

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for determination of need for a new combined cycle generating unit and onsite associated facilities located at St. Johns River Power Park Unit 3 in Duval County, by JEA.

DOCKET NO. 20260087-EM
ORDER NO. PSC-2026-0323-FOF-EM
ISSUED: September 9, 2026

The following Commissioners participated in the disposition of this matter:

GABRIELLA PASSIDOMO SMITH, Chairman
GARY F. CLARK
MIKE LA ROSA
BOBBY PAYNE
ANA ORTEGA

FINAL ORDER APPROVING DETERMINATION OF NEED FOR JEA'S
ST. JOHNS RIVER POWER PARK UNIT 3 COMBINED CYCLE GENERATING UNIT AND
ONSITE ASSOCIATED FACILITIES

APPEARANCES:

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On behalf of JEA.

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Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
On behalf of the Florida Public Service Commission (Staff).

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Florida Public Service Commission General Counsel.

BY THE COMMISSION:

BACKGROUND

On June 4, 2026, JEA filed its Petition for a Determination of Need for St. Johns River Power Park Unit 3 combined cycle generating unit and onsite associated facilities in accordance

with Section 403.519, Florida Statutes (F.S.), Chapter 120, F.S., and Rules 25-22.081 and 28-106.201, Florida Administrative Code (F.A.C.). In its petition, JEA seeks an affirmative determination of need for a new combined cycle generating unit and onsite associated facilities to be located at the JEA's existing St. Johns River Power Park site in Jacksonville, Florida.

In this docket, the Florida Public Service Commission (Commission) makes that need determination. Separate public hearings will be held before an Administrative Law Judge of the Division of Administrative Hearings to consider environmental and other impacts of the proposed plant and associated facilities, as required by the Florida Electrical Power Plant Siting Act, Sections 403.501-403.518, F.S.

An Order Establishing Procedure, Order No. PSC-2026-0213-PCO-EM, was issued on June 11, 2026. A prehearing conference was held on August 4, 2026. The administrative hearing was held on August 18, 2026, and no issue was contested. By our bench decision, we approve an affirmative stipulation of all issues, as set forth below.

Pursuant to Section 403.519(3), F.S., this Commission is the sole forum for the determination of need for an electrical power plant. In making our determination, we must take into consideration the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, whether the proposed plant is the most cost-effective alternative available, and whether renewable energy sources and technologies, as well as conservation measures, are utilized to the extent reasonably available.

This Order reflects our decision on the Petition for Determination of Need, and serves as our report under the Power Plant Siting Act, as required by Section 403.507, F.S. We have jurisdiction over the subject matter of this proceeding pursuant to Sections 403.519, 403.507, 366.01, 366.04, and 366.05, F.S. Our decision is explained in detail below.

DECISION

I. NEED FOR ELECTRIC SYSTEM RELIABILITY AND INTEGRITY

We are required to consider the need for electric system reliability and integrity, pursuant to Section 403.519(3), F.S., in determining the need for JEA's proposed St. Johns River Power Park Unit 3 (SJRPP Unit 3).

As demonstrated by the evidence in the record, JEA's projected annual capacity requirements indicate that it will fall below the 15 percent planning reserve margin beginning in winter 2028. JEA projected a need for an additional 72 megawatts (MW) in winter 2031 based on forecasted customer demand and reserve margin requirements. The expected planning reserve margin deficits continue to increase over the planning horizon, growing to 222 MW in 2033 and 802 MW in 2035, driven primarily by increased seasonal peak demand, continued load growth, expiration of existing power purchase agreements (PPAs), and the planned retirement of generating resources.

JEA proposed constructing SJRPP Unit 3 to remedy the capacity need, with short term PPAs addressing system reliability until it enters service in 2031. SJRPP Unit 3 is a 1x1 dual-fuel generating unit consisting of one combustion turbine (CT) generator, one heat recovery steam generator (HRSG), and one steam turbine (ST) generator, with a 582 MW (summer) / 678 MW (winter) generating capability.

The record demonstrated that JEA will require additional firm generating capacity beginning in 2028 and that SJRPP Unit 3 will provide sufficient firm generating capacity for improving JEA's ability to meet its reserve margin requirements beginning in 2031. Furthermore, SJRPP Unit 3 should reduce JEA's reliance on PPAs, facilitate the retirement of the less efficient generating units, and enable JEA to maintain reliable electric service. Accordingly, we find there is a need for SJRPP Unit 3 when considering the need for electric system reliability and integrity.

II. RENEWABLE ENERGY AND CONSERVATION MEASURES

We are required to consider conservation or demand side management alternatives reasonably available which would mitigate JEA's need to construct SJRPP Unit 3, pursuant to Section 403.519(3), F.S.

Regarding renewables, JEA currently has contracts in place for approximately 329 MW from renewable energy sources, including 314 MW from solar and 15 MW from landfill gas-to-energy via PPAs. JEA also has 50 MW of battery energy storage available. Additionally, JEA fires more than 10 percent biomass in NGS Units 1 and 2. JEA also installed solar photovoltaic systems at various locations in Duval County totaling approximately 100 kW. JEA reported several challenges impacting further construction of solar generation facilities: (i) finding environmentally suitable land in Duval County is prohibitively expensive; (ii) extensive transmission upgrades would be required to import solar power into JEA's systems; and (iii) elimination of subsidies for utility-scale solar projects. Several renewable and energy storage projects were still considered as potential alternative resources to SJRPP Unit 3 in JEA's economic modeling. However, JEA concluded that none of the renewable and energy storage alternatives were more cost effective than the proposed SJRPP Unit 3 beginning in 2031.

Regarding conservation, JEA is subject to the Florida Energy Efficiency and Conservation Act (FEECA), and its goals were last approved by Order No. PSC-2024-0432-FOF-EG and programs by Order No. PSC-2025-0094-PAA-EG. According to JEA's 2026 Annual Conservation Report, JEA exceeded its Commission approved FEECA goals in 2025. JEA included its current and projected conservation activities in its load forecast, which demonstrated a need for capacity beginning in winter 2028. JEA would need more than 30 times the amount of DSM reflected in its current conservation goals for 2031 to mitigate the need for SJRPP Unit 3.

In addition to its Commission approved programs, JEA investigated if additional conservation measures would mitigate the need for SJRPP Unit 3 and tasked the company Resource Innovations to perform a DSM Market Potential Study (MPS). While the MPS identified additional potential conservation, especially demand response programs, even if JEA could reach the maximum achievable potential, it would fall short of the projected seasonal peak

capacity need. Accordingly, we find that both renewable energy and conservation measures and these alternatives would not mitigate the need for the proposed SJRPP Unit 3.

III. NEED FOR ADEQUATE ELECTRICITY AT REASONABLE COST

We are required to consider the need for adequate electricity at reasonable cost, pursuant to Section 403.519(3), F.S., in determining the need for SJRPP Unit 3.

In evaluating the construction of SJRPP Unit 3, JEA evaluated factors including: (i) resource start-up costs; (ii) resource operating costs; (iii) the range of capacity that could be provided; and (iv) overall system fuel efficiency. SJRPP Unit 3 will use 37 percent less natural gas per megawatt hour (MWh) produced than NGS Unit 3, indicating operational cost savings. In addition, SJRPP Unit 3 is anticipated to achieve more than \$200 million (2026 dollars) in fuel savings over the next lowest-cost alternative, a simple cycle natural gas-fired CT. JEA also anticipated saving approximately \$834 million by avoiding repairs to NGS Unit 3 and placing the unit in limited-use status until its eventual retirement in 2035, which was assumed in all scenarios. SJRPP Unit 3 will be built on an approximately 194-acre site owned by JEA that was part of a larger 1,600-acre parcel, eliminating the need to acquire additional land. SJRPP Unit 3 will only require two new 230 kV generator tie lines to connect to an existing substation that is connected to four existing 230 kV transmission lines. Accordingly, other than the two generator tie lines, no additional transmission infrastructure will be required to integrate SJRPP Unit 3 with JEA's system. SJRPP Unit 3 is also the most cost-effective alternative for meeting JEA's capacity needs, representing a cost savings of approximately \$92 million in cumulative present worth cost (CPWC) over the next lowest cost alternative. In addition, constructing SJRPP Unit 3 in 2031 rather than delaying by one year would save \$20 million in CPWC. Therefore, we find that the record demonstrates SJRPP Unit 3 is expected to provide adequate electricity at a reasonable cost.

IV. NEED FOR FUEL DIVERSITY AND SUPPLY RELIABILITY

We are required to consider the need for fuel diversity and supply reliability, pursuant to Section 403.519(3), F.S., in determining the need for SJRPP Unit 3.

For fuel diversity and supply reliability, the proposed SJRPP Unit 3 will have dual fuel capabilities (natural gas and ultra-low sulfur diesel (ULSD)), with natural gas being the primary fuel source and ULSD fuel oil as back-up. Additionally, SJRPP Unit 3 will be capable of running on a fuel blend of 50 percent hydrogen, provided the infrastructure is available. Upon commercial operation of SJRPP Unit 3, beginning in 2031, NGS Unit 3 will be placed in limited-use status, operating at or below an 8 percent capacity factor, as a back-up for peak demand periods, emergencies, and unexpected outages. NGS Unit 3 is a predominately natural gas-fired generation unit but will be fired only on residual fuel oil when placed in limited-use status. SJRPP Unit 3 is anticipated to use 37 percent less natural gas per MWh than NGS Unit 3, representing a better utilization of natural gas supply.

The natural gas currently utilized for NGS Unit 3 will be diverted to SJRPP Unit 3 via a new, approximately 25-mile lateral from the JEA Brandy Branch Generation Station. The pipeline lateral and the metering and regulating yard will be owned, operated, and maintained by

Peoples Gas Systems. Natural gas will be supplied to the area by existing interstate pipelines owned and operated by Florida Gas Transmission (FGT) and Southern Natural Gas (SNG). JEA owns firm interstate transmission on both the FGT and SNG pipelines indicating fuel can be reliably delivered to the lateral serving SJRPP Unit 3. Enough ULSD to supply SJRPP Unit 3 for five (5) days at full load will be stored on-site and delivered by tanker truck.

SJRPP Unit 3 possesses several advantages in regard to fuel efficiency. As mentioned in Issue 1, SJRPP Unit 3 will be comprised of 1 CT, 1 HRSG, and 1 ST, configured as a combined cycle (CC) power plant. CC power plants are able to achieve greater efficiencies compared to CTs in simple-cycle mode, or steam plants, meaning the CC power plant can generate more electricity without burning additional fuel. During peak load times, SJRPP Unit 3 will have the ability to fire supplemental natural gas in the HRSG burners providing an increase of approximately 12 to 15 percent ST electrical output. Hence, we find that JEA has demonstrated a need for SJRPP Unit 3 considering the need for fuel diversity and supply reliability.

V. MOST COST-EFFECTIVE ALTERNATIVE AVAILABLE

We are required to consider whether SJRPP Unit 3 is the most cost effective alternative available for JEA, pursuant to Section 403.519(3), F.S.

JEA evaluated numerous resource alternatives before selecting SJRPP Unit 3. The next-lowest cost alternative would have delayed construction of SJRPP Unit 3 by approximately four years by adding a simple-cycle natural gas-fired CT in 2031, followed by both a CC unit and a CT in 2035. Although both resource plans would result in the same generating portfolio, they differ primarily in the timing of adding SJRPP Unit 3. The record demonstrated that the proposed resource plan, which includes SJRPP Unit 3 being constructed in 2031, is projected to produce approximately \$92 million in CPWC savings compared to the next-lowest cost alternative resource plan. Additionally, JEA evaluated a one-year delay in the construction of SJRPP Unit 3 and determined that such a delay would increase CPWC by approximately \$20 million.

In addition to DSM strategies and various generating resources, JEA also conducted a Market Test Request for Proposals (RFP). Through JEA's Market Test RFP, which was overseen by the independent evaluator, Merrimack Energy, three Power Purchase Agreements (PPAs) were evaluated against the 1x1 CC self-build resource (SJRPP Unit 3) using both quantitative and qualitative criteria. The quantitative evaluation was an economic comparison of the proposals and self-build resource through base cases and sensitivity tests that included high load forecast, low load forecast, and high gas price scenarios. The qualitative evaluation was a risk assessment that considered commercial experience and credit worthiness, transmission status, costs and impacts, fuel supply, operational flexibility, project status and design, and environmental considerations. JEA evaluators scored the 1x1 CC self-build resource as the highest-ranking option based on the quantitative and qualitative criteria. Merrimack Energy reviewed the evaluation results and agreed the 1x1 CC self-build resource was the highest-ranked option. Accordingly, we find that the SJRPP Unit 3 is the most cost-effective and reasonable alternative to meet JEA's capacity needs.

VI. CONCLUSION

We find that JEA has demonstrated through its analyses and witness testimony that a determination of need for SJRPP Unit 3 is justified based on the factors we must consider set forth in section 403.519, Florida Statutes. The record demonstrated that JEA would fall below its 15 percent planning reserve margin beginning in 2028. Based on forecasted customer demand and reserve margin requirements, JEA projected a capacity deficit of approximately 72 MW in 2031, increasing to 222 MW in 2033 and 802 MW in 2035.

The record further demonstrated that JEA evaluated SJRPP Unit 3 using both economic and operational criteria, including overall system fuel efficiency. SJRPP Unit 3 would use approximately 37 percent less natural gas per MWh than NGS Unit 3 and is projected to save approximately \$200 million (2026 dollars) in fuel costs compared to the next-lowest cost alternative. Additionally, SJRPP Unit 3 will have dual fuel capabilities, capable of operating on natural gas and ULSD fuel oil. The unit will also possess the ability to run on a fuel blend containing 50 percent hydrogen, provided the infrastructure is available.

JEA considered renewable energy resources and conservation measures to mitigate the need for SJRPP Unit 3. However, JEA demonstrated that no reasonably available renewable energy resources and conservation measures would alleviate the need for SJRPP Unit 3. JEA also evaluated self-build generation and third-party generation available through PPAs as alternatives. Economic modeling projected that SJRPP Unit 3 would achieve \$92 million in CPWC savings compared to the next-lowest cost self-build generation alternative. Additionally, JEA's Market Test RFP evaluation process, which was overseen by Merrimack Energy, ranked the SJRPP Unit 3 self-build option the highest over the three third-party generation PPA proposals based on quantitative and qualitative evaluation criteria. Hence, SJRPP Unit 3 is the most cost-effective and system beneficial option to meet JEA's capacity needs. SJRPP Unit 3 is expected to improve system reliability and integrity as well as fuel diversity and efficiency at a reasonable cost. Based on the foregoing analyses, findings, and evidence presented, we approve JEA's petition for determination of need for SJRPP Unit 3.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that JEA's Petition for Determination of Need for its proposed St. Johns River Power Park Unit 3 project is granted. It is further

ORDERED that this docket shall be closed after the time for filing an appeal has run.

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By ORDER of the Florida Public Service Commission this 9th day of September, 2026.



ADAM TEITZMAN
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Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Any party adversely affected by the Commission's final action in this matter may request:

- 1) reconsideration of the decision by filing a motion for reconsideration with the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, within fifteen (15) days of the issuance of this order in the form prescribed by Rule 25-22.060, Florida Administrative Code; or
- 2) judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or the First District Court of Appeal in the case of a water and/or wastewater utility by filing a notice of appeal with the Office of Commission Clerk, and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days after the issuance of this order, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.