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June 4, 2024

DECISION MEMORANDUM

TO: Council members

FROM: Kevin Smit, Christian Douglass

SUBJECT: Authorization to Contract with the Applied Energy Group (AEG) for Energy Efficiency Potential Estimates for the Agriculture Sector in the Northwest

PROPOSED ACTION:

Council staff are requesting that the Council authorize staff to execute a contract to conduct research and assess the energy efficiency potential and develop supply curves for the agriculture sector in the Pacific Northwest. The contract would be with AEG in an amount not to exceed \$59,906.

SIGNIFICANCE:

This project will provide energy efficiency measures and potential estimates for the agriculture sector that will be used in the upcoming Ninth Power Plan.

BUDGETARY / ECONOMIC IMPACTS

The cost for the project is not to exceed \$59,906. The proposed costs are reasonable relative to other bids received as well as projects of similar scope. However, the proposed budget is expected to cross over two fiscal years: \$29,736 in FY2024 (ending September 2024), and \$30,170 in FY2025 (October – December 2024).

BACKGROUND

The Council has traditionally conducted a separate assessment for the energy efficiency potential in the agriculture sector. Energy use, and therefore efficiency, in the agriculture sector is relatively unique compared to other sectors and segments. Significant amounts of electricity are consumed by large pumps distributing water for irrigation, and efficient use of water translates into efficient use of electricity. In addition, measures for the dairy

segment are included in this assessment. Some examples of agricultural measures included in the 2021 Power plan include:

- Efficient pump replacement
- Add variable speed drive (VSD) to pump
- Hand and wheel line gaskets
- Sprinkler package replacement
- Variable rate irrigation
- Plate milk pre-cooler
- VSD vacuum pump
- Scroll compressor upgrade
- Efficient high speed fans
- High volume low speed fans
- Engine block heater controls
- LED area lighting

The Council staff issued a request for proposals (RFP), formed a committee to review the proposals, reviewed and ranked the proposals received, and ultimately selected AEG to be recommended for this project. AEG provided a similar service to the Council for the 2021 Power Plan, so this will also provide good continuity between plans.