for Run
CT2 STIG	100.0%		4,535.6 MWh		CAISO
Curtailements, Outages, and Comments:					
Normal operation.					
Unit	Availability		Production		Reason for Run
LEC	100.0%		148,106 MWh		CAISO
Curtailements, Outages, and Comments:					
Normal Operations.					

Maintenance Summary – Specific per asset above.

Geothermal Facilities

Availability/Production for February 2021

Unit	Availability	Net Electricity Generated/Water Delivered	Out-of-Service/Descriptors
Unit 1	100 %	18,503 MWh	U1 had no outages for the month
Unit 2	99.06 %	*20,088 MWh	U2 had no outages for the month
Unit 3	N/A %	N/A	Unit 3 remains out of service.
Unit 4	87.35 %	23,950 MWh	U4 was off line 0001 2/16 thru 1300 2/19 for lube oil booster pump repair
Southeast Geysers Effluent Pipeline	94 %	165.1 mgallons	Average flow rate: 3,971 gpm
Southeast Solar Plant	N/A	47,576 KWh	Year-to-date KWh: 3,259,440
Bear Canyon Pump Station Zero Solar	N/A	107,303 KWh	Year-to-date KWh: 4,774,108

* Accounts for an additional 1,510,823 MWh of house load for the 21KV power supply to the effluent pipeline supplied from Unit #2.

Hydroelectric Project

Availability/Production for February 2021

Units	Availability	Net Electricity Generated	Out-of-Service
Collierville Unit 1	99.12%	6319 MWh	CV Unit 1 – was out of service on 2/17/21 from 0704 to 1111 for WECC testing and on 2/19/21 from 0915 to 1108 for a bearing oil system problem
Collierville Unit 2	99.63%	3796 MWh	CV Unit 2 – was out of service on 2/17/21 from 1037 to 1128 for WECC testing and on 2/18/21 from 0701 to 0836 for WECC testing.
Spicer Unit 1	99.38%	229 MWh	NSM1 was out of service on 2/9/21 from 1200 to 1611 for scroll case repair
Spicer Unit 2	90.97%	38 MWh	NSM2 was out of service on 2/1/21 to 2/2/21 from 0000 to 1438 for unit unavailability and on 2/15/21 to 2/16/21 from 1700 to 1506 for a failed start condition
Spicer Unit 3	94.18%	201 MWh	NSM3 was in an islanding condition on 2/1/21 to 2/2/21 from 0000 to 1508.

Operations & Maintenance Activities:

- CMMS work orders
- Winter Snow Removal Site access work
- WECC Testing at CVPH
- Awarded a contract for a FERC Security Plan Evaluation

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

- There were no Cal OSHA Recordable, Lost Time, or vehicle accidents in the month of February.
- 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 February 27, 2021.
- 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.

February 2021 Generation Services Safety Report

	Hydro	GEO	CT Group *	NCPA HQ **
Cal OSHA Recordable (this month)	0	0	0	0
Cal OSHA Recordable (calendar year)	0	0	0	0
Days since Recordable	139	949	2,154	3,138
Work Hours Since Last Recordable	11,457	196,802	322,020	2,644,366
LTA's (this month)	0	0	0	0
LTA's (calendar year)	0	0	0	0
Days without LTA	4,888	2,017	10,058	6,151
Work Hours without LTA	444,028	413,777	732,564	2,266,384
Vehicle Incident (month)	0	0	0	0
Vehicle Incident (calendar year)	0	0	0	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 February 27, 2021.

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 2021 Data

	February 2021		Calendar Year 2021	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	311.11 2/3 @1900	167,670	329.69 1/26 @1900	358,640
SVP	483.99 2/23 @1600	298,216	483.99 2/23 @1600	627,708
MSSA	776.55 2/11 @ 1900	465,886	804.83 1/27 @ 1900	986,348

Last Year 2020 Data*

	February 2020		Calendar Year 2020	
	Peak MW	MWh	Peak MW	MWh
NCPA Pool	330.79 2/3 @1900	177,189	467.45 8/14 @ 1700	374,721
SVP	484.02 2/27 @1600	296,647	586.3 8/14 @ 1700	613,476
MSSA	791.4 2/3 @ 1900	473,836	1053.75 8/14 @ 1700	988,197

* Last year's data added for comparison purposes only

System Peak Data

	All Time Peak Demand	2021 Peak Demand
NCPA Pool	517.83 MW on 7/24/06 @ 1500	329.69 1/26 @ 1900
SVP	587.78 MW on 6/11/19 @ 1600	483.99 2/23 @ 1300
MSSA	1070.79 MW on 9/1/17 @ 1700	804.83 1/27 @ 1900

- 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.

NCPA Deviation Band Performance		
	February 2021	Calendar Year 2021
MSSA % Within the Band	98.41%	98.66%

- NCPA continues to operate in 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 System Operating Message for thirteen days in February, 2021, warning of a potential for over supply during the middle part of the day. Oversupply can potentially require market curtailment of preferred resources.
- There were no Public Safety Power Shutoff (PSPS) warnings issued by PG&E in February, 2021.

Pooling, Portfolio Planning & Forecasting

- NCPA Pool load during February 2021 was 167,671 MWh, or 94.7% of forecast due to temperature variations and continuing uneven demand resulting from Covid mandates and restrictions. Pool load during March 2021 may continue slightly below normal compared to the same period a year ago, despite weather-related heating demand during the first half of the month.
- Lodi Energy Center (LEC) produced 25,894 MWh for the pool during February, or 116% of the forecasted generation, due to widespread extreme cold over the President's Day weekend that caused the price of power to skyrocket proportionally more than natural gas. The unit was committed 24 of the 28 days, with 18 of those 24-hour runs. Due to the current volatile market pricing structure, LEC was projected to generate 7,978 MWh for the pool during March 2021 as rising gas prices serve to reduce economic generation by shortening daily run times.
- During February 2021, 3.26" of rain was recorded at the Big Trees gauge. Average February Big Trees precipitation is 10.00".
- The Value of Storage (VOS) of New Spicer Meadow Reservoir (NSMR) has been maintained at \$150/MWh.
- NSMR storage as of February 28, 2021 was at 64,116 acre feet. The historical average NSMR storage at the end of February is 75,340 acre feet. As of March 15, 2021 NSMR storage is 63,729 acre feet. The current NCPA Pool share of NSMR storage is 32,726 acre feet.
- Combined Calaveras Project generation for the Pool in February 2021 totaled 5.2 GWh, up from 3.9 GWh in January 2021. The Pool's 5.2 GWh in February 2021 was in line with the pre-month forecast of 5.2 GWh.
- Western Base Resource (BR) deliveries for the Pool during February 2021 were above the forecasted 1,888 MWh at 2,262 MWh, with Displacement program energy remaining on pause. Western's forecast for the pool's share of March 2021 generation jumps up as runoff begins to 17,391 MWh.
- The PG&E Citygate gas index averaged \$3.61/MMBtu for delivery on March 10, 2021, well below the high, weather-driven average PG&E gas price during February of \$4.584/MMBtu – a full dollar higher than the January average. Natural gas prices increased last month as production fell sharply due to well freeze-offs and transport

problems, particularly in Texas. The March 2021 PG&E Citygate Bidweek price is \$3.815/MMBtu, up another 26.5 cents from the February 2021 Bidweek price as the era of gas oversupply appears to be over.

- Day-Ahead NP15 electricity prices averaged \$67.80/MWh (HLH) and \$48.45 (LLH) during February 2021, a most unusual month where the evening ramp hour prices reached \$961.04 at TH_NP15 on February 17th and fell to negative 4 cents midday on February 27th.

NCPA Pool Loads & Resources Value Summary								
Peak and Energy Summary Feb-21				Estimated Production Costs			Cost of Serving Demand	
Demand	Coincident Peak (MW)		Pre-Month Forecast Values		NCPA Pool		Totals	Avg (\$/MWh)
	Feb-03-21 Hour 19	Total MWh		Avg. MW	Cost/Revenue (Estimate)	Variable Cost (\$/MWh)		
	311.1	167,671	177,040	249.5	N/A	N/A		
WAPA	-	2,262	1,888	3.4	\$ 909,162	\$ 401.93	\$ 10,707,977	\$ 63.86
Geothermal	-	25,894	23,600	38.5	491,981	19.00		
Hydro	-	5,200	5,200	7.7	31,200	6.00		
Stig & CTs	-	3,408	148	5.1	292,588	85.85		
LEC	-	26,632	22,875	39.6	862,344	32.38		
Contracts	-	77,143	75,206	114.8	4,471,268	57.96	\$ 8,421,241	\$ 50.22
Market - Net (Net Sales = Negative)	311.1	27,132	48,123	40.4	1,667,538	61.46		
Net Total	311.1	167,671	177,040	249.5	\$ 8,726,081	\$ 50.22		

Monthly Market Summary					
Month	Pool Energy (MWh)	HLH Avg MCP (\$/MWh)	Avg Variable Cost of Pool Generation (\$/MWh)	Forward Prices (EOX NP15 HLH Ask Prices) (\$/MWh)	
				NP15 2/1/2021	3/15/2021
Jul-20	203,610	\$ 27.80	\$ 37.25	Mar-21 \$ 35.69	\$ 36.91
Aug-20	216,986	\$ 59.74	\$ 41.08	Apr-21 \$ 31.64	\$ 32.83
Sep-20	195,756	\$ 46.66	\$ 45.40	May-21 \$ 31.47	\$ 31.49
Oct-20	216,986	\$ 59.74	\$ 45.47	Q2 2021 \$ 34.20	\$ 35.88
Nov-20	181,145	\$ 40.43	\$ 44.27	Q3 2021 \$ 68.70	\$ 75.20
Dec-20	194,203	\$ 42.06	\$ 44.17	Q4 2021 \$ 49.90	\$ 51.23
Jan-21	190,971	\$ 35.05	\$ 47.79	bal2021 \$ 48.38	\$ 52.38
Feb-21	167,671	\$ 63.86	\$ 50.22	CY2022 \$ 44.43	\$ 46.06
Mar-21				CY2023 \$ 39.39	\$ 41.54
Apr-21				CY2024 \$ 37.62	\$ 39.50
May-21				CY2025 \$ 35.73	\$ 38.51
Jun-21				CY2026 \$ 35.38	\$ 37.80

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.

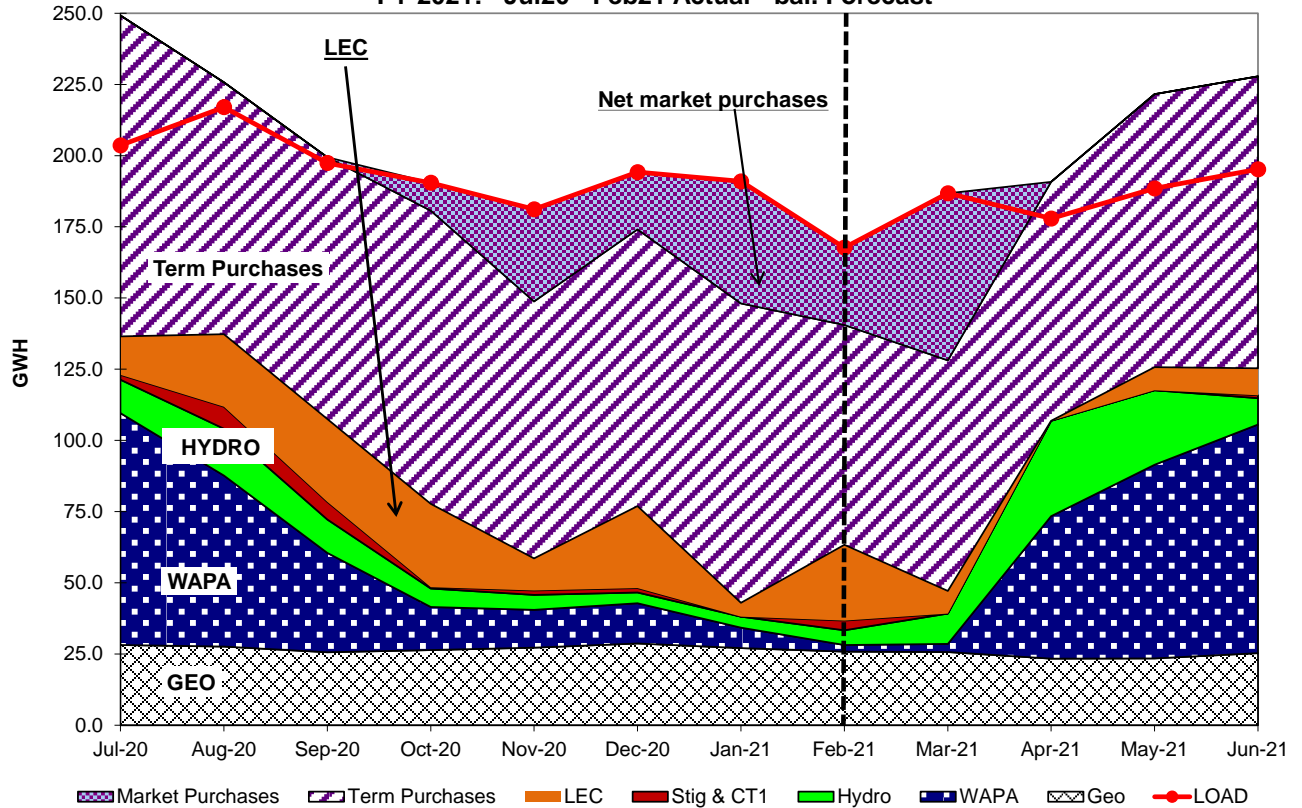
Estimated Production Costs:

* 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

NCPA POOL RESOURCES
 FY-2021: Jul20 - Feb21 Actual - bal. Forecast



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 of May 2021:
 - Monthly System Resource Adequacy Demonstration (filed March 17, 2021)
 - Monthly Supply Plan (filed March 17, 2021)
- 2022 Load Forecasts are due April 19, 2021.

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:

Market Enhancements for Summer 2021 Needs Initiative

- This continues to be the focus of CAISO efforts. The initiative is rapidly evolving and has been fast tracked for March 2021 Board of Governors' approval. The revised draft final proposal will be published March 16, 2021. Key provisions include:
 - Price Taker Exports contracted with non-RA capacity, Wheel Throughs, and internal Load will share top priority in CAISO Day Ahead and Real-Time market runs.
 - Provide real-time market imports with a make whole payment during system warnings and alerts
 - Expand Reliability Demand Response Resources bid dispatchable option from 5 minutes to 5, 15, and 60 minutes and incorporate into load forecast.
 - State of charge requirement for storage during to be determined "critical hours".

Extended Day-Ahead Market

- This initiative has been put on hold pending Day Ahead Market Enhancements initiative development.
- 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 CAISO 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

- Phase 1 draft tariff language was published March 1, 2021 and comments are due March 17. NCPA has reviewed language to ensure scope limited to two terms agreed upon in the draft final proposal.
- Phase 2A draft final proposal and Phase 2B seventh revised straw proposal will be published in April 2021.
- Phase 1 will include planned outage process enhancements, RA Import requirements, operationalizing storage, and backstop capacity procurement focused on CPM for local energy sufficiency. The planned outage process enhancements are scheduled to become effective June 2021 while the others are slated to go live in time for the 2022 RA year (Jan. 2022). The primary outage process enhancement is requiring generators to submit substitution up front for all planned RA outages shortly after month ahead submittals. CAISO rejected NCPA's response to keep status quo whereby substitution is only required after a study produces an assignment. RA Import enhancements focus on determining the source of an RA import. Western is sufficiently covered under the new definition of resource specific since it includes a "system of resources" such as CVP.
- Phase 2 includes unforced capacity evaluations, determining system RA requirements, system RA showings and sufficiency testing, individual assessments, must offer obligations and bid insertion modifications, UCAP for local studies, backstop capacity procurement, and further planned outage process enhancements including implementation of a substitute capacity pool. Issues with this phase include counting rules being taken from the LRA and handed to the CPUC or other LRAs. However, CAISO is maintaining MSS exemptions to bid insertion and must offer obligations.

Day-Ahead Market Enhancements

- This initiative has been delayed due to the Summer 2021 Readiness Initiative taking priority.
- 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
- 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)
 - NCPA has requested CAISO to allocate LF-MSS costs similar Flexible Ramping Product cost allocations.
 - Addition of Up and Down Reliability Capacity in RUC process used to address gaps between bid in demand and forecast demand. NCPA is advocating to retain right to opt out of RUC.
- 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 ¹ (MWh)	BR Delivered (MWh)	Difference (MWh)	Base Resource & Restoration Fund (\$)	Monthly Cost of BR ² (\$/MWh)	CAISO LMP Differential ³ (\$/MWh)	12-Mo Rolling Avg. Cost of BR ⁴ (\$/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	13,280	(1,318)	\$909,162	\$ 68.46	\$ 0.10	\$ 30.44
Dec-20	13,128	14,102	974	\$909,162	\$ 64.47	\$ 0.79	\$ 31.48
Jan-21	6,278	7,174	896	\$909,162	\$ 126.73	\$ 1.02	\$ 32.15
Feb-21	16,372	2,262	(14,110)	\$909,162	\$ 401.93	\$ (0.00)	\$ 33.53
Mar-21	26,497	-	(26,497)	\$909,162	\$ 34.31	\$ -	\$ 34.02
Apr-21	41,629	-	(41,629)	\$1,982,665	\$ 47.63	\$ -	\$ 35.57
May-21	74,036	-	(74,036)	\$1,982,665	\$ 26.78	\$ -	\$ 36.39
Jun-21	93,177	-	(93,177)	\$1,982,665	\$ 21.28	\$ -	\$ 36.45
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 2,262 MWh Base Resource (BR) energy in February 2021. MEEA savings is near zero due to minimal variances between IBAA and MEEA pricing at BR delivered hours. Displacement program is temporary suspended from November 1, 2020 through March 31, 2021 due to limited base resource availability forecast. The program is expected to restart on trade date April 1, 2021.
- Pool Members' cumulative net MEEA savings for NCPA FY 2021 is about \$248,400 and Displacement savings at approximately \$721,500, from July 2020 through February 2021.

2025 WAPA 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 final contracts electronically for execution by March 16, 2021. The tentative timeline for Custom Product Contracts execution will be early 2023 and 2025 Rate Case Development in 2023-2024.

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.
- Next Steps: Interveners met to discuss PG&E's proposal to resume settlement negotiations for a complete resolution of TO-18 issues. Interveners agreed to resume negotiations and to invite PG&E to make a black-box settlement offer.

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 operating procedure is complete.
- Use of the Intertie Switch is still pending CPUC approval. Interim solution if necessary will be to use the temporary jumpers as in Jan of 2020.
- PG&E requested a long-term outage on the Lakeville Line from March 8 – May 8, 2021. Currently a temporary jumper/shoe-fly is in place to deliver the full output of Geo Plants to PG&E's Fulton Substation.

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.
- In Feb 2021, PG&E came across an opportunity to engage in mediation with CDWR to address the cost of removal issue. NCPA has agreed to join the mediation with PG&E.

Transmission Planning BPM Updated Modeling Data Submittal

- CAISO is requiring Generators to submit updated modeling data to ensure CAISO has current and accurate system information.
- NCPA has submitted updated data and power flow models for Hydro, all Geo, and all CT units. With the exception of New Spicer Meadows, all NCPA units are deemed compliant by the ISO. New Spicer modeling data is due the first quarter of 2022.

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 December 1, 2020, PG&E submitted a 10-year capital plan to all stakeholders. The list included 1,596 total projects (equal to or greater than \$1M) and over 500 supporting documents (Project Authorizations/Business Cases).
- NCPA drafted stakeholder 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, projects which are on hold due to CAISO or CPUC action, and projects which might be related to non-CAISO controlled facilities.
- PG&E replied to stakeholders' comments and held a stakeholder meeting on March 4, 2021.
- Next step: Stakeholders may ask follow-up questions to PG&E responses and March 4th presentations. PG&E will submit updated 10-year capital plan again on June 1, 2021.

Debt and Financial Management

- On March 17th, the Federal Reserve announced it would continue holding interest rates at a range between 0% and 0.25%, where it has been for the past year, and reaffirmed its commitment to other easing policies despite a resurgent economy that policymakers expect to rapidly strengthen in the coming year in light of the stimulus bill.
- Despite the improved outlook, the majority of policymakers said in their first economic projections of 2021 that they expect rates to remain near zero through 2023. About 7 of the 18 Fed officials at the meeting said they expect to start lifting rates in 2022 or 2023 which is an increase from December when just 5 forecasted a rate hike. If the forecast holds true, this will help preserve the estimated savings of the anticipated refunding of the 2012 Hydroelectric bonds in early 2022.
- The 10-year Treasury hit a high of 1.689% earlier in the session, its highest level since Jan. 24, 2020. The 30-year also hit its highest levels since early last year but both rates drifted lower as Fed Chair Jerome Powell reinforced a dovish stance for the central bank during his afternoon press conference.

Schedule Coordination Goals

Software Development

- New applications and enhancements under development
 - LEC MSG Software Suite, including the updated Prescheduler and MIDS apps, deployed in the test environment to participate in the CAISO Market Sim end-end testing
 - 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 (RPS) Reporting app to be added as an enhancement to the Risk Management application. The report will provide members an automated RPS Balance Sheet of their RECs in a Compliance Period. RPS Reporting app Phase 2 is underway.
- IS staff is working with Accounting and its software consultant to enhance the financial reporting. Product demo and evaluations scheduled this month.

Network

- Windows 10 upgrade has been completed with just a few exceptions that will be addressed over the next month.
- The IS SCADA team has integrated Central 40 solar into the NCPA Dispatch Operations Realtime SCADA Control Center.
- Operations and Support staff continue working to migrate from the HQ Cisco core switch to a new Aruba stack for better performance and support. All physical network communications have been moved over to the new Core and we are working to finalize the routing migration by end of March.

- SCADA team has rolled out new screens for dispatchers that alerts them of any substantial unexpected load loss. This will help to notify our real time operations desk of any equipment trouble or city outages.
- IS continues working with EBCE and technical contractors to further integration efforts with Altamont Wind. Initial point testing of the Altamont wind project has been completed, with an anticipated follow up testing by end of March.
- The Operations and Support staff have resumed monthly infrastructure and operations testing at the Disaster Recovery Center, in preparation for a late spring hard failover.

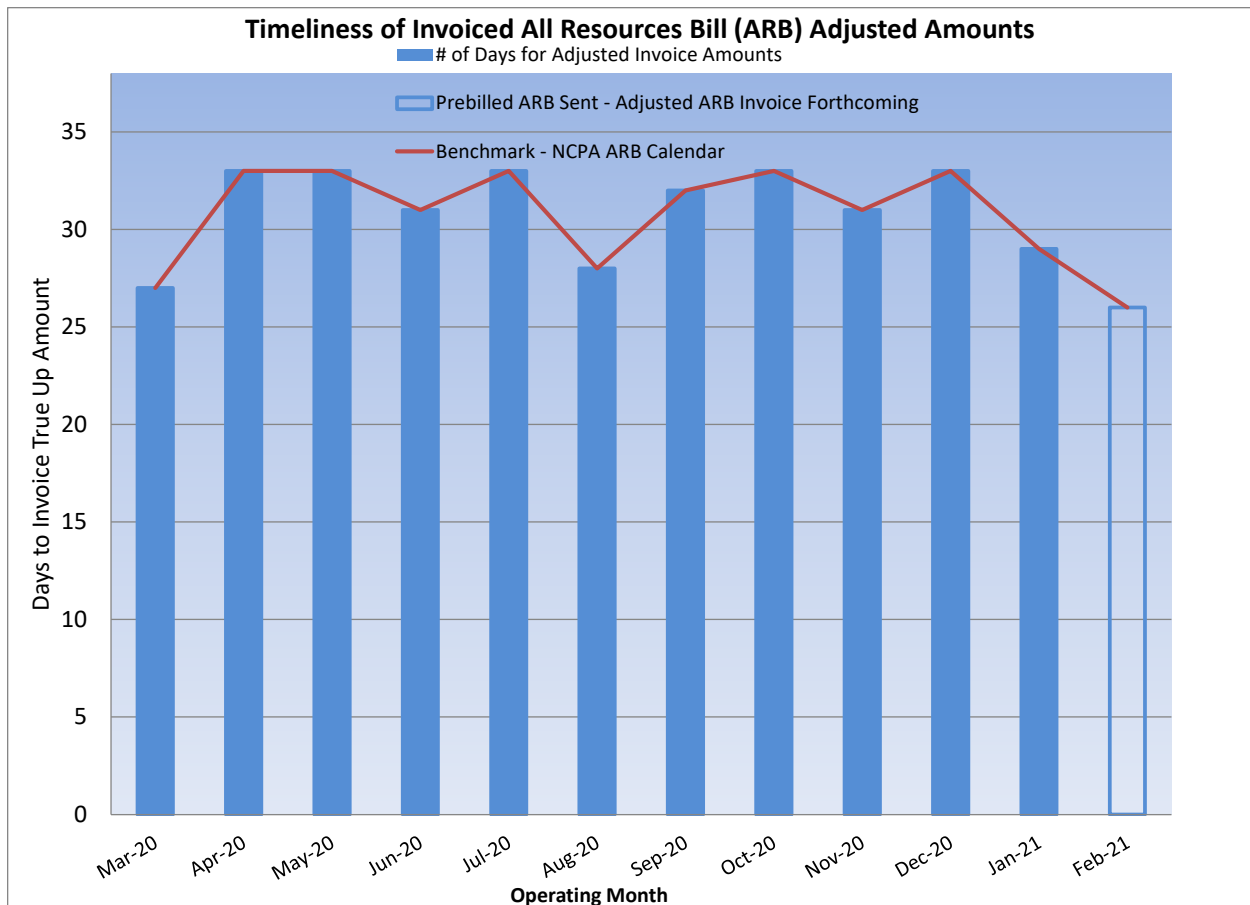
NCPA Bills & Settlements

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 February 2021 NCPA All Resources Bill (ARB) monthly invoice sent to members on January 26, 2021 contains:

- February 2021 monthly pre-billed budget/forecast amounts;
- December 2020 (1st Adjustment) NCPA Project and CAISO Initial settlement true-ups;
- November 2020 (2nd Adjustment) NCPA Project settlement true-up and T+12 business day recalculated CAISO settlement true-up allocations;
- September 2020 (3rd Adjustment) T+55 business day recalculated CAISO settlement true-up allocations and NCPA Projects true-up;
- March 2020 (4th Adjustment) T+9 month recalculated CAISO settlement true-up allocations;
- May 2019 (5th Adjustment) T+18 month recalculated CAISO settlement true-up allocations;
- February 2018 (6th Adjustment) T+33 month recalculated CAISO settlement true-up;
- November 2017 (7th Adjustment) T+36 month CAISO settlement true-up;



Legislative & Regulatory

Political Arena State/Federal/Western Programs

State Update

- NCPA staff continue to engage in discussions regarding introduced legislation on green hydrogen, broadband deployment, renewable energy planning and procurement, transportation decarbonization, and wildfire issues. The Legislature is beginning its first policy committee hearings, and will adjourn for its Spring Recess from March 25 through April 5. The month of April will be busy with policy and fiscal committee hearings, as legislators work toward moving bills out of their house of origin.
- As part of its external affairs function, NCPA has made new communication resources available to members via NCPA Connect. Members can log-in and access customizable social media content, infographics, and other resources to support customer communications.

Customer Programs Update

- NCPA has executed 4 contracts for Utility Physical Security Plan Evaluation Services, after approval at the NCPA Commission meeting on February 25, 2021. The vendors were selected through an RFP issued in December 2020, in response to the CPUC's regulatory requirement for POU's to develop and independently evaluate a physical security plan by July 2021. Members have been actively

engaging with the selected vendors to develop their Physical Security Plans and/or to have their Plans independently evaluated, in order to meet the regulatory deadlines.

Federal Legislative Update

- Last month, the NCPA L&R Committee held its first meeting of the year which included a budget workshop and a federal legislative briefing to prepare members for our virtual congressional visits held in conjunction with APPA's Annual Legislative Rally. During the rally program, NCPA successfully advanced three resolutions during the annual meeting of the association's Legislative and Resolutions Committee Meeting—supporting a strong federal response to the COVID-19 pandemic, supporting federal incentives for hydrogen storage projects, and supporting efforts to streamline sediment removal from hydroelectric reservoirs. The resolutions establish new APPA policy in these areas, and will have the effect of bringing the association's legislative advocacy efforts to bear on behalf of these issues. As well, NCPA submitted a nearly identical resolution on behalf of sediment removal and relocation during NWPPA's Government Relations Committee meeting—the resolution was approved, and lays the groundwork for collaboration between our organizations as we advocate before Congress on this issue. Partial removal of the sediment from NCPA's McKay's Point Reservoir is anticipated to cost project participants up to \$80 million, and the permitting process to allow the contaminant-free debris to be placed back on adjacent federal lands does not appropriately account for the serious impacts of the runoff on water quality and storage capacity of this important carbon-free generation source.

Western Update

- March 16, 2021, marks an important step for NCPA members in securing long-term entitlements to the Central Valley Project hydropower resource. Following lengthy contract and power marketing plan discussions, NCPA members executed or will soon execute 30-year contracts with Western Area Power Administration. The Western 2025 base resource contract entitles each member to a percentage of the carbon-free, hydropower resource through December 31, 2054. While contract terms are defined Western-wide, it was through NCPA member and customer engagement with Western that members secured important termination provisions to counter uncertainties due to cost, quantity, and market conditions. Collectively, NCPA members will continue to receive more than 40 percent of the base resource hydropower generation produced by the federal Bureau of Reclamation and marketed by the Western.

Human Resources

Hires:

- Jason Calderon joined the NCPA team on March 8, 2021 as a new Schedule Coordinator III. Jason worked for CDWR as a Water and Power Dispatcher and Senior Hydroelectric Plant Operator with over eight years' experience managing the State Water Project.
- Branson Ropp joined the NCPA team on March 15, 2021 as a new Schedule Coordinator III. Branson worked for CAISO as a Transmission Dispatcher the last two years. Branson is a former engineering intern with NCPA in 2018 and has a B.S. Mechanical Engineering degree from CSU Sacramento.

Intern Hires:

- None

Promotions/Position Changes:

- Mike Brush was promoted to Lead System Dispatcher – Relief on March 14, 2021. The Lead System Dispatcher position was established to assist with the integration and support of the existing and future Power Management control center as well as scheduling service for customers. In this position, Mike will support day-to-day operations of the NCPA Dispatch Center, train and support System Dispatcher and Schedule Coordination personnel, and perform compliance activities and requirements.

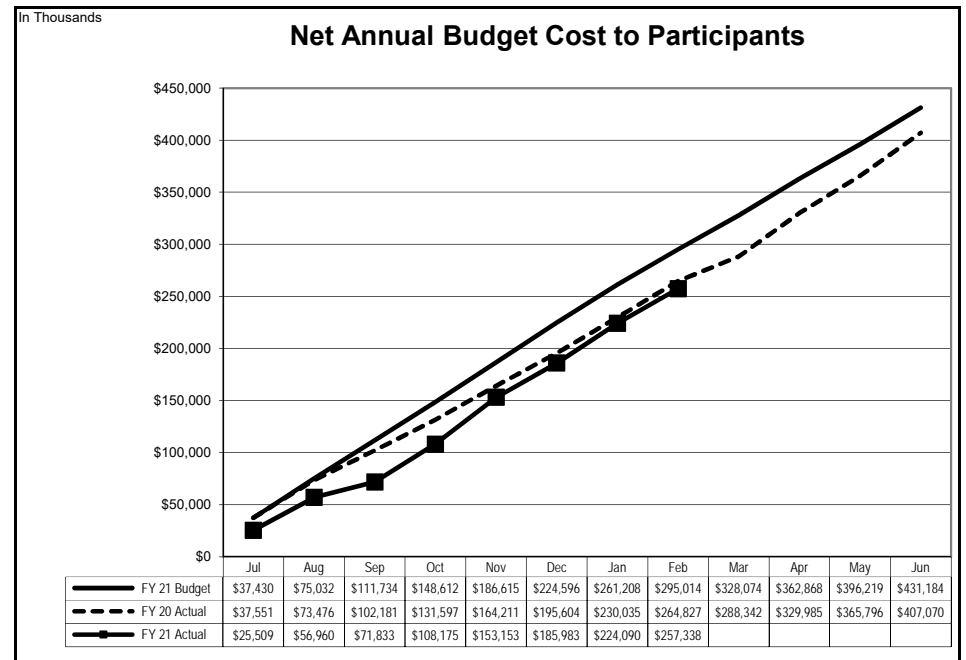
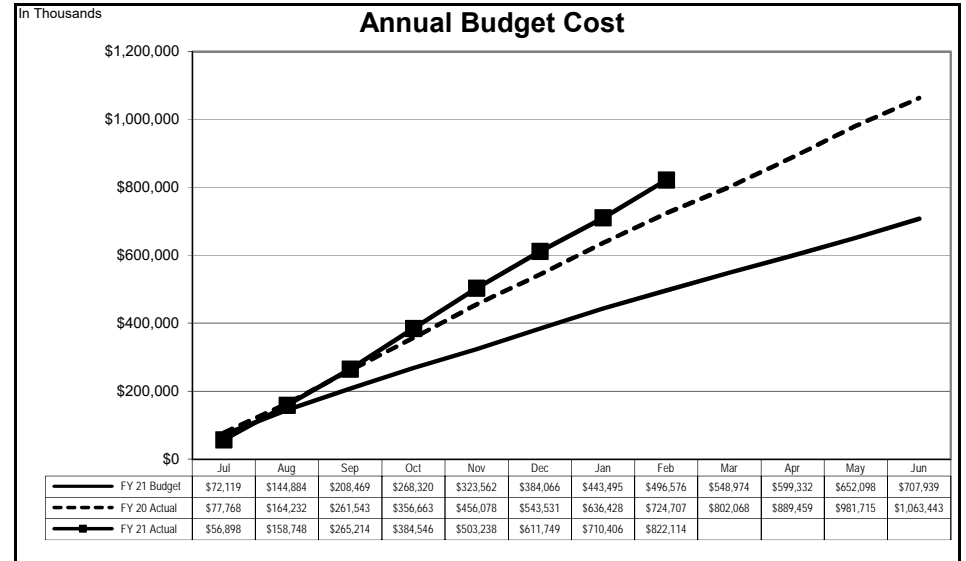
In Mike's 20 years of experience working both the Dispatch and Schedule Coordinator functions, he has served as a strong asset to NCPA.

Separations:

- Brent Helm, Hydro Tech Operator, retired from our Hydroelectric facilities on March 18, 2021 after over 15 years of service with NCPA.

**Annual Budget
2020-2021 Fiscal Year To Date
As of February 28, 2021**

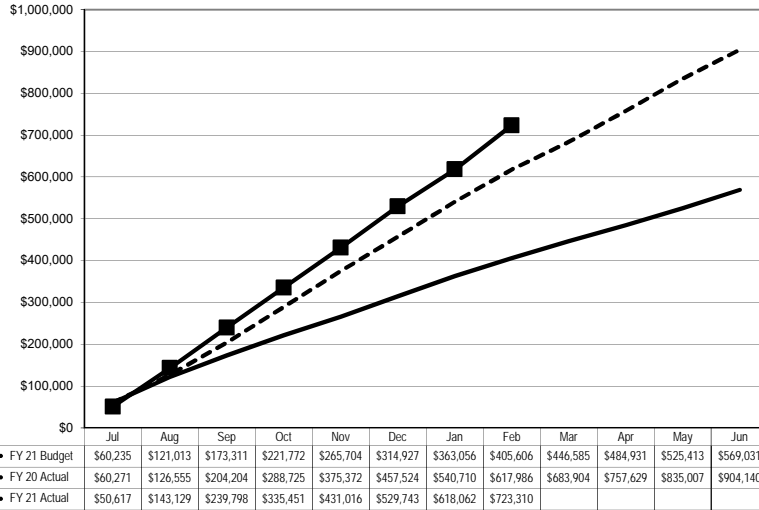
In Thousands	Program			
	Annual Budget	Actual	Under(Ovr) Budget	YTD % Remaining
GENERATION RESOURCES				
NCPA Plants				
Hydroelectric	54,260	34,775	\$ 19,485	36%
Geothermal Plant	35,561	23,732	11,830	33%
Combustion Turbine No. 1	7,884	4,240	3,644	46%
Combustion Turbine No. 2 (STIG)	7,989	6,579	1,410	18%
Lodi Energy Center	92,551	54,819	37,732	41%
	198,246	124,145	74,101	37%
Member Resources - Energy	60,056	38,790	21,266	35%
Member Resources - Natural Gas	2,442	2,263	179	7%
Western Resource	29,870	17,350	12,519	42%
Market Power Purchases	27,423	23,709	3,714	14%
Load Aggregation Costs - ISO	250,995	515,844	(264,849)	-106%
Net GHG Obligations	-	1,210	(1,210)	
	569,031	723,310	(154,279)	-27%
TRANSMISSION				
Independent System Operator	120,026	86,071	33,955	28%
MANAGEMENT SERVICES				
Legislative & Regulatory				
Legislative Representation	2,180	1,059	1,121	51%
Regulatory Representation	715	483	232	32%
Western Representation	716	385	331	46%
Customer Programs	477	278	198	42%
	4,088	2,205	1,883	46%
Judicial Action	460	382	78	17%
Power Management				
System Control & Load Dispatch	6,766	4,135	2,631	39%
Forecasting & Prescheduling	2,934	1,880	1,054	36%
Industry Restructuring	425	271	154	36%
Contract Admin, Interconnection Svcs & Ext. Affairs	1,000	653	347	35%
Gas Purchase Program	82	41	41	50%
Market Purchase Project	117	60	58	49%
	11,324	7,040	4,285	38%
Energy Risk Management	230	174	56	25%
Settlements	924	458	466	50%
Integrated System Support	266	129	137	51%
Participant Pass Through Costs	1,591	893	697	44%
Support Services	-	1,452	(1,452)	
	18,882	12,733	6,150	33%
TOTAL ANNUAL BUDGET COST	707,939	822,114	(114,175)	-16%
LESS: THIRD PARTY REVENUE				
Plant ISO Energy Sales	105,258	86,552	18,706	18%
Member Resource ISO Energy Sales	26,422	22,494	3,928	15%
Member Owned Generation ISO Energy Sales	69,679	60,259	9,420	14%
Customer Owned Generation ISO Energy Sales	-	44	(44)	
NCPA Contracts ISO Energy Sales	18,915	16,425	2,490	13%
Western Resource ISO Energy Sales	17,481	17,687	(206)	-1%
Load Aggregation Energy Sales	-	232,580	(232,580)	
Ancillary Services Sales	3,988	5,974	(1,986)	-50%
Transmission Sales	110	74	37	33%
Western Credits, Interest & Other Income	34,902	122,688	(87,787)	-252%
	276,755	564,776	(288,021)	-104%
NET ANNUAL BUDGET COST TO PARTICIPANTS	431,185	257,338	\$ 173,846	40%



Annual Budget Budget vs. Actual By Major Area As of February 28, 2021

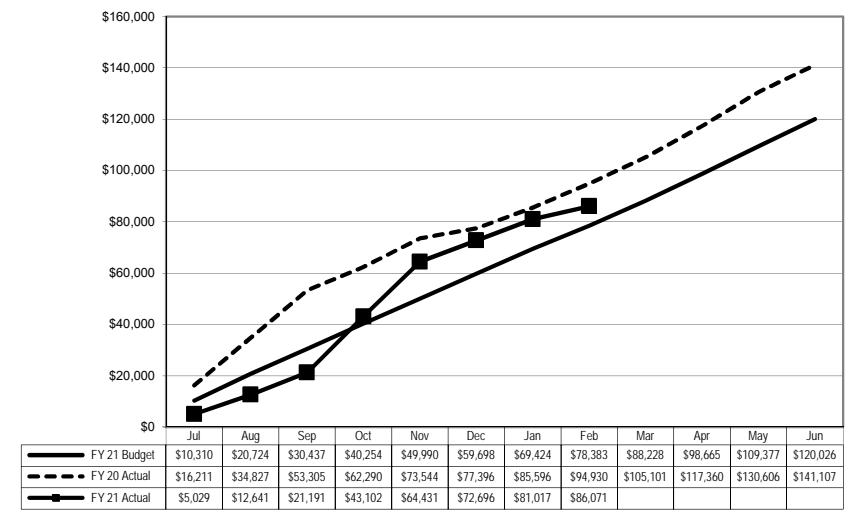
In Thousands

Generation Resources



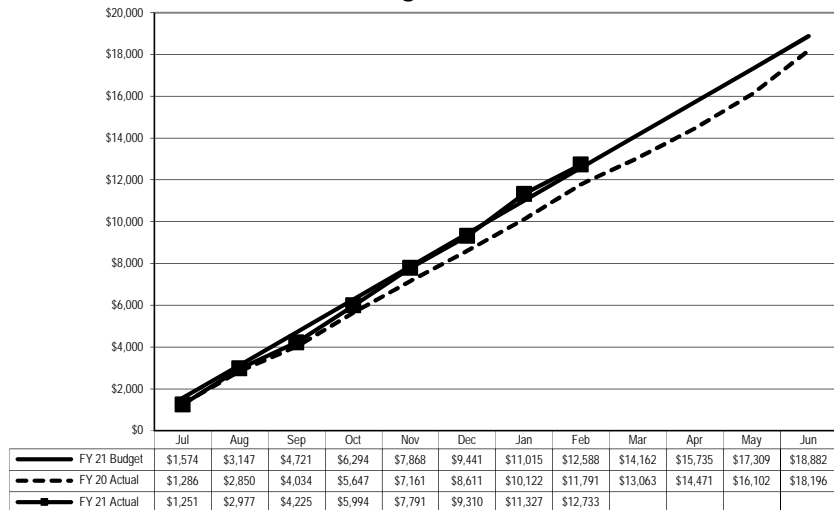
In Thousands

Transmission-ISO



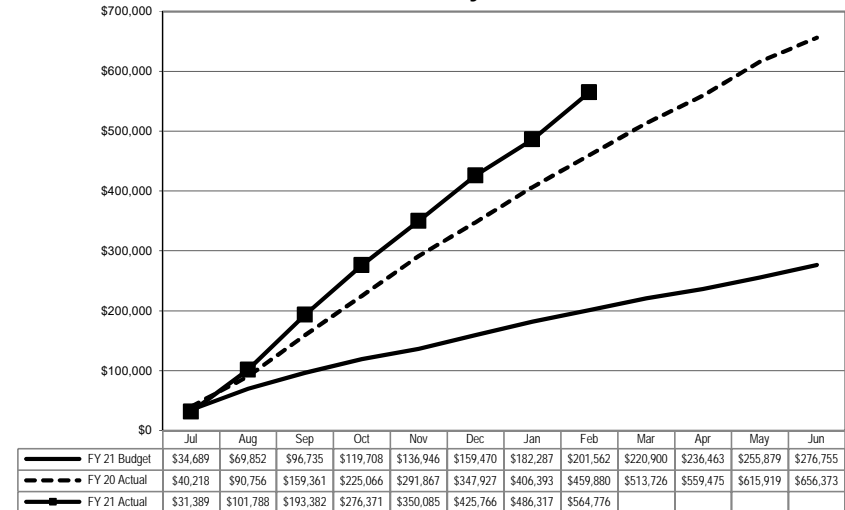
In Thousands

Management Services



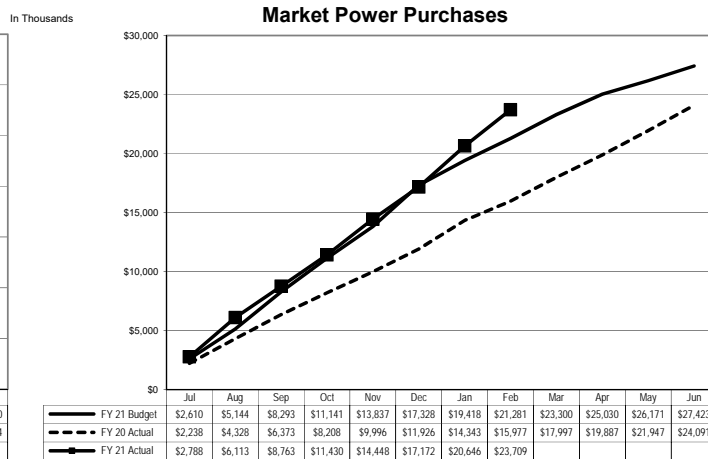
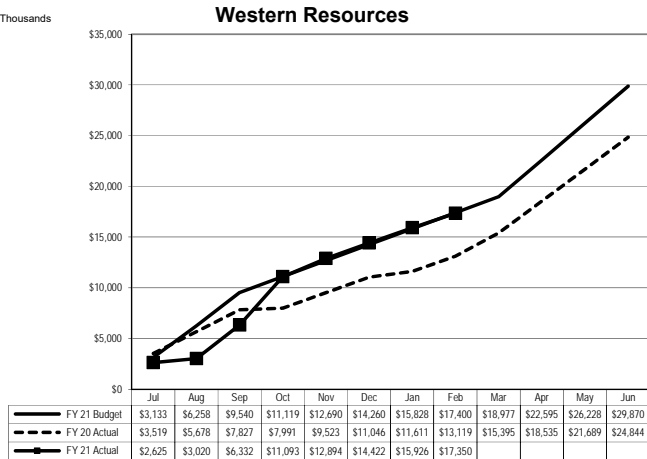
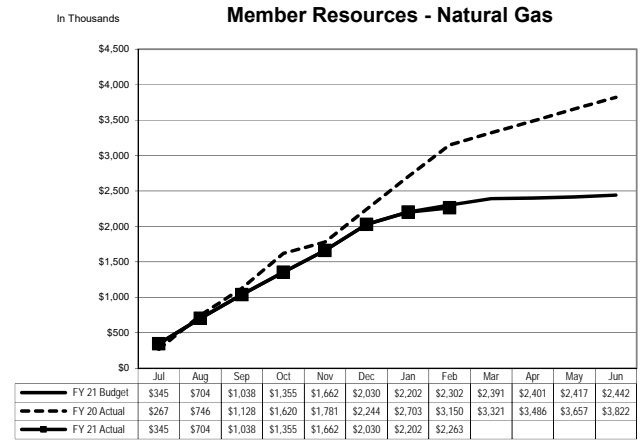
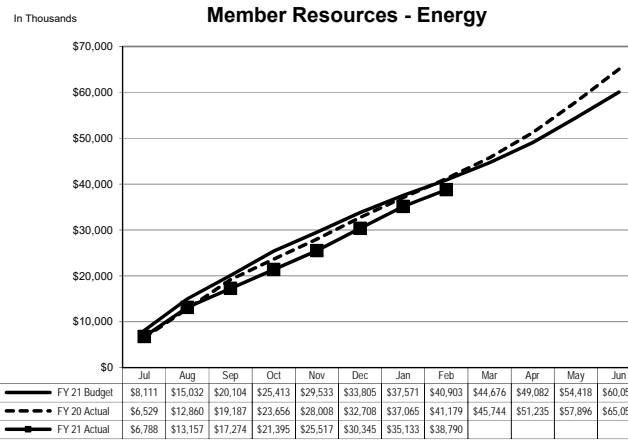
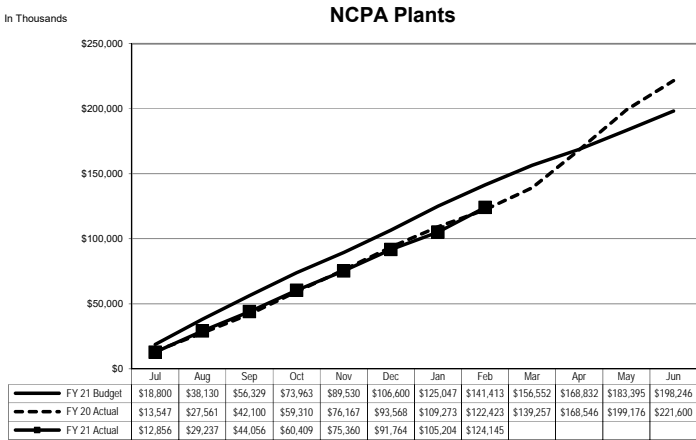
In Thousands

Third Party Revenue



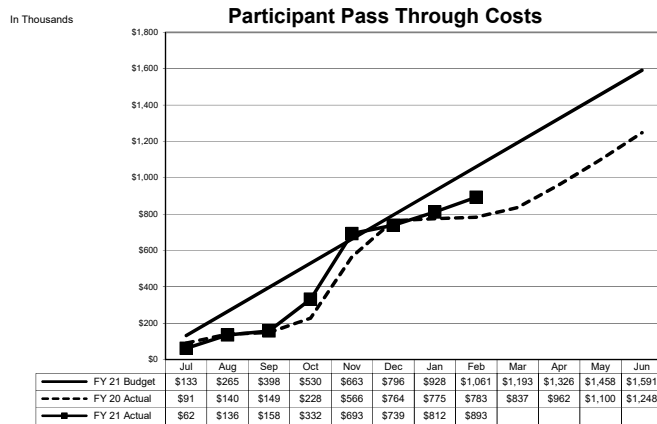
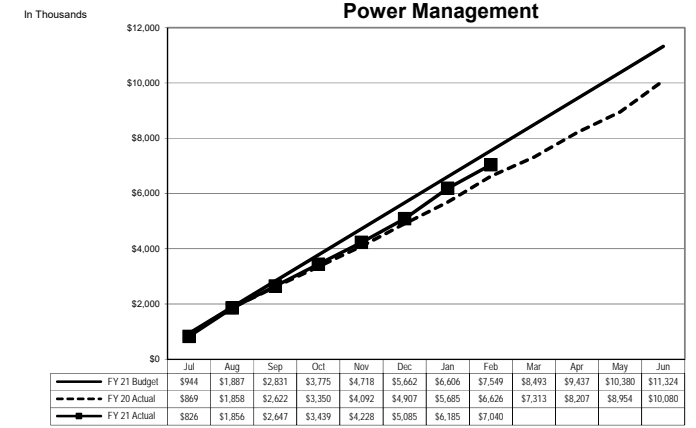
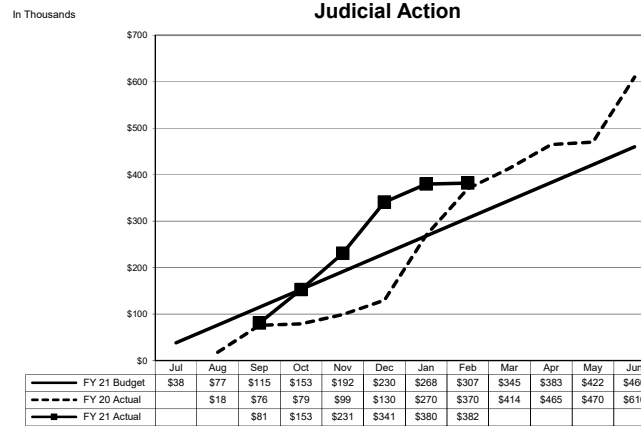
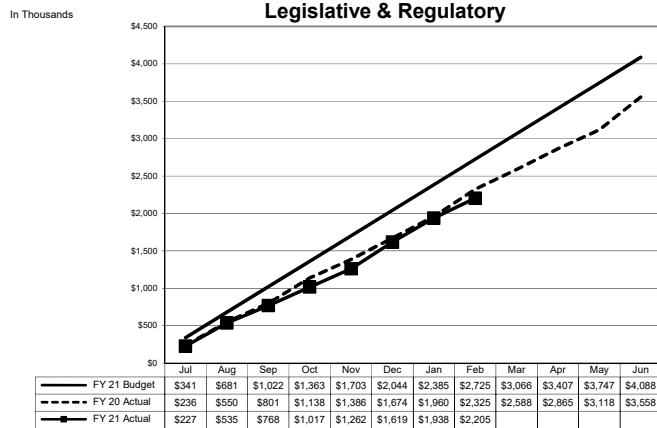
Footnote: Transmission is solely reflective of Independent System Operator (ISO) costs

Annual Budget Cost Generation Resources Analysis By Source As of February 28, 2021



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

**Annual Budget Cost
Management Services Analysis By Source
As of February 28, 2021**



**Annual Budget Cost
Management Services Analysis By Source
As of February 28, 2021**

In Thousands

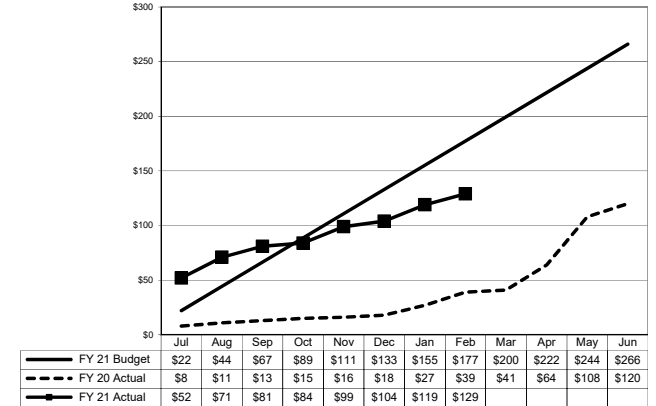
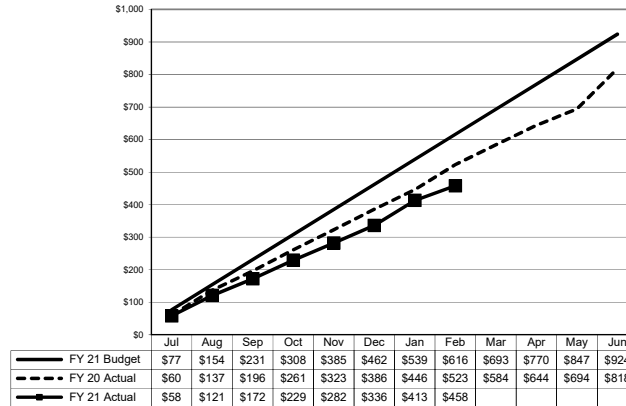
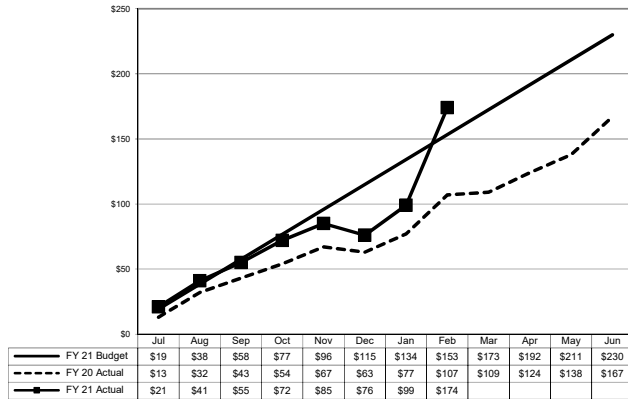
Energy Risk Management

In Thousands

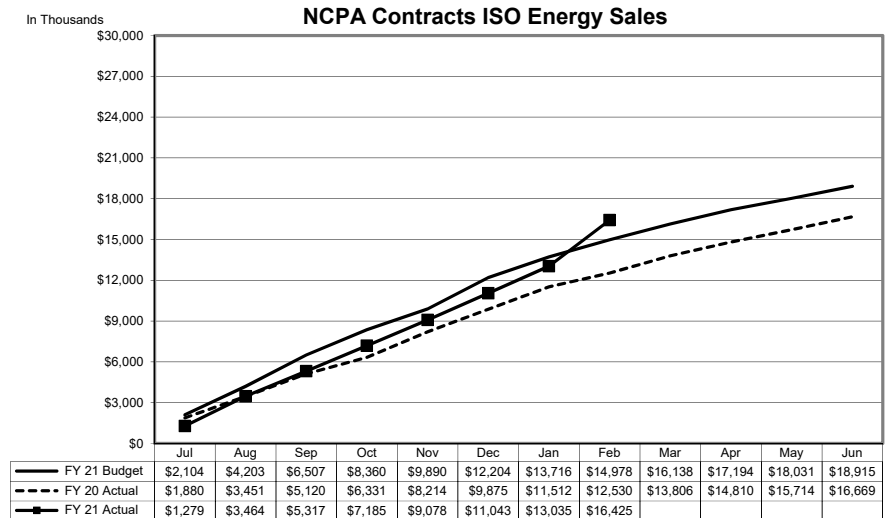
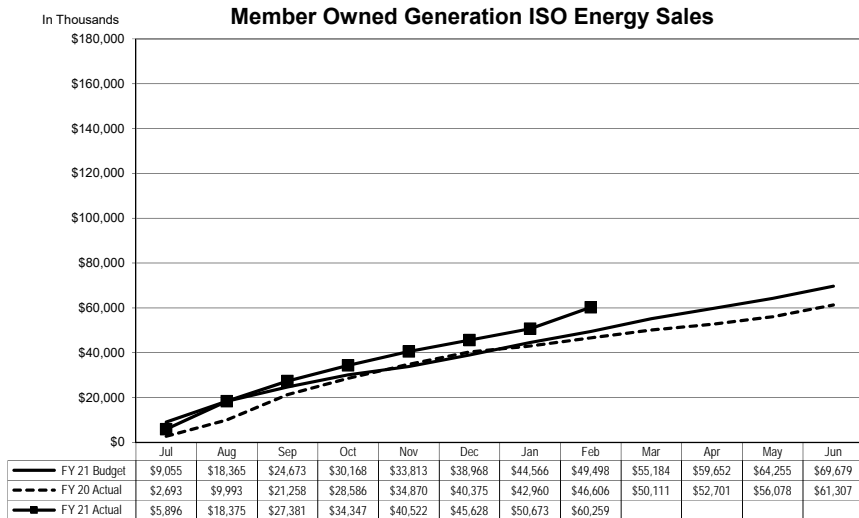
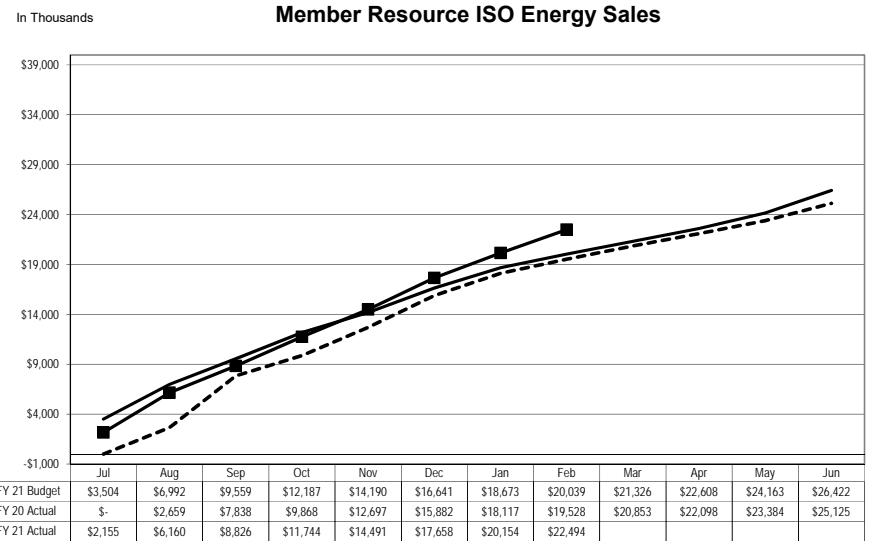
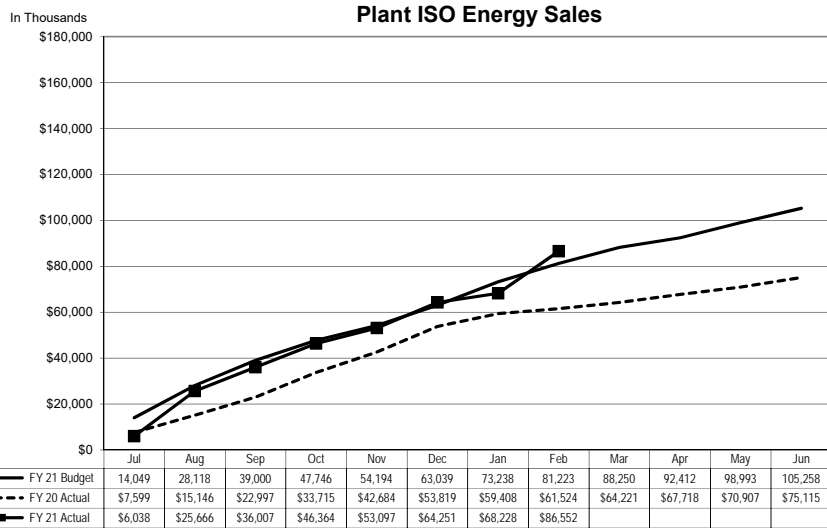
Settlements

In Thousands

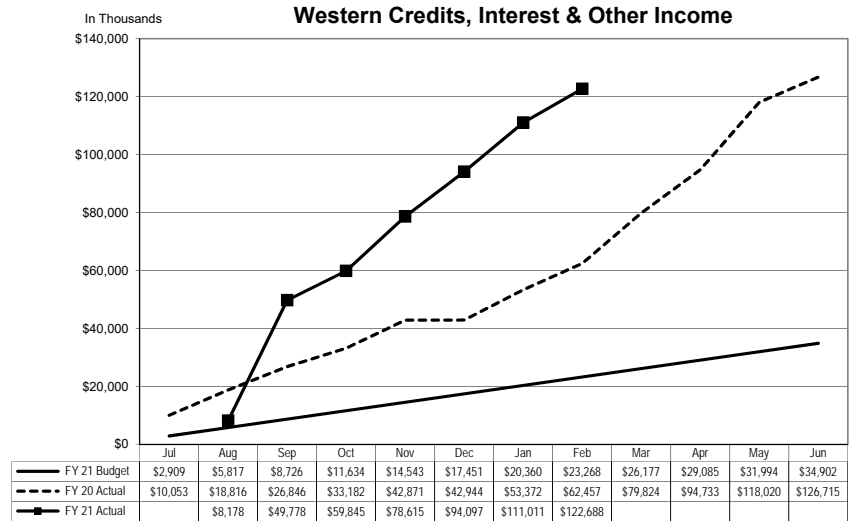
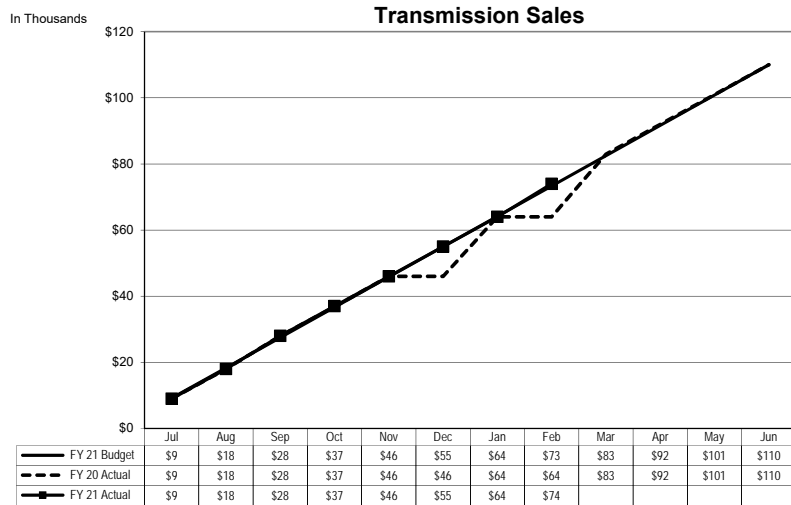
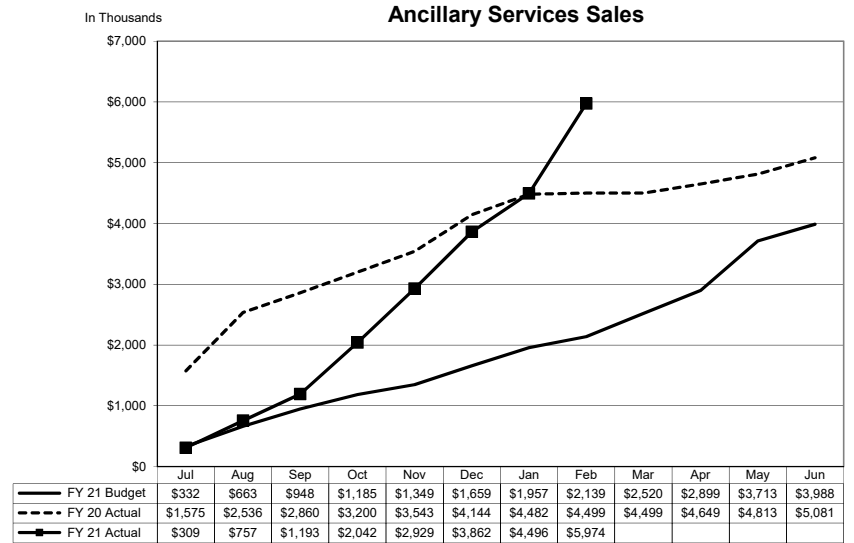
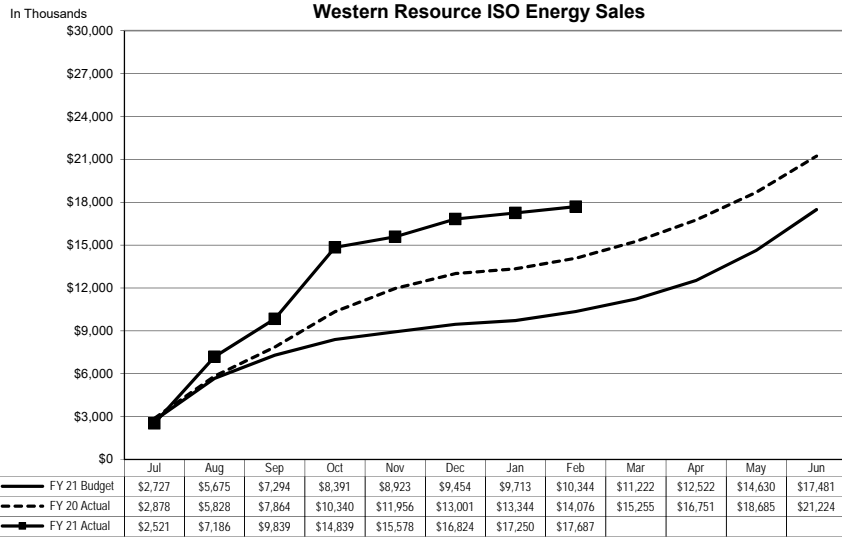
Integrated Systems Support



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of February 28, 2021**



**Annual Budget Cost
Third Party Revenue Analysis By Source
As of February 28, 2021**



**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2021**

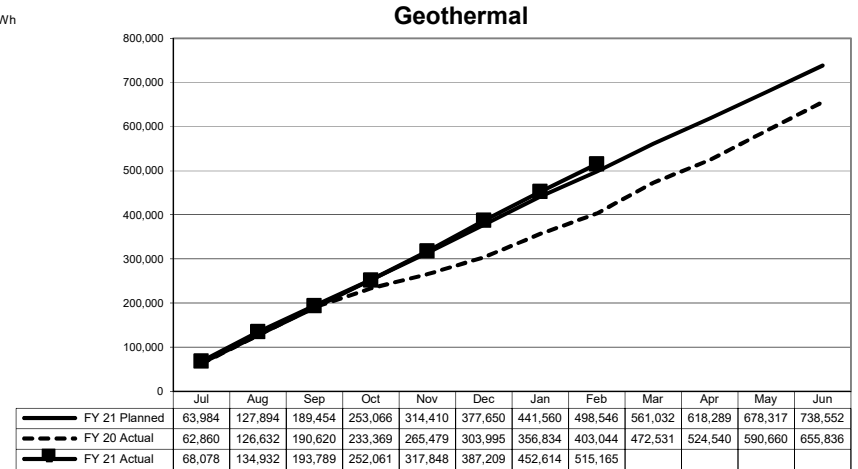
Generation Cost Analysis

\$ in thousands

	Geothermal				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 19,252	\$ 12,701	\$ 24.65	\$ 6,551	34%
Capital Assets/Spare Parts Inventories	2,585	1,743	3.38	842	33%
Other Costs	8,239	5,035	9.77	3,204	39%
CA ISO Charges	534	952	1.85	(418)	-78%
Debt Service	4,950	3,300	6.41	1,650	33%
Annual Budget	35,561	23,732	46.07	11,830	33%
Less: Third Party Revenue					
Interest Income	382	95	0.18	287	75%
ISO Energy Sales	25,811	22,276	43.24	3,535	14%
Ancillary Services Sales	-	-	-	-	-
Effluent Revenues	750	648	1.26	102	14%
Misc	113	76	0.15	37	33%
	27,056	23,095	44.83	3,961	15%
Net Annual Budget Cost to Participants	\$ 8,506	\$ 637	\$ 1.24	\$ 7,869	93%
Net Generation--MWh @ Meter	738,552	515,165			
\$/MWh (A)	\$ 4.81	\$ (5.17)			

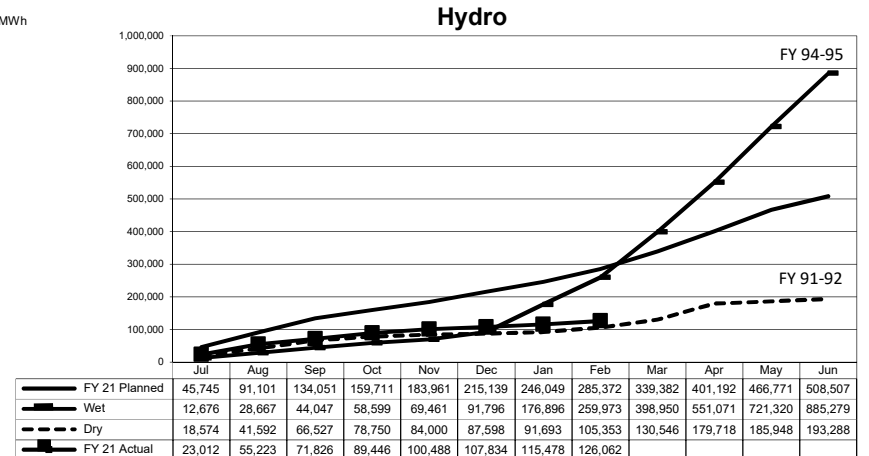
MWhs Generated

In MWh



	Hydroelectric				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 9,570	\$ 5,057	\$ 40.12	\$ 4,512	47%
Capital Assets/Spare Parts Inventories	365	3,138	24.89	(2,774)	-761%
Other Costs	8,323	2,202	17.47	6,120	74%
CA ISO Charges	2,615	2,118	16.80	497	19%
Debt Service	33,388	22,259	176.57	11,129	33%
Annual Budget	54,260	34,775	275.86	19,485	36%
Less: Third Party Revenue					
Interest Income	670	127	1.01	543	81%
ISO Energy Sales	22,147	13,404	106.33	8,743	39%
Ancillary Services Sales	2,276	3,084	24.46	(808)	-35%
Misc	-	-	-	-	-
	25,094	16,615	131.80	8,479	34%
Net Annual Budget Cost to Participants	\$ 29,167	\$ 18,160	\$ 144.06	\$ 11,007	
Net Generation--MWh @ Meter	508,507	126,062			
\$/MWh (A)	\$ (8.30)	\$ (32.51)			

In MWh



Footnotes:

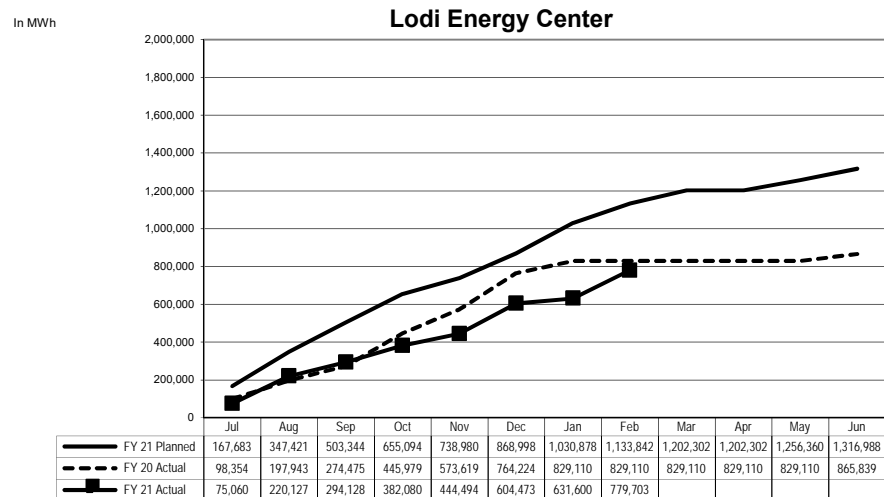
(A) Aggregate fiscal year generation in \$/MWh (excluding debt service)

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2021**

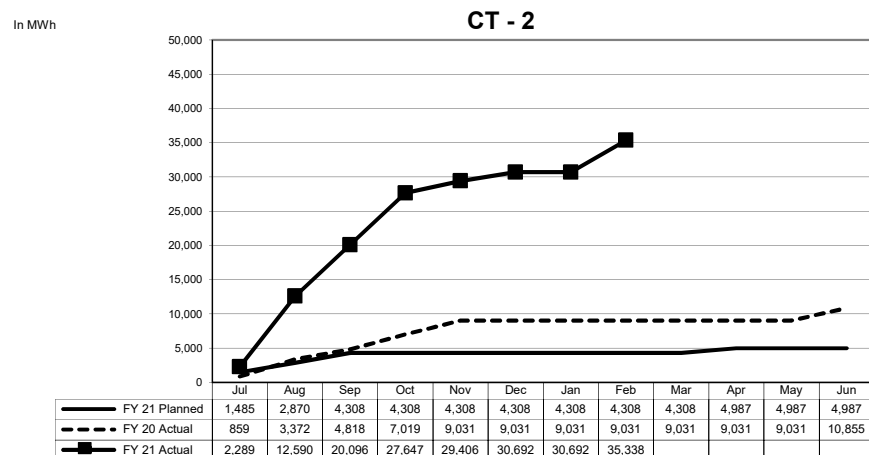
Generation Cost Analysis

	Lodi Energy Center				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 14,463	\$ 6,731	\$ 8.63	\$ 7,733	53%
Fuel	32,956	22,057	28.29	10,899	33%
CA ISO Charges and Energy Purchases	3,831	1,842	2.36	1,989	52%
Capital Assets/Spare Parts Inventories	2,906	1,591	2.04	1,315	45%
Other Costs	12,372	5,250	6.73	7,122	58%
Debt Service	26,024	17,349	22.25	8,675	33%
Annual Budget	92,551	54,819	70.31	37,732	41%
Less: Third Party Revenue					
Interest Income	386	183	0.24	202	52%
ISO Energy Sales	55,590	43,924	56.33	11,666	21%
Ancillary Services Sales	1,712	2,143	2.75	(431)	-25%
Transfer Gas Credit	-	-	-	-	0%
GHG Allowance Credits	8,463	-	-	8,463	100%
Misc	-	35	0.04	(35)	0%
	66,151	46,285	59.36	19,866	30%
Net Annual Budget Cost to Participants	\$ 26,400	\$ 8,534	\$ 10.95	\$ 17,866	68%
Net Generation--MWh @ Meter	1,316,988	779,703			
\$/MWh (A)	\$ 0.29	\$ (11.31)			

MWhs Generated



	Combustion Turbine No. 2 (STIG)				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 1,584	\$ 1,084	\$ 30.68	\$ 499	32%
Fuel and Pipeline Transport Charges	910	1,487	42.09	(577)	-63%
Capital Assets/Spare Parts Inventories	37	4	0.10	33	90%
Other Costs	593	418	11.84	174	29%
CA ISO Charges	40	368	10.41	(328)	-811%
Debt Service	4,826	3,217	91.05	1,609	33%
Annual Budget	7,989	6,579	186.17	1,410	18%
Less: Third Party Revenue					
Interest Income	109	28	0.79	81	74%
ISO Energy Sales	399	3,625	102.59	(3,227)	-809%
Ancillary Service Sales	-	-	-	-	0%
Fuel and Pipeline Transport Credits	1,821	868	24.57	953	52%
GHG Allowance Credits	43	-	-	43	100%
Misc	-	-	-	-	0%
	2,371	4,521	127.95	(2,150)	-91%
Net Annual Budget Cost to Participants	\$ 5,618	\$ 2,057	\$ 58.22	\$ 3,560	63%
Net Generation--MWh @ Meter	4,987	35,338			
\$/MWh (A)	\$ 158.75	\$ (32.83)			



Footnotes:

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

**Annual Budget
NCPA Generation Detail Analysis By Plant
As of February 28, 2021**

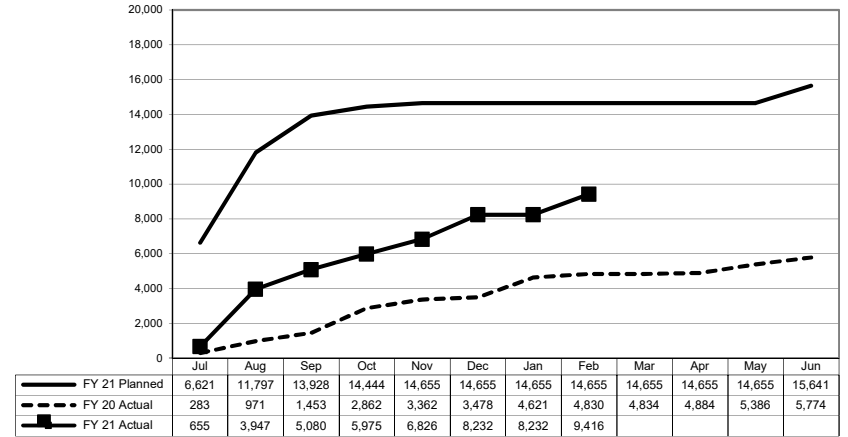
Generation Cost Analysis

	Combustion Turbine No. 1				
	Budget	Actual	\$/MWh Actual	Under(Over) Budget	YTD % Remaining
Routine O & M	\$ 2,320	\$ 1,670	\$ 177.36	\$ 650	28%
Fuel and Pipeline Transport Charges	937	641	68.12	295	32%
Capital Assets/Spare Parts Inventories	3,667	937	99.50	2,730	74%
Other Costs	866	487	51.74	378	44%
CA ISO Charges	94	504	53.57	(410)	-437%
Debt Service	-	-	-	-	-
Annual Budget	7,884	4,240	450.29	3,644	46%
Less: Third Party Revenue					
Interest Income	-	30		(30)	
ISO Energy Sales	1,311	3,323	352.90	(2,012)	-153%
Ancillary Services Sales	-	-	-	-	0%
Misc	-	16	1.66	(16)	0%
	1,311	3,369	354.56	(2,057)	-157%
Net Annual Budget Cost to Participants	\$ 6,572	\$ 871	\$ 92.55	\$ 5,701	87%
Net Generation--MWh @ Meter	15,641	9,416			
\$/MWh (A)	\$ 420.19	\$ 92.55			

MWhs Generated

In MWh

CT - 1



Footnotes:

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