

EUGENE WATER & ELECTRIC BOARD  
WORK SESSION  
EWEB BOARD ROOM  
MAY 20, 2008  
6:30 P.M.

Commissioners present: John Simpson, Ron Farmer, John Brown, and Mel Menegat.

Others present: Randy Berggren, Jim Wiley, Dick Helgeson, Debra Smith, Bill Welch, Jeannine Parisi, Sheila Crawford, Marc Anderson, Dick Varner, Tom Buckhouse, Marty Douglass, Will Bondioli, Jay Bozievich, Terry Bequette, Brenda Sirois, Steve Newcomb, and Krista Hince of the EWEB staff; Ruth Atcherson, City of Eugene minutes recorder.

President Simpson convened the work session of the Eugene Water & Electric Board (EWEB) at 6:32 p.m.

### **STEAM OPTIONS/ALTERNATIVES**

Steam Plant Supervisor Will Bondioli reported that Sacred Heart Hospital was seeking to remain a steam customer, though with a reduced load. He said it was in Sacred Heart's favorable interest for the hospital to stay a customer for the foreseeable future. In response to a question from General Manager Randy Berggren, he related that Sacred Heart had estimated it would reduce its load by 50 percent.

Vice President Farmer asked what was driving the reduction. Mr. Bondioli attributed it to the reconfiguration of the buildings and that the main building was completely redone, including the HVAC facility.

President Simpson ascertained that the hospital had four meters among its buildings.

Commissioner Menegat asked how a 50 percent reduction from Sacred Heart would affect the other customers. Mr. Bondioli responded that it would cause rate increases to some. He said the fuel costs were a straight pass through and the rates would only increase nominally.

Mr. Berggren asked what the existing rates were. Mr. Bondioli explained that the general commodity rate fell into three tiers, starting at \$11 per kilopound with the average customer paying \$12 per kilopound. He projected a possible increase of 50 cents to that rate.

In response to a question from Vice President Farmer, Mr. Bondioli related that the hospital had asked EWEB if it intended to remain in the steam business and had indicated that if this were so, it wanted to remain in that system.

Commissioner Brown asked how the sale of the Willamette Clinic and its potential razing would affect the steam utility and its ratepayers. Mr. Buckhouse replied that staff had not gone through each and every customer and conducted this type of analysis. He said they only reviewed Sacred Heart because it was the largest customer.

In response to a follow-up question from Commissioner Brown, Mr. Buckhouse stated that EWEB was not subsidizing the hospital.

Commissioner Brown asked what would happen to the hospital if EWEB decided it would not be in the steam business. Mr. Bondioli responded that the hospital likely had a plan for this. Water and Steam Division Director Tom Buckhouse added that the hospital understood EWEB was making a decision this year on whether it would continue the steam utility and for how long it would do so.

Energy Management Services Engineering Supervisor Bill Welch stated that the University had a physical plant like EWEB did. He said the University predicted that its load would increase and steam was still viable to the University. He related that in the analysis of how the University would meet its load it would have to increase its chilled water plant and its steam system and the University would have to seek funding for this. While discussing this the idea of cogeneration had arisen, so that in addition to a boiler the University might consider inclusion of a combustion turbine, a heat recovery steam generator, and a back pressure turbine to get some power out of the fuel before it generated steam. He reported that the consultant recommended a 20 megawatt (mW) system, based on the assumption that both the University and EWEB would generate steam "forever." He said EWEB had questioned that assumption and realized that EWEB's steam system was a critical component of the analysis. After analyzing the different sizes of systems, staff had determined that the optimal size would be 10 mW. He averred that a 10 mW and even a 6 mW system would be economically viable for the University without EWEB.

Vice President Farmer asked what net present value meant in reference to the steam utility. Mr. Welch replied that if the debt service for a cogeneration facility over 20 years were included along with the economic value of the steam and all of the maintenance costs, one would arrive at a cost of power. He said they had compared this with the cost of power purchased on the market and with five years of EWEB steam load it would be about \$8 million and with ten years of steam load it was approximately \$9 million.

In response to a follow-up question from Vice President Farmer, Mr. Welch said staff was trying to determine what benefit the EWEB steam system could provide the cogeneration facility. He stated that it would allow the cogeneration facility nearer to its capacity in its early years while the University's load was building and EWEB's steam load was being reduced.

Commissioner Brown asked if staff were making an assumption that the cost of fuel would remain constant. Mr. Welch replied that they had used the EWEB medium and high fuel forecast numbers.

Commissioner Brown commented that he had personally looked at a couple of buildings that were paying 40 cents per square foot for heat when they should have been paying 12 cents. He averred that for a \$200,000 investment in a heating system a building could save \$120,000 per year in utility costs. He thought the customers would leave the program, given that the cost would remain the same. Mr. Welch responded that staff had modeled the program with the assumption that "people

would jump off.”

Mr. Berggren noted that a concern had been brought up in conversation that there could be some risk that some control of product costs would be lost in joining the University. He felt that the good news was that EWEB would create some economic value to the degree that the utility signed on, which would give some leverage in negotiating a short-term supply.

Environmental Manager Steve Newcomb reported that he had been asked to look at the steam system from the standpoint of sustainability. He said he had looked at two scenarios: the shut-down of the steam facility and the conversion of buildings to heat systems that were reliant on natural gas and the continuation of the steam facility as it stood. He had not yet analyzed the potential proposal of a cogeneration facility. He related that just shutting down the steam system would result in a CO<sub>2</sub> savings of approximately 4,500 metric tons annually. He explained that this was the equivalent of taking 839 cars off the road or growing 120,000 trees for ten years.

Mr. Berggren asked Mr. Newcomb to explain why this was. Mr. Newcomb responded that a lot of this was due to transmission inefficiencies; a lot of energy was lost through leakage. Mr. Berggren added that the system had been designed back when the fuel was free.

Commissioner Brown said it was his understanding that the natural gas lines did not extend all over the downtown area and where they did extend they were not always a large enough line to expand the service. He asked if the assumption had been made that everyone could convert. Mr. Newcomb confirmed that he had, adding that he had conducted a simple gross analysis to provide an efficiency comparison. He said there was a market for carbon credits.

Mr. Newcomb related that there were some other impacts of the transmission loss, which included that some warm water went into the stormwater system.

Continuing, Mr. Newcomb stated that abandonment of the steam infrastructure would include costs for asbestos abatement.

Vice President Farmer asked if hooking into the University system would cause more steam loss. Mr. Newcomb replied that in rudimentary calculations it seemed that it would break even.

President Simpson asked if the University built a cogeneration facility whether it would burn more natural gas. Mr. Buckhouse replied that it would. Mr. Welch added that it could be burned at a more efficient heat rate than could be bought from a combined cycle turbine in the market. He stated that it was incrementally more efficient.

Public Affairs Manager Marty Douglass reported on the survey EWEB had conducted with the steam customers. He noted that staff had held individual meetings with its larger customers. He related that some customers wanted to know whether EWEB would be willing to consider incentives to customers and, if so, what they would be comprised of.

Vice President Farmer noted that the backgrounder had indicated that only 30 percent of the customers had responded. Mr. Douglass replied that responses were still trickling in. He thought they would end up with 35 to 40 percent of the customers responding, which was a pretty good rate. Vice President Farmer felt that with less than 100 customers it should be possible to do a follow-up.

Vice President Farmer asked if any conversations had been held with the customers about a possible benefit to the customers to shift to another heat source. Water & Steam Division Director Tom Buckhouse replied that without the actual information of the costs of putting in a new system and what the ongoing costs of such a system would be, staff could not adequately discuss this. In response to a follow-up question regarding incentives, he said at the least EWEB could establish a time period it would keep the system running and make that long enough to allow the businesses to convert and the other end of the incentive spectrum would be writing actual checks to the customers.

Commissioner Brown stated that if there was not adequate coverage of the downtown area with gas lines and EWEB cut the downtown off from the steam utility, it would be tantamount to giving some buildings the death sentence. He hoped that EWEB would make the determination on just how many buildings would be cut off and how it would impact them. He said the cost to tear up the streets to install gas lines would be huge and EWEB could not mandate that the natural gas service provide its service to those buildings. He wanted to know what alternatives there would be for those businesses.

Mr. Buckhouse thought there may be ways that the gas company would be willing to provide service. He said staff was considering all of these factors. He stated that staff would return before the Board once the University's plans were known.

President Simpson adjourned the meeting at 7:09 p.m.

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Assistant Secretary

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President