



City of Needles, California Board Report

CITY COUNCIL NPUA BOARD OF PUBLIC UTILITIES
 Regular Special

Meeting Date: November 16, 2021

Title: NPUA Newsletter

Background: Commissioner Brown requested staff consider publishing a monthly or quarterly newsletter to all households, apartments, and businesses to keep rate payers up to date on current events. The newsletter can be used to provide educational information, conservation tips, and capital project status.

Enclosed is the first quarterly newsletter addressing electrical power purchasing education, upcoming water improvement and recent wastewater maintenance.

Fiscal Impact: N/A

Recommended Action: No Action Needed - Information Only

Submitted By: Rainie Torrance, Assistant Utility Manager

City Management Review: *Rick* **Date:** 11/9/21

Approved: <input type="checkbox"/>	Not Approved: <input type="checkbox"/>	Tabled: <input type="checkbox"/>	Other: <input type="checkbox"/>
			Agenda Item: <u>3.</u>

UTILITIES CURRENTS

NEEDLES PUBLIC UTILITY AUTHORITY NEWSLETTER

WINTER 2021

HOW DOES THE NPUA RECEIVE POWER?

Ever wonder where your power comes from? The Needles Public Utility Authority (NPUA) receives power in two ways: hydropower (water generated) and open-market sourcing.

HYDROPOWER

The NPUA has two contractual obligations for hydropower from the U.S. Department of Energy which accounts for 47% of the annual utility load. Those two hydropower contracts are from:

- **Parker-Davis Dam Hydro Allocation** - The Parker-Davis Project resulted from the consolidation of two projects on the Colorado River. Parker Dam created Lake Havasu 155 miles below Hoover Dam. Davis Dam is 67 miles below Hoover Dam. The combined capacity of the powerplants at the dams is 315 MW. The NPUA has a long-term contract for hydro supply which is allocated monthly.
- **Aqua Caliente Hydro Benefit Crediting Agreement** - NPUA has long term power purchase agreement to purchase Aqua's Parker-Davis hydro allocation for a set contractual delivery allotment at \$52/megawatt (MW). Contract is through September 30, 2028.

OPEN MARKET

The NPUA also receives all remaining power through the open market in quarterly or longer terms which accounts for 53% of the annual load. This is accomplished with the following contract:

- **Aggregated Energy Services Term Purchases** - Partnerships with Western Area Power Administration, Wellton-Mohawk Irrigation & Drainage District and, Yuma County Water Users' Association (YCWUA) supply the remaining load.



Parker Dam and Davis Dam are located on the Colorado River, 155 miles and 67 miles, respectively, downstream of Hoover Dam. Parker-Davis Dam rated capacity of 120,000 kilowatts. The transmission system currently includes more than 1,500 miles of high-voltage transmission lines and 32 substations.

HOW DOES THE NPUA PURCHASE POWER?

1. The NPUA first calculates the estimate on and off-peak load for each month based on historic usage, potential development and forecasted weather impacts.

2. All hydropower contractual obligations are then factored into the needed load forecast.

3. Term loads and spot loads are forecasted based on the remaining on and off-peak hours needed to balance the load. Terms are purchased in quarters or longer depending on market prices and the NPUA's ability to pay

The NPUA must balance loads monthly. The contracts are "put or pay". If more power is purchased than consumed the NPUA losses funds. Any excess power is not able to be re-sold. Monthly loads are balanced to over any intentional cover procurement of power.

WHY HAVE POWER PRICES INCREASED?

In June 2021, power prices for on-peak went from roughly \$65/MW to over \$260/MW and off-peak from \$30/MW to over \$75/MW. That is triple and double increase in power purchases. To procure power for July and August 2021 the Needles Power Utility Authority (NPUA) spent \$2,261,373 dollars on power purchases. The historical annual budget for an entire fiscal year for power purchasing has historically been around \$2.5 million. The prices of power continue to increase as a result of the state and federal policy to move to more expensive green power.

The NPUA's non-hydropower allocation is fueled by a combination of 40% nuclear gas, and natural gases. There has been an increasing use of renewable energy sources while shutting down nuclear and gas powered plants.

The NPUA utilizes a Power Cost Adjustment (PCA). The Power Cost Adjustment rate is determined as the difference between the actual cost of power and the annual projected base power cost, as calculated and applied each October.

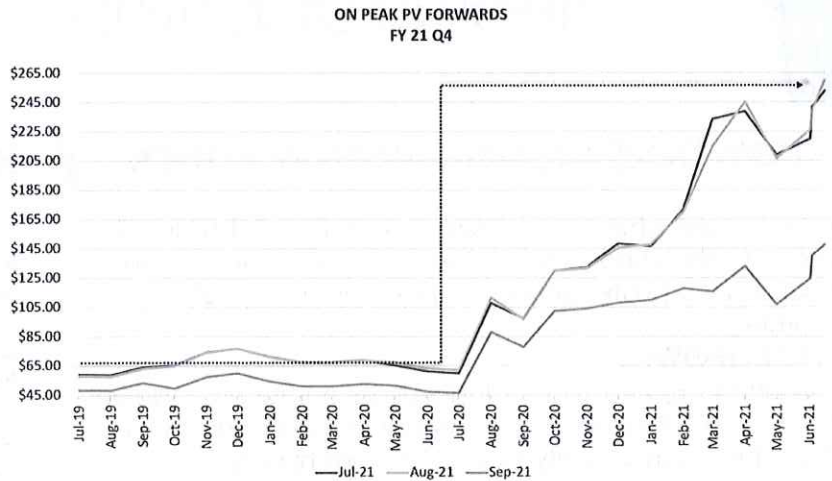
The purpose of the PCA Balancing Fund is to provide a reserve that can be utilized to mitigate unanticipated increases in energy costs primarily associated with the open market. The PCA Balancing Fund is funded by an initial balance of \$750,000 and the continuing fund balance is to be determined by the Utility Board.

See reverse for power purchasing expenditure chart.

POWER PURCHASING

This chart shows the increase in power purchasing costs from \$2.2M annually to an estimated \$4.6M. This is the result of an increase in the over hydro rate. The over hydro rate was .1079 in June 2019, decreased to .0860. The current over hydro rate is still below the all time historical high of .15 in 2007-2008.

The NPUA cannot make a profit and the goal is to keep rates as low as possible for the rate payers.



UPCOMING WATER SYSTEM PROJECTS

The State Water Resource Control Board has \$8.2 million dollars awarded as a grant for the NPUA water system. The projects range from addressing a single water source, increasing storage, system improvements, and addressing the drought. By obtaining grant funds, this will have a long-term impact on rate payers as rates will not need to be increased to address these deficiencies.

Proj #	Phase	Project Title	Estimate	Estimate Project Start Date
001C	Phase 1	Lilly Hill Booster Station Replacement/Relocation	\$ 1,187,584	January 2022
002C	Phase 2A	Well No. 16 Project (Drilling & Equipping)	\$ 1,651,277	January 2022
002C	Phase 2B	Well No. 16 Project (Connection to City Distribution System)	-	February 2022
003C	Phase 3	L Street Pump Station Project	\$ 205,900	January 2022
004C	Phase 4A	Well No. 15 Backup Generator	\$ 500,000	January 2022
004C	Phase 4B	Monterey Ave Waterline Upgrade	\$ 1,087,300	March 2022
004C	Phase 4C	Maintenance Yard Manifold Pipe Rebuild	\$ 750,000	December 2022
004C	Phase 4D	River Road Waterline Upgrade	\$ 500,000	March 2022
005C	Phase 5	New 1.5 MG Storage Tank	\$ 2,380,608	December 2022
			\$ 8,262,669	

WASTEWATER MAINTENANCE

During winter crews drain each of the sequencing batch reactor (SBR) tanks to inspect for damage and perform annual maintenance. 30,000 liner feet of service mains were hydrovac'd in November in high traffic areas to remove buildup. Every manhole is being inspected and a replacement program is being developed to replaced those in need.



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Need help with your utility bill? Assistance is available. Contact the billing office at 760-326-5700 x111.



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 760-326-5700**