



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Brown, Helgeson and Manning  
FROM: Roger M. Kline, Enterprise Risk & Internal Controls Manager  
DATE: November 20, 2015  
SUBJECT: 2014 Audit Management Letter Update

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As part of the annual process, attached is the end of year status report on the comments from the 2014 External Audit Management Letter.

Please contact me if you have any questions.

Communication to Those Charged with  
Governance and Internal Control Related Matters

**Eugene Water & Electric Board**

December 31, 2014



## **COMMUNICATION TO THOSE CHARGED WITH GOVERNANCE AND INTERNAL CONTROL RELATED MATTERS**

To the Board of Commissioners  
Eugene Water & Electric Board

Dear Commissioners:

We have audited the financial statements of Eugene Water & Electric Board (EWEB or the Board) as of and for the year ended December 31, 2014 and have issued our report thereon dated March 27, 2015. Professional standards require that we provide you with the following information related to our audit.

### **OUR RESPONSIBILITY UNDER AUDITING STANDARDS GENERALLY ACCEPTED IN THE UNITED STATES OF AMERICA**

As stated in our engagement letter dated January 19, 2015, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities.

Our responsibility is to plan and perform the audit in accordance with generally accepted auditing standards and to design the audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control over financial reporting. Accordingly, we considered the Board's internal control solely for the purposes of determining our audit procedures and not to provide assurance concerning such internal control.

We are also responsible for communicating significant matters related to the financial statement audit that, in our professional judgment, are relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

### ***Planned Scope and Timing of the Audit***

We performed the audit according to the planned scope and timing previously communicated to you in our planning meeting on November 4, 2014.

### ***Significant Accounting Policies***

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Board are described in Note 1 to the financial statements. There were no additional policies adopted in the current year and no changes in the application of existing policies during 2014. We noted no transactions entered into by the Board during the year for which there is a lack of authoritative guidance or consensus. There are no significant transactions that have been recognized in the financial statements in a different period than when the transaction occurred.

### ***Accounting Estimates***

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most significant estimates affecting the financial statements are as follows:

**Unbilled Revenue** – Unbilled revenue is a measure of revenue earned through the end of the reporting period that has yet to be billed. This generally represents accounts with billing cycles that start in the reporting year and end in the subsequent year. We have evaluated the key factors and assumptions used to develop unbilled revenue in determining that it is reasonable in relation to the financial statements taken as a whole.

**Allowance for Doubtful Accounts** – This represents an estimate of the amount of accounts receivable that will not be collected. We have evaluated the key factors and assumptions used to develop the allowance in determining that it is reasonable in relation to the financial statements taken as a whole.

**Recovery Periods for the Cost of Plant** – This represents the depreciation of plant assets. Management's estimate of the recovery periods for the cost of plant is based on regulatory-prescribed depreciation recovery periods. We have evaluated the key factors and assumptions used to develop the recovery periods in determining that they are reasonable in relation to the financial statements taken as a whole.

**Other Post-employment Benefit Obligations** – This represents the amount of annual expense recognized for post-employment benefits. The amount is actuarially determined, with management input. No liability is recognized in EWEB's financial statements because the annual required contribution, as actuarially determined, is transferred to an external trust. We have evaluated the key factors and assumptions used to develop the annual expense in determining that it is reasonable in relation to the financial statements taken as a whole.

**Mark-to-Market Adjustment** – Certain derivative instruments are marked to market at year end. However, the impact to the statement of revenues, expenses, and changes in net position is deferred in accordance with GAAP. We have evaluated the key factors and assumptions used to develop year-end amounts and have determined that they are reasonable in relation to the financial statements taken as a whole.

***Financial Statement Disclosures***

The disclosures in the financial statements are consistent, clear, and understandable. Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. Significant disclosures include: Note 2 – Power Risk Management and Note 17 – Commitments and Contingencies.

***Audit Adjustments/Passed Adjustments***

**Audit Adjustments** – For purposes of this letter, professional standards define an audit adjustment as a proposed correction of the financial statements made subsequent to the start of audit final fieldwork. An audit adjustment may or may not indicate matters that could have a significant effect on the Board’s financial reporting process (that is, cause future financial statements to be materially misstated).

The following audit adjustments were noted on the water system in the current year:

- To close work orders in commercial operation at year end: \$2,119,819. This is a Statement of Net Position reclassification entry only.

No audit adjustments were noted on the electric system in the current year.

**Passed Adjustments** – Passed adjustments are those entries found during the course of the audit that management has decided to not post to the financial statements of the Board. It has been concluded by management, and agreed upon by Moss Adams, that the adjustments are immaterial to the financial statements as a whole.

Passed adjustments are as follows:

- Water Passed Adjustments –
  - To reverse improper entry to gross up cash and accounts payable: \$153,661. This is a Statement of Net Position reclassification entry only.
  
- Electric Passed Adjustments –
  - To close work orders in commercial operation at year end: \$326,206. This is a Statement of Net Position reclassification entry only.

***Significant Difficulties Encountered in Performing the Audit***

We encountered no significant difficulties in dealing with management in performing and completing our audit.

***Disagreements with Management***

For purposes of this letter, professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

***Management Representations***

We have requested certain representations from management that are included in the management representation letter dated March 27, 2015

***Consultation with Other Accountants***

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Board's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

***Independence***

Moss Adams is independent in appearance and fact with respect to Eugene Water & Electric Board.

## COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS

In planning and performing our audit of the financial statements of EWEB as of and for the year ended December 31, 2014, in accordance with auditing standards generally accepted in the United States of America, we considered the Board's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Board's internal control. Accordingly, we do not express an opinion on the effectiveness of the Board's internal control.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses and therefore, material weaknesses may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

***We consider the following deficiency in the Board's internal control to be a significant deficiency:***

EWEB underwent a significant system implementation project in the current year that replaced key financial and operational IT systems. Due to the wide-reaching impact of this system throughout many departments of the organization, having appropriate representation from the departments impacted and, more importantly, collaboration between these departments is vital to a successful system implementation. In addition, not only is inter-department collaboration important, but also appropriate collaboration and understanding of the roles and responsibilities expected between EWEB staff and consultants involved in various aspects of the system implementation and ongoing maintenance / stabilization of the system. We have noted the following:

### ***Coordination between key stakeholders***

Given the significant system implementation that occurred during the year and the various departments and functions that it impacted as a result, collaboration within the various representatives from each department involved with project management is considered key to successful project implementation. Through our discussions and observations, we noted that, at times during the project, there was a lack of coordination and collaboration of key stakeholders, which has caused continued reliance on third party consultants and additional projects to realize the full benefit of the system.

### ***Lack of Service Level Agreements***

During our discussions with management and our procedures over IT systems, we noted that EWEB has implemented key financial and operational IT systems without a clear understanding of service levels required by the internal IT department. The lack of service level agreements with the internal IT department caused confusion of roles and responsibilities of internal IT versus external contractors, which resulted in extending external IT contracts. Given the upcoming July 2015 contract end date with a key outside consultant related to the new Work Order & Asset Management (WAM) system, establishing a clear understanding in writing between the third party service provider and EWEB staff is key to ensuring system optimization.

***Recommendation:*** The Board should ensure that service level agreements are implemented for all key financial and operational systems and ensure key stakeholder coordination in future system implementations and projects.

***Management Response - Roger Gray, General Manager*** - Management acknowledges the significant deficiency stated above. This response serves to provide additional context around the communicated deficiency as well as to describe the plans that were already underway to address the issue.

Additional context:

Management has been on a multi-year plan to address several issues related to all IT systems at EWEB (financial and operational). We have addressed what we considered primary issues first and are still working on additional secondary issues. Primary issues were lack of disaster recovery (DR) and no business continuity (BC) plans. These primary issues are being addressed. Other accomplishments have been to define the business requirements for all major financial and operational systems so that the BC/DR plans are appropriate. Management has established Service Level Agreements (SLAs) for a number of systems, but that is not yet complete. Completion of these SLAs was already an existing goal (established prior to delivery of this communication) for the IS Division and the organization as a whole and they will be monitored over the course of 2015.

The circumstances surrounding the launch of WAM that are described above are acknowledged. The WAM project steering committee made a risk-based assessment and decision to launch the WAM system based on these circumstances knowing that EWEB was not fully prepared to take on operation of WAM upon launch and that EWEB would need to continue to rely on 3<sup>rd</sup> party support for a period of several months at least. While the GM does not necessarily disagree with the project steering committee's decision to launch under these circumstances, the decision and implications of that decision should have been discussed and understood more fully and broadly by all stakeholders involved.

Prior to the audit, this issue had already led to internal management and process changes at EWEB. The GM initiated what is called the WAM Business Stabilization Project. It is a formal project with a new project manager to address not only the issues identified in this communication, but to address other business-side issues where the new WAM system and business processes still need improvement to support business and operational results at EWEB. While the WAM system is capable of assisting management to implement financial controls that an auditor is concerned about, it still needs to be improved to support operational processes and results.

Going forward plans that will address this communicated deficiency:

- 1) Complete WAM Business Stabilization Project (current projected finish is August 2015)

**November 2015 Update – Roger Gray, General Manager** - The WAM Business Stabilization Project was completed, but was extended in to September. This project focused on the highest priority issues which were completed. This project also identified many issues that still need to be addressed now to optimize and improve overall organization performance. The system is stable and supported and we are now turning to improving business processes that interact with WAM and reporting. This new effort has already been launched. On the positive side WAM is giving us better insight in to how EWEB accounts for and tracks assets that we have historically not had. This new effort has already been launched.

- 2) Complete SLAs for all major financial and operational IT systems (2015 IS Division Goals)

**November 2015 Update – Roger Gray, General Manager** - This goal will be completed by EOY 2015. Many systems are already complete. The SLA work plan for 2015 provides that SLA Leads and SMEs shall produce service level agreements for several critical systems, up to and including successful sign off by all parties by November 30, 2015. SLA Leads would be responsible for upload of signed agreements to EWEB's SharePoint site upon completion. The following critical systems included are in the 2015 work plan: HRIS, Smart Stream; Allegro; WAM; CIS; Milestone; Lenel; GIS and Outlook email.

- 3) Formally adopt what are now informal “go-live” requirements for launch of any operational or financial IT system (2015 Internal Process Requirements)

**November 2015 Update – Roger Gray, General Manager** - A change management function has been created under the Business Analyst Office that is responsible for ensuring projects are ready to launch. Criteria included are reporting, training, sufficient documentation, and other shows of readiness. The requirements have been informally shared and are in the process of being vetted. They will be formally adopted by EOY 2015.

- 4) Extend 3<sup>rd</sup> party WAM support contract if required and/or formally transfer support to EWEB personnel including completion of training. (prior to July 2015 Owned by WAM Stabilization Project, IS and Finance Divisions)

**November 2015 Update – Roger Gray, General Manager** - The support contracts were extended as needed and formal training and transfer to EWEB personnel has been completed. The EY support contract was put in place through December 2015. Our goal was to stop relying on them far before that and we have been successful. This has been a key success of the stabilization effort.

In addition to the required communications, we have identified the following matters for your consideration. Our recommendations are based on observations and testing during the course of our audit. These recommendations should be evaluated by management and the Commissioners for implementation and EWEB should conduct a cost benefit analysis including consideration of the risks for the recommended action.

#### **Other Matters**

##### ***Internal audit department***

EWEB created a position for an internal auditor in 2014 and appointed the previous Generation Manager to take over this role. The position is structured such that the internal auditor is to report directly to the General Manager and the Board of Commissioners. Going forward, we recommend that the internal auditor develop an internal audit program to document risk assessment for the organization, internal control processes and procedures, and also to implement a testing plan for the coming year. We conclude that this issue has been partially resolved through the creation of the internal audit department in the current year, but further action is necessary to fully realize the benefits of an internal audit department.

***Management Response – Roger Kline, Enterprise Risk and Internal Controls Manager***

– In September of 2014 Roger Kline was appointed to the position of *Enterprise Risk & Internal Controls Manager (ER/IC)*. One of the duties of this position is to provide independent assurance work and oversight for the organization as well as other *governance, risk and compliance* management functions. *Internal Audit* is one integral component to be used in accomplishing this charter work.

The program documents, operating procedures and test plans supporting these efforts are either complete or nearly complete, and the work as referenced above is underway. Periodic regular reporting to the Board of Commissioners and General Manager is forthcoming.

***November 2015 Update – Roger Kline, Enterprise Risk & Internal Controls Manager***

– Progress continues in this area. In July of 2015 the Board of Commissioners adopted SD20 “Enterprise Risk Management” as a Strategic Direction for the organization. A framework has been crafted to link the strategic direction of the organization to the process and risk evaluation of work at EWEB. It is intended to be fully implemented during CY 2016.

Specific to Internal Audit, the formal position of Internal Auditor is being filled by Mr. Kevin Fahey who reports to Roger Kline. Multiple actions have been completed during 2015 and available for review outside of this update.

***Cross training and documentation of policies and procedures for WAM***

During our discussions with employees involved with the core implementation team for the WAM system, we noted that cross training and documentation of policies and procedures had not yet fully occurred to ensure the knowledge of individuals gained throughout the implementation process is passed along to others within the organization and key processes are documented for training purposes. Without such cross training and documentation, the organization is at risk for significant knowledge loss if one of the core team members were to terminate employment with the organization. We recommend that EWEB identify and train additional individuals within the organization to backup those with significant knowledge and experience within the WAM system and document key processes.

***Management response – Susan Eicher, General Accounting and Treasury Supervisor and the WAM Steering Committee***

– Management acknowledges that cross training and documentation of processes are critical to the success of WAM and the organization as a whole. The skills of the core implementation team members were acquired over the course of the implementation process, and cross training additional staff will require time and a commitment of resources that EWEB is prepared to make. A key goal of the WAM Business Stabilization Project is to identify and meet additional training needs. Documentation of policies and procedures related to WAM business practices is ongoing and will continue to be a priority throughout the utility as aided by the Leadership Team’s recent approval to formulate an Operation Policies framework.

**November 2015 Update – Susan Eicher, General Accounting and Treasury Supervisor and the WAM Steering Committee** – During 2015, as a part of the WAM Business Stabilization Project, additional training has been delivered to end users for key modules of WAM. IS staff have received training and demonstrated the ability to support the system with minimal assistance from outside resources. System and process documentation is underway and will be continuing as processes are refined and improvements are implemented. Management acknowledges that cross training for skills of the core team and other key system users will continue during 2016. Ongoing work will include an emphasis on documentation of processes performed by key system users.

***Support for Oracle application and database environments***

We noted that EWEB significantly expanded its use of Oracle as a result of the recent WAM system implementation. However, resources on staff to adequately support the application and database environments are limited. EWEB employs one FTE who has the skills and knowledge to manage and support the extensive Oracle environment. We recommend that EWEB consider hiring additional Oracle expertise or contracting with a third-party who can provide resources on an as-needed basis.

**Management Response - Erin Erben, Manager of Power Planning** – The Oracle environment within EWEB is multi-tiered (database, middleware and application) and EWEB maintains expertise at all three levels. Throughout 2014, EWEB had two resources supporting the Oracle database and middleware tiers - a database administrator and application server support person. There are several people that can work in the application tier. As of Q1 2015, EWEB was able to fill an open position (due to retirement) for a third oracle database support person. Third party contractors were used during the WAM roll-out to augment support while this position was open. We will continue to look to contract support should additional support gaps be defined.

**November 2015 Update - Erin Erben, Manager of Power Planning** - IS management has implemented a training and development program to deepen Oracle support in both the database management and middleware areas. Staff assignments have been made and technical training has begun in the Oracle DBA arena. IS management targets having 3 deep bench strength in all areas. There are currently 2 staff members able to provide basic Oracle DBA support, with a 3rd person currently in training and development. There are plans to develop a 4th person in this area in 2016, to eliminate overlap between Oracle DBA and Oracle middleware support. There are also 2 staff members able to provide basic Oracle middleware support, with a different 3rd person having 2016 training plans to achieve the 3 deep target. EWEB maintains contracts with 3rd party temporary service providers (Teksystems, Xtreme, etc.) who can provide additional Oracle expertise on a short-term basis, if needed.

***Analysis of roles and permissions within IT systems***

We noted that a segregation of duties analysis was conducted for the WAM security roles and permissions, however, this analysis did not also consider segregation of duties issues between WAM and other systems. This creates a risk that employees may have access to several different systems that creates an overall segregation of duties conflict between systems. We recommend that EWEB continue the practice of analyzing duty conflicts, but should consider expanding this analysis to other systems.

**Management Response - Erin Erben, Manager of Power Planning** – EWEB agrees with this recommendation and will continue to implement this recommendation.

**November 2015 Update - Erin Erben, Manager of Power Planning** -This will be in the 2016 I.S. Operations Plan for completion in 2016.

***Data protection management policy and data classification procedures***

A data protection management policy and associated data classification procedure have been developed for the WAM system. This represents a recognition that information and data is an important asset for the organization and requires special handling to ensure the security and confidentiality of information. However, no such policy and procedures

have been developed for other systems. We recommend that EWEB go through the process of classifying the systems and data for each system identified as mission critical.

***Management Response - Erin Erben, Manager of Power Planning*** – EWEB agrees with the recommendation to classify systems and data and will continue its data classification efforts. EWEB has developed a data protection management policy and associated data classification procedures for all IT systems, not just WAM. EWEB had been going through the process of classifying the critical systems in 2014 and will look into refining and populating our central repository to store the data classifications already completed in 2015.

**November 2015 Update - Erin Erben, Manager of Power Planning** - IS management has continued its effort at classifying data across the enterprise, in parallel with upgrade and improvement projects undertaken by the business and IS. A Repository was created in 2015 and additional systems added.

***Conflicts of interest related to the internal audit function***

EWEB created a new internal audit department in 2014 that will report directly to the General Manager and the Board of Commissioners. Through our discussions with management and individuals within the organization, we noted that the employees who transitioned to the internal audit department still maintain responsibilities from their prior positions at EWEB. The internal audit function should be established as an independent function from the internal control processes and procedures that the department may be assessing in the future.

We recommend that the responsibilities and duties of the employees in the internal audit department be reviewed to ensure no conflicts of interest remain.

***Management Response – Roger Kline, Enterprise Risk and Internal Controls Manager***

– There are currently two full time employees dedicated to the Enterprise Risk and Internal Controls Division. All previously held duties and responsibilities from their former positions have now been reassigned or redistributed to others as recommended.

There are non-ER/IC Division staff members working in support of this new division as part of normal and typical cross-functional team responsibilities within the organization. These individuals do not presently report to the ER/IC Manager and do still maintain other business unit responsibilities. It is not management’s intent to ever place any individuals into positions with conflicts of interest.

***November 2015 Update – Roger Kline, Enterprise Risk & Internal Controls Manager***

– During 2015 two re-organizations occurred in which staff were transitioned into the Governance, Risk & Compliance Department. All duties that could pose a conflict of interest were reassigned or redistributed to others. It is not management’s intent to ever place any individuals into positions with conflicts of interest. An organizational chart of this department is available herein.

***System passwords***

Currently, the minimum password length is set to 6 characters, but best practices typically state that the minimum should be set to 8 characters. Shorter password lengths increase risk as they are easier for hackers to unlock. In addition, the minimum age for passwords is set to 0 days. With this setting, users would be able to cycle through a series of passwords back to their original password when the systems force them to change their password, which negates the requirement to regularly change passwords. We recommend that this setting be a minimum of 2 days, which would require 48 days for a user to cycle back to their original password (based on the configuration that the system retains a password history of 24 passwords). We also recommend that this requirement be consistently applied to all users within the organization.

***Management Response - Erin Erben, Manager of Power Planning*** – EWEB does have a standard in place, but it is not consistently applied across various identity management systems. As such, EWEB agrees with this recommendation and will finalize implementation of this recommendation.

***November 2015 Update – Erin Erben, Manager of Power Planning*** - This will be in the 2016 I.S. Operations Plan for completion in 2016.

***Cybersecurity protocols***

Through our discussions with the organization’s cybersecurity team, we noted that a comprehensive inventory of systems does not exist to ensure proper security protocols

have been applied to all systems. We also noted that regular penetration testing of the perimeter focuses primarily on the system components that fall under the NERC regulations. We recommend that EWEB apply similar testing to other systems that do not fall under NERC regulations to cover all areas where risk is identified. This includes penetration testing around all external facing systems and vulnerability scans of both external and internal systems.

**Management Response - Erin Erben, Manager of Power Planning** – EWEB agrees with this recommendation and has already prioritized this work in its 2015 work plan.

**November 2015 Update - Erin Erben, Manager of Power Planning**

This is currently a work in progress and a key element of 2016 priorities. IS has added a Network Technician FTE which includes these duties in the job description.

***Version control***

During our discussions with developers involved in programming scripts, procedures, and other interface components, it was noted that the organization is not using defined coding standards or development protocol. We also noted that this interface development activity was not being managed properly through version control systems. We recommend that that all development activity adhere to proper policy and procedures including storage and management of the code repositories and proper documentation of all customized code to reduce the risk associated with employee turnover.

***Management Response - Erin Erben, Manager of Power Planning*** – EWEB agrees with this recommendation and has already prioritized this work in its 2015 work plan. EWEB is already focusing in 2015 to improve and deliver new policies, procedures, and standards related to version control as well as unifying version management to a single environment standard.

***November 2015 Update - Erin Erben, Manager of Power Planning*** - In Q2/Q3, the Enterprise Horizontal Architecture Team completed an assessment of appropriate version control processes related to financial and non-financial business systems. The recommendations and principals defined in this work takes into account industry best practices related to Version Control. With this architectural direction, IS management is currently developing Version Control Procedures related to our Financial Systems which should be completed by end of the year. Implementation and adoption of these new processes will go into effect at the same time. It is also expected that a new Quality Assurance/Release Management Coordinator position will be hired on by the end of the year. This position will be focused on the implementation and oversight of the Version Control Procedures being developed.

**Prior Year Comments Not Fully Resolved in 2014 (see Appendix A for prior year comments resolved in 2014)**

***Inventory purchases outside of the inventory system***

We noted in the prior year that employees had the ability to purchase and maintain significant amounts of inventory items via the use of a EWEB credit cards or through purchase orders. An adjustment was made to inventory in the prior year. We recommended that management discuss inventory held outside of the warehouse to determine 1) whether the inventory would be better held and secured within the warehouse, 2) if inventory is to be held outside of the warehouse, what controls will be implemented to ensure the security of the inventory, 3) what procedures will be established to ensure periodic physical counts of the inventory held outside of the warehouse will be performed, 4) whether inventory purchases should be purchased strictly through PO to ensure State purchasing laws are consistently followed.

***2014 Update*** – We noted that the Board has addressed recommendation number 4 above, and is in the process of addressing the other recommendations, which would

include tracking and continued recording of these items. Therefore, though improvements have been made, we believe this issue has not been fully resolved in 2014.

***Management Response - Todd Simmons, Electric T&D Operations Manager*** - Of the inventory located outside warehouse control identified in 2013, the majority has been disposed of as scrap material, identified as a consumable, or will be entered into WAM, controlled, and inventoried by warehouse personnel. In the fourth quarter of 2014 all items in the Warehouse, including Water and Electric Operations inventory, and Emergency Response bins within the Roosevelt Operations yard have been entered into the Warehouse and are controlled by Storekeepers.

Consumables located in multiple areas throughout the organization are now controlled by an outside vendor and managed by the supervisor in each Section. Each Section has created a Purchase Order that will be charged monthly for any consumables used.

Material and inventory not considered as scrap or identified as a consumable, located at Hayden Bridge, Leaburg/Waltermville, Carmen Smith, and in the Water Pump, Substation, Meter Relay, and Communications Shops, will be entered into WAM by the end of 2015 as part of WAM Phase II.

**November 2015 Update – Sarah Gorseger, Purchasing & Warehouse Supervisor-** Additional management and controls for the remote inventory have been developed and are being implemented. Business and software system processes have been created and tested to support inventory management.

As of October 2015, over \$400,000 of inventory items located outside the main warehouse have been counted, labeled, and entered in WAM. Many more inventory items are anticipated to be entered by year end. Remote site supervisors have assigned storekeeping responsibilities, and staff have completed training on those responsibilities. The inventory policy and procedures are being updated to include controls over remote inventory and also address the process for purchasing inventory. Management believes that significant progress will be made by year-end and recognizes that to complete the remote site inventory, efforts will continue into 2016.

***Timely reconciliation of bank reconciliations***

At the time we performed our interim fieldwork testing in December 2013, we noted that bank reconciliations had only been completed through June 2013. Timely reconciliation of all cash accounts is important to ensure that this detective control is able to identify errors or suspicious activity in a timely manner. We recommend that a policy be established to require monthly bank reconciliations to be completed within a month of the month end close.

**2014 Update** – During 2014, we noted that EWEB went through a significant re-evaluation to the cash reconciliation process. As this process and the improvements were ongoing during 2014, we noted that all material reconciling items were timely addressed through the reconciliation process. We also noted that as of year-end, staff had completed the new process and all months for 2014 were reconciled in accordance with the new process and reviewed accordingly. Though we noted that not all months in 2014 were completely reconciled and reviewed within our recommended timeline, we have noted this timing is included in the new policy and procedures that have been implemented. As such, we believe this comment will be fully addressed in 2015.

**Management Response – Susan Eicher, General Accounting and Treasury Supervisor** – The General Accounting and Cash Accounting departments continue to

work on improvements in reporting tools and processes for the bank reconciliation, and are committed to timely processing.

**November 2015 Update - Susan Eicher, General Accounting and Treasury Supervisor** General accounting and cash accounting staff continued to improve the processes supporting the bank reconciliation through 2015. Bank reconciliations are complete, but staff continues to research the causes of several immaterial reconciling items. As process improvements were implemented, the staff time needed to complete and review reconciliations has decreased and efficiency has increased, allowing for timely completion per policy.

***Customer adjustments report***

During our review of the controls surrounding customer adjustments and review of those adjustments, we noted that EWEB policy states that all adjustments over \$300 should be reviewed on a monthly basis to ensure that they are appropriate and have supporting notes in the customer information system. However, we noted a segregation of duties issue since the person responsible for reviewing the monthly adjustments report also has access to record adjustments. Second, no adjustments under \$300 are reviewed, which may leave a significant fraud risk to the organization since most residential customer bills would be below this amount.

**2014 Update** – During our procedures in the current year, we noted that a process has been established to review adjustments from various customer service reps each month, including adjustments under \$300 and adjustments recorded by the City of Eugene. The number of adjustments reviewed each month is estimated to be 2-3 adjustments for 12 different customer service reps. However, we did not note any documentation or evidence to support that this process was occurring, other than inquiry of the personnel responsible for performing this process. We also noted issues with the timeliness of this process given that during our walkthrough procedures in December 2014, this process had not been performed since September 2014. Therefore, we believe this issue has not been fully resolved, but improvements have been made. We recommend review of adjustments be documented and performed in a timely manner.

**Management Response – Mark Freeman, Energy Management & Customer Service Manager** – Timeliness of reviews of the 2014 Billing Adjustment Reports reflect a staffing transition which occurred in the last quarter of 2014, resulting in a delay in processing. As of first quarter, 2015, the staffing transitions have been resolved. The Billing Adjustment Reports now show consistent auditing within 3 weeks of each prior month audited and should stay consistent going forward. A process is in place to run the Report monthly within 10 business days of the end of each month to maintain current practices for proof of documentation. The Billing Control Supervisor reviews the auditing process monthly within 30 days of each prior month.

**November 2015 Update – Mark Freeman, Energy Management & Customer Service Manager** - To enhance separation of duties, utilized staffing transition to ensure future reviews of Billing Adjustment Report to be made by staff without CIS permissions to also process adjustments.

The Board's written responses to the significant deficiency and other recommendations identified in our audit were not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

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This communication is intended solely for the use of the Board and members of management and is not intended to be and should not be used by anyone other than these specified parties.

**APPENDIX A**  
**PRIOR YEAR CONTROL DEFICIENCIES RESOLVED IN 2014**

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***Circumvention of controls***

During the prior year procedures, we noted several instances where employees have been able to circumvent the control structure in place, whether knowledgeable of the implications of their actions or not. We noted this to be a material weakness in the prior year, which we believe to be resolved in the current year. We have included additional discussion related to the internal audit department implemented in 2014 as a result of this issue. See current year issue noted in this letter related to this additional discussion.

***Approval of pay rate changes***

During our internal control testing over payroll, we noted that several employee personnel files did not include signed personnel action forms for the employees' most recent pay adjustments. We recommend that an approved and signed personnel action form be included in each employee's personnel file for each pay change implemented. In addition, we identified several errors in the updated wage rate spreadsheet including incorrect wage rates for a number of employees. We recommend that a detailed review of all wage increases be performed with a final review by the payroll department prior to inputting the updated rates into the system.

***2014 Update*** – During our control procedures over payroll in the current year, we did not note any such lack of documentation for pay rate changes. We believe this issue has been resolved in 2014.

***Breach of \$5,000 procurement threshold***

During our internal control testing over disbursements, we noted a breach of EWEB's \$5,000 threshold for small procurements. The original purchase order was under the \$5,000 threshold, however, the purchase order was amended with a change order which brought the total PO amount up above EWEB's small procurements threshold.

Per EWEB's small procurements rule 3-0265(1), amendments to small procurements which will cause breach of the \$5,000 threshold may not increase the total contract price to greater than \$6,000. Therefore, this was outside of EWEB's policies, and once it was clear that the \$5,000 threshold was in danger of being breached, 3 quotes should have been sought in order to comply with EWEB policy. We recommend that employees be educated on how to comply with EWEB's procurement rules.

We also recommend that EWEB implement procedures to evaluate disbursements throughout the year for compliance with the procurement thresholds.

***2014 Update*** – EWEB updated its policy and threshold for small procurements from \$5,000 to \$10,000 in the current year. Through our testing procedures, we did not note noncompliance with the new \$10,000 small procurements threshold.

***Timeliness of conservation loan receivable reconciliation***

During the process of auditing conservation loans receivable, we noted that although the account had been reconciled to the conservation loans system at year end, it hadn't been reconciled prior to that since February 2013. Through the year end reconciliation process, accounting personnel noted that there were loans that were assigned incorrectly to expense FERC accounts rather than receivables. As a best practice, we recommend that loan detail be reconciled to the general ledger on a monthly basis by the personnel responsible for maintaining the conservation loan system so that all errors may be reconciled in a timely manner.

***2014 Update*** – We noted that this reconciliation is now a joint process between finance and loan administration and is generally occurring on a monthly basis. We believe this issue has been resolved in 2014.

***EWEB credit cards***

During our discussions with EWEB personnel and through review of credit card statements, we noted one case in which a supervisor was using an employee's credit card to make purchases, and then approving that employee's credit card statement.

We recommend that each employee's credit card be used only for purchases made by that specific employee, as required by current policy, and that a supervisor or manager review and approve the charges before being submitted for payment. Any purchases should also be made by the appropriate personnel and go through the normal process to ensure compliance with EWEB policy. We discussed this issue with the employee and noted that the issue has been resolved in 2013. However, we still believe that the risk for additional issues like this is present given the number of employees with EWEB credit cards coupled with the current credit card policy. We recommend decreasing the number of employee's with access to EWEB credit cards and revisiting the credit card policy to ensure that the credit card limits assigned, and the types of items allowed to be purchased are appropriate to achieve a stronger level of internal controls.

***2014 Update*** – EWEB has updated its credit card policy in 2014 to address some of the specific issues noted in our recommendation above. We believe this issue has been resolved in 2014.

***Work order documentation consistency***

During our review of work orders, we noted that the documentation maintained to explain and support the reason for significant variances from budget / estimate differs significantly from job coordinator to job coordinator. Often, no documentation exists in the job packets to explain the reason for significant variances from budget / estimate, and only limited comments in the Work Tracking system are maintained to explain variances at the project level. As a best practice, we recommend working with the job coordinators to develop a close out sheet to document when the work was completed and why the job was over / under budget (if applicable). It may be helpful to set a threshold for when these controls need to be applied as not all jobs require this detailed level of monitoring.

**2014 Update** – Through our discussions with engineering and operations personnel, we noted that the organization has established a threshold of \$50,000 for requiring a uniform close-out document. Through our work order control testing, we noted that the policy was implemented and the work orders selected for testing included the new uniform closeout form. We believe this issue has been resolved in 2014.

***IT circumvention of controls***

It was noted that there was an issue where internal controls were circumvented by IT personnel based on requests from users. A Requisition was altered after it was initially entered, without the appropriate approval. The value of the requisition was changed directly in the database based on a request made in passing without thought about the issue with circumvention of controls. In most cases it is not appropriate to address issues in this manner, however, there may be times when business needs may necessitate a quick or emergency fix. In such cases, documentation of the actions taken and the formal approval of those actions should be retained. In addition to making sure that all requests get documented and approved, consideration should be given to generating reports on a regular basis that shows activity performed within the systems by IT personnel with respect to transactions.

**2014 Update** – During our current year procedures and discussions with both management and the IT personnel, we did not note similar instances of circumvention of controls in 2014. We believe this issue has been resolved in 2014.



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Helgeson, Manning, and Brown  
FROM: Mel Damewood, Engineering Manager; Wally McCullough, Water Engineering Supervisor  
DATE: November 20, 2015  
SUBJECT: 2015 Water Capital Over-Runs  
OBJECTIVE: Information Only

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## Issue

The Second and Third Quarter Water EL-1 Capital Reports reported significant over-runs in Main Replacement/Improvement work as well as in Services and Meters. A Budget Amendment is not required, however, the Q3 EL-1 Report stated that a backgrounder would be provided on this issue.

## Background

According to Financial Policy EL1, budget amendments are required if the capital budget of the Water Utility (or Electric Utility) is projected to exceed the authorized budget amount. There are no rules regarding individual areas within the capital budget from running over, rather the intent is that the individual areas would be managed so the overall utility budget is not exceeded.

## Discussion

Capital over-runs in 2015 have primarily been in the following areas:

- Main Replacements/Improvements - At the beginning of the year, EWEB had projected about \$2.6 million in work to be conducted by EWEB crews for the EmX project. Because of this predicted work load, Water Engineering also contracted out planned main replacement and improvement work that would have normally been conducted by EWEB crews. EmX work was value-engineered through-out the year which resulted in a reduction in EWEB related work for that project, which shifted crews back to other EWEB related main and service work, and hence caused a natural overrun on internally driven capital work. The projected over-run in this area is approximately \$1,500,000.
- Services and Meters - Due to new capitalization rules, a significant shift of work from O&M to Capital for service and meter work occurred. The projected over-run in this area is approximately \$950,000.

Both of the above areas were also influenced by a much higher level of development than what was anticipated. It is estimated that by year end there will be approximately \$1,200,000 more in non-

EmX reimbursable developer and customer work than what was anticipated. While this work is reimbursable, it still results in expenditures that fall under Policy EL-1.

Offsetting the above overages, at least in part is a correction made by Finance in November to move \$600,000 in equipment charges from capital to O&M.

In addition to the equipment charge issue, the over-run is offset in part by under-runs in several other areas. These include the EmX project which is projected to have an under-run of approximately \$500,000. In total, there is about \$850,000 in offsets resulting from jobs coming in under budget in 2015. This does not include the reimbursements for developer and customer driven work.

Even with the above offsets, there is still a significant over-run in the areas discussed. To ensure expenditures do not exceed the Water Capital Budget, the replacement of the Willamette Reservoir #1 has been deferred. Originally scheduled to begin construction in 2015, the project has been deferred to 2016-2017. Deferring this project along with some other minor delays in other projects will ensure the Water Utility capital expenditures stays in compliance with Financial Policy EL-1.

The Board can expect to see the deferment of the Willamette Reservoir project and the ripple effects presented to the Board as part of the 2016 April Budget True-Up.

### **Recommendation and Action**

This is an information item only, no action required. If you have any questions please contact Mel Damewood a 541-685-7145 or email at [mel.damewood@eweb.org](mailto:mel.damewood@eweb.org)



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Brown, Helgeson, and Manning  
FROM: Mel Damewood, Alan Frazier, Frank Lawson, Mike McCann, and Todd Simmons  
DATE: December 2015  
SUBJECT: Electric Utility Emergency Preparedness Planning Activities  
OBJECTIVE: Provide Board with Information

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## **Issue**

Provide Board a high level overview of Electric Utility Emergency Preparedness Planning activities.

## **Background**

The Electric Utility Emergency Preparedness plans includes Generation, Transmission, Substations, and Distribution. Investment in infrastructure and the maintenance of each system is critical to prepare us for winter storms, isolated wind events, earthquakes, floods, and acts of sabotage. With this in mind we take an all hazards approach to preparedness and reach across all departments within EWEB to create three deep staffing levels for all critical positions with our Incident Command System or ICS structure.

All incident response at EWEB uses a version of the Nation Incident Management System or NIMS of which ICS is a major component. For the Electric Utility we stand up the ICS with an Incident Commander, Communications Officer, Liaison Officer, Safety Officer, Planning Chief, Operations Chief, Logistics Chief, and Finance & Administration Chief.

The Incident Commander is responsible for protecting life and property, establishing command, developing the appropriate command structure, creating incident objectives, developing an Incident Action Plan, coordinating all strategic goals and tactical objectives, maintaining a manageable span of control, authorizing additional resources as needed, and maintaining accountability for responder safety, public safety, and task accomplishment.

The Incident Commander accomplishes all this by utilizing the staff within the structure. The Incident Commander takes direction from the Incident Management Team, made up of at least two Leadership Team members and the General Manager. The Incident Management Team reports to the Board of Commissioners.

## **Discussion**

### **Transmission and Distribution Planning:**

An important consideration being included in the Electric System Master Plan, currently being developed, is the resiliency of the system under compromised conditions. The concept of the “resilient spine” was created to articulate the concept of linking a variety of generation sources (both local and the regional grid) with EWEB’s most important emergency loads. Over the next several months, culminating in April 2016, the Board will receive updates on aspects of the Electric Master Plan.

Over the past few years, EWEB has concentrated electric infrastructure projects on those projects that generate improvements in compulsory areas, including safety, regulatory, and obligation-to-serve (customer work). Additionally, some of the projects related to improving resiliency and reliability are the following:

- EWEB has initiated a multi-year plan to replace aged transmission oil breakers with modern gas breakers. In 2015, seven breakers were replaced, with approximately forty remaining.
- The Holden Creek substation is an example of a project that links local generation with a more reliable transmission connection.
- In 2013, EWEB commissioned a fully-functioning Backup Control Center (BCC) at the Roosevelt Operations Center (ROC). This facility operates completely independent of the primary control center (PCC) at Headquarters, and was driven by regulatory requirements.
- Sacred Heart Hospital was provided a dedicated feeder, along with a spot network.
- Field-Located distribution switches (e.g. “live front” switches) are being systematically replaced with safer, more reliable devices.
- In some locations, distribution feeders are being looped for improved reliability (e.g. Owl Road).

Electrical Assessor Training – We trained (~40) and certified about 20 additional EWEB assessors to assess storm damage.

Because we do not have AMI, Responder value for yielding accurate customer outage accounting is only as good as the data that is manually input and managed within Responder. This task falls on the Electric Distribution Coordinators who have many other tasks during the storm. We have taken several steps to prioritize storm duties to enable more time to be dedicated to Responder data management.

Downed com/cable wire occupied us during the last storm. We have a Comcast/Century Link approved plan to either cut in the clear, or delineate com/cable wire with different caution tape and secure in place.

## **Generation:**

Generation's emergency planning and preparation efforts begin with and are closely tied to FERC's Dam Safety Program. Under the Dam Safety Program, Generation routinely completes an analysis of potential dam failure modes at all McKenzie River hydroelectric facilities. While potential failure modes often focus on water/river related events (storms and floods), seismic risk analysis, mitigation and preparation are also part of the effort. EWEB works with and through FERC's Portland Regional Office on evaluation, analysis and mitigation of dam failure modes.

As part of the Dam Safety Program, Generation developed and maintains an Emergency Action Plan (EAP) designed to guide EWEB's actions in a dam safety emergency. The EAP in addition to outlining emergency notification steps and responsibilities, provides coordination and contacts for all upriver resource and emergency response agencies. As required by the FERC, EWEB drills on the EAP at least twice annually and completes a full functional exercise using the EAP at least once every five years.

EWEB Generation also participates in FERC's Surveillance and Monitoring Program for dam safety. The Surveillance and Monitoring Program is directly tied to the potential failure modes identified for each project and includes measures such as seepage and ground movement monitoring. EWEB uses remote monitoring cameras, seepage weirs, piezometers, ground survey and canal level monitoring as part of the program. At the Leaburg and Walterville Projects EWEB uses a hazard mitigation control system (HCMS) for early warning of canal level changes that might indicate overtopping or a canal breach. Every five years as part of the FERC's Dam Safety Program EWEB hires an independent consultant to physically review the projects, re-evaluate the potential failure modes, and review all technical documents related to dam safety. Finally, EWEB and FERC staff complete an annual dam safety inspection of all McKenzie River hydroelectric projects for compliance and opportunities for improvement in emergency preparation.

The Carmen-Smith Project also has an early warning system with audible alarms (sirens) signaling a dam safety emergency that is tied into real time monitoring at Smith Dam. Sirens located at Trail Bridge Campground and at Olallie Campground will sound in the event of a significant dam safety issue, warning the public to evacuate from the water area and seek higher ground. While Leaburg and Walterville do not currently have a similar system, EWEB is in discussions with the University of Oregon and the U.S. Geological Survey (USGS) to add early warning / early detection earthquake monitoring at EWEB's lower river projects as part of an existing network of earthquake detection in western Oregon.

In addition to planning for emergency response, Generation, through the normal course of business, maintains many tools, equipment, processes and procedures that will be valuable to EWEB and our community in the event of an emergency. Generation maintains onsite staff housing at each of the McKenzie hydroelectric power plants. Personnel are available or on call 24/7 at each of the facilities. EWEB maintains three modes of communication between EWEB trading and dispatch and the hydro facilities: phone, radio and satellite phone. The Carmen power plant has black start capability through on site generators, which means it can be returned to service (operation) without relying on the larger electric grid for support. The Leaburg and Walterville plants do not have this capability at this time. Both the Carmen-Smith and the Leaburg/Walterville projects have emergency generators, onsite fuel supply and a variety of heavy equipment / construction equipment to support emergency response and recovery. EWEB also coordinates through McKenzie Watershed Emergency Response

System (MWERS) with other upriver entities that maintain emergency supplies and equipment, as was evident last winter during the roll gate failure at Leaburg Dam.

The Carmen-Smith Project has worked with the Forest Service, ODOT, Oregon State Police and others on upper watershed emergency response coordination, including the identification of helicopter landing zones in the project vicinity. Because of the project's proximity to the McKenzie River Trail and Oregon Highway 126, interaction and coordination with these agencies already happens periodically, and this helps to establish a working relationship for future events.

Finally, it is important to point out that Generation staff routinely participate in emergency preparedness and response drills and simulations. While most of these activities are structured as part of EWEB's Dam Safety Program, Generation, as an active member of MWERS, has participated in previous MWERS spill response drills. Generation has access to MWERS spill response supplies and equipment in addition to spill response supplies stored onsite as part of the SPCC program. EWEB's Generation management team, including Generation Engineering, is certified in ICS system operation, and all hydroelectric staff have had or will soon have a basic level of ICS training that will enable them to operate under an ICS structure.

### **Logistics:**

#### Integrated Logistics Plan

EWEB Logistics are coordinated using the ICS structure and creating a Service Branch and a Support Branch. The Service Branch includes the Communications Unit which creates and controls the Communications Plan. EWEB deploys six levels of communications for redundancy and has a project to look at web based ICS communication tools. The Support Branch includes supplies, facilities, and fleet. In addition to converting to bio fuels and maintaining fuel for backup generators and response vehicles, the Support Branch has also created rapid response teams to accommodate employees on site for extend operational periods. The Logistics Plan also includes several Wire Watch teams that have been trained and can be deployed from several other departments, significantly reducing the labor resource load of qualified electrical workers.

### **Technology:**

#### 21<sup>st</sup> Century

EWEB deployed new components of our outage communication program, utilizing text messaging and estimated times of restoration. An interactive web based outage map is in the works for 2016.

#### ARCOS

EWEB is currently managing a project to increase our call out capabilities for 17 different departments, expediting the deployment of first responders and decreasing outage time for multiple systems.

#### Assessment Tools

New electric assessment forms (DoForms) have been developed that will communicate photo-

documented damage from the field using iPads or cell phones. The forms are streamlined to gather data quickly and use in-office staff receiving the data in real time to do more post processing and data organization. This allows assessors to stay deployed in the field, and eliminates the need to return paper damage assessments back to the Roosevelt Operations Center. It will also allow Engineering to start designing repair work in real time as electronic assessments are received minutes after each assessment is completed. Still under construction, each assessment is geo-referenced data so can be provided to Responder to allow view of where assessments have occurred. All of this creates a more complete picture of storm damage and provides better deployment of resources.

### Resource Tracking

New RF Sign-in/sign-out (EWEB) badge readers were purchased to help with FEMA storm labor reporting. It also provides better visibility of staff deployed to work during the incident.

### Exercises:

Annually – EWEB participates in a regional restoration drill sponsored by our regional reliability coordinator, PeakRC.

In October, EWEB engineering, systems operators, and electric operations simulated a complete system blackout, and tested the process to restore power to the utilities top ten most critical loads including water, communications, and selective emergency services. Changes in processes and potential system infrastructure changes will result from this simulation.

As part of annual regulatory requirements, EWEB system operators transfer control of the EWEB system to our Backup Control Center (BCC) located at the ROC. Additionally, the system equipment at the BCC is tested periodically throughout the year.

EWEB's Electric Generation Division, supported by Generation Engineering, actively prepares for and drills on emergency response measures related to EWEB's McKenzie River Hydroelectric facilities. As a requirement of the Federal Energy Regulatory Commission's (FERC's) hydroelectric licensing program, EWEB participates in FERC's Dam Safety Program. The dam safety program includes evaluation and planning for potential dam failure scenarios, and provides a framework for emergency planning, preparation and response. All three of EWEB's McKenzie River hydroelectric projects participate in the FERC dam safety program. EWEB's participation is managed by Generation Engineering.

Because all of our hydroelectric facilities also use and store oil in close proximity to the McKenzie River, Generation also participates in the U.S. Environmental Protection Agency's (EPA's) spill prevention, control and countermeasures (SPCC) program, which provides the basis for emergency spill preparation and response. Generation's SPCC Plans are developed by EWEB's Environmental Management Division and committed to by EWEB's Generation Manager. Finally, in coordination with EWEB's Drinking Water Protection Program, Generation participates in the McKenzie Watershed Emergency Response System (MWERS), which provides additional context and coordination capabilities with upriver emergency providers/responders.

## **Mutual Aid:**

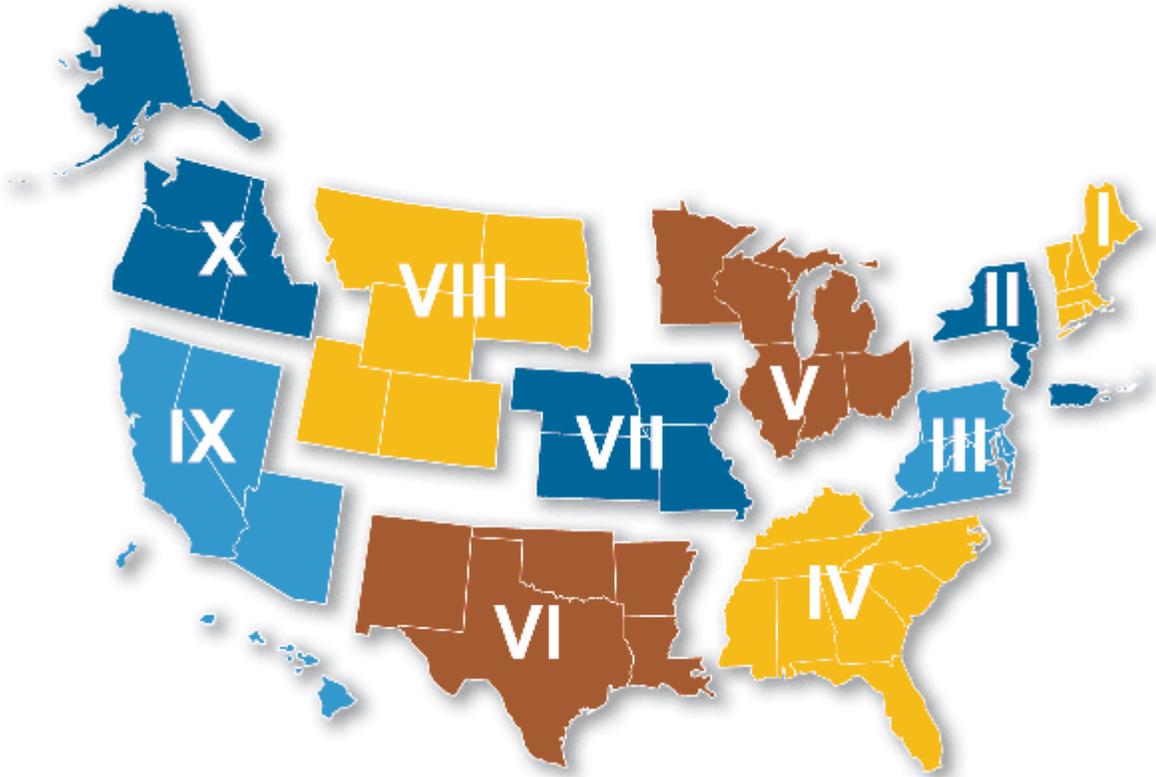
The Electric Utility has signed two mutual aid agreements designed to respond to utilities in need and to receive aid should an incident at EWEB require additional resources. In both cases there are no requirements to respond. Staff looks at current system loads and configuration, labor and equipment resources, weather forecasts, and current workload before deciding to send aid. The Incident Commander consults with the Incident Management Team along with the ICS General Staff to determine resource needs when considering asking for mutual aid from other utilities.

## **Western RMAG**



Twelve years ago, EWEB signed the Western Region Mutual Assistance Agreement. It was created as an effort for gas and electric utilities throughout Western North America to support one another in the event of an emergency affecting generation, transmission, distribution and/or services. Parties involved in the WRMAA convene each year to share best practices, discuss key emergency response issues, review the agreement itself and name the annual custodian. In April 2015 the WRMAA officially created the Western Regional Mutual Assistance Group to coordinate mutual aid across the country with the six other RMAGs. The agreement is transferable to the other RMAGs. We utilized this agreement when responding to New Jersey to help the restoration efforts following hurricane Sandy.

## APPA MAWG



EWEB has also signed the Mutual Aid Agreement with the American Public Power Association and is a working member of the Mutual Aid Working Group. Our Electric Operations Manager is a Region 10 Network Coordinator for the MAWG. This agreement is with most of the public power agencies across the United States and includes eighteen municipal and public utility districts in Oregon. Our local utility partners are part of this agreement.

### **Recommendation**

This material was presented for information purposes and no action is needed at this time.

Please contact Todd Simmons at 541 685-7373 or [todd.simmons@eweb.org](mailto:todd.simmons@eweb.org) if more information is needed or if you have any questions or comments.



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown  
FROM: Sue Fahey, Finance Manager; Deborah Hart, Senior Financial Analyst  
DATE: November 20, 2015  
SUBJECT: System Development Charges Review Process  
OBJECTIVE: Information Only

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## **Issue**

Per Board direction, Management reviews and updates the Water System Development Charges (SDC) approximately every 5 years. The last SDC proposal was reviewed by the Board in 2010. In January, Management will present options for Board consideration and direction, and in April will ask the Board to consider an update to the SDC.

## **Background**

Effective July 1, 1997 EWEB implemented a Water SDC to fund capital improvements to meet increased demands on the system caused by new users. This SDC is separate and in addition to any applicable main extension, service, and meter installation charges or fees.

EWEB's Water SDC consists of three parts; reimbursement, improvement, and administration. The reimbursement charge is based on the value of unused system capacity. It is determined by establishing the existing Water system plant value and current system capacity available for future development. The improvement charge is based on the projected water demand necessary to serve future growth and the cost of the corresponding system improvements identified in the Water System Master Plan. Costs from accounting, billing, and collection are recovered through the administration charge. Water System Development Charges are developed in accordance with the requirements of ORS 223.297 to 223.314.

## **Discussion**

EWEB staff is working with consultants from Galardi Rothstein Group to develop a proposed updated schedule of Water SDCs. The proposed SDCs will incorporate the Capital Improvement Program prepared with the recently approved Water Master Plan.

At the January 2016 Board Meeting, Management will bring to the Board SDC methodology alternatives to consider and will request direction. Alternatives will include a draft fee schedule that acknowledges the costs associated with serving customers at elevation. Following the Board Meeting, staff will formally engage with the Home Builders Association of Lane County and other community stakeholders as needed.

## **Requested Board Action**

No action required. This is information only.



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown  
FROM: WAM Steering Committee Co-Chairs – Frank Lawson, Systems Engineering Supervisor; Erin Erben, Information Systems Manager; Sue Fahey, Finance Manager  
DATE: November 20, 2015  
SUBJECT: Type 2 Project Update: Work and Asset Management (WAM)  
OBJECTIVE: Information Only

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## Issue

This memo addresses the Eugene Water & Electric Board (EWEB) of Commissioners' request for an update on EWEB's Work and Asset Management (WAM) system project.

## Background

EWEB manages capital assets and other resources for the delivery of drinking water and electricity to our customers. Including water and electric utilities, EWEB manages approximately \$973 million<sup>1</sup> of assets in service, \$36 million in construction in progress, \$6 million in inventory, and the labor of more than five hundred people. Historically, managing work and assets at EWEB involved several legacy, stand-alone systems with limited ability to discern between individual assets and asset classes, departments, or types of projects for decision-making. Understanding asset values in classifications beyond required general financial statements was difficult to impossible. Physical assets were managed individually, and processes evaluated from a limited departmental (non-enterprise-wide) perspective. Utilities are driven by capital cost and are extremely capital intensive. It is essential that such businesses have good systems to track and manage those assets. In response to these limitations, the EWEB Board approved management's proposal to acquire and implement an enterprise-wide system to "fully integrate core business processes, share and track data across these systems to support better decision making and reduce operational costs by streamlining functions and reducing redundancy."<sup>2</sup>

## Discussion

The Board approved the contract and license agreement on May 7, 2013, with Five Point Partners (later to become part of Ernst & Young, LLC) and their partners Oracle Utilities, RIVA Modeling,

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<sup>1</sup> Electric, \$734 million; Water \$239 million. Prior to accumulated depreciation.

<sup>2</sup> Board Memorandum and Contract Approval, dated May 25, 2013.

and GeoNexus Technologies for the WAM system software and support services. EWEB went “live” with the Oracle-based WAM system on November 1, 2014, and began using the system for work tracking (including timekeeping), inventory, purchasing and financial recording purposes. Following Go Live and year-end financial closing, the first system audit by Moss-Adams found no deficiencies in the functionality, financial controls and reporting of the system. The project also provided basic performance as expected, and was on budget. However, post-implementation also experienced some challenges including limited reporting, lack of internal technical support capability, insufficient user change management and training, and under-developed pre-WAM and post-WAM business processes. Moss-Adams did raise some important issues in the management letter and those are being addressed (see the audit findings update in the December board run). It is important to understand and keep these issues in perspective. In most industries, a large percentage of IT projects experience failure or major issues, and almost all experience a multitude of minor issues. WAM passed its basic functionality, financial controls and performance issues. The WAM system is fully operational and performing. It was completed on budget, another major accomplishment for any IT project. The kinds of issues being experienced are common to many IT projects.

### *WAM Business Stabilization Project*

On February 4, 2015, in light of organizational challenges with WAM adoption, General Manager Roger Gray initiated the WAM Business Stabilization Project, assigned three co-chairs representing Finance (Bloom, subsequently Fahey), Information Systems (Erben), and Operations (Lawson), and chartered the WAM Steering Committee and Project Manager with the following goals:

- Assess and identify knowledge, business process and technical gaps still being experienced from the WAM release.
- Prioritize and decide scope of issues, and address in-scope gaps with appropriate resolutions.
- Complete WAM technical and business knowledge transfer and technical infrastructure, and deliver WAM into an improved Operations status.

Over the past six months, the WAM Core User-Support Team and WAM Technical Team, along with key business users, have been instrumental in accomplishing initial progress on WAM functionality, business processes and adoption. Specifically, new processes have been developed and launched to manage work orders and the supply chain for parts and materials. Reporting capability has been enhanced, and EWEB is now able to author user-specified reports including those needed for general financial and operational reporting. Technical training and knowledge transfer has increased EWEB’s Information Systems (IS) support capability, significantly reducing contracted support requirements. This specifically addressed an issue raised by Moss-Adams.

Overall, the WAM Business Stabilization Project has improved EWEB’s adoption of the WAM system. As of today, many aspects of the WAM system are functional, and business processes are improving. However, for WAM to become an integral and effective tool for EWEB’s management of assets and resources, more improvement is needed. Some processes remain cumbersome, and have not been optimized to provide strategic decision-making support. Much of the data being collected in WAM has not been extracted or made available in useful operational reports. Other “targeted” processes have not been fully incorporated into WAM, limiting the value of the enterprise-wide data in the system. These present opportunities which will be addressed as we advance our application of the system.

## *WAM Advancement Project*

Going forward, as we improve the usability of the WAM system, our efforts will include the refinement of asset strategies and the work processes interacting with the system. Future work has been prioritized and will focus on selectively-justified and specific aspects of work and asset management using the WAM system. Over the next six months, we intend to focus on developing and integrating asset management strategies with infrastructure planning efforts, finalizing remote inventory management processes, determining the role and methods of the WAM system that support asset maintenance, and refining work order and closeout processes, including asset identification/definition.

## *Continual Improvement*

In the future, EWEB will apply the improvements discovered during the WAM project to other upcoming systems, especially those involving the entire enterprise. The most significant lessons learned include the following:

1. ***Focus on the system's role*** – Information technology and systems are tools supporting human processes that accomplish organizational goals. The processes and the IS tools must be created to align with EWEB's strategic and IS strategic direction. Every strategically-driven project should have specific and measureable features, advantages, and benefits identified and descriptions highlighting "how" the system supports the processes used to meet EWEB's goals.
2. ***Leadership accountability*** – Organization-wide projects (e.g. enterprise systems) need leadership immersion, including support and situational detailed involvement and knowledge. This includes, but is not limited to, strong communication, commitment of resources, detailed understanding of critical issues/decisions, and accountability for decisions.
3. ***Cultivate knowledge transfer*** – The transfer of identified consultant knowledge, abilities, and skills should be formally planned early, and executed in order to fill internal resource gaps.
4. ***Proactive project "tollgate" decision criteria*** - "Go Live" readiness for any major system needs thorough evaluation to insure that the production release can be effectively supported, and that it will not unexpectedly or adversely impact the organization. The evaluation should include all user levels (users, supervisors, managers).
5. ***Develop a change management system*** – Change management at EWEB needs further definition and improvement, and should be a formal requirement of projects and change initiatives. Change needs to be communicated formally to the organization.
6. ***Gear training to the user*** – Training on new systems should be delivered "Just-in-Time" before Go Live, using refined processes and user-oriented documentation. The training should be tailored for specific activities and/or jobs (for "their" work).

## **TBL Assessment**

For this correspondence, the TBL assessment will concentrate on financial issues including evaluating WAM's return on investment.

Original justification for WAM included that the system would provide "a highly efficient enterprise Work and Asset Management structure"<sup>3</sup> and eliminate 20 applications that are not standardized or

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<sup>3</sup> Board Correspondence, dated May 23, 2012

integrated.<sup>4</sup> Additionally, “consolidation and simplification of the IT infrastructure along with efficiencies gained through work and asset management practices will significantly reduce operating costs”.<sup>4</sup> The payback for WAM was projected to be 5.4 years with the majority of the savings occurring in later years from managing capital costs and maintenance expenses more strategically and proactively.

To date, the capital investment in the WAM system is \$8.7 million, including licensing, configuration and development, testing, and implementation. Of those costs, \$2.8 million is for internal labor (in-other-words, about 1/3 of the total WAM costs were EWEB employee costs who would otherwise have charged time to regular expenses). Approximately 15 of the standalone processes and programs intended for retirement are no longer active, but simply provide archived read-only data. Two other programs have been completely retired and no longer reside on EWEB servers. These represent savings as expected. Additionally, the internal labor savings that were projected by the business case in many cases were taken from EWEB divisional budgets. In-other-words, Management has already captured labor savings projected in the business case through labor reductions made during the past several years.

Generally, enterprise systems require a few years for operational benefits to be realized. While it is too early for a complete determination, presently some processes appear to have benefited from the implementation, while others have become burdened. Some of this "burden" appears to be a result of having a system that now tracks and records things that EWEB did not previously track and monitor. Extracting benefits from this new information can take years to realize. Only by continuing to evaluate these processes based on contribution to enterprise-wide strategic value, will EWEB be able to optimize practices and realize operational savings.

In the business case, the primary organizational value of WAM will be determined by the application of the system in making better long-term capital investment decisions, improving and extending asset life through improved maintenance, and understanding and balancing resources more efficiently and effectively. At one extreme, WAM may confirm that EWEB’s asset planning was optimal with little impact on overall capital expenditures. However, WAM is expected to provide information for decisions that reduce capital expenditures while better understanding and mitigating risk associated with these decisions. Without a system like WAM that tracks costs at a detailed level, it is not possible to manage capital assets effectively.

The bottom line is that WAM is operational, completed on budget, old systems have been retired, and savings have been captured. WAM passed important assessments by our external auditor, Moss-Adams, and we have effectively addressed some legitimate concerns raised by Moss-Adams. WAM is stable and functioning. We need to continue to improve how we use this new tool, which is why the WAM Advancement Project was established so we can continue to mine the benefits of this new tool.

For the first time in EWEB’s history, the organization has a system that tracks its significant asset investments. The standardization of processes and recordkeeping that has occurred and will continue to be refined, should allow EWEB to be more flexible and adaptable in the future. In 2016, staff will develop a process to update the Board on all large projects post-implementation.

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<sup>4</sup> Board Correspondence, dated April 25, 2013.

**Recommendation**

None

**Requested Board Action**

No Board action is required.

If you have any questions, please contact Frank Lawson ([frank.lawson@eweb.org](mailto:frank.lawson@eweb.org)), Erin Erben ([erin.erben@eweb.org](mailto:erin.erben@eweb.org)), or Sue Fahey ([susan.fahey@eweb.org](mailto:susan.fahey@eweb.org)).



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown  
FROM: Mike McCann, Generation Manager & Patty Boyle, Principal Project Manager  
DATE: December 1, 2015  
SUBJECT: Update on the Carmen Smith Settlement Agreement Renegotiation Effort  
OBJECTIVE: Information Only

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## **Issue**

In July, the Board directed Management to engage the Parties of the Carmen-Smith Settlement Agreement in order to propose modifications to the agreement that would maintain EWEB's commitment to the environmental outcomes envisioned for the Project while avoiding large and expensive civil infrastructure. This memo provides an update on that effort.

## **Background**

In July, EWEB formally requested that the FERC delay license issuance for six months so that Management could update the economic analysis of the Project due to significant changes in the energy sector. The FERC granted the request and EWEB's response is due by the end of January. In addition to modifying and updating the Project's economic analysis, Management has been meeting regularly with the Settlement Parties since early September to discuss possible modifications to the Agreement. The Parties have agreed to meet with EWEB through at least January when EWEB is due to report back to the FERC.

## **Discussion**

EWEB continues to make progress both on the updated economic evaluation of the Project and on negotiating appropriate modifications to the 2008 Settlement Agreement with the Settlement Parties. Based on the August 28, 2015 letter from the FERC granting EWEB's request for a licensing delay, EWEB is due to respond to the FERC by the end of January 2016. At that time, Management plans to provide the FERC with updated economics based on the existing license application as modified by the 2008 Settlement Agreement, and with a progress report on the status of negotiations with the Settlement Parties to modify significant portions of the Settlement Agreement that would maintain the environmental investments while avoiding large civil infrastructure. Based on discussions with Settlement Parties so far, Management also expects to request, possibly with support from at least some of the Settlement Parties, additional time of up to one year to complete negotiations and amend the Settlement Agreement.

Preliminary results from the updated economic evaluation verify that the Project, as envisioned in 2008, continues to expose EWEB to unacceptable financial risk. Even with a significant reduction in planned infrastructure, including elimination of the fish screen, fish ladder and powerhouse bypass and other powerhouse reductions, the Project's overall economics will be uncertain and

highly dependent on future market prices.

The primary driver for the change in Project economics is clearly lower power prices. Power prices are currently 1/2 to 1/3 of what they were in 2008 and they are expected to stay relatively flat for the next ten years. Many believe that the combination of installed renewable resources and low gas prices have resulted a fundamental shift in the market that is keeping wholesale energy prices low.

What is clear from the economic analyses done to date is that for the Project to continue to make sense for EWEB, given market uncertainties, the expected costs of implementing the license and Settlement Agreement need to be significantly reduced. Due to the uncertainty inherent with any economic analysis of this nature, decisions regarding investments in the Project will largely be a reflection of the organization's tolerance of financial risk. This message has been conveyed to the Settlement Parties and they are aware of both the Project's financial outlook and EWEB's desire to renegotiate an outcome that restores the Project's economic viability at an acceptable risk tolerance while at the same time addressing critically important environmental and other objectives.

For instance, the Parties had previously agreed to remove the Trail Bridge fish screen from the Settlement Agreement in return for putting all water and out-migrating fish over the Trail Bridge spillway. While it appears that some spillway and power plant modifications will be necessary to make this work and it will cause EWEB to cease generating power at the Trail Bridge power plant, it will remove significant capital and future O&M costs from the agreement. Similarly, the Parties appear to be accepting of the concept to replace the proposed upstream fish ladder with a less costly capture / release (trap and haul) solution that will still meet federal and state fish passage requirements. Negotiations are continuing, however, and the total outcome, and potential benefit, of the renegotiation won't be known for some time. Management thinks that the time extension request to FERC will be necessary to complete negotiations in a manner that Settlement Parties can support.

In return for revising the 2008 Settlement Agreement and to obtain interim incidental take coverage under the Endangered Species Act<sup>1</sup>, the Parties have asked for EWEB to agree to implement certain fish passage, fish habitat, and recreation-related measures in advance of a revised Settlement Agreement. Early implementation of some items would allow these environmental and recreational benefits to be realized sooner than if carried out following FERC action on the license. The interim measures advocated by the Parties are related to the existing Settlement Agreement or the agreement to eliminate the fish screen at the Trail Bridge facility. EWEB is not opposed to the concept of early implementation of some measures but have cautioned the Parties that EWEB's commitment to those measures depends on agreement on Settlement Agreement modifications. Whether EWEB can commit to or undertake costly interim measures until an overall deal is reached with the Parties is an important question. Ideally, EWEB and the Settlement Parties will find solution through continued negotiation and find something that FERC can act on more quickly to give all parties the outcomes and certainties they desire.

Management believes a modified Settlement Agreement that enables the fish passage and other

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<sup>1</sup> EWEB was issued a Biological Opinion from NMFS in 2003 that provided ESA coverage until the expiration of the existing License (2008) and in the event of delay, coverage would extend until 2013. Given the delay in License issuance with no expected License earlier than 2018, NMFS is requesting that EWEB agree to certain interim measures in order to secure further ESA coverage.

environmental improvements to proceed as soon as practical is the right thing to do and the best course of action. In the event that EWEB is unsuccessful in reaching an agreement on revisions to the Settlement Agreement with the Parties, Management will return to the Board to discuss next steps and other potential options based on the "lay-of-the-land" at that time. Most likely, EWEB would first request a technical conference with the FERC to ensure that the FERC understands that EWEB is not "playing" the licensing process to unreasonably delay license issuance.

At the end of January 2016, Management plans to provide the FERC with updated economics based on current power price forecasts and the existing license application as modified by the 2008 Settlement Agreement. Management will also provide the FERC with a progress report on the status of negotiations with the Parties to modify portions of the Settlement Agreement in an effort to improve the Project economics. Based on this progress and a path forward to finalize the Settlement Agreement modifications, EWEB will ask the FERC for additional time to complete the revisions to the Settlement Agreement and for the Parties to take the other actions necessary for the FERC to issue EWEB a new license. EWEB will propose that the license be held in abeyance during that time. In order to show commitment and solidarity around the request, EWEB will seek letters of support from the parties, Oregon's federal congressional delegation, and, if appropriate, from other local leaders. A number of local leaders and the local staff of the Oregon delegation have already been briefed and voiced a willingness to write to the FERC in support of EWEB's request. Management has also met with the Editorial Board of the Register-Guard to share context for re-opening the Agreement.

### **Requested Board Action**

No action is requested at this time. These materials are for information only. Questions may be directed to Mike McCann at 685-7379 or Patty Boyle 685-7406.