MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Carlson, Mital, Helgeson, Schlossberg, and Brown

FROM: Susan Ackerman, Chief Energy Officer

DATE: April 2, 2019

SUBJECT: 2019 Power Market, Budget Hedging, and Generation Update

OBJECTIVE: Information Only

Issue

The purpose of this backgrounder is to provide an annual update of wholesale power markets and generation resource outlook.

Background

The Power Planning and Trading Operations sections manage EWEB's power supply and wholesale market activities consistent with utility financial objectives, in accordance with Board Policy contained in SD8, and as further described in the EWEB Energy Risk Management Procedures. Generation manages EWEB's owned generation assets.

Discussion

Market Price Update

Wholesale energy markets can generally be described as either near term "spot markets" or longer term "forward markets"[1]. For spot markets, prices are impacted by weather (e.g., temperature and precipitation) and operational phenomena (e.g., generation and transmission availability), while forward markets reflect longer term market expectations of energy supply and consumer demand.

Spot Markets

The 2018 spot market finished higher than the previous 5 year average (Figure 1, below). This shift was predominantly driven by unforeseen natural gas transmission events in Southern California[2] and Canada[3] which resulted in limited gas supply. The generation mix in the northwest is such that the marginal resource is nearly always natural gas generation. As a result, swings in natural gas pricing can have a dramatic impact on power prices, especially in the day-ahead or greater timeframes. These events occurred during periods of extreme weather, when

[1] Spot markets typically refer to markets where commodities are traded for immediate (next day, next hour) delivery, whereas forward markets imply markets where the traded commodity is delivered in a future period.

[2] https://www.eia.gov/todayinenergy/detail.php?id=37112

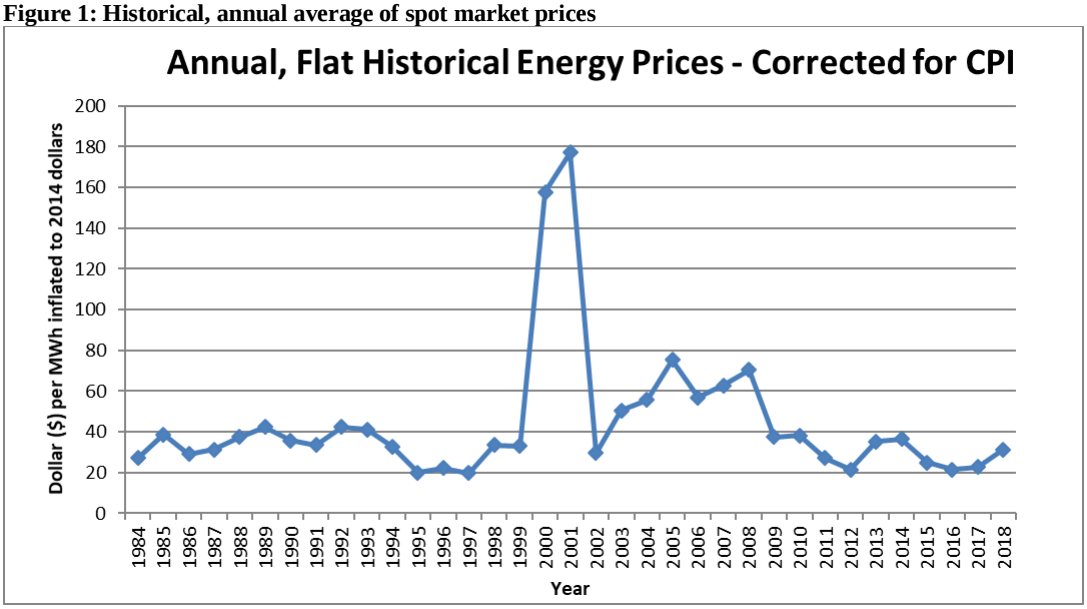
[3] https://www.eia.gov/todayinenergy/detail.php?id=37312

regional natural gas supplies were already stressed due to higher than normal demands for electric generation and/or space heating. During this time, day-ahead, peak energy prices were routinely above $60/MWh, peaking above $300/MWh in August. During the same period, real-time energy prices frequently surpassed $100/MWh, peaking above $400/MWh.

To date in 2019, the northwest has seen a slow start to the hydro year (i.e., the amount of water forecasted to be available for generation). It is currently anticipated that regional hydro generation will be approximately 85% of normal for the year. Given regional hydro and continuing gas supply limitations, staff anticipates more price volatility in 2019 than in recent years. Illustrating this point, starting in mid-February regional loads increased as cold weather set in. This stressed an already limited natural gas supply to the point where daily gas traded for over 16 times the normal price. With the continued cold weather, day-ahead markets routinely saw on-peak energy pricing above $100/MWh, peaking over $900/MWh in March during a gas pipeline event. Real-time prices during this period have frequently been in the $80-100/MWh range; peaking near $200/MWh. Staff anticipates that this sort of price volatility is likely to continue into the summer, when California loads peak.

It should be noted that the U.S. Energy Information Administration ("EIA") anticipates that Henry Hub natural gas prices will stay relatively stable through 2020[4]. The price volatility that the west coast is currently experiencing is generally being caused by temporary transmission and storage scarcity[5], not necessarily limited gas production.

Figure 1: Historical, annual average of spot market prices



Forward Markets

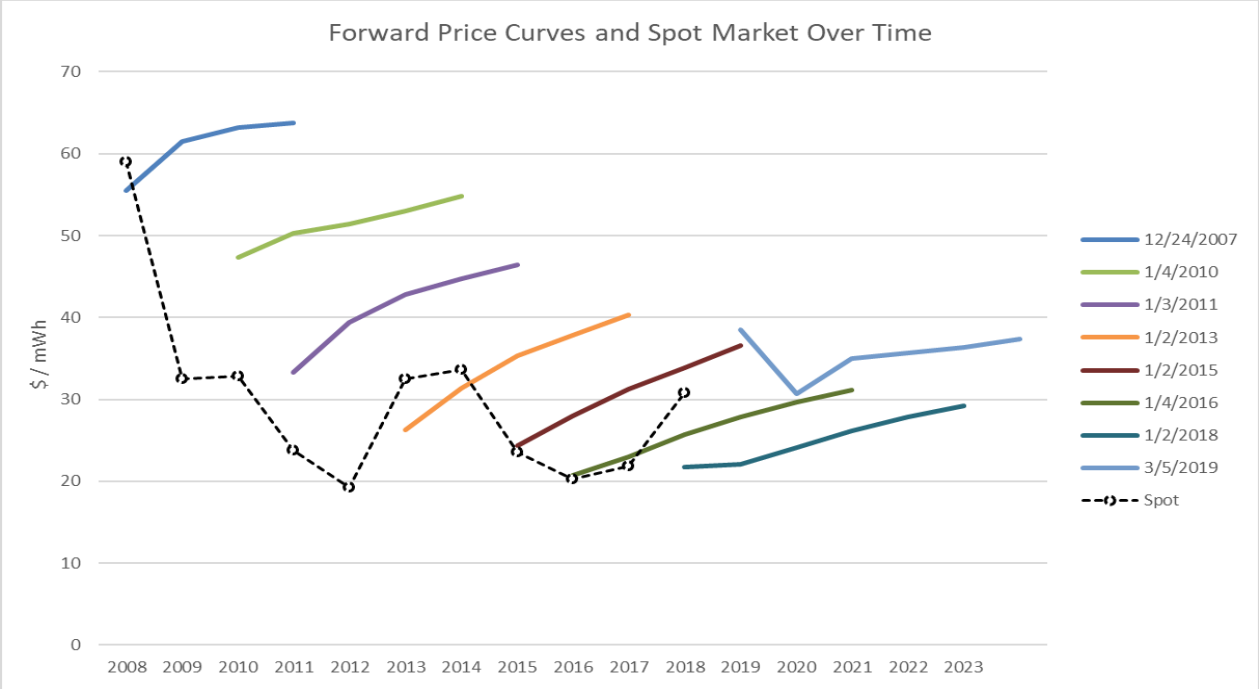
Some of the drivers noted above also impact forward markets, the delivery of power at prices agreed upon today. As such, for the first time in several years forward market prices have shown relative strength compared to historical trends. The natural gas delivery limitations noted above

[4] https://www.eia.gov/todayinenergy/detail.php?id=38052
[5] https://www.eia.gov/naturalgas/storage/dashboard/

are likely responsible for most of this increase, but prices may also be seeing some support from tightening greenhouse gas (GHG) emission policies and practices.

Figure 2, below, shows both forward market price curves, and spot market prices, over time. A forward curve reflects prices for future periods of delivery, which can be traded at today. The first line reflects a forward curve was taken at the end of 2007. Trades executed during this time would likely reflect this sort of pricing. The subsequent lines reflect changing forward price curves for each year after that.

Figure 2: Historical forward price curves and spot prices



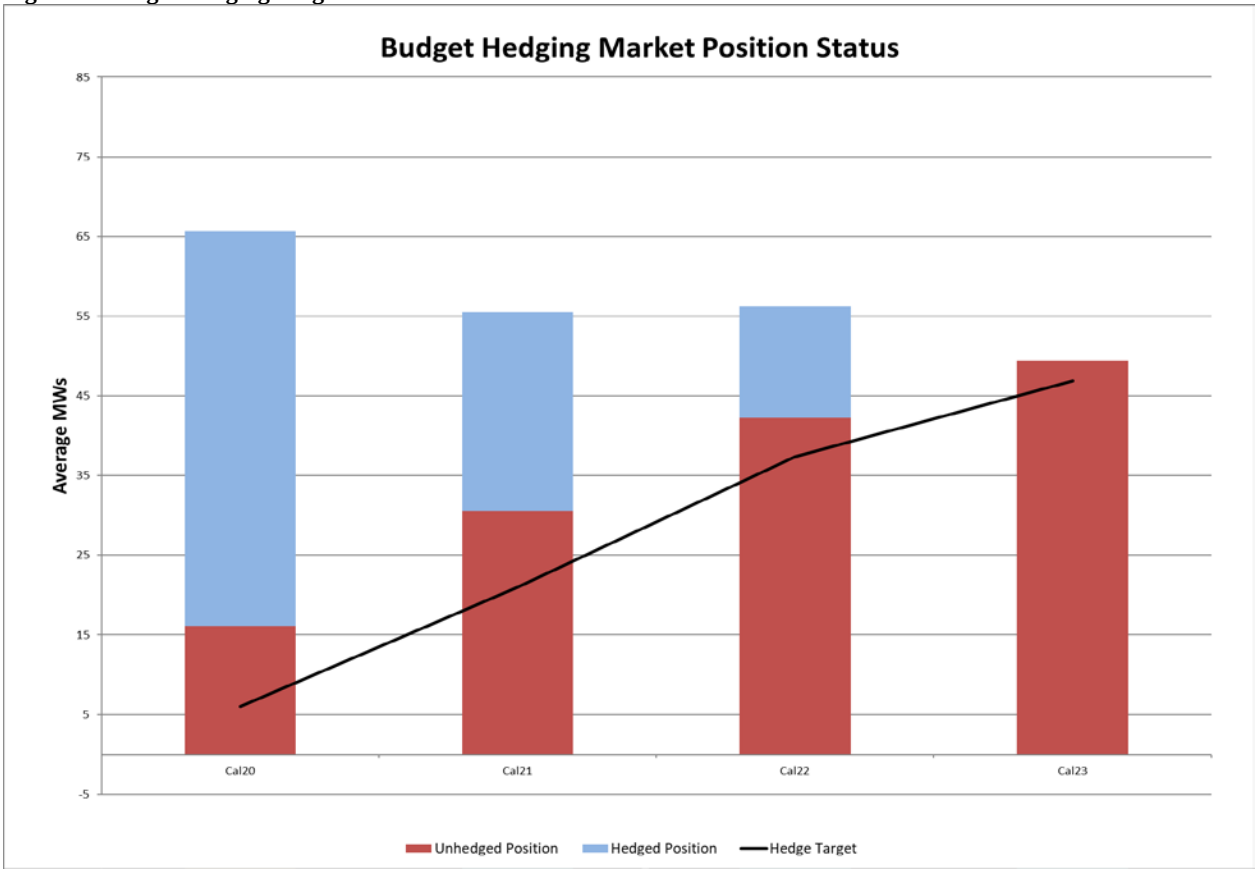
Surplus Position Hedging Update

Figure 3, below, shows EWEB's surplus market position for 2020-2023 based on the budget hydro assumption, or 90% of expected hydro generation. The top of each stacked column indicates EWEB's original surplus market position; i.e., the amount of forecasted generation EWEB expects to realize in excess of that which is forecasted as being necessary for reliable load service. The blue bar represents the volume of energy hedged[6] by staff. The red bar represents the remaining unhedged surplus. The black line reflects the desired pace of hedging activity the Risk Management Committee (RMC) would like to achieve over time.

In accordance with EWEB's Risk Management Procedures, staff hedges a portion of its surplus position up to five years in advance. This provides two benefits: 1) it reduces financial exposure related to market prices; and 2) it results in sales executed at various times which diversifies the sales price by "dollar cost averaging" through time. This strategy results in near term years being fully hedged while year five is the least hedged, with interim years somewhere in between. Beyond five years EWEB does not hedge any surplus energy.

[6] A hedge is a trade or set of trades that reduces the market price exposure risk inherent in EWEB's portfolio length.

Figure 3: Budget Hedging Progress



EWEB Owned-Generation Update

The Leaburg power canal and powerhouse remain offline due to dam safety concerns identified last fall. EWEB has an approved investigation plan for the canal and is working on repair designs. We hope to have the canal back in operation before the end of summer 2019. However, both the work and the repair plans are contingent on FERC approval. The Carmen-Smith facility, including both the Carmen and Trail Bridge powerhouses will go offline on April 1, 2019 for the second year of facility upgrade work. In 2019 EWEB will replace the electrical switchgear and transformers and rebuild the Carmen substation. We expect the Carmen-Smith facility to return to service in November 2019. EWEB's other generation facilities are scheduled to have typical minor maintenance outages throughout the year. Excepting for unplanned revisions to schedule, these maintenance outages are included in the current budget.

Following a cold and wet February and March, the 2019 hydrologic year for the Oregon Cascades, which will affect EWEB's owned hydroelectric resources, looks to be just below average, with current McKenzie streamflow projections of 95% of average and March snowpack estimates in the McKenzie basin of approximately 111% of normal. Based on these forecasts, we expect to be able to operate the Walterville facility normally throughout the year.

EWEB's other owned generation facilities continue to operate normally and are expected to do so throughout 2019.

Requested Board Action - None

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown

FROM: Sue Fahey, Assistant General Manager/Chief Financial Officer; Deborah Hart, Financial Services Manager; Adam Rue, Fiscal Services Supervisor

DATE: March 22, 2019

SUBJECT: Annual Report on Power Trading Compliance

OBJECTIVE: Information Only

Issue

Board Policy SD8, governing Power Risk Management, requires the Chief Financial Officer to present a report to the Board at least annually that covers trading and contracting compliance. This backgrounder provides that information for calendar year 2018.

Background

Oregon statutes stipulate the appropriate scope for a governmental agency's investment of "surplus funds." Accordingly, EWEB's activities in the power markets must be associated with the provision of electricity to meet anticipated sales and generation forecasts. The Risk Management Committee (RMC) is responsible for oversight and compliance with Board Policy SD8. This governance body sets limits and establishes Power Risk Management Procedures for power trading operations to protect the utility from financial instability and unacceptable risk.

Discussion

The eight specific responsibilities of the RMC outlined in Board Policy SD8 are listed below with a characterization of compliance status and instances in which compliance was maintained through exception.

Anti-speculation Statutes: **In Compliance**

In order to comply with Board policy and anti-speculation statutes the Power Risk Management Procedures establish megawatt limits on market positions to monitor and reduce opportunities for speculation and to limit exposure to price volatility. However, occasionally changes to forecasts, load, and/or generation result in position limits being exceeded. In those events, the Power Risk Management Procedures require positions to be brought back into compliance no later than the next trading day unless preapproved by the Fiscal Services Supervisor and Portfolio Management Supervisor. EWEB was in compliance with this procedure in 2018, which includes forward market positions throughout 2018 to 2022.

The market position limit exceptions approved by the RMC or Fiscal Services Supervisor and Portfolio Management Supervisor are described below.

- In January, extended construction outages for the Carmen-Smith project created an out of compliance position for June 2018. The Fiscal Services Supervisor and Portfolio Management Supervisor approved to hold the position until it could be traded back into compliance later in the month.
- In July, as a result of BPA's spill injunction, reduced generation was modeled in EWEB's multi-year Slice forecast leading to two out of compliance positions; both less than 2 aMW. Exceptions were approved by the Fiscal Services Supervisor and Portfolio Management Supervisor due to an anticipated BPA forecast update. Two days later, new BPA Block allocation forecasts added generation back into those periods, resolving the exceptions.
- In September, an extension of a planned outage at Leaburg, together with the sale of additional output from a contracted resource, resulted in compliance exceptions in several periods of 2019.
    - The RMC voted to cure the Q1 2019 position the following week in order to allow trading floor staff sufficient time to solicit competitive bids in the market.
    - The short positions in the periods of Q2 and Q3 were granted exceptions by the RMC to be carried beyond the compliance limits. Compliance is calculated on the firm generation forecast. Q2 firm was a lot lower than expected length due to the typical spring run-off period. The Q3 compliance exception was relatively minor in terms of volume (roughly 0.05 aMW). In February, an updated BPA water supply forecast was received increasing the out of compliance position. Q2 and Q3 2019 trades were executed to cure the out of compliance positions.

Development of Detailed Control Procedures: **In Compliance**

SD8 requires that the RMC establish and maintain Power Risk Management Procedures. Within these procedures, processes are defined which govern roles and responsibilities, daily trade activity, and exception authorization. The last modification to these procedures were approved in late 2017 and implemented in early 2018. Additionally, the RMC reviewed roles and responsibilities related to contracts in mid-2018 and directed staff to report back with potential edits to procedures. These were presented in October and no changes to procedures were made at that time.

Notification of changes to compliance limits: **In Compliance**

No changes to compliance limits were recommended or approved by the RMC during the 2018 calendar year.

Oversee control infrastructure and monitor compliance: **In Compliance**

The RMC meets monthly to monitor and review compliance limits. In addition, the RMC is updated on the status of short-term compliance measures weekly to provide insight in both current compliance status and market trends that may influence future compliance periods.

Authorize and monitor risk reports for financial results, market positions and credit exposure:

In Compliance
The RMC met in each month of 2018. Prior to each meeting, voting members received up to date compliance reporting materials that provided the basis for monitoring financial results and compliance with market position limits and credit.

In addition to the market position exceptions mentioned above there, were also two credit limit exceptions granted by the Fiscal Services Supervisor and reported to the RMC in accordance with procedures.

Procedures require that trades be entered no later than the close of business the day they are executed. On two occasions, renewable energy credit trades were input a few days after contract execution. These trades are more complex and obtaining the counterparty's signature resulting in delayed entry into the system.

Review and approve contracts which impact EWEB's power portfolio: **In Compliance**
The RMC provides cross-functional oversight and review of any contracts that may have an impact on EWEB's portfolio to ensure that the Board mandate of risk mitigation and financial stability are maintained. Where contracts require Board approval, the RMC provides direction and preliminary review in advance of Board action. No contracts requiring RMC or Board approval under SD 8 were executed in 2018 and no changes to the approval thresholds are being requested.

Recommendation and Requested Board Action
This item is information only and no Board action is being requested at this time.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown
FROM:	Rene Gonzalez, Customer Solutions Manager; Deborah Hart, Financial Services Manager; Jeannine Parisi, Customer Relationship Manager
DATE:	March 10, 2019
SUBJECT:	Business Growth and Retention Program Updates
OBJECTIVE:	Information Only

Issue

As part of EWEB's strategic planning efforts and focus on continuous improvement, a number of initiatives are underway to make it easier to conduct business with EWEB. This memo focuses on one specific area of improvement, the Business Growth and Retention program.

Background

In response to the Great Recession and a desire for EWEB to participate more actively in promoting economic develop in our service territory, in 2012 the Board adopted a *Business Growth and Retention Price Rider and Loan Program* (BGR). In developing the program, EWEB joined many other utilities across the country that offer similar economic development incentives. The loan program assists commercial customers with upfront utility infrastructure costs, while the price rider provides an incentive price for customers who add a minimum of 200 kilowatts (kW) of billing demand based on the differential between wholesale and retail prices.

A recent programmatic review was conducted and even though based on a solid framework, the eligibility requirements and the evaluation process relied on a high degree of subjectivity. Since established, fewer than ten business customers have taken advantage of these offerings.

Management proposes implementing more objective standards for participation, streamlining program administration, and offering increased flexibility to potential participants while managing financial risk to EWEB. Recommended changes include:

1. Increased Flexibility

    - Reduce the new demand threshold for program eligibility from 200 to 100 kW and add a minimum new revenue requirement of $50,000 annually. This ensures that new equipment with high demand that runs infrequently and has the potential to further increase peak load is not the basis for participation.

- Instead of a three-year incentive price for every project, allow for two through four year terms based on the projected economic value of the project.

2. Standardize Eligibility Criteria

   - Modify the environmental and community benefit criteria to align with current EWEB strategic direction, and use simple yes/no responses to reduce subjectivity.

   - While the program participation screening tool will still use a triple-bottom line framework, emphasis will be on objective criteria: 1) amount of increased load, 2) expected new EWEB revenue, 3) demand response potential, and 3) cost to customer for needed utility infrastructure. Projects with higher value and alignment with EWEB's strategic direction can qualify for the price rider up to four years.

3. Streamline Administration

   - Set the incentive amount annually based on the differential between the forward Mid-C price curve and retail pricing for that rate class rather than on a back-cast every six months. In addition to ease of administration, this process creates more certainty for the customer and EWEB. Financial risk to EWEB is minimized by adjusting this value annually.

   - Instead of decrementing the customer's portion of the price differential over the contract term, use a fixed percentage for the BGR contract duration such that the calculated incentive equates to approximately a 15% rate discount for medium and large general service customers.

4. Promote Customer Confidence

   - Apply the incentive as a bill credit annually in December with notification to the customer of amount in advance of bill receipt.

A financial impact analysis was conducted to assess how this methodology differs from the previous one. Using one of the past participants as a proxy, the customer incentive would have increased $2,000 annually to $22,000 and would qualify for four years of incentives rather than three. The additional revenue generated by the new load over those four years was calculated at $485,000.

TBL Assessment

The BGR is intended to provide short-term discounted electric pricing to support business growth when such development demonstrates clear economic, environmental and community benefits. Like the original program, the eligibility screening tool would use a triple bottom line framework to assess the economic, environmental and community benefits of a given project. To reduce subjectivity, the environmental and social criteria would be updated to focus on areas that could reasonably be verified, such as planned participation in energy or water efficiency programs, carbon reduction technology, and number of new jobs created.

Recommendation
Changing the Business Growth and Retention Price Rider kilowatt eligibility and incentive calculation requires public notification, public hearings, and Board approval. With general Board guidance and/or concurrence to simplify, streamline and enhance access to the program as described, Management recommends that staff begin the notification process and bring back a revised BGR-1 Price Schedule for Board approval at a later meeting.

Requested Board Action
None at this time.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown
FROM:	Rod Price, Chief Operating Officer; Rich Fatooh, Engineering Technician IV; Jeannine Parisi, Customer Relationship Manager
DATE:	March 12, 2019
SUBJECT:	Downtown Network Pricing Update
OBJECTIVE:	Information Only

Issue
This is the second of two progress reports on process improvements intended to make it easier to conduct business with EWEB. This memo is specific to the Downtown Network.

Background
Downtown Eugene is the economic, cultural and governmental hub for the City, with some $300 million in recent public and private investments. Additional growth is on the horizon, including both commercial buildings and multi-family residential projects.

Eugene's urban core is served via the downtown secondary network, which has specialized equipment and installation standards. While customers in the network benefit from exceptionally high power quality and reliability, the upfront infrastructure costs are typically higher than a similar service extension outside the network. Such costs can be a barrier to downtown development, particularly if high reliability is not a business decision driver.

At the July 2018 meeting, EWEB commissioners asked Management to look for flexibility in its service extension policy for specific types of economic development and community benefit projects. In a follow-up discussion in October, Management shared some early thinking specific to service connection costs in the downtown network, which has since been refined.

Discussion
Consistent with EWEB's long-standing policy, it is the developer's responsibility to pay all costs associated with the additional capacity needed to serve development in the secondary network. What is a bit different is that the network transformers come in just two sizes and are required to be housed in either an underground vault or in a utility room in the new building. In addition to other specialized network requirements, downtown developers may experience unexpectedly high infrastructure costs for excess capacity they can't fully utilize. While one developer will bear the total costs for this capacity, the next developer breaking ground can take advantage of this prior investment and avoid these extra costs. As a result, the costs to develop in the network are location dependent, vary widely, and are difficult to predict.

Because the downtown network interconnects with other existing network customers, all customers benefit when more redundancy is built. Given this broader benefit, Management believes it is reasonable for EWEB pay some of the upfront costs and recover them over time for new load in the network, thereby reducing the barrier to entry that exists today. Those costs would be recovered over time as other customers accessed the network. This cost-share would not apply to 'spot networks' that only benefit a single development, or to the developers' substructure costs (vaults, service laterals, etc.).

Management proposes replacing the current cost structure with a downtown network service connection charge that is based on standard requirements to provide service to projects within the Downtown Network. This change is intended to establish more predictability in network infrastructure costs, reduce price disparity between similarly-sized projects, and enable staff to be more responsive to developer requests for high level cost estimates early in their project scoping.

A downtown service connection charge differs from the current pricing model in the following key ways:

- All customers adding new load to the network will pay a service connection charge scaled to the amount of new load required regardless of existing capacity. This establishes a level playing field compared to the existing situation where a developer's cost exposure is based on the available capacity (or lack thereof) at a particular downtown location.

- EWEB's contribution is narrowly limited to capital equipment that provides reliability benefits to other network customers. This investment would be recovered over time as other customers connect to the network and pay their proportional share of installed equipment. If no future development materializes, unrecovered costs would be approximately $65,000 per year; however reliability has increased.

- A standardized network connection charge promotes transparency and consistency for customers, as well as ease of administration for staff.

TBL Assessment
No formal TBL has been conducted. However, this change mitigates the current incentive to choose natural gas to avoid additional equipment costs, equitably and cost-effectively reducing community and regional carbon emissions. Encouraging development in the downtown core not only has broad economic benefits, it facilitates more efficient transportation options, particularly for people who live and work there. This change would require an increase to EWEB electric capital plans of approximately $50,000-$100,000 a year, and is unlikely to impact customer pricing as the capital investment will be reimbursed as new development occurs.

Recommendation
Implementation requires policy updates and therefore Board action that with general direction at this time, can be prepared for a future meeting.

Requested Board Action
None at this time.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown
FROM:	Rene Gonzalez, Customer Solutions Manager
	Sarah Creighton, Enterprise Risk Supervisor
DATE:	February 19, 2019
SUBJECT:	Social Media Guidance for EWEB Commissioners
OBJECTIVE:	Informational Only

Issue
This correspondence is to provide the Board guidance regarding the use of social media in their capacity as elected officials.

Discussion
The role of technology in communicating and engaging with EWEB customers is constantly expanding. Social media platforms can improve the interactions between elected officials and the public, reaching broad audiences and supporting two-way dialogue. However, caution should be exercised to ensure transparency and compliance with public records and open meetings laws.

Staff created a document to help guide the Board on use of social media as an elected official. This document has been developed with input from legal counsel.

Recommendation and Requested Board Action
For informational purposes only. No action requested at this time.

Attachment A: Social Media Guidance for EWEB Commissioners.

Social Media Guidance for EWEB Commissioners

Purpose:
As an elected official, it is important to have transparent communications with constituents. Social media platforms can improve interactivity between elected officials and the public, reaching a broad audience and supporting two-way dialogue.

This guidance document is designed to help create a clear delineation between personal use of social media and use of social media as an EWEB Commissioner. Social media communications of elected officials may be subject to Public Records and Open Meetings laws.

For purposes of this guidance document, social media is content created by individuals using accessible and scalable technologies through the Internet. Examples include, but are not limited to: Facebook, Twitter, Instagram, Google+, Tumblr, and YouTube. To the extent that communications involve public business, they should only be conducted on social media which allow for capture and retention when appropriate.

EWEB maintains an account on Facebook, Twitter, Instagram and YouTube under the username "EWEButility." Throughout this document, those accounts are referred to as "EWEB's official social media accounts" and are not to be confused with EWEB Commissioner social media accounts.

Commissioner Use of Social Media:
When communicating with constituents via social media, it is recommended that Commissioners create designated EWEB Commissioner accounts:

- Sign up for the social media platform using EWEB Commissioner email address.
- Choose a username or handle that clearly indicates the account is for "EWEB Commissioner *(name)*."
- Set the account type as "Government" or "Government Official" (if applicable).
- Set all privacy settings on social media platforms to "public" to ensure equal access to all constituents.
- Under the about or profile section, provide a link to EWEB's website (eweb.org), provide EWEB's phone number (541-685-7000) and if applicable consider providing a Social Media Rules of Conduct and/or Terms of Use statement, provided below.

As an elected official, the following guidelines are recommended with regard to EWEB business and social media:

- Commissioners should not post to EWEB's official social media accounts for campaigning purposes.
- Use caution when commenting on social media posts that relate to utility business, whether on EWEB's official social media accounts or Commissioner accounts. Identify yourself as an EWEB Commissioner, and consider open meeting laws. Commissioners are encouraged to not post comments on another Commissioner's official webpage.
- Two-way communication between Commissioners on social media is not advised.
- Commissioners should not use social media as a platform for conducting official EWEB business, other than to engage in informal communication with the public.

- Content published on social media platforms that relates to the conduct of utility business should be treated as an open record. Upon establishing a Commissioner social media account, contact the Executive Assistant to the Board to ensure content is appropriately retained.
- Exercise caution when removing comments from public view and blocking users on a Commissioner social media account to ensure such action is taken on a viewpoint neutral basis. If a member of the public is clearly violating Rules of Conduct, remove the offending comment from public view rather than deleting it. Contact the Executive Assistant to the Board to ensure content is appropriately retained.

Example Social Media Rules of Conduct:

This is an official page for EWEB Commissioner *(name).* All content is a public record and may be subject to public disclosure. Opinions expressed by visitors to this page do not reflect EWEB opinion. Commissioner (*name)* reserves the right to remove posts from public view that include obscene, explicit, discriminatory or threatening language.

Commissioner *(name)* welcomes dialogue on utility-specific topics and issues and asks that you respect the following Social Media Rules of Conduct. Posts violating these rules may be removed from public view, and any community member not following these rules may be blocked:

- Obscene, explicit, discriminatory or threatening language is not allowed.
- Do not post personal account information.
- Any threats made against EWEB, EWEB staff, EWEB Commissioners or against other community members are strictly prohibited.
- Commercial promotions or spam are not allowed.

Personal Use of Social Media

To delineate between EWEB Commissioner accounts and personal social media accounts, the following is recommended:

- Use a personal email address for personal social media accounts, rather than EWEB Commissioner email, and set personal account security to "private."
- Under the about or profile section, clearly indicate it is a personal account and not for engaging with the public on utility matters. Example: "The postings on this site are my own opinion and do not reflect the opinions of EWEB or my position as an elected EWEB Commissioner. I do not engage in dialogue on utility matters on this page. Please go to (link to official social media account) to engage with me in my capacity as an EWEB Commissioner."
- If someone posts on a personal social media account about EWEB, do not respond. Their comment alone is not a public record, but any response may be viewed as such.
- Avoid talking about EWEB business on a personal social media account. While sharing content from EWEB's official social media accounts is fine, commenting on the shared content on a personal social media account may be viewed as a new public record. It is best practice to share content from EWEB's official social media account on EWEB Commissioner social media accounts.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown

FROM: Jason Heuser, Public Policy and Government Affairs Program Manager

DATE: March 25th, 2019

SUBJECT: State Legislative Update

Issue

The 2019 State Legislative Session convened January 28, 2019. This memo is to apprise the Board of key issues of interest to EWEB, and the current status of these issues in the legislative process.

Background

Prior to the start of each legislative session, the Board adopts general policy directives for advocacy at the Capitol, which guide the work of EWEB's lobbying activities. When political considerations test the applicability of those directives, the General Manager makes a determination as to whether a fundamental shift in direction is required. The Board may be asked to reaffirm its policy or direct staff to make necessary adjustments.

Discussion

The following is a summary of state legislative activity in March of interest to EWEB:

<u>HB 2020 – Oregon Climate Action Program/Clean Jobs/Cap and Invest</u>

After the introduction of HB 2020, and two hearings of invited testimony, the Joint Carbon Reduction Committee held three legislative hearings in February for the public to comment. Four additional hearings for public comment were then held around the state in early March, in Springfield, Bend, Medford, and The Dalles, as well as a hearing by video conference from Baker City. Afterwards, in mid-March the leadership members of the Joint Carbon Reduction Committee and the Governor's Carbon Policy Office forwarded a request to Legislative Counsel to have an omnibus amendment to HB 2020 drafted. The amendment is expected to be released the week of March 24th with a hearing of the Joint Carbon Reduction Committee to walk through the bill with staff from Legislative Counsel.

<u>SB 408 – Flexibility in Siting Utility Infrastructure in Exclusive Farm Use (EFU) Zone</u>

SB 408 was approved on March 14th by the Senate on a 30-0 unanimous vote and will now go to the House for consideration. EWEB submitted a letter of support for SB 408, co-sponsored by Senator

Bill Hansell of Pendleton and Senator James Manning of Eugene. This legislation will help utility providers reduce their footprints on farm land by allowing the creation of parcels based on the amount of land actually needed for a utility facility, rather than based on the larger minimum lot sizes associated with the Exclusive Farm Use zone. Because of these large minimum lot sizes, properties in the Exclusive Farm Use zone are often larger than what would otherwise be needed for a utility facility.

HB 2769 – Flexibility to consider price in Qualifications Based Selection (QBS) Public Contracting

This legislation was approved by the House 55-0 on March 21st. EWEB and several other local governments, over multiple legislative sessions, have advocated for restoring some ability for public agencies to consider price in the procurement of professional services such as architects, engineers and land surveyors.

HB 2769 allows local public contracting agencies to evaluate and score price as part of a two-step process. Agencies would issue a request for qualifications as step one and select up to three (3) of the highest ranked firms based solely on qualifications. After the initial qualifications-based selection, local public contracting agencies must then provide a detailed statement of work and request pricing information from the three most qualified firms as part of a second evaluation step. To retain a focus on qualifications, the local contracting agency may use pricing information for up to 15 percent of the points used during this second evaluation step.

HB 2769 was negotiated as a compromise between local governments and professional associations representing architects, engineers and land surveyors. The bill is expected to be approved by the Senate and signed by the Governor.

SB 508 – Authorizing Hydropower to Qualify for the Oregon Renewable Portfolio Standard (RPS)

This bill would allow ALL hydropower to qualify for the Oregon RPS, irrespective of size, vintage, ownership, etc. The legislation would have made no other changes – the percentage targets for renewable energy would go unchanged.

EWEB staff submitted testimony reiterating our core principle that technology-neutral solutions are the most efficient and least cost approaches and that hydropower should be eligible for the RPS. The testimony did acknowledge that making such a change in the RPS would necessitate thoughtful consideration of modifications to other elements of the policy, and would be best handled through a work group and stakeholder process in the interim after session.

It was generally understood that the hearing was primarily for informational purposes and no further action on the bill is expected. It foreshadows the likelihood that Oregon will consider in a future legislative session a "100% Clean Energy Standard" (net), similar to what was approved in California recently and is under consideration presently in the Washington legislature, in which hydropower does qualify and the targets are higher, up to 100 percent renewable (on a net basis -- a small amount of carbon may still be used in the electric sector in these policies).

Recommendation/Requested Board Action

This memo is for informational purposes. No board action is requested.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Brown, Carlson, Mital, Helgeson and Schlossberg
FROM:	Mark Zinniker, Generation Engineering Supervisor
DATE:	March 22, 2019
SUBJECT:	Update on Carmen Diversion Reservoir Sinkhole Investigations
OBJECTIVE:	Information Only

Issue

On July 25, 2018, the Federal Energy Regulatory Commission (FERC) issued a letter directing EWEB to develop a work plan to investigate existing sinkholes on the bottom of Carmen Diversion Reservoir. Sinkhole features at the reservoir site had been noted during original construction and EWEB had been roughly monitoring sinkhole features for decades. In more recent years, EWEB documented the sinkhole features in great detail by performing a detailed bathymetric survey in July 2016 by using high-resolution multi-beam sonar. At the time of FERC letter, EWEB had just performed a follow-up bathymetric survey on July 23/24, 2018 and was in the process of comparing new results to the 2016 baseline information. In response to apparent sinkhole changes that were revealed by analysis of the follow-up survey results, EWEB lowered the lake level from elevation 2626.5 feet to under elevation 2621 feet in early August 2018 as a precautionary measure.

Discussion

EWEB continues to operate the Carmen Diversion Reservoir at a reduced water surface elevation. The normal maximum water level at Carmen Diversion during the wet weather season is elevation 2625 feet. In response to the sinkhole concerns, EWEB proposed to modify the wet weather season maximum water level to 2621 feet. This proposal was approved by the FERC in December 2018.

Since receiving FERC approval, EWEB has been able to keep the reservoir level well below the modified maximum level while maintaining our diversion of the majority of reservoir inflows for power generation. To date, the highest reservoir level experienced during modified operations has been elevation 2616.75 feet. And during the recent heavy snowfall/cold weather period, the reservoir level fell as low as 2615 feet. The upcoming spring snowmelt period could present significant operational challenges for remaining below elevation 2621 as concurrent storm systems can always trigger flooding. But detailed operating plans are in place such that EWEB staff are well positioned to manage potential flood conditions to the greatest extent possible.

EWEB submitted a Drilling Program Plan (DPP) for investigating subsurface conditions at Carmen Diversion in October 2018 and is awaiting approval from the FERC. Recent communication with

FERC staff at the Portland Regional Office indicate that their approval could be imminent pending blessing from their counterparts in Washington DC. As such, EWEB has scheduled our specialty drilling contractor for their next available work window which is in May. The results from this drilling work will improve EWEB's understanding of the dam safety risks associated with the sinkhole features and inform our proposal to the FERC for sinkhole remediation as appropriate. EWEB would hope to implement any warranted remediation work in Fall 2019 during the low inflow period and prior to the return of wet weather.

With the Carmen-Smith Project entering into an eight month outage in April for reconstruction of the substation and plant electrical systems, flow management at Carmen Diversion will shift toward directing flow into the bypass reach (toward Blue Pool/Tamolitch Falls) as opposed to diverting flow to Smith Reservoir. This transition is expected to eventually take the water elevation at Carmen Diversion even lower during the upcoming dry weather season, perhaps as low as elevation 2612. Since the current and projected summertime water levels are not compatible with the normal recreational activities at the reservoir (boat ramps do not extend all of the way to the lake, large mud flats are present around the perimeter of the lake, dangerous river currents extend well into the lake, etc.), EWEB has worked with the US Forest Service (USFS) to restrict public access to the lake.

Requested Board Action

Information only. No Board action requested.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Carlson, Mital, Helgeson, Schlossberg and Brown

FROM: Mark Zinniker, Generation Engineering Supervisor

DATE: March 22, 2019

SUBJECT: Update on Leaburg Canal Dam Safety Investigations

OBJECTIVE: Information Only

Issue

The Leaburg Canal remains out of service pending remediation of excessive seepage conditions near Cogswell Creek Road that were discovered to be causing slow but worrisome internal erosion of the canal embankment. EWEB staff continue to work with geotechnical engineers at Cornforth Consultants to prepare for subsurface investigations at the site and plan to submit a canal repair design for approval by Federal Energy Regulatory Commission (FERC) dam safety engineers as soon as possible.

Discussion

The FERC approved EWEB's Drilling Program Plan on February 21st. EWEB's specialty drilling contractor's first window for the performing the work begins on March 25th. The anticipated duration for the drilling effort is three weeks.

In parallel to preparation for the drilling work, EWEB and Cornforth staff have advanced a conceptual repair design and presented the concept to FERC engineers for review. Pending analysis of results from the subsurface investigations and associated confirmations of our conceptual design assumptions, FERC has indicated openness to the repair concept. As such, EWEB and Cornforth are proceeding with preparations to convert the conceptual design into final design documents as soon as confirmations from the subsurface investigation results become available. The design documents and supporting analysis will be submitted to the FERC for approval as soon as possible following completion of the drilling program.

While EWEB staff will continue to expedite work to return the Leaburg Canal to service, schedule projections are highly uncertain due to the slow rate of progress gaining FERC approvals and the challenge of scheduling contractors to perform work with minimal notice. As a result, EWEB has been notifying stakeholders of the risk that the canal outage will persist into the dry weather season. Stakeholders such as the McKenzie Hatchery and some neighbors with canal-dependent irrigation systems are pursuing contingency plans accordingly.

Despite the shutdown condition, there remains a minimal amount of flow in the canal. Leakage at the canal intake gates, combined with flows from tributary streams that the canal intercepts, results in a small baseline flow through canal. The baseline flow is on the order of 100 cubic feet per second (cfs; canal capacity is 2,500 cfs for perspective). This flow is critical for the resident fish population in the canal, a mix of native and invasive species that became established prior to fish screening infrastructure at the canal intake. EWEB has indicated openness to accommodating contingency plans by stakeholders wanting to continue drawing an established and permitted water supply from the available baseline flow.

The McKenzie Hatchery staff and their supporting engineers at the Oregon Department of Fish and Wildlife (ODFW) are preparing a coffer dam design that would pond baseline flow at their intake facility and allow diversion of a portion of their normal water supply from the canal. EWEB engineering staff are facilitating FERC review and approval of the ODFW coffer dam design. EWEB Environmental Management staff are providing ODFW with permitting support to gain Army Corps of Engineers (ACOE) and Oregon Division of State Land (DSL) approval for the coffer dam installation. Presuming success obtaining FERC, ACOE, and DSL approval, hatchery staff would like to install the coffer dam in June.

In a similar manner, EWEB expects to be able to accommodate a modified irrigation withdrawal system with appropriate fish screening equipment as proposed by the Spring Creek Holly Farm. There may be other established water withdrawal system owners along the canal that also propose contingency plans for maintaining supply from the baseline canal flow.

ODFW is also investigating the potential for installing a temporary fish trap in the left bank fish ladder at Leaburg Dam. The purpose of the trap would be to capture hatchery salmon that are unsuccessful finding the McKenzie Hatchery due to the anticipated reduction in available attraction water flows at that facility. ODFW needs to obtain approval from the National Marine Fisheries Service (NMFS) to install the temporary fish trap. EWEB's initial review of ODFW's conceptual trap design indicates that it could be feasible to install without substantial conflict with the existing facilities and normal operations of the ladder.

Requested Board Action

Information only. No Board action requested.