Eugene Water & Electric Board

Mike Logan, Key Accounts Program Manager
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Eugene Water & Electric Board

Steam Utility Transition Plan:

Discussion Draft Outline

October 7, 2008

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Steam Utility Transition Plan DRAFT:
"Head-nod" sought from tonight's discussion…

To what degree does the draft outline capture the Board's policy considerations?

- **Close enough.** Go forth and begin seeking public input.

- **Time out.** Are you crazy? What could you possibly have been thinking?

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Process / Timeline

- ✓ **September 2:** **Present, discuss draft SD #18, modify as requested.**

- ✓ **September 16:** **Include SD #18 on consent calendar for Board Approval**

- *October 7:* *Board work session: Steam Utility Transition Plan – Discussion draft outline*

- **December 16:** **Board Action: Steam Utility Transition Plan**

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2008 General Manager Goal #4:

“Develop a long-range plan for the operation of the Steam Utility and make recommendations to the Board for positioning the utility to be able to shut down the utility, as appropriate.”

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Project Team, Technical Support, Contributors

Steam Operations

- Will Bondioli
- Lee McClellan
- Scott Brenneman
- Michael Straney
- Bill Harbaugh
- David Rasavage

Key Accounts

- Steve Mangan
- Tom Williams

Accounting

- Leslie Kidd

Energy Management Services

- Dan Morehouse
- Rod Olsen
- Chris Wolgamott
- Will Price

Fiscal Services

- John Yanov
- Patty Boyle

Human Resources

- Alison Lewis
- Christina Bennett

Executive Mgt Team

- Tom Buckhouse
- Debra Smith
- Randy Berggren
- Dick Helgeson
- Jim Origliosso

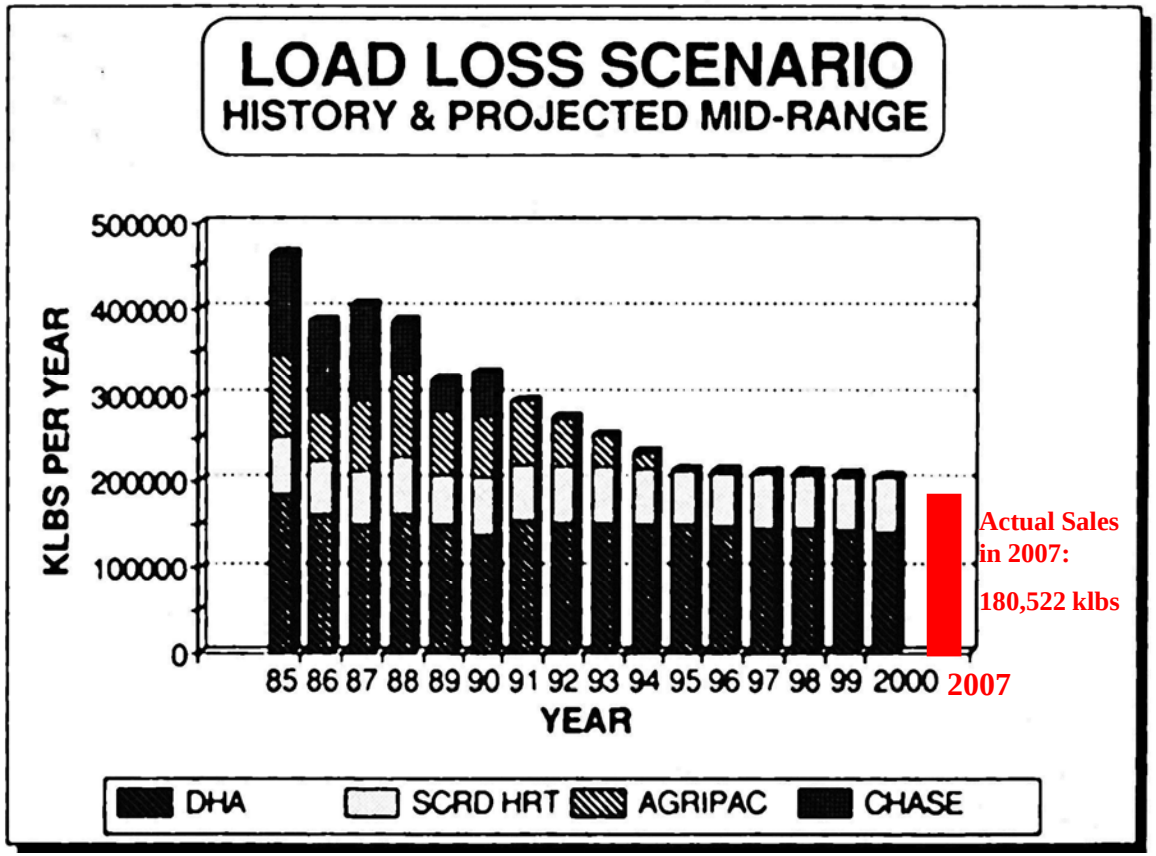
Public Affairs

- Marty Douglass
- Jennifer Joule
- Steve Newcomb

ECC Division

- Sheila Crawford

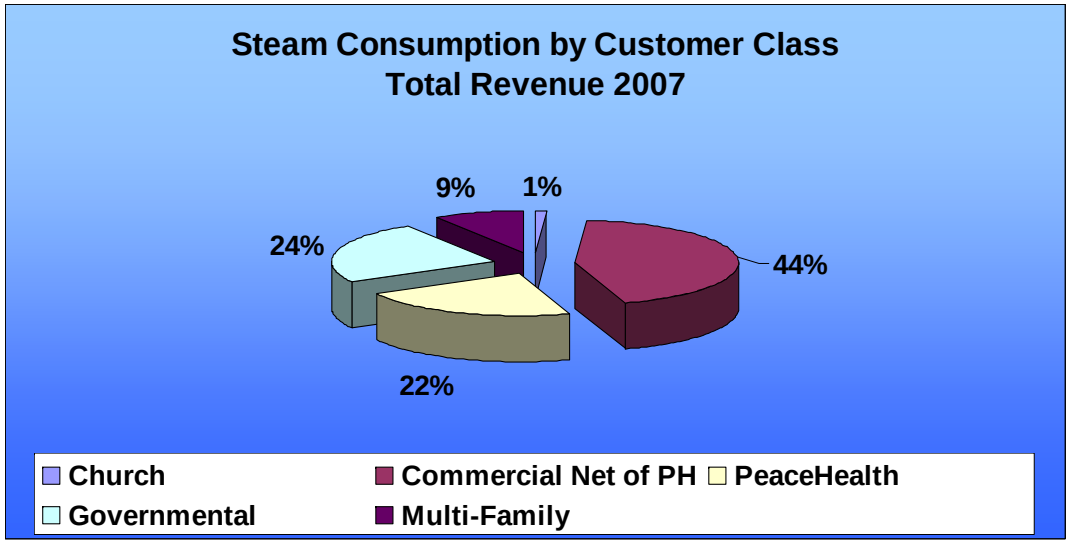
1991 Steam Load Erosion Estimate



Business Perspective: Steam Utility Costs & Revenue

2008 Steam Costs

Production & Distribution	$ 850,000
Administrative & General	25,000
Fuel	2,600,000
Operating costs	**3,475,000**
Interest paid to Electric	60,000
CILT paid to City	160,000
Total costs	**$ 3,695,000**



Steam Cash Flows: Preliminary Estimate (2009 – 12)

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 of year	78	75	69	58	
Full cost recovery / Klb.	$30.40	$32.60	$35.40	$57.40	

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Steam Utility Transition Policy:
Strategic Direction No. 18

SD #18: Considerations to address in the Transition Plan

- **Public involvement**
- **Financial assistance**
- **Strive for a reasonable transition period for customers**
- **Environmental stewardship**
- **Electric utility cost considerations**
- **Social & community considerations**
- **Energy efficiency**

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Steam Utility Transition Plan:
Major Task Areas in Development

1. PeaceHealth
2. Steam System Operations
3. Steam Customer Account Management
4. Steam System Financial Scenarios
5. Employees - Support, Retention & Communications
6. Environmental
7. Communications & Public Involvement
8. Implementation Review & Plan Modification

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Steam Utility Transition Plan:
Fundamental Approach

1. **Secure a 3-5 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 downtown system core.

3. **As customer load declines, re-align steam production with customer load requirements by pursuing two options:**
   a. Develop wholesale steam agreement and re-locate UO / EWEB intertie or;
   b. Re-configure steam generation with smaller boiler

Ensuring Responsiveness in our Customer Transition Approach

Key Elements Being Pursued

1. **Small Loans***
   a. Simpler facilities *(customer may apply loan toward equipment?)*
   b. More complex facilities *(customer may apply loan toward engineering review?)*

   *Includes option to buy-down of interest from private lender

2. **Leverage all available programs – to apply toward technical assistance & system conversion costs**
   a. Internal EMS programs
   b. Oregon Department of Energy
   c. Energy Trust of Oregon
   d. Northwest Natural

3. **Technical Assistance Referral Network**
   a. RFQ approach - preliminary discussions (as needed, depending on success with above)

Steam Utility Transition Plan:
Key Risks

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

Steam Utility Transition Plan:
Potential transition costs in 2009 & Future Years

Loans:

- 2009 estimate: 30 loans @ $10,000 = ~$300k

Steam Generation Options:

Option A: **UO / EWEB Steam System Intertie**

- Oregon Research Institute ground breaking - Q1 2009
- Re-locating steam line estimated at ~$200k (split with UO?)

Option B: **Smaller Boiler (Future budget – 2011?)**

- Rent / lease option appears to be possible

Cost Recovery Approach in Out Years? (2010-12):

Full?

Partial?

Ensuring Proactive Communications

Key Elements

1. **Customized outreach via personal key contact accounts**
    a. Review current facility situation
    b. Owners
    c. Leased facilities

2. **Informal discussions, information sharing – small customer groups, organizations**
    a. Hosting information sessions with similarly situated customers

3. **Coordinated internal approach**
    a. Steam operations
    b. Key Accounts
    c. EMS

4. **Coordinated external approach**
    a. Oregon Department of Energy
    b. Energy Trust of Oregon
    c. Northwest Natural

5. **Written Communications, Survey, Feedback Solicitations**
    a. Continued feedback sought from ALL steam customers
    b. Compile & share findings with Board, steam customers

Steam Utility Transition Plan:

Customer Perspective

Steve Mangan
Tom Williams

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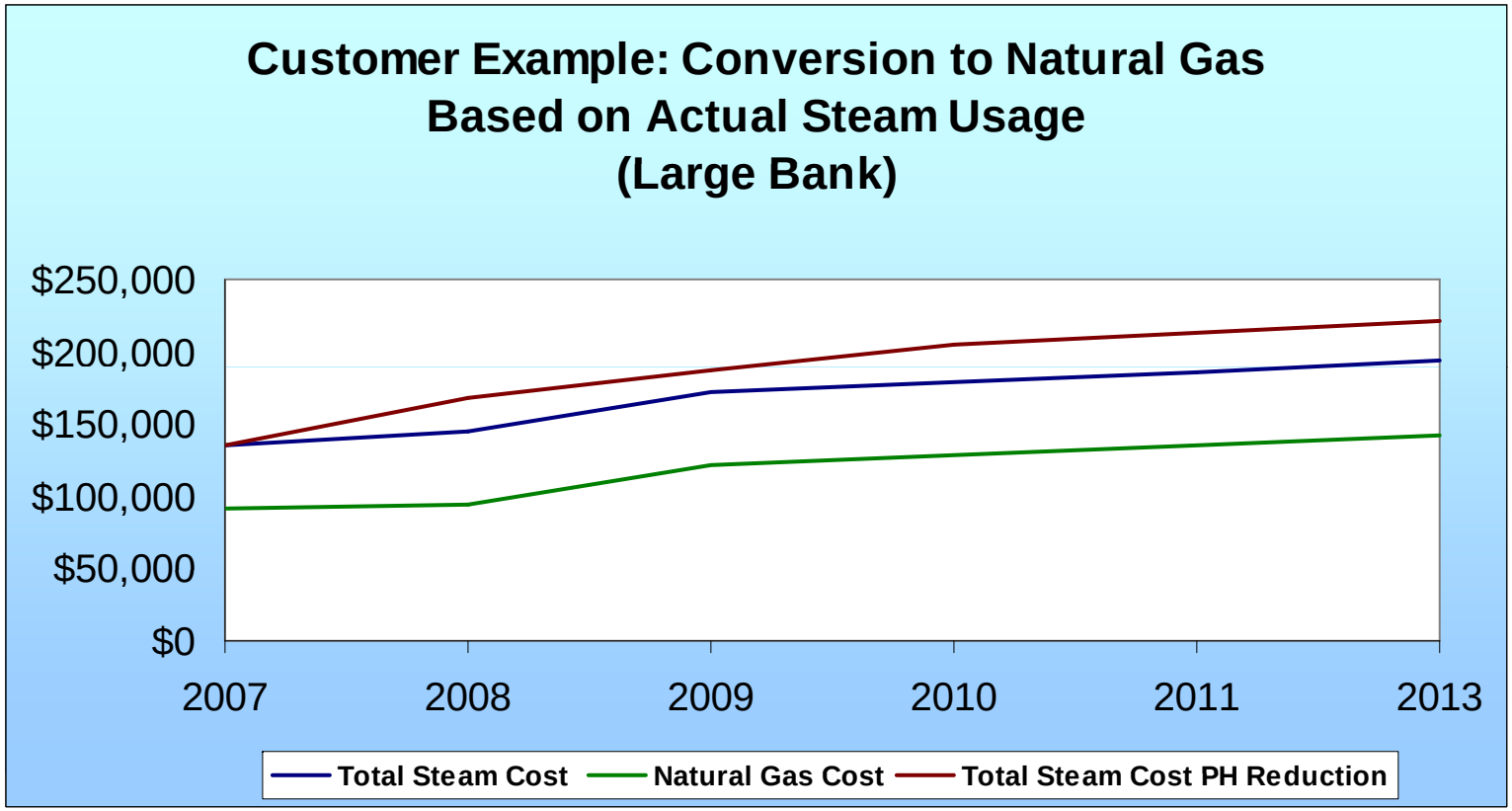
Customer Perspective: Steam vs. Other Fuel Choices



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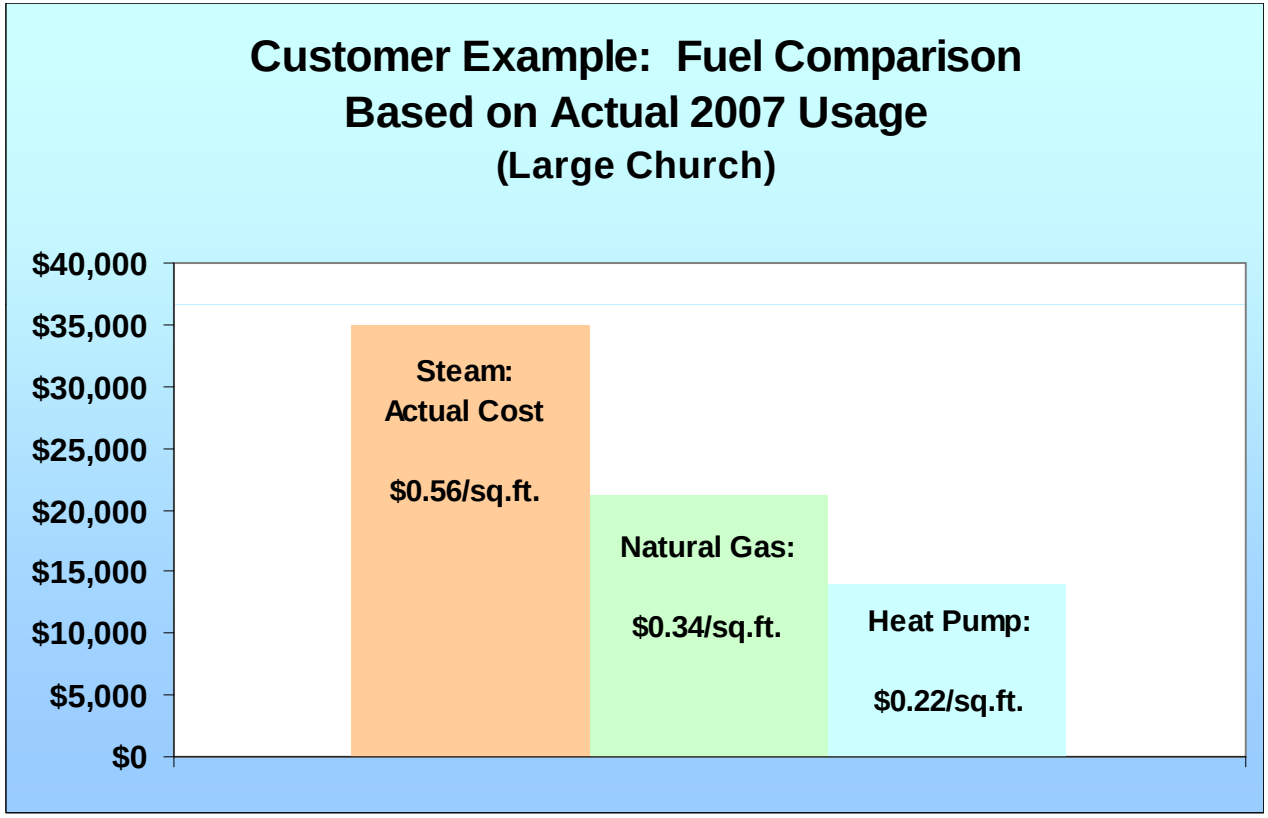
Customer Perspective: Steam Cost vs. Other Fuel Choices



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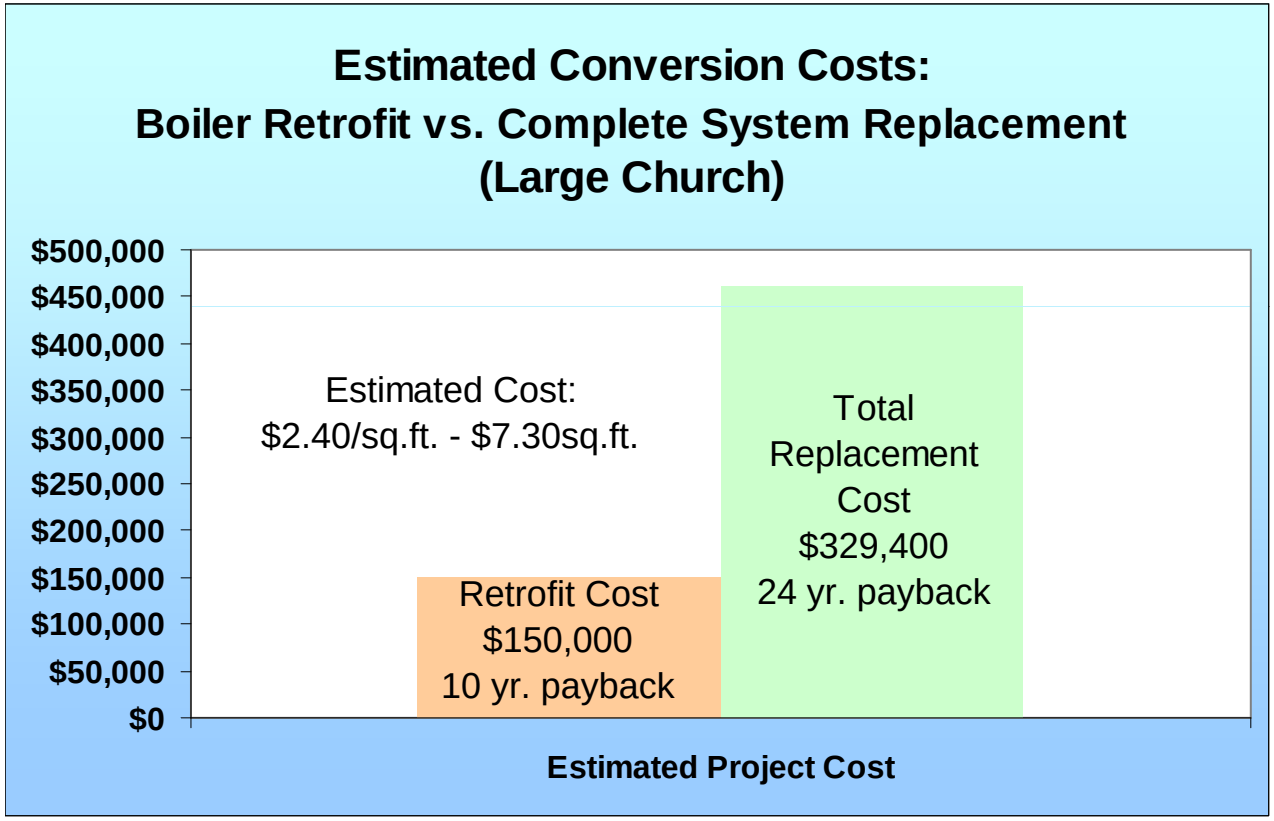
Customer Perspective: Example of Estimated Conversion Costs



Customer Perspective: Estimated Fuel Comparison

Facility Example - Hult Center

Current Annual Steam Cost vs. Natural Gas

EWEB Steam	$ 46,000
High Efficiency[1] Natural Gas Boiler	$ 23,000
Estimated Annual Savings	$ 23,000

[1]Assumes replacement system efficiency @ 90 percent

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Customer Perspective: System Conversion Cost

Facility Example - Hult Center

Estimated Conversion Cost:

Estimated Project Cost	$221,000
Potential Incentive Funding	$ 18,000
25% BETC[1] "pass-through"	~$ 11,000
Energy Trust[2]	~$ 7,000
Net Cost (after incentives)	$203,000

1 Business Energy Tax Credit (State of Oregon – applies to steam, electric & gas users)

2 Energy Trust of Oregon (applies to existing and prospective NW Natural customers)

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Customer Perspective:

Facility Example - Hult Center

Simple Payback and Environmental Impact:

Total Estimated Cost (net after incentives):	$203,000
Estimated Annual Savings:	$ 23,000
Simple Payback:	9 years

Estimated Environmental Benefits:

~20[1] metric tons in reduced CO^2 emissions

[1] *Reduction equivalent to parking ~4 vehicles for a full year, based on U.S. Environmental Protection Agency estimates*

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Customer Perspective: Estimated Fuel Comparison

Facility Example – Large Church

Current Annual Steam Cost vs. Natural Gas

EWEB Steam @	$ 35,000
High Efficiency[1] Natural Gas Boiler	$ 21,000
Estimated Annual Savings	$ 14,000

[1]Assumes replacement system efficiency @ 93 percent

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Customer Perspective:
Facility Example - Large Church

Estimated Conversion Cost:

Estimated Project Cost	$150,000
Potential Incentive Funding	$ 10,000
25% BETC[1] "pass-through"	~$ 7,000
Energy Trust[2]	~$ 3,000
Net Cost (after incentives)	$140,000

1 Business Energy Tax Credit (State of Oregon)
2 Energy Trust of Oregon

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Customer Perspective:
Facility Example – Large Church

Simple Payback and Environmental Impact:

Total Estimated Cost (net after incentives): $140,000

Estimated Annual Savings: $ 14,000

Simple Payback: 10 years

Estimated Environmental Benefits:

~7.4[1] metric tons in reduced CO_2 emissions

[1] Reduction equivalent to parking ~1.5 vehicles for a full year, based on U.S. Environmental Protection Agency estimates

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Steam Utility Transition Plan:

Discussion Draft Outline

Board Discussion, Questions, Comments?

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Steam Utility Transition Plan DRAFT OUTLINE:

1. To what degree does the draft outline capture the Board's policy considerations?

A. Close enough. *Go forth and begin seeking public input.*

B. Time out. *Are you crazy? What could you possibly have been thinking?*

2. Is the Board comfortable with staff's approach for 2009?

A. $300,000 for financial assistance (assumes loans)

B. $100,000 if agreement reached with UO on intertie

Rely on us.

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