



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Helgeson, Brown, Mital, Simpson and Carlson
FROM: Mel Damewood, Chief Engineering & Operations Officer, Matthew Ibaraki, Project Manager
DATE: April 21, 2017
SUBJECT: Use of the Design-Build Alternative Contracting Method for the Grid Edge Demonstration Project Backgrounder and Findings

Issue Statement

The Design-Build process is considered an Alternative Contracting Method and requires Board Approval after publishing findings and the opportunity for a public hearing.

Background

The Grid Edge project team recommends changing course for the contracting process for the Grid Edge Demonstration Project. In December 2016, the Board approved a Construction Management/General Contractor (CM/GC) Alternative Contracting Method for this project. Staff recently issued an RFP to contract for design of the project, the CM/GC contract was planned to follow. During this solicitation process contractors provided feedback that most firms in this industry offer a turnkey solution, including design services. Staff recommend using a Design-Build process based on this feedback.

Findings

Findings require overview of the following 8 categories and must address favoritism, competition, and cost savings factors.

- (1) **Operational, budget and financial data.** The project is budgeted up to \$1.2 million and is included in the capital plan for 2017 and 2018. A standard solicitation would require resources that EWEB currently does not possess and would likely not be able to achieve the targeting commissioning date of mid-2018.
- (2) **Public benefits.** There are a few ways that the public will benefit directly. The customers served by the pumps at Crest 1325 will have a more reliable system during extended outages upon project completion. For the installation at the ROC, emergency systems will continue to function for a longer period of time, extending EWEB's ability to function during an outage. Lastly, from a research perspective, EWEB will be improving its knowledge in the microgrid field, allowing it to be better positioned to integrate this technology into the operation of the Distribution system.

- (3) **Value engineering.** By utilizing the Design-Build process EWEB can work with the designer to keep the project within the desired scope and remove unnecessary features.
- (4) **Specialized expertise required.** EWEB Engineering does not currently have staff with the skills and experience to do the design in-house. EWEB wishes to work with seasoned contractors and designers in the micro-grid field to further its own knowledge base and develop micro-grid systems that will achieve project goals.
- (5) **Public safety.** Safety of the public at the microgrid locations will be achieved using best business practices and by applying industry standards for fire prevention and chemical safety.
- (6) **Market conditions.** After asking several companies involved in the Engineering design RFP, it was determined that those with necessary design experience were part of larger companies that were more interested in the construction work of the project. It appears that the micro-grid field industry provides turn-key solutions by practice and that a Design-Build approach will be more successful in that market.
- (7) **Technical complexity.** Designing microgrids and their controllers requires specialized expertise which EWEB does not have in-house. While there are some off-the-shelf products EWEB could pursue, they would not be sufficient to satisfy the project goals.
- (8) **Funding sources.** The project will be funded by both the Capital Improvement Plan budget and grants provided by Sandia National Laboratories, which will be administered by Oregon Department of Energy and Oregon BEST.

Favoritism and Competition

EWEB will be using several criteria to evaluate proposers which will include cost, experience, previous works, and must demonstrate an understanding of EWEB's project goals. The RFP will be advertised publicly and proposers will be equally subject to these criteria.

Cost Saving Factors

EWEB will save cost by not requiring multiple contracts for each step, which takes time to manage and execute. Additionally, EWEB can work with the contractor's design engineer to apply Value Engineering work to the project.

Recommendation

The project team requests that the Board approve the use of a Design-Build Alternative Contracting Method for the procurement and construction of the two battery storage systems associated with the Grid Edge Demonstration Project.

If the use of the Alternative Construction Method is approved, staff will bring the fully executed Design-Build Contract to the Board for approval.