The following questions have been posed by Commissioners prior to the scheduled Board Meeting on May 7, 2019. Staff responses are included below, and are sorted by Agenda topic.

Business Growth and Retention Rate Credit - (FAHEY/PARISI) Why isn't this actively promoted? This seems like a fantastic return on investment and it directly aligns with the City's CAP.

RESPONSE: *While the BGR program is available to customers, it has not been actively promoted while the programmatic review and Board discussion is in progress. Marketing materials will be updated after Board approval for primarily direct B2B marketing efforts.*

Would this apply to customers switching from natural gas or just brand new to Eugene businesses?

RESPONSE: *The BGR is designed to support both new and existing businesses overcome some of the financial hurdles in making capital improvements to develop or grow their companies, not as a mechanism for fuel switching. One of the evaluation criteria is the number of additional employees. While BGR could be used to encourage expanding businesses to switch from natural gas to electric technologies, it is intended for efficient economic growth. As part of aligning the BGR with EWEB strategic priorities, carbon reduction technology was added as a participation screening criteria, so that customers receiving the credit will have the capability to assist with carbon reduction goals.*

What is the reasoning behind lowering from 200 kW to 100 kW? Is normal variance taken into account when setting the companies baseline? Could a company reasonably vary more than 100 kW from one billing cycle to the next?

RESPONSE: *Management is proposing to lower the demand from 200 kW to 100 kW to encourage more participation in the program since the Eugene market doesn't see a lot of new businesses or expansion that would generate growth of 200 kW. Examples of business demand are Arcimoto, Bi-Mart, and Big Foot Beverages fall in the 100-200 kW range while a new car dealership is under 100 kW. For existing customers, the company's baseline is determined by reviewing monthly billing data and usage from the prior year which will take into account any typical variances. Some larger companies might have higher demand fluctuations due to weather or seasonal production differences, however the BGR credit requires sustained demand increase, which more directly ties to business expansion.*

Reserve Fund Status and Transfers/Use of Reserves – (ACKERMAN) Both the storm costs ($4.3 mil) and the purchased power costs ($3 mil) seem either directly or partially related to the effects of climate change. Is it reasonable to assume that these previously one-time, sporadic cost requests will become more regular? How can we reduce budget uncertainty in a changing and unpredictable climate? I know every other utility is dealing with this issue - what is happening both nationally and internationally?

RESPONSE: *Climate change has the potential to create significant impacts to EWEB and other utilities. The trend experienced by EWEB in recent years has been increased summer demand, higher demand volatility in winter months (both higher and lower demand), and increased supply volatility. EWEB currently manages near-term budget impacts through conservative revenue assumptions, power reserves which are recalculated annually for reasonableness, and monthly monitoring to compare projected financial results with budget. The recommendation to increase the Electric Utility operating reserves to $4 million comes after a review of costs from the most recent storms and a concern about future timing and availability of FEMA funds as a result of increased weather related disasters. Reserves can be used to smooth the impact to our customers. Long-term, EWEB and the Northwest face unique challenges because of reliance on hydro and other weather dependent resources. Both long-term and short-term historical trends are reviewed when developing the ten-year financial plan assumptions. The strategic plan includes creating consumption flexibility and resilient delivery*

that considers the challenges of climate change. Current projects that assist in creating flexibility include the meter upgrades and the redesign of products and services.

Please provide additional information about the several million in new capital work. What are the emergent capital projects? – (PRICE)

Capital plan variances 2019 - source Q1 EL1

Project name	Notes	Additional 2019 (millions)	Project total costs (millions)	Additional scope since July 2018 (Y or N)	Strategic need
Advanced Meter Program	radio communications infrastructure additions, IS software upgrade	$ 3.0	$ 9.5	y	resiliency, safety and operational efficiency
ROC consolidation	added scope and rollover form 2018	$ 0.6	$ 2.5	y	operational efficiency
Feb Snow Storm		$ 0.6		y	emergency restoration
Smith Dam Intake Rehabilitation	FERC order	$ 1.2	$ 2.8	y	compliance
Holden Creek Substation Expansion	reliability requirements	$ 1.8	$ 7.5	y	reliability
Hayden Bridge Disinfection System	rollover from 2018	$ 1.2	$ 4.5	n	reliability and operational efficiency
Water Main replacements	several emergent opportunity	$ 1.2	$ 4.1	y	long term asset replacement plan

<u>Quarterly Strategic Operational Report</u> – (FAHEY) In the Electric Utility Financial Report it is stated "net income for the Electric Utility is $900,000 compared to a budget expectation of $7.2 million". Is that for the entire year or for net income up to this date? This is a significant different. Do we believe this will continue for the rest of the year?

RESPONSE: *This is as of the end of March and is driven by two main factors:*

- *The contribution margin was $4.1 million unfavorable primarily as a result of high purchased power costs. Due to lower than budgeted generation and higher than anticipated consumption, EWEB bought more power at significantly higher than budgeted prices.*
- *Storm costs of $4.3 million.*

Current projections indicate that the contribution margin variance will improve approximately $1 million by year end resulting in a projected $3 million shortfall for the year. FEMA's reimbursement of storm costs is not anticipated until 2020.

In the Workforce section there is a partnership listed as "ASSP Cascade Chapter – EWEB President 2019," what is that?

RESPONSE: *EWEB's Lance Hughes presently serves and the President of the Cascade Chapter of the American Society of Safety Professionals.*

Annual Strategic Plan Review – (LAWSON) I would prefer we have a work group session around the strategic plan, rather than comment and approve changes during a regular Board meeting. The questions Frank poses are big ones and I don't think the format of a Board meeting allows us to really get at the crux of the issue - How can we, as a publicly owned utility, be both good financial stewards and uphold the values of our community? There are a lot of things we want and a limited amount of money.

RESPONSE: *The goal of Tuesday's discussion is to gauge the scope of potential changes to the plan as part of the annual review. Depending on the magnitude of the strategic changes the Board wishes to explore, allocating additional time may be warranted. This can be done as a separate meeting, or by allotting additional work time during upcoming meeting(s).*

There is strain between public requests, values, and organizational strategy. A strategic plan should provide the guidance necessary to effectively manage policies, establish priorities, and inspire the actions that align and focus the organization on desired outcomes. And, both our day-to-day and strategic work must reinforce our "core values", which provide the fundamental basis for our policies, actions, behavior, and decisions.

Consent Calendar

CONTRACTS

Jacobs – Carmen-Smith Task Orders for Fish Passage Facilities – (ACKERMAN) What if a license isn't issued within 6 months? Will we need to submit plans again?

RESPONSE: *No, the Plan and Schedule submittals due at 6 months after License issuance are not final designs. They are more of a detailed description of what we intend to build and in what timeframe. The Task Orders currently before the Board are the front-end evaluations needed to decide on the best alternatives to pursue, and to prepare the Plan and Schedule submittals. There will be future Task Orders for final design work, but we will not move forward with those Task Orders until we actually have the license and the Plan and Schedule has been completed and submitted.*

Is the design for the fish access very different from what we have now? If so, how did we come up with this design?

RESPONSE: *The concepts for upstream and downstream fish passage at Trail Bridge are significantly different than fish passage currently at Leaburg, and also different from the previous volitional fish passage designs at Trail Bridge from eight years ago. We do not currently have any fish passage facilities at Trail Bridge. Our current upstream passage plan involves "Trap and Haul" – essentially a short fish ladder ending in a "trap" where fish are transferred into a tanker truck and driven up to the reservoir. For downstream passage, fish will pass over and down the spillway instead of through a separate bypass pipe. Both concepts are significantly less expensive than previously envisioned, and were re-negotiated with the Settlement Parties when the expense of the then planned upstream ladder and downstream floating fish screen could not be supported by the anticipated value of power from the project.*

Northbank Civil and Marine, Inc. - Construction Services at Carmen-Smith – (ACKERMAN) How does weather degrade the gate and hoist system and what type of extreme weather events have hastened the degradation? If we continue to see more extreme weather events, what is the expected lifespan of the system, compared to what we've expected in the past?

RESPONSE: *The Smith Intake Tower is located outdoors in the middle of Smith Reservoir and has thus been exposed to nearly 60 years of the sun, wind, rain, and freezes of the Cascades Mountain Range. Equipment degradation is driven by long term exposure to weather that causes paint system deterioration, lubrication deterioration, and seal deterioration. These seemingly minor types of deterioration lead to more major problems of corrosion, premature wear, seizing, unsafe equipment, and can ultimately lead to equipment failure if unaddressed. This project will address these issues and reduce the risk of equipment failure.*

Following the Refurbishment Project, the hoist and gate are expected to last at least another 40 years, the duration of the license period, with periodic maintenance. While the original lead-based paint systems have lasted more than 50 years, it is unlikely we can expect the same from modern systems. Where feasible, EWEB engineering will consider use of corrosion resistant materials and the addition of equipment covers to better protect equipment from the elements. If more extreme sun and extreme freezing is expected in the long term, we can expect to repaint and replace seals more often in order to prevent the excessive corrosion and lubrication loss that leads to equipment failure.

Schnabel Engineering - Safety Inspection Report for Carmen-Smith – (ACKERMAN) Please explain this comment: "Schnabel's work under the original scope of work, which is nearing completion, showed that the existing stability analyses for the Smith Dam and Trail Bridge Dam do not meet current standards of practice and need to be updated immediately to remain acceptable to the FERC." Is this stability analysis usually performed by EWEB or by a contractor like Schnabel? In what way isn't it compliant?

RESPONSE: *EWEB relies on consulting engineer specialists to perform the stability analyses for our hydro facilities. The most recent stability analyses for the spillways at Smith Dam and Trail Bridge were completed for EWEB by consulting engineers at Engineering & Economic Services (EES) Consulting in 2013. The specific updates that are required for this current version will include more conservative assumptions that a failure plane could develop through the concrete spillway keys rather than the underlying bedrock, that the spillways could be subject to larger uplift forces than previously considered, and that intermediate floods could produce lower factors of safety due to decreased offsetting pressures from higher tailwater elevations during the design flood. The analysis will also consider the potential for deteriorated strength of post-tensioned anchors that were installed in the Smith spillway 45 years ago. Recent studies have shown that the standard practice for corrosion protection systems at that time have not always performed well, warranting increased conservativeness regarding the assumed capacity of the existing anchors.*

CORRESPONDENCE

Transportation Electrification Program Update – (FAHEY) How long does a Level 1 charger take, on average, to charge a nearly empty battery?

RESPONSE: *A level 1 charger uses a regular power outlet and can provide 3-5 miles per hour. A Nissan Leaf 2018 with a 40 kWh battery would take 28.5 hours to fully charge. In contrast, a level 2 charger can provide 12-40 miles per hour, and the Leaf would take about 7 hours to fully charge. (information supported by ClipperCreek, Inc. – manufactures of charging equipment).*

Can you set a timer on a Level 1 charger to charge during off peak as well?

RESPONSE: *Yes. Most EV's have imbedded controls that handle charging programming. Level 2 charging equipment enhances ease of use and provides additional features, such as controlling amperage and providing web access for ease of software upgrades and management.*

Who would decide the placement and be the "owners" of the new public charging stations?

RESPONSE: *The property owner who wishes to have charging stations available for their customers or employees would own the stations. Currently, the City offers several level 2 charging options and they are looking to expand their infrastructure.*

Do we currently monitor the usage of the already installed public chargers?

RESPONSE: *Smart meters assist with monitoring residential charging using a manual process. In partnering with the City on EV efforts, they provide EWEB network access on the usage of their stations which is currently the easiest way for EWEB to track consumption of a public charging station although this is also a manual process.*