

STAFF REPORT

Date: April 9, 2025

To: Mayor and City Council

Through: Jackie Bryant, City Manager

Subject: Staff Report (For Possible Action): Approval of Amendment to the operational grade audit agreement dated December 13, 2019 between the City of Reno and Ameresco to perform an audit of streetlight assets in the City of Reno in an amount not to exceed \$100,000. (Green Energy Fund)

From: Suzanne Groneman, Environmental Services Manager

Department: City Manager's Office

Summary:

This agreement amendment allows Ameresco to audit the locations and characteristics of city-wide streetlight assets to reduce costs, verify energy use, determine future energy usage, and identify billing errors. The audit cost is \$100,000. Funding for this audit is available in the Green Energy Fund from energy rebate revenues. The city's streetlight energy and operational costs are currently estimated to be over \$2 million per year.

| Consent Review | Yes | No |
|--|---------------|----------|
| 1. Is this item an annual or standard item that comes before Council for regular approval? | | x |
| 2. Is this item an agreement required based on an item previously approved by Council? | | x |
| 3. Is this item included in the current budget approved and adopted by Council? | | x |
| Other Considerations | | |
| What percent of the total City budget does this item represent? | <1% | |

Alignment with Strategic Plan:

Infrastructure, Climate Change, and Environmental Sustainability

Fiscal Sustainability

Previous Council Action:

- 2022 the Reno City Council approved an Energy Performance Contract with Ameresco for a city-wide park lighting project and solar and storage at the Public Safety Center.
- 2009 and 2010 the Reno City Council approved a previous Energy Performance Contract with Ameresco.

Background:

In 2019, the City of Reno entered into a contract for an Operational Grade Audit to identify potential energy savings and generation projects. Ameresco was selected from a list maintained by the State of Nevada of Qualified Service Companies, after an invitation to bid from multiple vendors and an internal review. The project scope was finalized in September 2020 to include new LED park lighting and in solar and battery improvements at PSC, in addition, the roof at PSC was also included.

In 2022, the Reno City Council approved an Energy Performance Contract with Ameresco. The project is complete, and the City of Reno is under the Measurement and Verification portion of the project.

The City of Reno identified its streetlights (both utility-owned and city-owned) as an opportunity to reduce costs and save energy. Therefore, Staff determined the audit and potential energy performance contract process was appropriate for the project. In the past 3-5 years, Staff worked to improve and streamline the streetlight inventory and billing process. Improvements made are: added the utility-owned inventory to the GIS, completed an internal billing audit, and evaluated the utility-owned inventory against sustainability goals.

Discussion:

The total city streetlight inventory is approximately 12,000 lights (both city and utility owned). Ameresco will complete a comprehensive audit of the streetlighting luminaires and poles identifying the locations and characteristics of the streetlight assets based on the geospatial data and compiling all streetlight inventory data. An audit will provide the city with the following:

- Rate Analysis
- GIS Audit
- Pole Condition Assessment
- Assistance in understanding utility impacts
- Photometric study
- Retrofit cost
- Maintenance costs and responsibilities
- Smart cities options
- Data and function integration

- Measurement and verification
- Savings analysis
- Development schedule
- Google location
- Fixture type (high pressure sodium, LED, etc)
- Pole mast arm length
- Identification tags

Ameresco has completed 60 similar projects to date, totaling 900,000 streetlights, including the City of Chicago, City of Phoenix, and City of Philadelphia. Based on the City's existing lighting design criteria, AMERESCO will develop a lighting design strategy that standardizes luminaire selection based on the design criteria. This strategy will incorporate the existing characteristics: roadway classification, roadway physical characteristics, pole configuration, pole spacing, luminaire mounting height, and other attributes. The design strategy will be used in the photometric analysis to confirm luminaire selections. (a) Upon completion of the streetlighting audit, AMERESCO will review the full inventory of the luminaires and wattages to determine the future energy usage associated with the new luminaires. Based on the current NVE energy rates, the Year 1 (after conversion to LED) energy savings will be determined. The baseline energy usage will be established from the billing accounts associated with the existing streetlights.

Financial Implications:

The cost of the audit is \$100,000 and funding is available in the Green Energy Fund from energy rebate revenues.

Legal Implications:

Legal review completed for compliance with City procedures and Nevada law.

Recommendation:

Staff recommends Council approve the Audit Agreement Amendment to the Operational Grade Audit dated December 13, 2019, between the City of Reno and Ameresco.

Proposed Motion:

I move to approve the Audit Agreement Amendment to the Operational Grade Audit dated December 13, 2019, between the City of Reno and Ameresco.

Attachments:

1. Scope of Work
2. Audit Agreement Amendment