The following questions have been posed by Commissioners prior to the scheduled Board Meeting on March 7, 2023. Staff responses are included below and are sorted by Agenda topic.

EWEB Enterprise Solutions (EES) Implementation Contracts (KNABE) - It states that certain programs are now legacy including WAM. How long ago did EWEB purchase WAM and at what cost?

RESPONSE: *The original WAM project began in 2013 going live in November 2014, with project costs of approximately $8.2Million, which included software licenses, project management and implementation.*

Climate Guidebook (HOELL/LAWSON) - On page 23, under City Operation Goals it states that "all city facilities and operations shall be carbon neutral by 2020…" Has that goal been met?

RESPONSE: *The most recent GHG inventory completed by the City of Eugene shows results for fiscal year 2019 and was completed in December 2020. Historically, City of Eugene has completed these inventories on a three-year cycle. Since that time, City of Eugene has had significant staff turnover within its sustainability program and its new Sustainability Manager was recently brought on board in Fall 2022.*

City of Eugene has planned to reduce emissions by 60% compared to the 2010 baseline and purchase carbon offsets for the remainder of emissions to reach neutrality in accordance with Climate Recovery Goals.

Within the 2019 report linked above, the section on "Meeting the CRO Goals" (page 2) states:

"Emissions from operations total 6,126 MT CO2e for fiscal year 2019. Between 2010 and 2019, the City's total GHG emissions have decreased by 1,150 MT CO2e, or -16% compared to 2010. This is primarily the result of Eugene's fleet shifting from fossil fuel diesel to renewable diesel, the discontinuation of district steam energy for heating in 2013, and a reduction in GHGs from Eugene Water & Electric Board's (EWEB) electricity supply. For comparison, Eugene's population increased by 8% since 2010. As a result, City operational emissions per resident served (MT CO2e/person) has decreased by 22% since 2010.

To meet Eugene's Climate Recovery Ordinance GHG emissions target, emissions will need to decrease at least another 3,215 MT CO2e (another 44% from to 2010 emissions) to meet the 60% mitigation target, with the remaining emissions either reduced or offset to become net neutral.

The City's GHG emissions from electricity have decreased by 406 MT CO2e (-53% since 2010). District steam heat totaled 1,163 MT CO2e in 2010 and was discontinued in fiscal year 2013; it was replaced with more efficient natural gas heating. Correspondingly, emissions from natural gas used to heat space and water at City facilities have increased by 830 MT CO2e or +38% since 2010."

IRP Sensitivity Analysis and Public Engagement Update

How many years, over the past 5-10 years, have actual conditions closely resembled a typical year in terms of planning? (BOOTH/CAPPER)

RESPONSE: *This IRP is foundational, so we have focused on averages and where possible tried to educate the community about variability, which we will study further in the future. We are assuming both average load and*

average water conditions in our modeling right now and the most recent 10 years of data mostly resembles these averages. However, this data also illustrates the variability we see from year-to-year, which is also important.

For example, the IRP assumes an annual average load of 275 MW and we have historically been within 5% of that number for the last 10 years. Peak load forecasting is more difficult, but we estimate that 465 MW is our typical winter peak load. 6 out of the last 10 years have been within 5% of that forecasted number, but it can be more volatile due to temperature extremes. The peak load variability of the remaining years ranged from -10% to 20%.

The majority of our portfolio is hydro generation and the water condition variability can be impactful to our electricity generation. In the last 10 years, half of the years have been within 5% of average water conditions on the Columbia River. However, the variability in the remaining years has ranged +(-)20%.

<u>Small modular nuclear (LAWSON)</u> - I vaguely remember that we were supposed to take a field trip to see a nuclear project (at OSU?), but that was canceled due to covid. Was that a small nuclear reactor or something else? Can we reschedule that site visit if it is pertinent?

RESPONSE: *In early 2020, EWEB Commissioners were invited on a tour of the NUSCALE facility in Corvallis to learn more about Small Modular Reactors (SMRs), more generally referred to as "advanced nuclear". This trip was cancelled and replaced with a virtual discussion in mid-2020. Advanced nuclear is developing and the region is looking more toward this technology as demand for carbon-free resources outstrips existing and other renewable resources. Over the next few years, it will be appropriate for Commissions to gain more exposure to nuclear alternatives, although these are not scheduled to come online until ~2030. The following is an excerpt from Newsdata's most recent edition of Clearing Up. "The Bonneville Power Administration has earmarked $31 million in its BP-24 rate case for an Energy Northwest study estimating the cost of increasing the Columbia Generating Station's output by at least 170 MW. Energy Northwest and BPA have been discussing uprating the plant for some time, but the idea has gained momentum from public power's fears that BPA does not have enough power to serve Tier 1 customers in its post-2028 contracts, and from the need to acquire new carbon free resources to meet state carbon reduction mandates."*

<u>Q4/2022 Year-end Operational & Strategic Goals Report</u>

<u>Workforce (KOSTOPULOS/KELLEY)</u> - It seems that many of the goals that have red dots where we did not meet the goals was due to staffing shortages. How serious is the staffing shortage and what plans do we have to address this? I recall years ago we over-hired to address the issue.

RESPONSE: *Most departments reporting challenges due to staffing are those comprised of both trade and professional jobs requiring specific technical knowledge, skill, and experience. Candidate pools for specialized electric and generation jobs have been shrinking, resulting in greater competition among utilities for qualified candidates.*

As a possible factor in attracting employees, studies of EWEB benefits and compensation were done. Benefits packages lead the region but compensation lagged. Adjustments to the MAPT pay structure were made and higher wages negotiated for the IBEW's newly ratified Collective Bargaining Agreement. Compensation plans for both groups are designed to keep salaries and wages at pace with other regional employers.

Sourcing channels are being expanded. EWEB continues to implement strategies to develop its current workforce as a means to ensure continuous staffing in critical roles. Entry career pathways into EWEB through customer service or utility support jobs continue to be effective channels for advancement. Telecommuting, hybrid-work, part-time schedules, and "over-hiring" have been implemented where practical. EWEB will explore longer-term approaches including expanding apprentice numbers and out-reach to trade schools, colleges and even high-schools.

Staffing disruptions in 2022 were also attributed to unplanned absences. Early in the year, exposures to Covid and other transmissible illness impacted groups with employees whose work is conducted in close proximity. Also, departments are thoughtfully staffed, but particular EWEB jobs simply do not have staffing "depth." That is to say the extended OFLA/FMLA-protected absence of even one employee in a specialized role can impact the work-group's ability to achieve certain goals. This sort of impact is likely to grow with the introduction of yet another protected state leave program, Paid Leave Oregon.

Regarding the Electric Division's Appendix H Metrics Report Card, the staffing shortages are primarily from vacancies, including retirements, transfers, and protected leave. In addition, the staffing shortages in Vegetation Management come from our contractors. Ability to hire qualified staff does play a role and while we work on that front, we also attempt to mitigate the impacts by using overtime, additional contractors, and re-prioritizing work where possible.

<u>Energy Conservation Programs (MCGAUHEY/KELLEHER)</u> - Looking at the quarterly report, it seems like residential energy savings through our efficiency programs remains flat. Is there a realistic growth target we could aim for? What accounts for the increased commercial savings?

RESPONSE: EWEB's energy efficiency and conservation targets are based on the Integrated Resource Planning needs. *EWEB's last completed Integrated Electric Resource Plan (IERP) in 2012 set a target for total new energy savings acquired each year equal to projected load growth. EWEB has consistently met or exceeded this target for over a decade. In 2022, EWEB exceeded this target by 50% and spent 98% of our incentive budget. EWEB does not set a target for energy savings by sector. Energy savings by sector varies from year to year based on available technologies and savings, measure costs, incentives available to pass through from BPA, economic conditions, and construction activity. Although commercial savings have exceeded residential savings in each of the past five years, historically in some years, such as when mass market measures are available (e.g., LED lightbulbs and appliance rebates through retailers) or when large complexes are built or renovated, residential savings have exceeded commercial.*

To add some clarity, "residential" is defined as single-family homes, manufactured homes, small plexes, and condominiums. Projects at large apartment complexes, high rises of 4 or more stories, and senior and assisted living facilities are classified and reported as commercial. Commercial also includes projects at public, educational and nonprofit institutions, as well as retail and office space. Commercial savings increased this year due to completion and verification of UO Knight Campus (part 2: 2,788 MWh, $277k in incentives), completion of the City's Sheldon Pool project (160 MWh, $29k incentives), custom refrigeration efficiency projects at 10 grocery stores (1,450 MWh, $265k in incentives) and 71 commercial lighting projects (5,067 MWh, $426k incentives). Out of the 71 lighting projects, 9 were in grocery stores, 7 were at public education institutions (UO, LCC, 4J) and 5 were at City of Eugene.

EWEB attempts to balance programs and budget across various objectives, including something for everyone (programs available to all sectors, as well as customers with different heating types, rentals, and limited income (LI) customers), meeting total savings targets, acquiring cost-effective energy savings, not missing lost opportunities, staying within budget, managing staff time, applying for and receiving all possible BPA reimbursement, affordability, and social equity. In doing so we make a concerted effort to balance spending across sectors. Residential measures cost more and require more staff time, per kWh energy saved, than non-residential measures. In 2022, the average cost for residential savings (per first year kWh) was $0.59/kWh ($0.42/kWh for non-LI and $2.14/kWh for LI) and $0.14/kWh for commercial and manufacturing combined. Although residential comprised only ~15% of total savings this past year, residential projects received 47% of incentives and required the majority of staff time. In a typical year, the vast majority of staff time and incentives (for energy efficiency, electrification, water efficiency and most other customer-facing programs) are used to serve the residential sector.

If staff were to seek to progressively increase residential energy savings, we would come up against limitations including budget, less acquisition of more cost-effective commercial savings & risk of not meeting overall targets,

staff time, and BPA reimbursement. EWEB staff are constantly seeking and evaluating new opportunities to make the best use of our resources to benefit customers. EWEB also will be using the Integrated Resource Planning process to evaluate the effectiveness of energy efficiency and a conservation spending compared to other resource investments.

Staff understand that there is interest from the Board in more detail about energy savings investments and trends and are planning information and Q&A sessions on EWEB programs for commissioners later this spring.

Consent Calendar

CONTRACTS

Lake Oswego Construction – for Roof and Gutter Replacement at the EWEB Leaburg Homes (KELLEY/KRENTZ)
**NOTE: This consent calendar item has been pulled by Management; the contract will be rebid.*

Why wasn't a local contractor awarded this contract?

I was shown an email indicating the reason an out of area contractor got the job was that they were the only qualified contractor that could do the job as the houses are " Historic". Is this true and if so, how did these houses get on the Historic register and not the Powerhouse? If there are 4 or 5 houses that amount seems a bit high for roofs and gutters, so is the cost inflated because we have to adhere to special historic standards?

RESPONSE: *Prior to Commissioner questions, EWEB management pulled this consent item due to cost and will rebid it as soon as possible. The reason Lake Oswego Construction was the only responsive/responsible bidder was due to holding a Lead-Based Paint Renovation License, which is required by the Construction Contractors Board for renovation work on homes built prior to 1978. The other two bidders did not have proof of this license with the Construction Contractors Board. The highest costs from the Lake Oswego Construction bid are for labor and materials and not the additional licensure. This work does require prevailing wage which does increase the price.*

The Leaburg Hydroelectric Project Historic District was listed on the National Register of Historic Places in 2015 as required by FERC in the relicensing of the project. There are 17 components that make up the Leaburg Hydroelectric Project Historic District including the powerhouse and all four operator homes. A summary of the history of the historic registry process and what it entails is attached for your information. We do not believe the cost of this project is high due solely to the historic registry of the homes, but a combination of requirements.

RESOLUTIONS

Resolution No. 2307 – Annual Price Adjustment for Dark Fiber Lease Pricing (KELLEY/HART)
Our 2021 dark fiber leasing price was the same as our 2020 price. Our 2022 price was ~ 8% above the 2021 price (based on the CPI). I am surprised to see our proposed rate increase this year is 0.59% (even though the CPI is 6.6% (ending in March 2023). I am surprised that the cost of owning and operating dark fiber hasn't increased more than our 0.59% rate increase suggests, given the remarkable inflation in the cost of everything....

RESPONSE: *The Dark Fiber Lease Price schedule will be adjusted annually based on the updated Cost of Service Analysis (COSA) or the City of Portland Consumer Price Index if no COSA was performed, per Board resolution No. 1705. EWEB staff performed a COSA for 2021 rate evaluation. The model suggested a less than a thousandth of a percent (0.02 cent/ per strand mile) increase to public purpose rate. At that time, it was decided to hold the price at the 2020 rate for 2021. The following year Portland CPI index reported 7.1% which was applied to achieve the annual rate adjustment. As the practice has been to alternate on a biennial basis between COSA and Portland CPI EWEB staff once again performed a COSA for the 2023 rate adjustment.*

The current COSA model considers three components.

- *Capital Recovery Cost Component – Recovers the cost of EWEB's fiber optic backbone over a twenty-year period. Based on the average age of the fiber system, years to recover is 4.2 years.*
- *Capital Reserve/Replacement Cost Component – Builds a reserve fund for replacement or major maintenance of the backbone system and of customer-funded fiber laterals.*
- *Operation & Maintenance Cost Component – Covers operations and maintenance expense in the backbone system and in customer-funded fiber laterals.*

Even if the total cost of ownership hasn't increased, hasn't the value increased?

RESPONSE: *We use a Cost of Service for rate setting. We consider replacement value of the system in our model. The estimated replacement cost in 2021 was approximately $12.75 M vs. $13.1M in 2022.*

How does our revenue from dark fiber leasing compare to our total cost of ownership for dark fiber?

RESPONSE: *Dark fiber lease revenue for 2022 was $920K. Total 2022 cost + depreciation was $909K. Our fiber system is primarily purposed for internal communications. It serves relaying capacity for our substations and communication backbone for our IS, Generation and Water facilities. The excess capacity leased to schools, public partners and for-profit internet service providers could be considered "opportunity" revenue.*

Does the leasing of dark fiber cover all lifecycle costs of owning and operating fiber?

RESPONSE: *No, as mentioned in #2, the primary purpose for having the fiber system is to serve our own facilities. Lifecycle costs are used to determine the lease rates, which cover the usage of the infrastructure by leased customers.*

Is the revenue greater than our total costs and, if so, how is that revenue used or reinvested?

RESPONSE: *On an annual basis, lease revenues appear greater than ongoing O&M costs. However, revenues are designed to cover both ongoing O&M and create cost recovery for established capital infrastructure.*

Why doesn't the leasing of fiber show up in our annual budget report? I suspect it's because fiber is not part of the electric utility nor the water utility, but I hope you'll clarify.

RESPONSE: *Financial budgeting and reporting for Telecom activity is included in the Electric Utility. Figures are comparatively small and grouped with other items that make it hard to isolate in the annual budget report. Within the budget document, this rolls up to Other Revenue.*

CORRESPONDENCE

<u>State of the Watershed Annual Report (KELLEY)</u> - There are several items that cause me concern contained in the report that I would hope would be brought to a level a bit higher than just "correspondence only". I know that is how we have done this in the past, but when we have items that maybe should be highlighted to the Board is there a way we can get this on as an agenda item?

RESPONSE: *The Annual State of the Watershed Report covers a very broad set of topics and is intended to evaluate long-term trends and results of EWEB protection and recovery programs. The unique report is not provided by most utilities, is not mandated, and is provided in correspondence as a way to bring the Board and public up to speed in general knowing that you may ask us to return with more information or a presentation on specific topics of interest. If there were ever a significant problem found in our monitoring, we would raise that through the chain of command appropriately.*

Examples include like on page 15 where it is stated that we have an event that resulted in E coli "ten times higher than the previous baseline maximum for this location". In addition there is reference where we have had instances where e. Coli was double the value of the previous storm event maximum. It indicates this "suggests a potential bacteria source somewhere upstream and relatively close…"

RESPONSE: *While e. Coli can easily be treated by EWEB's drinking water treatment plant, high bacteria levels in the raw water can be associated with degraded water quality and other potential contaminants. The elevated e. Coli results from the lower McKenzie mainstem locations in November certainly gained the attention of staff, and warrant a closer look at subsequent monitoring results and potential bacterial sources immediately upstream from Hendricks Bridge, particularly in the event elevated bacteria levels continue to be observed. However, spikes is bacteria levels during storm events is not unusual and these results represent a short time span, not a persistent presence. Staff will continue to monitor the water quality and will consider additional monitoring, bacterial source tracking (genetic analysis), and investigate possible sources if/when these results become persistent or occur with more frequency.*

Another example of something that I think rises to a level of more attention is when City of Springfield staff was spraying herbicides in the Thurston area along roadways and stormwater outfalls and that the spray product was glyphosate.

RESPONSE: *EWEB staff were made aware that the City of Springfield was applying pesticides along Thurston Road on April 18th after a citizen reported the activity to the Oregon Emergency Response System. EWEB staff immediately followed up with the City of Springfield and Oregon Department of Environmental Quality (DEQ). EWEB staff were also able to collect pesticide samples at a nearby stormwater channel the same day following a late afternoon rain event. City of Springfield staff were very responsive with information related to the spraying event, including the status of the applicator's license, the product being used, and the applied concentrations. Oregon Department of Agriculture and DEQ investigated the applicator's licensure, process, and products and found no evidence of a violation and closed the complaint.*

Lastly, the report indicates that the PCP plume is now only reported once a year from the previous semi-annual reporting. So now the 2022 monitoring well results "will not be available until March 15, 2023 and will be presented in the 2024 State of the McKenzie Watershed report". Personally, since IP is doing their own monitoring why is it only required to be reported once a year and we don't see the results for almost 2 years after the monitoring?

RESPONSE: *DEQ approved IP's request to move from semiannual to annual reporting in April 2021. All monitoring is done by a third-party environmental company, PES Environmental, Inc. The timing of the March 15th annual report does not line up with our current Board process to supply the annual State of the Watershed Report in the March meeting, however Staff do prudently review the results when they are received. Staff could push out this report to April if the Board would like to see these results sooner. In addition, staff do receive SUB/Rainbow's well samples on a monthly basis. If there were ever a significant problem found in this monitoring, we would raise that through the chain of command immediately.*

We are always happy to share our work with you. Please let us know what you'd like to know more about as a future agenda item.

National Register of Historic Places

When the Leaburg-Walterville Project was relicensed, the Federal Energy Regulatory Commission (Commission) was required to comply with Section 106 of the National Historic Preservation Act (NHPA). It was determined that the Leaburg Development Historic District was eligible for inclusion on the National Register of Historic Places.

In 1996, the FERC, EWEB, the Oregon State Historic Preservation Officer (SHPO), and the U.S. Advisory Council on Historic Preservation signed a Memorandum of Agreement, which laid out certain stipulations for relicensing. One of these was that EWEB was to "complete a National Register of Historic Places Nomination form for the Leaburg Development Historic District to define components of the District, and file it with the SHPO and the Commission." EWEB was also to "prepare and implement a Cultural Resources Management Plan (CRMP) to avoid or mitigate any effects of continued Project operation on the historical integrity of the District" and potential archaeological sites in the project area.

The CRMP was to address the protection of historic resources, including "(a) preservation standards for the District; (b) categories of actions that would affect components of the District and how they would be avoided or mitigated in maintaining, rehabilitating, or otherwise modifying the Project; and (c) a defined consultation process for notifying and consulting the SHPO concerning such effects, conducting necessary work, and filing reports with the SHPO and the Commission on these actions."

The CRMP, including Historic Resource Management and Maintenance Guidelines (as an appendix), was submitted to the Commission in 2002. The Historic Resources Management and Maintenance Guidelines is applicable to all aspects of the Project that are considered "contributing to the historic significance of the facility."

The Leaburg Hydroelectric Project Historic District was listed on the National Register of Historic Places in 2015. The District boundaries are consistent with the FERC license area, from the reservoir to the downstream (western) boundary of the Leaburg Village Grounds/Site, encompassing the dam, canal, forebay, penstock, powerhouse, and all other Leaburg project facilities.

The Register Nomination Form is a 61-page detailed evaluation of the identifies twenty-six (26) historic (Contributing) and non-historic (Non-Contributing) built elements (e.g., structures, buildings, sites) in the Historic District. The narrative states, "the multiple built resources of the project, including power generation (dam, powerhouse), water conveyance (reservoir, canal, tailrace), and residential uses (housing), retain very high integrity to their original design, use of materials, workmanship and other aspects and so effectively convey the historic associations that make the district significant."

Each built element is described with respect to its historic value and contribution to the historic significance of the Leaburg Hydroelectric Project Historic District. The following are the 17 components identified as contributing elements:

Leaburg Reservoir
Watchman's House
Leaburg Dam
Fender House
Sluice Gate
Control (Pier) House
Leaburg Bridge
Leaburg Canal Headgates
Leaburg Canal
Forebay, Penstock Headgates, Intake and Penstocks
Leaburg Powerhouse
Tailrace
Operators Cottage No. 1
Operators Cottage No. 2
Operators Cottage No. 3
Operators Cottage No. 4
Leaburg Village Grounds/Site

Historic Resources Management and Maintenance Guidelines

The Historic Resources Management and Maintenance Guidelines provide "information and techniques to aid the maintenance and repair of historic resources" that are considered "contributing" to the historic significance of the facility. The guidelines identify the standards for preservation and rehabilitation, and recommendations for maintenance, repair or replacement techniques and materials to retain the character-defining aspects in compliance with the CRMP.

Section 5 of the guidelines includes standards for preservation and rehabilitation of Housing and Support-Related Structure, and addresses foundations, walls, doors, windows, decorative features and trim, roofing, gutters and water management elements, building specific issues (e.g., lighting), and interior features. For each of these features, are the following: description, character-defining aspects, alterations or modifications present, goal, approach, and appropriate technique or materials.

Replacement is to be in-kind, to "replicate the original element in scale, design, material, and all other visual characteristics to the greatest extent possible." On the Operators Cottages, the current roofing and gutters are assumed to be later additions or replacement features.

The goal for roofing is "to provide a cost effective and fire-proof roofing material that is as visually compatible with the original character as feasible." The approach specifies that "historically compatible asphalt shingles that retain the small unit scale are a cost-effective and long-lasting alternative."

The goal for gutters is to minimize the visual impact while maintaining a functional gutter and downspout system for roof damage. The approach is replacement in-kind as needed, and "if entire systems require replacement the use of round-section downspouts and traditional half-round eave-troughs or "K" profile eave troughs, is a recommended alternative."