



INSTALLATION AND OPERATION OF BATTERY STORAGE SYSTEMS AT THREE WATER PRODUCTION AND TREATMENT LOCATIONS

Riverside Public Utilities

Board of Public Utilities
May 10, 2021

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BACKGROUND

1. SCE provides power to RPU facilities in San Bernardino
2. Public Safety Power Shutoff (PSPS) are:
 - a) Called when fire risk is elevated due to winds
 - b) Continuing to increase over time
 - c) Impacting RPU's water facilities more often
3. Self Generation Incentive Program (SGIP)
 - a) \$1 Billion set aside by CPUC
 - b) Funds Battery Energy Storage Systems (BESS) installations



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BACKGROUND

3. Equity Resiliency Incentive Program (ERIP)

- a) Subset of SGIP
- b) Provides highest incentive of up to \$1/kWh
- c) Three Criteria:
 - Facilities located in High Fire Threat District (HFTD)
 - Facilities are critical
 - Facilities serve disadvantaged or low-income community in a HFTD

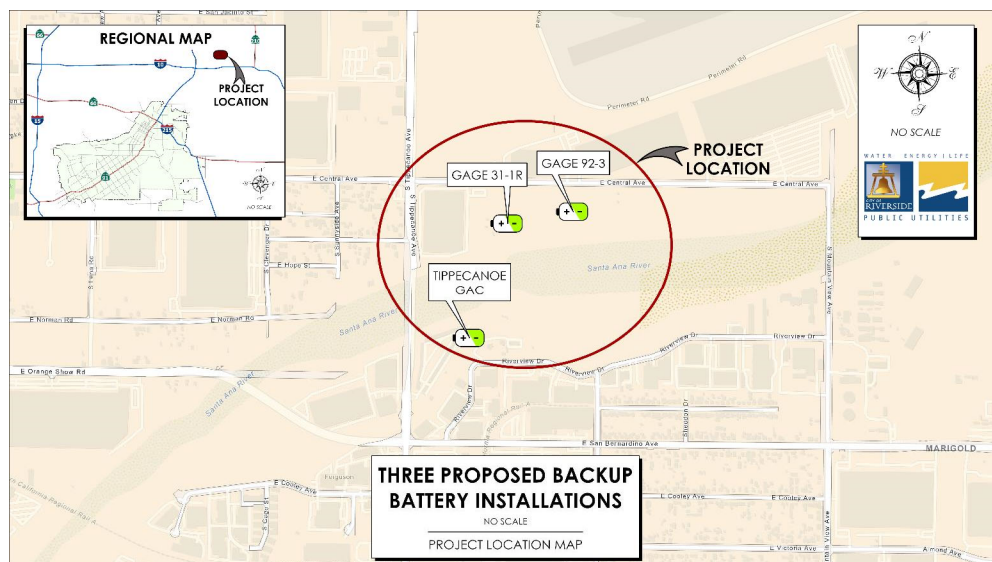
4. Three of RPU's sites potentially qualify for SGIP-ERIP



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BACKGROUND



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PROJECT DESCRIPTION

1. Tesla is proposing to install batteries at three locations.
 - a. Tippecanoe Water Treatment Plant – 350kW/2088kWh battery to provide 10 hours of operation when fully charged and 5 hours of operation on an average charge.
 - b. Gage 92-3 Well – 210kW/1160kWh battery to provide 13 hours of operation when fully charged and 6.5 hours of operation on an average charge.
 - c. Gage 31-R Well – 210kW/1160kWh battery to provide 11 hours of operation when fully charged and 5.5 hours of operation on an average charge.



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PROJECT DESCRIPTION (CONT'D.)

2. RPU will pay \$600 in application fees to CPUC.
3. Tesla will receive \$3,722,000 in incentives from CPUC for the three installations.
4. RPU will own the three battery systems.
5. Tesla will operate and maintain the battery systems for 10 years at zero cost to RPU.



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PROJECT BREAKDOWN

Facility	Output Rating (kW)	Battery Size (kWh)	Fully Charged Backup Duration (hrs)	Avg. Backup Duration (hrs)	Project Construction Cost	SGIP Incentive
Tippecanoe WTP	350	2088	10	5	\$1,227,151	\$1,722,000
Gage 92-3 Well	210	1160	13	6.5	\$749,453	\$1,000,000
Gage 31-R Well	210	1160	11	5.5	\$749,453	\$1,000,000
Totals	770	4408			\$2,726,056	\$3,722,000



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RECOMMENDATIONS

That the Board of Public Utilities recommend that the City Council:

1. Authorize grant applications to the California Public Utilities Commission's Self-Generation Incentive Program for battery storage systems in the estimated amount of \$3,722,000;
2. Authorize the City Manager, or his designee, to accept the amount awarded, including amounts lesser or greater than the amount applied for, and execute all grant documents including making minor and non-substantive changes to documents associated with the grant;



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RECOMMENDATIONS

3. Approve three Energy Products Purchase Agreements, and Energy Products Operation and Maintenance Agreements for battery storage systems with Tesla, Inc. for: Gage 31-R Well, Gage 92-3 Well, and Tippecanoe Water Treatment Plant, respectively; and
4. Authorize the City Manager, or his designee, to execute the three agreements with Tesla Inc., including any amendments required for purchase, installations and continued operation of the battery storage systems.

