May 9, 2023

DECISION MEMORANDUM

TO: Council members

FROM: Kevin Smit, Senior Energy Analyst

SUBJECT: Authorization to contract with Cadeo Group LLC to develop a new model for estimating industrial energy efficiency.

PROPOSED ACTION: Staff recommends authorization to contract with Cadeo Group LLC in an amount not to exceed $67,500 to develop a new energy efficiency model for the industrial sector.

SIGNIFICANCE: The industrial sector in the Northwest is robust and consumes about 42,300 GWh per year. In the 2021 Power Plan, the industrial sector accounted for 647 aMW of cost-effective energy efficiency potential (27% of the total), and before beginning the next power plan, a new model is needed for the EE potential for this sector.

BUDGETARY/ECONOMIC IMPACTS
Staff recommends authorization to contract with Cadeo Group LLC in an amount not to exceed $67,500.

BACKGROUND AND ANALYSIS
The model currently being used for estimating the energy efficiency potential for the industrial sector was originally developed for the Sixth Power Plan (2010). This model utilizes a top-down methodology that starts with the total electricity consumption of an industry segment, then divides that out by end-use shares (e.g., lighting, motors, HVAC) for each industry, with each measure then defined as the percent savings of an end-use. Many additions and modifications were made to this model for both the Seventh
Power Plan and the 2021 Power Plan. This model now consists of over a dozen Excel spreadsheets. As a result, the model is now relatively difficult to update and use.

Staff issued a Request for Proposals in April, and from this process, recommends the Council authorize staff to contract with Cadeo Group LLC to complete this work. As outlined in their proposal, Cadeo Group LLC is well qualified to complete the development of this new industrial EE model efficiently and effectively.

**ALTERNATIVES**
In the alternative to proceeding as recommended by staff, the Council could continue to use the existing model. However, this model had gotten difficult to use and is prone to errors. The other option would be to have staff develop the new model in-house. However, this option would require some existing staff duties to be delayed or re-assigned.