## Task Order 5

# **Integrated Resource Plan**

This Task Order 5 ("Task Order 5"), effective as of September 22, 2025 (the "Task Order 5 Effective Date"), is made part of the Resource Management Agreement dated December 3, 2013, as amended ("RMA"), and is entered into by and between **The Energy Authority, Inc.**, a Georgia nonprofit corporation, having its principal address at 1301 Riverplace Boulevard, Suite 2700, Jacksonville, Florida 32207 ("TEA"), and the **City of Columbia, Missouri**, a municipal corporation ("CMWL"), having its principal address at 701 E. Broadway, PO Box 6015, Columbia, Missouri 65205. TEA and CMWL are sometimes referred to individually as a "Party," or collectively as the "Parties." This Task Order 5 is subject to all terms and conditions of the RMA. Capitalized terms used but not defined herein shall have the meanings assigned to such terms in the RMA.

#### Recitals

WHEREAS, CMWL requests that TEA provide CMWL with the professional services required to prepare a comprehensive economic assessment in the form of a twenty (20)-year Integrated Resource Plan ("IRP"), as such services are described herein;

**WHEREAS**, the objective of the IRP, *inter alia*, is to optimize supply- and demand-side resources to meet CMWL's load and reserve requirements while minimizing Net Present Value of Revenue Requirements ("NPVRR");

**WHEREAS**, TEA agrees to provide such services, pursuant to the terms and conditions set forth in this Task Order 5.

**NOW, THEREFORE**, in consideration of the mutual agreements, covenants and conditions herein contained, the Parties hereby agree as follows:

#### **Section 1.** Scope of Services

The "Services" shall include the following:

- TEA shall prepare and deliver a 20-year IRP that provides a comprehensive econometric load forecast, analysis of CMWL's assets, demographics, consumption patterns, along with the applicable laws and regulations.
- Based on the analysis, TEA will project portfolio options that include cost and a discussion
  of the relative risk of each respective option and work with CMWL to recommend portfolios
  that strive to achieve minimal levels of risk relative to cost.

TEA shall provide the Services pursuant to the terms of the RMA and this Task Order 5, as more particularly described in Section 2 through 5 below.

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## **Section 2. IRP Process**

## <u>Identification of Inputs and Objectives</u>

TEA will collaborate with CMWL to identify the required inputs for the IRP and discuss and finalize CMWL's objectives. This study will include: (i) econometric load forecast; (ii) market factors, such as, natural gas and market price forecasts; and (iii) resource costs for both existing and potential future assets of different classes, plus demand side program costs for future programs. These inputs and other assumptions will be reviewed with the IRP team through on-going discussions with CMWL.

TEA will leverage the most recent econometric long-term demand forecast for CMWL as an input into the modeling process. TEA will work with CMWL staff to determine the hourly impacts of distributed resources ("DR"), electrification, and electric vehicle ("EV") demand. The final deliverable will incorporate projected economic growth for the utility and demand shifts due to DR, electrification, and EV impacts.

TEA will also work with CMWL to develop the selection criteria for the recommended resource plan. Typical measures include the NPVRR. As appropriate, TEA will provide CMWL with spreadsheets containing the preferred resource plan for each scenario and the plan's associated NPVRR. TEA will then collaborate with CMWL staff to define the CMWL's goals for renewable resources, resource adequacy requirements, reliability, conservation, or other objectives.

## Creation of Market Models

TEA will develop at least two (2) market models. The first is the wholesale market model, representing the wholesale power and natural gas markets from a price perspective. The other is a CMWL-specific financial model (i.e., pro forma model) representing CMWL's revenue requirements throughout the study period.

## **Economic Screening**

Once all of the new assumptions are set, TEA will assist CMWL staff in collecting economic data for supply resources from various sources. Utilizing an NPVRR model, TEA will aggregate resource, regulatory, and market assumptions to identify the competitive resources to minimize the life cycle costs of an alternative.

## Portfolio Construction

TEA and CMWL staff will collaborate to develop a Base Case and then identify up to six (6) candidate portfolios consistent with CMWL's strategic objectives (e.g., high or low fuels

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assumptions, renewables penetration, market load, resiliency, being served as a full requirements customer with assumptions provided by CMWL, capacity requirements or carbon legislation) that are consistent with CMWL's strategic objectives. Constraining factors such as resource availability and resource construction time will also be included to the extent such information is available.

#### Portfolio Selection and Action Plan

TEA will simulate the wholesale electricity markets relevant to CMWL, factoring in identified uncertainties. Once this is complete, CMWL and TEA will identify the best-performing portfolios and create an action plan.

## Section 3. Software

TEA utilizes a combination of TEA in-house and third-party software programs to model the Base Case and analyze the market sensitivity scenarios. Third-party software that TEA may use for CMWL's IRP include: ABB's PROMOD and Velocity Suite, Energy Exemplar's PLEXOS, Cambridge Energy Solutions' Dayzer, and YES Energy. The Parties acknowledge that (i) TEA must comply with all third-party software licenses in the performance of its Services, and (ii) this Task Order 5 does not assign or grant CMWL a sub-license to use any specific third-party software.

## Section 4. Reporting

TEA will provide the Deliverables as outlined in Exhibit A ("Deliverables"), attached hereto, including an initial draft of the IRP (the "Draft Report") and the final version of the IRP (the "Final Report"). TEA will present the Draft Report to CMWL staff. The following is an example of the elements of the Draft Report and Final Report, which TEA will provide to CMWL upon completion of the IRP:

- <u>Executive Summary</u> outlining the critical findings and recommendations
- Overview discussing CMWL's current resources and the IRP's objectives
- <u>Assumptions</u> identifying and discussing the critical assumptions used in the IRP, such as:
  - Study period,
  - Load forecast,
  - Fuel forecast,
  - Market price forecast,
  - Generation expansion options, including construction costs and operating costs,
  - Key transmission issues in the CMWL area,
  - State and federal rules and regulations, and
  - Other information, as appropriate

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- Approach Identifying models were used, time period studied, ranking criteria, and scenarios studied.
- Results Provide tables reflecting the various scenarios studied and the model outputs for each scenario; capital expansion, operating costs, and NPVRR.
- Recommendations A recommended resource plan will be developed through collaboration by TEA and CMWL. A review of all portfolio selections made in the Base Case, which is a business-as-usual method for managing the portfolio and will include expected/base forwards for power and fuel assuming no changes in market operating procedures and no changes in procurement resources. A recommendation of which subsequent scenario will result in a "best fit" portfolio. A discussion around the recommended plan and how it was developed will be held.

#### **Section 5.** Public Presentation of Final Recommendations

Upon request of CMWL, TEA will present the IRP findings and recommendations up to three (3) times in-person to the CMWL's Community Advisory Panel ("CAP"), City Council and Board. If CMWL requests such a presentation, TEA will summarize the IRP in a presentation format containing the critical components of the IRP, including study objectives, key assumptions, study approach, findings, and final recommendations. Reasonable, out-of-pocket travel expenses for two (2) of the in-person meetings mentioned above will be reimbursed by CMWL, subject to CMWL's advance approval thereof.

#### **Section 6. Compensation for Services**

As compensation for providing the Services, CMWL will pay TEA the amount of One Hundred Seventy-Five Thousand Dollars (\$175,000.00) (the "IRP Fee"). The IRP Fee includes all costs, and labor for TEA staff related to TEA's provision of Services under this Task Order 5, including the initial setup, analysis, drafting, and delivery of the IRP study requested by CMWL. CMWL will be responsible for payment of any project-specific expense or costs resulting in changes in the scope of Services for this Task Order 5, as more particularly described in Section 9 herein.

#### **Section 7. Term and Timeline**

The term of this Task Order 5 shall commence on the Task Order 5 Effective Date and shall continue until the later of (i) November 1, 2025, or (ii) the date on which all Services have been delivered by TEA hereunder and all fees related to such Services under this Task Order 5 have been paid to TEA by CMWL, unless otherwise terminated or extended in writing by an authorized representative of each Party. A tentative timeline is further described in Exhibit A.

TEA will prepare and provide preliminary results within five (5) months of the IRP Task Order 5 Effective Date. This IRP also includes a review of known and currently discussed state and federal regulations that could impact the resource plan for CMWL for the purposes of

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commercial support only and shall not be construed as legal advice provided by TEA. Preparation of the final IRP analysis will consist of resource cost assumptions and power and natural gas market price assumptions, agreed upon by the Parties.

TEA will schedule an initial kick-off meeting with the CMWL team to discuss CMWL's criteria, TEA's approach, and initial assumptions for the IRP process. TEA will also conduct biweekly IRP team meetings with visual status reports and additional briefing reports via video conferencing bi-weekly. Upon request of CMWL, TEA will also participate in up to five (5) scheduled virtual meetings (not more frequently than once per calendar month, and no longer than 1.5 hours each). Upon request of CMWL, TEA will present the Final Report (as defined herein) on-site at CMWL upon conclusion of the project. Additional TEA staff in-person visits may be requested, as needed, and will be billed at the Additional Services hourly rates in Section 9 below.

## **Section 8. Billing and Payment**

TEA shall invoice CMWL for the Services provided pursuant to this Task Order 5, as follows:

- The first payment of \$43,750 (representing twenty-five percent (25%) of the IRP Fee) will be due upon execution of this Task Order 5 to coincide with commencement of Services;
- The second payment of \$87,500 (representing one-half (50%) of the IRP Fee) will be due upon completion of the draft IRP report; and
- The final payment of \$43,750 (representing the remaining one-quarter (25%) of the IRP Fee) will be due upon completion and delivery of the final IRP report to CMWL and, if requested by CMWL, on-site presentation of the Final Report.

CMWL shall pay the portion of the IRP Fee due within thirty (30) days of receipt of such invoice. Unless otherwise instructed on the invoice, payment for all invoices shall be made by CMWL to TEA via electronic funds transfer or to the following address:

The Energy Authority, Inc. 1301 Riverplace Boulevard, Suite 2700 Jacksonville, Florida 32207 Attention: Accounts Payable Department

Reasonable out-of-pocket expenses for travel incurred by TEA, if any, in connection with rendering Services, must be authorized in advance by CMWL and shall be reimbursed by CMWL at no mark-up.

## **Section 9.** Additional Services.

CMWL may request, and TEA may provide, changes in the scope of Services for this Task Order 5 or additional services (in either case, "Additional Services") not described herein. Upon mutual agreement of the Parties, TEA shall provide Additional Services to CMWL based on hourly rates for actual Additional Services performed. For any such Additional Services, TEA will bill

CMWL at TEA's then-current billing rates. TEA shall invoice CMWL for any Additional Services provided pursuant to this Task Order 5. Rates for Additional Services provided during 2025 are included in the table below and are subject to escalation annually.

TEA 2025 Billing Rates (1)		
Job/Group	Billing Rate (\$/hour)	
Principal Consultant	\$450	
Senior Consultant/Project Manager	\$345	
Consultant	\$255	
Analyst	\$190	
Clerical	\$120	
(1) Billing rates are subject to increase annually starting January 1, 2026		

## Section 10. Headings

Headings or captions contained in this Task Order 5 are solely for the convenience of the Parties and shall not affect the construction or interpretation of any of the provisions of this Task Order 5.

## **Section 11. Counterparts and Electronic Signatures**

This Task Order 5 may be executed in counterparts, each of which shall constitute an original, but all of which shall constitute one agreement. The delivery of this Task Order 5 by electronic mail or other means of electronic transmission with an electronic signature in PDF or other manually acceptable digital format (e.g., DocuSign or Adobe Sign) by either Party's authorized representative shall be deemed an original for execution and enforcement of this Task Order 5.

#### Section 12. Amendment

This Task Order 5 may only be amended by an instrument in writing signed by each Party's authorized representative.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Task Order 5 to be executed in their respective names by their duly authorized representatives.

	City of Columbia, Missouri
	By: Name: De'Carlon Seewood
	Title: City Manager
	Date:
ATTESTED BY:	
Sheela Amin, City Clerk	
APPROVED AS TO FORM:	
Nancy Thompson, City Counsel	
appropriation to which it is to be charged,	rtify that this Agreement is within the purpose of the account(s) to be determined at the time of the purchase palance to the credit of such account(s) sufficient to pay
	By:
	Matthew Lue, Director of Finance

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The Energy Authority, Inc.

By John B. Luas

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Name: John B. Lucas

VP, Finance and CFO Its:

## Exhibit A

## **Integrated Resource Planning Services**

## **TEA Deliverables to CMWL**

- I. Visual Monthly Project Status Reports;
- II. Outlined Assumptions;
- III. Modeling Results;
- IV. Draft Report; and
- V. Final Report.

# **Tentative Timeline**

•	Project Kickoff	September 2025
•	Assumptions Data Request Received from CMWL	September 2025
•	Assumptions Review with CMWL	October 2025
•	Model Development	October 2025
•	Base Case Development and Review with CMWL	November 2025
•	Scenario Cases Development and Review with CMWL	December 2025
•	Document Development and review with CMWL	January 2026
•	Document Delivery and Final Presentation	January 2026