Lake Oswego Tigard Water Partnership
Summary of Partnership Committee Meeting
November 6, 2023

City of Lake Oswego:	**Oversight Committee:** Mayor Buck, Councilor Corrigan Staff: Erica Rooney, Public Works Director/City Engineer; Stefan Broadus, Assistant City Engineer; Bret Bienerth, Water Treatment Plant Manager; Susie Anderson, Administrative Assistant
City of Tigard:	**Oversight Committee:** Councilor Hu, Councilor Wolf Staff: Brian Rager, Public Works Director

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1. CALL TO ORDER/ROLL CALL

Chair Wolf called the meeting of the Lake Oswego Tigard Water Partnership Committee to order at 4:30 pm. The meeting was held at Tigard Public Works, 8777 SW Burnham St., Tigard, OR 97223.

2. APPROVAL OF MINUTES

Councilor Hu moved to approve the minutes of the meeting held July 17, 2023. **Councilor Corrigan** seconded the motion. Motion passed.

3. PUBLIC COMMENT

None.

4. COMMITTEE BUSINESS

4.1 Operations Committee Activities Report
4.2 Budget Report
Mr. Bienerth referenced the activities report in the meeting packet and stated there wasn't anything out of the ordinary. Water production and budget were tracking as expected. **Councilor Corrigan** asked how impactful the PGE rate increases had been. **Mr. Bienerth** replied electricity costs were up by 9 - 10 % at the plant and Lake Oswego pump stations were up by 14%. The increases had been reflected in the budget. He added during the summer the plant ran harder at night because electricity between 10:00 pm and 6:00 am was 25% less expensive.

4.3 Back Up Power Update
Mr. Broadus recalled the ice storm of 2021 which caused regional power outages. He explained the water treatment plant and river intake both had dual feeds from PGE, all four of which went down. Staff was able to procure emergency backup equipment but it became very clear that backup power was a real vulnerability. He provided a handout depicting the various options for backup power and how they increase in cost as reliability increases. The current plan was at 99.9% reliability. If an event were to hit

today, generators would be rented as done in 2021. He pointed out it was quite lucky to find generators to rent during that crisis. The most resilient system would be an automated onsite generator that would automatically kick on when an outage was detected. While attractive from a performance and function standpoint, it would be very expensive at about $18M. The project team had determined the best approach at this time would be to continue to rent generators in a more prepared manner. In 2021 electricians had to break in to the electrical equipment and make new connections, very dangerous and difficult work in extreme conditions. The capital improvement would create more of a plug and play scenario with connections installed and ready to go in an emergency. The recommendation was to make the modifications and enter into rental agreements with providers of generators where the Partnership would have first rights to generators for a few months of the year, during the most vulnerable seasons. It would be a more reasonable cost vs. purchasing generators and having them be on site and maintain them year-round. It would be a capital investment of about $4M, and an annual operating cost of $250k - $500k depending on the model of generator. The lead time for delivery of purchased generators could be up to two years where rental/lease agreements could be in place by the upcoming winter season and plug in connections ready for the following year's winter season. Another advantage to the rental approach was flexibility so if new technology becomes available that's more efficient, environmentally friendly, and cost effective then we could pivot. **Councilor Corrigan** stated the focus seemed to be winter storms and asked if earthquakes or wildfire shutdowns had been considered. **Mr. Bienerth** stated he was more concerned regarding wild fires and having power shut down during peak water use season. If the pig-tails/plug-ins were sized appropriately, the plant could run at full capacity on backup power during peak season, if necessary. **Mayor Buck** asked if there was a difference between equipment that might be purchased and equipment that would be leased. **Mr. Bienerth** responded there were different sizes. Some were large enough to solely provide power and others that are smaller and could work together. **Mr. Broadus** noted if we were to rent in an on-demand situation, there would be far less choice on the type of generator and level of output. **Mayor Buck** asked if the leased equipment would be onsite. **Mr. Broadus** replied that was a variable that had pros and cons. The pro being it's readily available, the con that the equipment would need to be exercised weekly which would have a noise impact on neighbors. Keeping the equipment at the supplier while leasing would also be an option with less impact to the neighborhood but run the risk of not being able to get the equipment onsite. **Ms. Rooney** added an earthquake couldn't be anticipated but weather and fire events were predictable. Generators could be delivered in anticipation of such events and ready to use if needed. **Mr. Broadus** added if they were onsite but not necessary, staff could use the opportunity as a training exercise. **Mayor Buck** asked if the generators being proposed as rentals were available for purchase instead of waiting two years to order. **Mr. Broadus** replied he didn't think so as equipment rental was the vendors line of business. **Mayor Buck** asked if they're tied up in a lease then why wouldn't they consider selling. **Ms. Rooney** clarified they wouldn't be leased throughout the entire year but rather a few months each year. **Mr. Bienerth** added they could be leased throughout the year but it would be expensive, It would be more economical to lease them seasonally. **Mr. Broadus** offered one scenario might be to rent/lease the generators December through February with them onsite and the other nine months of the year the approach would be an on-demand setup so if there were a need, like during wildfire season, generators could be ordered and delivered onsite. Another scenario would be to lease them year-round, at more expense, but resiliency would be higher. **Councilor Wolf** asked about the market and if there would be competion with others because of high demand for generators. **Mr. Broadus** replied emergency use was not the only market. A large percentage of the market for the generators was construction sites, temporary use, not seasonal use. He noted many of the facilities like ours already have backup power built in. **Councilor Hu** voiced concern about availability during an emergency and how a rental provider could guarantee availability if

they were to maximize their profit. He also asked if there would be land use implications if the rental was for a full 12 months. **Mr. Broadus** stated land use would still apply because there were provisions for long term temporary equipment. Temporary storage of portable equipment would have significantly less land use implications than constructing a building to house a permanent generator onsite. **Councilor Hu** voiced concern about site accessibility and if a connection to the generator could be run from the site to a main road. **Ms. Rooney** stated the connections would have to be at the site. **Mr. Broadus** clarified the rental would be for a specific unit, whether it's onsite or in the supplier's yard, it wouldn't be available for general use. They would be secured. **Mayor Buck** asked if renting three months of the year and on demand for the other nine months would be in the $250k range. **Mr. Broadus** affirmed. **Mayor Buck** asked if the type of hook-ups would change over time like iPhone chargers. **Mr. Broadus** replied they were universal and wouldn't change. He continued one of the negative aspects of purchasing or owning generators was that they don't have that long life, 30 - 35 years, and would incur annual costs of about $100k to maintain them. **Ms. Rooney** added the pigtail rental scenario would provide the flexibility to keep up with technology as it evolves. **Mr. Rager** noted that there wasn't much space for a permanent generator at the river intake, making the rental scenario a better option there. **Mr. Bienerth** added rentals that could be parked on the bridge behind the security gate were being considered. **Councilor Wolf** asked staff to clarify what the recommendation was and how the annual expense would be covered or what the tradeoff would be. **Mr. Broadus** responded step one would be to move forward with the hookups/pigtails, a capital expense that has been budgeted for. The exact rental configuration didn't need to be decided right now. **Ms. Rooney** stated staff wasn't recommending permanent generators due to expense and felt the pigtail and rental option offered more flexibility and affordability. **Mr. Bienerth** added this option would eliminate the expense of design, engineering, and community outreach for land use. **Ms. Rooney** said the dual outage was a rare event so having permanent generators, and that expense, really wasn't necessary. **Mr. Rager** acknowledged lessons learned during the outage two years prior that Tigard can push water back to Lake Oswego if necessary. **Mr. Broadus** stated in terms of scalability, he thought in the future they might purchase portables vs. permanent generator because they offer more flexibility and could be moved. The committee members agreed to moving forward with the pigtail/rental option.

4.4 2024 Meeting Schedule
The group agreed to continue to meet the 3rd Monday of each quarter at 4:30 pm, alternating between Lake Oswego and Tigard.

5. ADJOURN

There being no further business, **Chair Wolf** adjourned the meeting at 5:15 pm.

Respectfully Submitted,

Susie Anderson
Digitally signed by Susie Anderson
Date: 2024.01.30 11:32:50 -08'00'

Susie Anderson
Administrative Assistant

Approved by the Partnership Committee:

January 22, 2024