

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Lori Mitchell

SUBJECT: See Below

DATE: March 17, 2025

Approved		Date:	
	Ontevs. Mayure	3/21/25	

COUNCIL DISTRICT: Citywide

SUBJECT: Actions Related to the Agreements with MRP Pacifica Marketing III, LLC for San Jose Clean Energy Resource Adequacy

RECOMMENDATION

Adopt a resolution authorizing the Director of the Energy Department or their designee to negotiate and execute a Cover Sheet agreement with MRP Pacifica Marketing III, LLC setting forth common terms for the following four transactions:

- (a) Negotiate and execute an agreement with MRP Pacifica Marketing III, LLC to purchase resource adequacy associated with the Tracy Combined Cycle Gas facility for a maximum term of 12 years beginning in 2027, in an amount not to exceed \$10,700,000 annually and up to \$128,400,000 in aggregate;
- (b) Negotiate and execute a further agreement with MRP Pacifica Marketing III, LLC to purchase resource adequacy associated with the Tracy Long-Duration Energy Storage facility for a maximum term of 14 years beginning in 2027, in an amount not to exceed \$1,500,000 annually and up to \$21,000,000 in aggregate;
- (c) Negotiate and execute a further agreement with MRP Pacifica Marketing III, LLC for financial settlements associated with the Tracy Combined Cycle Gas facility for a maximum term of 12 years beginning in 2027, in an amount not to exceed \$11,300,000 annually and up to \$135,600,000 in aggregate; and
- (d) Negotiate and execute a further agreement with MRP Pacifica Marketing III, LLC for financial settlements associated with the Tracy Long-Duration Energy Storage facility for a maximum term of 14 years beginning in 2027, in an amount not to exceed \$1,600,000 annually and up to \$22,400,000 in aggregate; to be paid solely from the San José Clean Energy Operating Fund and subject to the annual appropriation of funds.

SUMMARY AND OUTCOME

This memorandum requests adoption of a resolution to authorize the Director of the Energy Department (Department) or their designee to negotiate and execute a Cover Sheet and four agreements with MRP Pacifica Marketing III, LLC (MRP) for resource adequacy from the Tracy Combined Cycle Gas facility, and from the Tracy Long-Duration Energy Storage facility, a planned new battery storage project, and for financial settlements associated with the Tracy Combined Cycle Gas facility, and from the Tracy Long-Duration Energy Storage facility, to serve customers of San José Clean Energy (SJCE).

These agreements contribute towards 1) the ability of SJCE to meet its resource adequacy requirements in 2027-2041, 2) the ability of SJCE to comply with procurement requirements of the California Public Utilities Commission (CPUC), 3) reducing SJCE's risk of high energy costs, particularly during expensive and volatile hours in the summer months, and 4) reduction of greenhouse gas emissions from the Tracy Combined Cycle Gas facility.

BACKGROUND

CPUC Resource Adequacy Slice of Day Requirements

On July 15, 2021, the CPUC released Decision 21-07-014 on Phase 2 of the Resource Adequacy Reform Track. In this decision, the CPUC adopted a new regulatory framework for Resource Adequacy, a program to ensure that there are sufficient power resources to reliably meet demand. The new regulatory framework requires load serving entities to show they have contracted with sufficient power resources to meet their demand every hour of the day on the peak day of each month. Since 2021, the CPUC has been refining the rules for this new structure.

Under this framework, the Tracy Combined Cycle Gas facility can be available each hour of the day to meet the capacity requirement but only produce energy when market conditions warrant. Additionally, by adding a long-duration storage facility at the same point of interconnection, the city can quickly deploy technology that will leverage existing infrastructure efficiently. This technology can be charged during periods of excess grid energy (e.g., during solar hours), and deployed as needed (e.g., during peak evening demand). This combination will increase grid reliability while decreasing system emissions.

CPUC Procurement Mandate and SJCE Integrated Resource Plan

On June 6, 2021, the CPUC released Decision 21-06-035 Requiring Procurement to Address Mid-term Reliability (2023-2026) due in part to the phased retirement of the Diablo Canyon Power Plant in 2024 and 2025 (CPUC Decision 21-06-035). This decision requires all load serving entities to procure their proportional share of 11,500 megawatts (MW)of resource adequacy. The resources procured must be available during the month of September, the peak demand month in the state, pursuant to long-term agreements that come online over the period of calendar years 2023 through 2026. The CPUC assigned SJCE 247 MW of this procurement requirement. A subset of the 247 MW includes 21.5 MW to be sourced from long-duration storage.

On February 2, 2023, the CPUC released Decision 23-02-040 that extended the deadline for part of this requirement to 2028. That decision also added to the procurement requirements in Decision 21-06-035, that all load serving entities must procure their proportional share of 4,000 MW of resource adequacy. The CPUC assigned SJCE 80 MW of this additional procurement requirement.

On February 20, 2024, the CPUC issued Decision 24-02-047, allowing an extension for long duration storage resources to come online no later than June 1, 2031. The Tracy Long-Duration Energy Storage facility qualifies as long-duration storage necessary to meet the CPUC procurement mandate.

2022 Integrated Resource Plan and 2024 Analysis

In 2022, SJCE prepared, submitted to City Council¹ for its approval, and filed with the CPUC a 2022 Integrated Resource Plan (IRP)². In 2024, Department staff conducted analysis to identify the most cost-effective portfolio to meet state requirements, including the new Slice of Day Resource Adequacy requirements, and the City's goal to be carbon neutral in 2030. Both the 2022 IRP and the 2024 analysis identified a need for 200 MW of natural gas generation paired with storage to cost-effectively and reliably meet State and local requirements. In late 2022, SJCE contracted with a natural gas fired combustion turbine paired with a battery³. The agreements recommended in this memorandum would, in combination with the 2022 agreement, fill the need identified in the 2022 IRP and the 2024 analysis.

¹ San Jose IRP Council Memo:

https://www.sanjoseca.gov/home/showpublisheddocument/90657/638017053102130000 ² San Jose Clean Energy 2022 IRP: <u>https://sanjosecleanenergy.org/wp-</u> content/uploads/2022/11/sjce_irp_public_v1.pdf

³ https://www.sanjoseca.gov/home/showpublisheddocument/90213/638006611921630000

Solicitation

On September 12, 2024, the Department issued a joint solicitation with Ava Community Energy seeking proposals for new resources including batteries with an emphasis on CPUC Decision 21-06-035 compliant projects. Nearly eighty entities submitted 160 unique project offers in response to the solicitation. The Department analyzed the offers considering factors such as value, technology, location, project risk, emissions mitigation, and counterparty experience. The project to construct the Tracy Long-Duration Energy Storage facility and pair it with the Tracy Combined Cycle Gas facility was selected pursuant to this solicitation.

Risk Oversight Committee Review

On March 6, 2025, the City Manager's Risk Oversight Committee recommended that the Department submit to City Council for approval a resolution as described in the Recommendation section of this memorandum.

ANALYSIS

See Attachment - Summary of Material Terms MRP Pacifica III, LLC Agreements

Benefits of the Agreement

Key benefits of these agreements include:

- Portfolio Fit:
 - Supports affordable resource adequacy in the Slice of Day resource adequacy framework to meet SJCE's regulatory requirements.
 - Reduces risk of high energy costs in the summer.
 - Fills a need identified in the 2022 SJCE Integrated Resource Plan and analysis undertaken in 2024.
 - Satisfies a portion of the CPUC Mid-Term Reliability Requirement mandates.
- Three of the four products can be provided based on existing infrastructure so there is less risk of nonperformance or delays.
- Reduction of emissions from an existing power plant

Portfolio Fit

Affordable Resource Adequacy in the Slice of Day Framework

These agreements would provide SJCE with resource adequacy that it can count toward its hourly requirements 24/7. Given California's current resource mix, the most challenging periods to meet resource adequacy requirements are late summer evenings and overnight/early morning hours year-round. This challenge occurs because 24/7

resources are limited. Traditional renewable technologies like wind and solar provide resource adequacy only during a limited set of hours. Pairing these resources with energy storage allows the resource adequacy to be shifted to periods of peak demand. However, current modeling indicates that to affordably meet slice-of -day requirements, load serving entities should prioritize a diverse resource mix.

The table below compares the efficacy and costs of providing resource adequacy using natural gas, geothermal, wind, and solar plus storage. While the Department continues to prioritize alternatives to natural gas for meeting resource adequacy requirements, some natural gas resources, such as those in these agreements, help ensure SJCE meets its Slice-of-Day requirements. This approach maintains affordability while also reducing emissions from the associated natural gas facilities.

Comparative Efficacy and Cost					
	MRP	Geothermal	Wind	Solar plus Storage	
MW required to meet 24X7 RA	1.00	1.00	3.00	3.50	
Relative cost per unit	1.00	2.73	0.45	0.93	
Relative RA cost per effective unit	1.00	2.73	1.34	3.26	

Reduces Risk of High Energy Costs in the Summer

The financial settlement provisions in these agreements would allow SJCE to offset periods of high energy costs. The California Independent System Operator (CAISO) requires facilities with a resource adequacy commitment to offer energy into the dayahead market. CAISO then awards resources based on a least-cost model, typically prioritizing renewables first before progressing up the resource stack to higher-cost options, such as 'peaker' natural gas facilities.

Due to the resource adequacy requirement, MRP must offer these facilities into the dayahead market and compensate San José when CAISO awards the facilities. This compensation offsets the costs that SJCE incurs when our load increases due to weather or other events.

2022 SJCE IRP and 2024 Analysis

In accordance with the State Law and San Jose Clean Energy Risk Management Regulations, the Department developed the 2022 SJCE IRP. In 2024, the Department updated its analysis, incorporating the transition to the Slice of Day approach for resource adequacy in preparation for the 2024 SJCE IRP. However, the California Public Utilities Commission (CPUC) postponed the IRP filing requirement to 2025.

Both the 2022 IRP and the 2024 analysis concluded that a least-cost portfolio should include 200 MW of natural gas resource adequacy, complemented by storage to minimize plant operations, and reduce emissions. The MRP agreements would address this outstanding need.

Low Construction Risk

Many new projects in California have experienced significant delays leading to postponed online dates. However, because three of the four agreements do not depend on battery installation, the agreements overall risk to provide resource adequacy and energy settlement is greatly reduced. Furthermore, the agreements would allow San José to terminate all agreements and receive a termination payment if the battery is not implemented on time. It also allows SJCE to evaluate the extent of the delay and the likelihood of project completion before making a decision.

Emission Reductions

The Tracy Power Plant is equipped with Best Available Control Technology (BACT) and has among the lowest nitrogen oxide (NOx) emissions limit for a combined cycle plant in California, 2 parts per million (ppm)⁴. MRP estimates that installing the battery, as outlined in the agreements, will reduce gas plant operations by 12%. This reduction in run time will reduce NOx emissions and is expected to lower greenhouse gas emissions as follows:

- Greenhouse gas (GHG) emissions are projected to decrease by 632,616 metric tons over 12 years—equivalent to removing 150,000 gasoline-powered cars from the road for one year⁵.
- San José's share of the plant and battery output is approximately one-third, equating to a reduction of 210,872 metric tons of CO₂, or the equivalent of taking 50,000 gasoline-powered cars off the road for one year.

Despite these environmental benefits, the plant will still produce emissions. While the agreements would not mandate gas plant operation, they would require MRP to make the plant available for dispatch by CAISO, and the CAISO market structure incentivizes MRP to operate the plant when economically viable. It is expected that plant's operation will decline over time, primarily due to the rising cost of carbon allowances.

The Tracy Power Plant is located in San Joaquin County. San Joaquin County has among the worst air quality in California. Accordingly, and recognizing the adverse impact of emissions on the San Joaquin County community, the agreements would

⁴ <u>https://www.energy.ca.gov/powerplant/combined-cycle/tracy-combined-cycle-power-plant</u>

⁵ <u>https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</u>

require that MRP contribute towards community benefits both in San José and in San Joaquin County.

Project Developer

The ultimate parent of MRP Pacifica Marketing III LLC is MRP Golden LLC. The parent is an experienced plant operator and its assets under management include two gigawatts comprised of 11 natural gas fired electric generation plants and four battery storage projects in California. Assets under management or under development include eight gigawatts of generation facilities across the United States.

San José has executed agreements with a total cost of approximately \$276 million for resource adequacy and energy with the parent and its subsidiaries. The counterparties have been reliable so far.

The agreements include strong performance security measures and other provisions to mitigate risks, including:

- Development and Performance security consistent with industry standards;
- A failure to deliver resource adequacy results in no payment for the service and could result in penalties;
- San José pays for the services after they are delivered; and
- San José may terminate the agreements for certain performance failures.

Project Terms

The agreements include one Cover Sheet setting forth common terms, and four individual confirmations setting forth the commercial details of each transaction as follows:

 Cover Sheet: sets forth common terms such as payment terms, standard events of default, termination rights, venue, etc.

Agreement Type	Facility	Max Annual Cost	Max Total Cost	Term (Years)	Delivery Start Year
Energy Settlement	Tracy Combined Cycle	\$11,300,000	\$135,600,000	12	2027
Energy Settlement	Tracy Battery Storage	\$1,600,000	\$22,400,000	14	2027
Resource Adequacy	Tracy Combined Cycle	\$10,700,000	\$128,400,000	12	2027
Resource Adequacy	Tracy Battery Storage	\$1,500,000	\$21,000,000	14	2027

Labor, Environment and Equity

The Department intends to finalize power workforce and environmental stewardship project selection criteria in 2025. In advance of finalizing such criteria, the Department reports that:

- The battery storage project is expected to be built using union labor via a project labor agreement;
- The project is in California and within the CAISO;
- The project has a low likelihood of affecting sensitive habitats or species, and any impacts will be mitigated per forthcoming permits;
- The project has committed to fund community investments in San José and in San Joaquin County; and
- The project co-locates a new energy storage facility at an existing natural gas facility reducing local emissions.

Under the contemplated project selection criteria (still being drafted and reviewed) MRP would be expected to score well in these important categories.

Energy Storage Safety

The catastrophic incident on January 16, 2025, at the Moss Landing Energy Storage facility, has led to widespread scrutiny of lithium chemical battery technology, configuration, and safety standards. The battery at Moss Landing was one of the first utility-scale battery storage facilities to come online in 2020. It was built to code at that time.

Energy storage facilities play an important role in the transition to a carbon-free grid. However, it is important they utilize modern technologies and designs to help ensure reliable and safe operations. For example, current safety standards include: modular fire prevention systems to prevent the spread of fire between units, fire-resistant barriers (or spacing between units) to limit thermal runaway, requirements for modern ventilation and cooling systems, and testing protocols to ensure containment of thermal runaway events. These standards are in addition to more traditional 24/7 monitoring, remote shut-down capabilities, detection systems and first-responder orientation.

Prior to commercial operations, Middle River Power will be required to demonstrate compliance with safety standards established by local, state, and federal agencies and pass operational tests based on manufacture operating specifications.

All long-term agreements in the City's portfolio are product offtake structures where the project developer is responsible for procuring, designing, constructing, and operating the facility per the codes required by the lead agency and other authorities specific to the project location. The City performs due diligence to confirm the facility has received all permits, authorizations and approvals required to operate the facility before the

project can achieve commercial operations. Additionally, prior to commercial operations, the City requires each storage facility pass a series of operational tests that demonstrate compliance with the agreement and manufacturer operating specifications. These steps help ensure facilities are compliant with lead agency standards and demonstrate physical operating capabilities.

Energy Department staff will continue to monitor the battery safety proceedings and analysis related to the Moss Landing incident.

Climate Smart San José Analysis

Proceeding with the agreements with MRP promotes San José's ability to provide power to SJCE customers at a reasonable price.

EVALUATION AND FOLLOW-UP

No additional follow-up is expected at this time.

COST SUMMARY/IMPLICATIONS

Entering into the agreement with MRP would cost, as follows:

	Max Annual	Max Lifetime	
Cumulative amount for all the	\$25,100,000	\$307,400,000	
agreements			

Funding for the agreements in the San José Clean Energy Fund (Fund 501) will be brought forward as part of future budget processes beginning with the development of the 2026-2027 Operating Budget and is subject to City Council-approved appropriation of funds. The Department recommends SJCE customer rates to City Council on an annual basis sufficient to meet the Department's costs including power costs considering all its agreements.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

PUBLIC OUTREACH

This memorandum will be posted on the City's Council Agenda website for the April 8, 2025 City Council meeting.

COMMISSION RECOMMENDATION AND INPUT

No commission recommendation or input is associated with this action.

<u>CEQA</u>

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

PUBLIC SUBSIDY REPORTING

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/ Lori Mitchell Director of Energy

For questions, please contact Paul Innamorato, Deputy Director of Power Resources, at Paul.Innamorato@sanjoseca.gov or 408-535-4891.

ATTACHMENT: Summary of Material Terms – MRP Pacifica III, LLC Agreements

Attachment - Summary of Material Terms - MRP Pacifica Marketing III, LLC Agreements

Buyer: The City of San José, a California municipal corporation, operating San José Clean Energy

Seller: MRP Pacifica Marketing III, LLC, a Delaware limited liability company.

Product: Financial settlement and resource adequacy (as defined under the agreement) from each facility.

Facility:

- Gas Facility: Seller will own and operate an existing combined cycle gas facility which is located San Joaquin County, CA
- Battery Storage: Seller will develop, design, permit, construct, own and operate an 8-hour energy storage facility (Facility), which is located in San Joaquin County, CA. Seller plans to develop the facility under a Project Labor Agreement.

CAISO Scheduling Coordinator: Seller will be the CAISO Scheduling Coordinator for the Facilities.

Term and Notional Value Summary:

Agreement Type	Facility	Max Annual Cost	Max Total Cost	Term (Years)	Delivery Start (Year)
Energy Settlement	Tracy Combined Cycle	\$11,300,000	\$135,600,000	12	2027
Energy Settlement	Tracy Battery Storage	\$1,600,000	\$22,400,000	14	2027
Resource Adequacy	Tracy Combined Cycle	\$10,700,000	\$128,400,000	12	2027
Resource Adequacy	Tracy Battery Storage	\$1,500,000	\$21,000,000	14	2027

The annual cumulative total of all agreements is \$25,100,000 and the cumulative lifetime total of all agreements is \$307,400,000.

Development Security: This amount is commercially sensitive information but consistent with industry practice.

Performance Security: This amount is commercially sensitive information but consistent with industry practice.

Events of Default and Termination Rights

- Includes customary events of default and termination.
- Buyer has the right but not the obligation to terminate all of the agreements if the new battery storage facility is delayed or cannot be completed.

Environmental Benefits: The battery storage facility is estimated to reduce operation of the natural gas plant by 12%.

Insurance: Consistent with the requirements approved by Risk Management.

Designated Fund and Appropriation of Funds: The agreement will include provisions that will limit the City's liability to the San José Clean Energy Operating Fund (Designated Fund). This fund is used solely for the City's costs and expenses associated with operating San José Clean Energy. The agreement will provide that payment obligations are special limited obligations of the City payable solely from the Designated Fund, and that those obligations shall not be a charge upon the revenues or General Fund of the City of San José or upon any non-San José Clean Energy moneys or other property of the Energy Department or the City of San José. The agreement will also not financially bind future governing bodies and will not constitute an obligation of future legislative bodies of the City to appropriate funds.

Prevailing Wage: Seller must comply with applicable federal, state and local law including labor laws. Seller must ensure that its employees, contractors and subcontractors, that will perform construction work or provide services related to construction of the battery are paid wages at rates not less than those prevailing for workers performing similar work in the locality as provided by applicable California law, if any.