



INTEROFFICE MEMO
EUGENE WATER & ELECTRIC BOARD
Employee, Community and Customer Service Division
Rely on us.

TO: Commissioners Simpson, Farmer, Brown, Menegat and Cassidy

FROM: Mike Logan, Key Accounts Program Manager December 10, 2008

RE: Steam Utility Transition Plan - Requested Board Action

Issue

Staff has incorporated Board and public input into the latest version of the Steam Utility Transition Plan and is now prepared to move forward with implementation and is seeking Board approval to go forward.

Background

At the September 16 regular Board meeting, the Board adopted Strategic Direction No. 18, called the “Steam Utility Transition Policy.” In accordance with that policy, staff drafted a preliminary outline for a “Steam Utility Transition Plan” that the project team first presented and discussed with the Board on October 7.

Staff has since modified the plan, incorporating both Board and public / steam customer comments. The most notable modifications and progress reports on several key areas in the major task areas outlined in the plan are summarized below and are reflected in the attachment.

Discussion

Financial Assistance: The most notable modification to the plan based on what we heard from the Board and the public is the significant increase in the financing component. Staff has made substantial progress with securing funding from the Oregon Department of Energy, which presented staff with an internal memorandum outlining their commitment to fund the initial phase of our proposed transition plan.

Based on this significant development, and from the input we have received, staff has amended our plan and now has developed a \$12 million loan fund concept (excluding any funding Peace health may desire, and assuming they are the last customer to transition) for converting steam customer space and water heating systems to an alternative fuel, to be financed by a combination of EWEB and state of Oregon “Small Scale Energy Loan Program” (SELP) funding. As of December 9, the Oregon Department of Energy (ODOE) has now confirmed (via an internal memorandum to the ODOE director) funding for a study described by ODOE as follows:

“(a) a full scope of a retirement plan for the city district heating system; (b) technical study of the 78 facilities systems needs in response to central system retirement and; (c)

timely implementation of the conversion from a 50 – year old plus central system to best available practice at each end use site.”

ODOE staff now is asking us to formalize our application, and is channeling our request through their “RD&D” (Research, Design and Development) process as soon as possible. The amount of funding they have indicated would result from this process is \$100,000 and we are told their director is prepared to sign it.

Once the study is completed in 2009, we can then work with ODOE to prepare for the construction phase, that would commence in 2010, using a combined EWEB / SELP financing approach. The maximum amount of SELP funding available for a conversion project like our steam system is \$15 million, including a 20 – 25% equity position by the applicant (e.g. EWEB), which would be about \$3 million.

Based on our work with ODOE since we last met with the Board, we now have confirmed that upon completion of the initial RD&D study phase, we will work with ODOE to access SELP funding. We also are pleased that ODOE has taken the initiative to work on our behalf with Northwest Natural and the Oregon Energy Trust to fully leverage the funding available from these organizations.

We are very encouraged by these developments with ODOE, and how our conversations with our steam customers are going, now that they see progress in these discussions.

Technical Assistance: Based on our progress we have made with ODOE, instead of using the \$300k in funds for small loans as our initial draft plan had assumed for 2009 when we last met with the Board on October 7, we now have modified our plan to direct these funds (including ODOE’s contribution) for an engineering study of all customer facilities to more accurately assess what the conversion cost would be for financing / budgeting purposes and for funding the construction phase using ODOE’s SELP program.

Upon Board approval of the plan, we will commence with an RFQ process to secure professional services to complete the fieldwork and analysis needed to develop an engineering estimate on customer conversion costs. The RFQ will request that the estimate be delivered for inclusion in the Board’s 2010 budgeting process, which is when we expect the initial loans would be issued for customer conversion projects.

During this time, we will continue to work with ODOE staff to develop our approach to how to coordinate all aspects of the entities and funding sources involved.

Annual Budget Scenarios (2009 – 13): Funds have been included in the 2009 budget for a vendor selected from the planned RFQ process.

In terms of what we can expect for 2010 and beyond, while we work with our vendor to develop the deliverables from the RFQ process, staff will continue to develop and refine our debt service and ODOE funding scenarios for planning purposes.

The funding scenarios will be refined considering several factors, assuming interest rate incentives to encourage customers to start their conversion projects soon after the design phase is completed, which we are targeting to begin in late 2009 or early 2010. Loans are expected to be issued through mid-2013, with customer repayments continuing for at least 10 years, which is a minimum requirement under the SELP program.

Peacehealth Contract: Peacehealth is currently reviewing a three-year contract we have prepared for their consideration, and has given us a favorable indication of their intent to sign it. The contract is an essential part of responding to the most common request we heard from customers: offering a reasonable transition period for fuel conversion. Without Peacehealth, we would have to shut down the system much sooner.

UO / EWEB Interconnection Agreement / ORI Project Status: The Oregon Research Institute (ORI) project appears to be moving forward, based on our most recent (November 18) communication. It also appears that the site plan could require ~500 feet of steam line to be removed. We are following up and expect to hear back from the UO in January on next steps with respect to our interconnection agreement. As a contingency, we are developing cost estimates for an alternative approach (e.g. steam plant re-configuration).

Public / Steam Customer Comments: In addition to Peace health and the UO, we've presented to the Lane Governmental Affairs Council and met on site with small groups and several individual steam customers, updating them on our efforts and seeking comments. We have developed a customer contact plan to meet individually with every steam customer before the end of January to review our planned approach, their situation and hear their comments. Comments thus far have re-confirmed what we've heard in our prior communications in terms of customer needs (e.g. financial assistance and time to convert to an alternative fuel).

Federal Economic Stimulus Funding: We are in the process of completing the applications for the latest solicitation from the federal government, including steam utility transition plan work.

Summary and Recommendation

Given all of the moving parts essential to accomplishing the desired "managed transition" called for under the Board's policy adopted September 16 for steam system shut down process, staff has built in a high amount of flexibility in the Steam Utility Transition Plan.

The good news is that as of December 9, we have verbal confirmation from ODOE to work with us, which means \$100k to put toward the site assessment work we have planned for 2009. This is a significant initial step to securing funding eligibility for ODOE's Small Scale Energy Loan Program, which could provide the majority of funding for the project.

And, perhaps most importantly, we have nearly closed on the most crucial piece of all for the plan: Securing a three-year contract with Peace health...which everything else would be moot had they had not pursued with us. Without this, customers would most likely experience steeper increases in their steam costs much sooner than we have been modeling.

For these reasons, we are recommending that the Board allow us to shift into the implementation phase. As the plan allows for, staff will continue to update the Board as certain modifications could become necessary as we learn more about the specifics within each aspect outlined in the attached plan.

With that, we are recommending that the Board approve this plan, which will allow us to proceed with the initial assessment phase in 2009, taking full advantage of the ODOE funding we verbally confirmed on December 9.

Staff will provide periodic updates to the Board via backgrounder or presentations.

Requested Board Action

Staff requests Board adopt of Resolution No. 0845 authorizing the General Manager to move forward with implementation of the Steam Utility Transition Plan, and modify / refine the plan accordingly as we continue to work with customers and ODOE.

RESOLUTION NO. 0845

EUGENE WATER & ELECTRIC BOARD
STEAM UTILITY TRANSITION PLAN

WHEREAS, EWEB approved Resolution No. 0826 on September 16, 2008, which adopted Strategic Direction No. 18 and directs the General Manager to develop a Steam Utility Transition Plan to ultimately shut down the steam utility.

WHEREAS, staff has presented to the Board an outline of the Steam Utility Transition Plan in Board Correspondence dated December 9, 2008.

NOW, THEREFORE BE IT RESOLVED that the Eugene Water & Electric Board makes the following findings:

- Significant loss of steam customers has occurred since the 1980s
- Eroding customer base shifts steam utility costs to remaining customers
- Future steam operations are highly vulnerable to fuel cost volatility
- Retail steam costs are not competitive with other available fuel choices
- Steam staffing has been significantly cut over the years, with 6 employees remaining to run the entire operation
- Financial outlook is not favorable for continued steam utility operation
- Steam plant is single highest source of carbon output by EWEB

BE IT FURTHER RESOLVED that the Board authorizes, delegates and directs the General Manager to implement the Steam Utility Transition Plan and ultimately work toward shutting down the steam system.

DATED this 16th day of December 2008.

THE CITY OF EUGENE, OREGON
Acting by and through the
Eugene Water & Electric Board

I, KRISTA K. HINCE, the duly appointed, qualified and acting Assistance Secretary of the Eugene Water & Electric Board, do hereby certify that the above is a true and exact copy of the of the Resolution adopted by the Board in its December 16, 2008 Regular Board Meeting.

Assistant Secretary

Steam Utility Transition Plan:



A Managed Approach for Discontinuing Steam
Operations While Mitigating Impacts to EWEB's
Downtown District Heating Customers

December 9, 2008



Summary of Approach: Context, Strategies and Considerations

CONTEXT FOR THIS PLAN: The Board adopted Resolution No. 0826, pertaining to Strategic Direction 18 (called the “Steam Utility Transition Policy”) on September 16, 2008. The resolution directs the General Manager to develop a “Steam Utility Transition Plan” outlining an approach to shut down and decommission the Steam Utility while incorporating specific considerations in developing the plan.

While the Board may have adopted this plan, the success of the actual implementation will require a high degree of flexibility as more certainty emerges with some of the key fundamental aspects on which this plan is based, such as the availability of financing given the global credit crisis and the extent that EWEB is successful in acquiring funding via the Oregon Department of Energy.

The need for this plan is in anticipation of the following operating scenario for the Steam Utility over the next five years, that assumes a significantly reduced sales volume due to an eroding customer base, beginning with our largest customer (Peacehealth). Their move to a new location is expected to result in a 60 percent reduction in their steam consumption, beginning in 2009:

Preliminary Estimate of Steam Cash Flows: 2009 - 2012				
(In Thousands)				
	2009	2010	2011	2012
Receipts	\$3,700	\$3,300	\$2,400	\$1,700
Costs	\$3,700	\$3,500	\$3,100	\$2,700
Cash Deficits	\$0	(\$200)	(\$700)	(\$1,000)
No. of steam customers @ beginning at of year	78	75	69	58
Full cost recovery / Klb.	\$30.40	\$32.60	\$35.40	\$57.40

BOARD REVIEW / ACTION: The implementation of the Steam Utility Transition Plan follows the adoption of a Board resolution authorizing the General Manager to implement the plan, which staff requested from the Board on December 16, 2008. The plan calls for implementation to continue until the last customers are transitioned off the system, and no later than June 30, 2013.

MAINTAINING STEAM SYSTEM OPERATIONS: Continuing to operate the steam system in an expected challenging economic environment over the next 2-5 years will be difficult. The strategy to try to accomplish a transition period to allow for a “softer landing” for steam customers is not without risk, and could result in a shorter than desired transition period for EWEB and many of EWEB’s downtown district heating customers if the operating conditions for the steam utility are worse than expected, such as:

1. **Insufficient steam load / customer base in order to operate steam boilers.**
2. **Price elasticity impacts are greater than expected for steam customers.**
3. **Insufficient staff to continue to operate the plant and meet customer needs.**
4. **Natural gas hedging cannot adequately mitigate fuel price volatility.**
5. **More than expected system repairs are required to keep the plant operating.**
6. **Re-configuring steam generation to smaller boiler cannot be accomplished.**
7. **EWEB / UO Intertie is not a viable option.**

In addition, the availability of capital in the lending markets for customers to access to switch to an alternative fuel may be hard to come by given current economic conditions. Property owners who may not pay their facility steam bills may not be sufficiently motivated to act and may defer action until they absolutely have to, which could further impede EWEB's customer transition efforts.

All of this uncertainty suggests that the plan needs to be a dynamic, "living" document, and may need to be adjusted periodically as more is learned about the critical components to its' success.

Approach for a Managed Steam System Decommissioning Process: To mitigate the risk factors described above, a multi-faceted approach will be needed on several fronts, in order to achieve a managed transition for customers to an alternative fuel. The following are the key strategies that staff intends to pursue, and are outlined in more detail in the following sections:

1. Secure a 3 year contract with Peacehealth
2. Assist customers with their transition to an alternative fuel
 - a. Focus on higher cost points of delivery for earlier departure, working from the system perimeter to the core downtown area
 - b. Fund and complete an engineering study on all steam customer facilities
 - c. Offer financing to convert steam customers to an alternative fuel
3. As customer load declines, re-align steam production with customer load requirements by pursuing two options¹:
 - a. Develop wholesale steam agreement and re-locate UO / EWEB intertie or;
 - b. Re-configure steam plant

¹With customer load erosion expected to fall below the minimum load threshold needed to continue operating the primary boiler, a steam production alternative is needed to offer a customer transition period beyond mid-2011. With the Oregon Research Institute's new building expected to break ground in the spring, 2009, staff has been focusing on the UO / EWEB intertie, which will need to be coordinated and re-located when the ORI project breaks ground.

Without a re-configured steam plant or a UO intertie, the system shut down will likely occur mid-year, 2011.

Policy Considerations:

The following are the specific considerations that staff is incorporating into the Steam Utility Transition Plan in accordance with the Board's Steam Utility Transition Policy:

- ***Public Involvement:*** Proactively engage customers, the community and appropriate stakeholders in a public process to develop the transition approach to shut down the steam system.
- ***Financial Assistance:*** Provide reasonable financial assistance to assist customers with transitioning to another fuel source. Seek to leverage programs and services available within EWEB and with other public and private entities to apply toward a coordinated steam customer transition effort.
- ***Environmental Stewardship:*** Provide appropriate funding as needed for when future downtown developments require steam distribution lines located within public rights of way to be addressed, such as in cases where asbestos abatement actions need to be taken.
- ***Reasonable Transition Period:*** To allow more time for steam customers to transition to an alternative fuel, pursue strategies to make it more feasible to continue operating the steam utility throughout the desired transition period.
- ***Electric Utility Cost Considerations:*** Be cognizant that the steam utility is an electric utility asset, and that continuing to operate a transition period beyond 2 - 5 years is highly unlikely without a significant financial impact to the electric utility.
- ***Social and Community Considerations:*** Minimize the impacts to the downtown area by coordinating steam customer system conversion construction efforts to the fullest extent possible.
- ***Encourage Energy Efficiency:*** Encourage customers to make wise choices, both from an energy efficiency and environmental perspective.

The following is a summary outline of the approach staff intends to pursue to accomplish a managed transition in accordance with the above considerations. Attached is a more detailed outline of the plan.

Summary Outline: Major Task Areas Only

1. Peacehealth

- Finalize contract with Peacehealth

2. Steam System Operations

- Re-configure steam production to align with eroding customer load (by 2011)
 - *Option 1: UO / EWEB Intertie*
 - *Option 2: Re-configure steam plant to align with reduced load*

3. Steam Customer Conversion Assessment

- Develop individual customer facility / system assessment
- Develop approach to work from perimeter to system core

4. Steam Customer Financial Assistance Approach - Loans

- Develop appropriate transition “package” for steam customer groups
 - *Customer Financial Assistance*
 - *Technical Assistance*

5. Steam Utility Financial Scenarios

- Develop estimates of potential steam system financial losses for 2010 – 13
- Develop financial scenarios based on loans (e.g. ~\$12 million, excluding Peace health, with we would approach separately, as requested upon completion of their contract) via Oregon Department of Energy financing (via ODOE’s Small Scale Energy Loan Program)

6. Employees - Support, Retention & Communications

- Employee Engagement
- Workforce Planning, Employee Support & Retention
- Bargaining Unit Issues

7. Environmental

- Ensure environmental considerations are addressed to the fullest extent possible.

8. Communications and Public Involvement

- Implement customer contact plan
- Periodic updates to all steam customers, EWEB customers as a whole
- Periodic check-in with Board
- Apply APPA Public Participation model

9. Transition Period Implementation Review & Modification

- Continually assess customer transition progress and steam operations going forward, modifying plan accordingly

Steam Utility Transition Plan: Detailed Outline (December 9, 2008)

Task Area #1: Peacehealth

Lead: Steam Operations

Technical Support: Key Accounts

1. Seek to re-negotiate a contract with Peacehealth. Current four-year contract expires on December 31, 2008. Seek a three-year contract. Continue to discuss options to extend the term of the agreement for two optional one-year periods if needed.

Task Area #2: Steam System Operations

Lead: Steam Operations

Technical Support: Key Accounts

1. Re-configure steam production with customer load. As customer load declines, it will be necessary to re-align steam production to accommodate a lower customer load threshold at some point, which is estimated to occur by July, 2011 based on the current rate of load erosion. When boiler capacity becomes too great for the existing customer load, two options are being pursued:

Option 1: UO / EWEB Intertie:

- Confirm points where EWEB steam load and UO production would align such that EWEB loads and UO capacity would be optimal to allow for UO options.
 - Develop a 3-5 year steam production concept for UO to serve in that capacity – determine mechanisms / agreements that need to be in place

Option 2: Re-configure EWEB steam generation to align with reduced load

- Confirm points where EWEB customer steam load is approaching the point where smaller boiler would be required
 - Current point where customer steam load expected to reach critical minimum load threshold (10,000 lbs per hour): ~July, 2011.
 - Obtain cost estimates for steam plant re-configuration

Task Area #3: Steam Customer Conversion Assessment

Lead: Key Accounts

Technical Support: Energy Management Services, Electric Distribution Reliability

1. Gather information and prepare for RFQ Process

- Prepare an RD&D project application and submit to ODOE
- Form “groups” of similarly situated customers, where possible
- Steam usage profiles, contact information – loads & key players for all accounts
- Individual customer facility / system assessments: Collect & compile what we know already and what we need to know:
 - Assess degree to which facilities are positioned to transition to an alternative fuel (e.g. condition of customer equipment, customer access to capital, owner / tenant / lease status, etc...)
 - Copies of all prior steam facility energy studies

- Coordinate requirements with ODOE from which to develop a standard exhibit for an engineering scope of work, specifying methodology and minimum efficiency improvements for BETC eligibility. Exhibit would serve as attachment to loan application for a customer facility's engineering review.
- Seek to establish a referral network of qualified trade allies HVAC contractors.
- Establish electric capacity requirements in coordination with Electric Distribution Reliability Division in anticipation of heat pump or PV system installations
- Northwest Natural - confirm proximity to gas lines for each customer

2. Write and administer an RFQ process to secure professional services to assess all customer steam facilities and develop an engineering estimate for customer conversion to alternative space and water heating system.

- This will be the primary focus for during 2009
- Verbal commitment obtained from ODOE to provide \$100k toward this study. Rough guess at cost estimate: ~\$200k - \$300k.

Task Area #4: Steam Customer Financial Assistance Approach - Loans

Lead: Key Accounts

Technical Support: Accounting, Energy Management Services, Public Affairs

1. Develop appropriate transition “package” for steam customers groups

- Develop Oregon Department of Energy (SELP) and EWEB loan options
- Finalize terms – Zero or low interest loan amounts
- Develop customer loan agreement and documents
- Develop loan packages for customer facilities: technical assistance & equipment
- Structure loan terms to encourage sooner departure (offer interest rate discounts?)
- Coordinate with Oregon Business Energy Tax Credit (BETC) Program
- Offer EMS efficiency incentives in parallel - package electric savings measures to fullest extent possible with transition loan / service package (fold into RFQ scope)
- Coordinate with Oregon Energy Trust program incentives, where available

2. Compete for any available funds as may be offered by the Federal Government

- Specifically, respond to their most recent “Economic Stimulus” funding proposal

Task Area #5: Steam Utility Financial Scenarios

Lead: Accounting

Technical Support: Key Accounts, Steam Operations

1. Identify financing scenarios – select a scenario for planning purposes

- Make assumptions about source of funds – perhaps with EWEB front-loading years 1-2 (e.g. 20 – 25% equity participation up front) and ODOE kicking in for year 3, or other combination of possible scenarios.
- Estimate number of customer conversions per year – and loan requirements (with or without other programs)
- Develop scenarios for annual debt service requirements, annual budgets (2009 – through the entire customer re-payment period)
- Pursue opportunities for Federal and State economic assistance initiatives

Notable financial tasks completed or identified to refer back to:

A. Maintain “As Is” Scenario: Use 2008 actual YTD / projected and the 2009 budget from which to assess the “as-is” situation for the steam utility.

B. Refine estimates of potential steam system financial losses for 2010 – 13, to use 2009 as a base case, (e.g. losses that would occur without any rate adjustments and with continued customer erosion). Include assumptions for expected fuel costs, O&M and any anticipated system repairs during the transition period. Capital should include anything immediately on the horizon we know we are going to have to do with aging-infrastructure in order to continue operating.

C. Stay open to possible “other” scenarios as they may present themselves

- Listen / respond to any further discussion requests from prospective buyers

Task Area #6: Employees - Support, Retention & Communications

Lead: Human Resources

Technical Support: Steam Operations

1. Proactive Employee Communications, Support & Retention. Take all proactive efforts to support, communicate and retain adequate steam utility staff during the steam utility transition effort, to ensure the best possible outcome for EWEB as an organization, our customers and our employees.

Employee Engagement

- Plan meetings to share information, hear thoughts, ideas and concerns prior to information being sent to the Board
- Emphasize proactive, empathetic / active listening, pointing to successful transition approach and effort already underway in anticipation of the AMI project
- Invite input and ideas to ensure the effectiveness of the transition process, and encourage retention of experienced staff for as long as possible throughout the steam customer transition process.

Workforce Planning, Employee Support & Retention

- Align with on-going efforts

Bargaining Unit Issues

- Review outline, with an eye toward identifying any potential issues with bargaining implications. Pursue, as needed.

Task Area #7: Environmental

Lead: Environmental Management

Technical Support: Steam Operations

1. Ensure environmental considerations are addressed to the fullest extent possible.

- Social / Environmental Assessment – Incorporate approach into RFQ process.
- Future downtown developments that encounter steam related mitigation needs
 - Anticipate environmental mitigation work within right of way areas

- Steam production facilities: To be assessed separately
 - Identify considerations the CAT process should be aware of
- Address other considerations, needs as identified

Task Area #8: Communications and Public Involvement

Lead: Public Affairs

Technical Support: Key Accounts

1. Individual steam customer communications - *Implement customer contact plan*

- Continue formal, informal steam customer meetings to share the key aspects of the Steam Utility Transition Plan, modifying approach as needed.
- Continue to work with those customers who are the most costly to serve (work from perimeter to core of the system)
- Update assessments of customer needs and begin working with them to prep for transition
- Continue to document communications

2. All steam customer communications: Implement APPA Public Participation model as the Steam Utility Transition Plan moves forward. Communicate with all steam customers, compile and share information as the plan progresses. Recruit customers to provide testimonials, as needed. Collaborate with customers on crucial elements of the plan in formal / informal sessions to adjust the approach, where appropriate.

- Prepare periodic updates for steam customers, as appropriate.
- Conduct follow up surveys as needed to assess the customer's perception of EWEB's responsiveness.

3. Proactive communications to all EWEB Customers: Keep all EWEB customers informed of the developments in the downtown area as it pertains to EWEB.

Task Area #9: Steam Utility Transition Plan – Implementation Review & Modification

Lead: Key Accounts

Technical Support: Assigned Task Area Leads

1. On-Going Implementation Review & Modification: Establish a process to track overall transition progress and assess near term steam system operating conditions:

- Review customer transition status on a bi-monthly basis
- Assess steam operations, system load status and stay current on pending customer service disconnections.
- Move up timeline for small boiler re-configuration process, if customer erosion is occurring faster than originally anticipated.
- Provide updates to the Board on customer transition status.