



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD
CORPORATE SERVICES DIVISION

Rely on us.

TO: Commissioners Brown, Cunningham, Cassidy, Ernst and Farmer

FROM: Jim Origliosso, Director Corporate Services
Patty Boyle, Fiscal Services Supervisor

September 3, 2010

RE: 2011 Capital Plan Prioritization

ISSUE

This memo responds to a question from Commissioner Cunningham at the July 2010 board meeting about the prioritization of capital projects in the 2011 Capital Plans.

BACKGROUND

At the 2011 Financial Planning Work Session there was a request that staff provide Commissioners information on prioritizing the work being proposed in the 2011 Capital Plans. Although EWEB does not presently produce a “zero-based” budget, (plans are to do so in 2011 for 2012 budget), the question of priority is particularly relevant given the economic recession continues to impact our community in profound ways.

We have completed a review of the capital budget and have identified lower priority items representing a 25% reduction in capital investment and the implications of such a reduction. Staff judged that 25% would represent a meaningful reduction in terms of potential rate impact savings, but would also have operating implications. This allows for a richer discussion of the rate versus reliability tradeoff. Staff reviewed the projects recognizing that, although deferring replacement results in an increased risk of system failure and lower reliability, the economic times call for an overt discussion about the risks that might be taken.

It is a recognized industry practice to take such risks in a single year due to fiscal constraints, however it is also widely accepted that doing this in multiple consecutive years creates structural underinvestment that has proven to be unwise and uneconomic in the longer term. A 25% one-time reduction in capital outlays does not make for a very serious rate reduction (see table below). While it does not create immediate and far-reaching service and reliability impacts it can be viewed as imprudent if the plan does not return to “normal” spending within a year or two later. A permanent and sustained 25% reduction does create reliability and service impacts, but it is worth discussing these tradeoffs between rate impacts and service and reliability.

Capital Strategy As Compared to the Capital plan Recommended in July 2010	One-time 25% reduction	Permanent and sustained 25% reduction
Approximate Rate Impact	0.9% for one year, but then an increase by the same amount the next year	3%
Approximate bill impact on typical customer	\$0.75 /month for one year, but then an increase by the same amount the next year	\$3.75 month
Expected service impacts on typical customers	Small degradation in service quality and reliability and outages (electric and water). Catch up in future years.	Sustained and potentially substantial degradation on service quality and reliability and outages (electric and water).
EWEB Implementation Strategy and Impacts	Ramp back in capital projects. Less costs and likely reduction in contractor and EWEB labor. Hire back the following year. Somewhat disruptive to EWEB internally (ramp-down/ramp-up issue or “fire-then rehire”	Ramp back in capital projects. Less costs and certain reduction in contractor and EWEB labor. EWEB response becomes more reactive than proactive as service degrades. Ability to reverse decision becomes harder each year (deeper in hole)

The main issue associated with a planned sustained reduction is that it will create service and reliability impacts. If those impacts are later judged to be unacceptable it can be very difficult to recover (i.e. “the digging yourself out of the hole syndrome”).

Current EWEB financial policies mitigate the risk by using the Capital Improvement Reserve to smooth out the rate impacts of changing levels of capital investment for short-term changes rather than long-term sustained changes. For example, the Long Term Financial Plan calls for approximately \$16.6 million in 2011 revenues to be directed to the Capital fund. If the Board chose to reduce capital investment, the Board would also need to reduce the amount directed to the capital fund to have an impact on rate or reserve levels.

Assuming that at some future date capital investment would return to a recommended level sufficient to support the system, it may be difficult to re-hire the staff and contractors required to complete the work. In-other-words, capital investment in EWEB’s large infrastructure base is not easy to turn on a dime. It is relatively easier to ramp down than it is to ramp up. A cut of this magnitude would require reductions in all categories of expenditures, potentially including EWEB labor. Also, at this

time, work is being completed at very competitive costs that may not be achievable when the economy begins to grow. Additionally, if EWEB was to ramp down now it could be very difficult to ramp up in a more prosperous economy. There are also other important considerations. First, the utility sector is relatively robust in spite of a general economic recession because utility services are essential services versus consumer discretionary products or services. Second, EWEB capital spending actually helps the local economy in many respects because much of the capital work requires local contractors and local labor and even EWEB labor that changes against capital-funded jobs.

DISCUSSION

At the July 2010 Board meeting staff introduced the three Capital Types listed below. Again, these “types” are classifications rather than priorities.

- Type 1: Ongoing Capital Infrastructure Replacement
- Type 2: Moderate Size Rebuilding and Expansion Projects
- Type 3: Major Strategic Projects

Water Utility

The following items represent the lowest priority work included in the capital plan. A cut of approximately \$3.6 million would be required to achieve a 25% overall reduction in the Water Capital Plan.

- Water Source and Production – A reduction of \$1,100,000 out of Type I & II projects would need to occur from these Project areas. This would be in the form of postponing the bulk of the work for the Intake Pump Replacements (Type II). We would also postpone work on replacing Hayden Bridge’s clearwell isolation gates (Type I) and postponing Laboratory Improvements (Type I) in 2011.
- Water Pump Stations and Reservoirs - A reduction of \$1,048,000 would be achieved by deferring the Willamette 1325 Reservoir Construction (Type II).
- Water Main Replacements, Relocations and Improvements - (Type I) - A reduction of \$819,000 of lower priority main replacements and relocations would need to occur. This would also be a deferral in work to later years. Deferral of Main replacements and improvements may increase operational and maintenance costs in repairing breaks or leaks.
- Water Utility General Plant and Instrumentation and Control General Plant (Type I) – The remainder of reductions would come from deferring the following areas: Vehicles, Upgrading of Water’s SCADA System, Water Quality Monitoring Sites and Radio Tower Installations, Corporate Information Technology and Facilities. Total reduction in this area is \$480,000.
- Transmission Lines – A reduction of 200,000 from the Willamette River Crossing could occur to make up the remainder of the 25% target goal. This is a type II project.

Operational impacts of these reductions involve continued deterioration of critical infrastructure necessitating more unscheduled outages and repairs and increased risk of failure. Near-term impacts include not being able to obtain as favorable pricing from contractors and service providers later as the economy pick back up. There are also some regulatory issues that we would not be as well prepared to meet, and ripple effects in the capital budget as we catch up on later completion of projects that are deferred.

Electric Utility

The following items represent the lowest priority work included in the capital plan. A cut of approximately \$5.0 million would be required to achieve a 25% overall reduction in the Electric Capital Plan.

- Transmission and Distribution – a total of \$2.5 million in reductions would come from the following Projects: Distribution Feeder Additions, Distribution Reliability Improvements, Pole Replacements, Transformer Replacements and PUC Capital Work. Risks associated with these reductions/deferrals include an increase in number and duration of customer outages caused by aging equipment and lack of redundancy, PUC action, increased maintenance costs and extension of replacement schedules.
- Substation & Telecommunications – A total of \$1.4 million in reductions would come from the following Projects: Circuit Switcher Replacements, Relays Upgrades and Noise Mitigation. Risks associated with these reductions/deferrals include continued exposure to power quality related disturbances for sensitive customer loads and customer dissatisfaction and potential litigation over noise above legal limits.
- Generation – A reduction of \$500,000 would come from the deferral of a new operator interface / control system at EWEB’s Smith Falls Hydro plant. Risks associated with a deferral include the lack of available spare parts for existing but unsupported technology.
- Electric General Plant - would be reduced by approximately \$800,000 as a result of the replacement of fewer vehicles and making a smaller amount of funds available to support corporate information technology hardware and software replacements and upgrades. The maintenance costs of vehicles may increase as they age and are not replaced and IT system outages may be impacted by a lower investment in replacement.

Were measures like these to continue over a period of several years, additional risks would be taken with system reliability and related customer satisfaction. Due to the aging infrastructure of the distribution and substation facilities, a continued replacement strategy needs to be followed in order to maintain current performance levels. The substation protective devices are starting to show early indications of deteriorating performance. These systems/devices not only protect equipment from catastrophic damage but provide a key component of protecting public safety. Presently, the generation projects operate at a high level of availability contributing to the revenue requirement of the utility. With a long-term reduction in capital replacement, the projects will not be as dependable resulting in the purchasing of more market power, thereby increasing the cost of power supply.

RECCOMENDATIONS / ACTION

This memo is for discussion only. No recommendation is being made and no action is required. If you have questions or would like additional information please feel free to contact me by email at jim.origliosso@eweb.org or 541 685-7335.