

**Blue Lake Expansion Project
Construction Contract Bid Update
for City and Borough Assembly Work Session
September 10, 2012**

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A. Summary of July 31, 2012 Construction Contract Bids

1. This is a project that has been designed with the best available information, assessing risk to the best of our ability. However, risks of all manner do exist that will require attention as the project moves through construction.
2. Bids were received for the Blue Lake Expansion Project general construction contract on July 31, 2012. The three bid proposals were \$84 million, \$93 million, and \$101 million, vs. the Hatch (design engineer's) construction cost estimate of \$49 million.
3. The bids are well in excess of the Hatch engineer's estimate, but are bunched together with the two high bids being 10% and 20% higher respectively, than the low bid. We received complete proposals from three construction firms who we believe researched and understood the bidding documents adequately.
4. Review of the engineer's estimate and the bids for Blue Lake show that:
 - a. Across almost all bid items, the engineer's estimate is low, suggesting that the estimate did not adequately consider the cost of work in Southeast Alaska.
 - b. The engineer's estimate likely did not adequately consider the difficult access constraints and unique construction methods required for the Project.
 - c. The unit costs for supply and installation of concrete, steel, fuel and materials were likely underestimated by the engineer.
 - d. The design drawings and specifications for the construction are detailed and essentially complete. We believe that the bid prices we received represent a true cost to construct the project that was designed by Hatch.
 - e. Following a request by the City, Hatch provided a letter in which they attribute their low estimate to a combination of: 1) hourly labor rates that were too low; 2) not including a construction camp in their estimate for the project; and 3) risk contingencies they feel were added by the bidders.
5. The bids are valid for 60 days, but *may* be extended by Bidders upon request by the City. If we are to accept any bid we need to obtain Assembly approval for that action no later than the September 11, 2012 Assembly meeting.

B. Overall Project Status

1. Design services by Hatch are complete and are largely closed out. We have moved into the construction management phase of the project with McMillen LLC of Boise, Idaho serving as the construction manager.
2. We received a FERC License Amendment Order for the Expansion Project on May 30, 2012, which will allow us to start construction late in 2012.
3. The Construction Contract bid documents assume the selected bidder will receive a Notice of Award in mid September, 2012 which will allow the following construction milestone dates:
 - a. November 1, 2012 Notice to Proceed, start of mobilization to Sitka
 - b. January 2013 Start of on-site construction
 - c. November 2014 First generating unit on-line in new powerhouse
 - d. January 2015 Project construction complete
 - e. October 2015 Reservoir full
4. The City now has under contract five supply contracts for equipment and materials. These materials and equipment are for the most part already under manufacture, with delivery of these goods to Sitka scheduled for the first half of 2013. These include:
 - a. Turbine and Generating Equipment: \$13.0 million
 - b. Gates and Hoist (for the tunnel): \$0.9 million
 - c. Penstock (pipe to the powerhouse): \$0.8 million
 - d. Powerhouse Crane: \$0.2 million
 - e. Supply of the Powerhouse Building: \$1.2 millionTotal materials and equipment on order = \$16.1 million
5. Our estimated “encumbered cost”, consisting of monies already spent and the already awarded supply and service contracts, is approximately:
 - a. Federal and State licensing: \$1.4 million
 - b. Engineering: \$11 million
 - c. Construction Management: \$5.0 million
 - d. Materials and Equipment on order: \$16.1 millionEstimated Encumbered Cost = \$33.5 million

C. Evaluation of Bids Received

1. Electric Department staff and our Construction Management team completed their review of the Contract 9 General Construction bids on August 20, 2012.
2. The evaluation was based on four main categories, each consisting of their own criteria or subcategories, as established by Article 19.03 of the Instructions to Bidders. The four categories and their weighted value were:
 - a. Total Bid Price – 50%
 - b. Bidder’s qualifications and capability to perform the work – 25%
 - c. Proposed preliminary work plan and schedule – 15%
 - d. Proposed generation outage work plan and schedule – 10%
3. The proposals were reviewed by the bid evaluation team which consisted of the following individuals:
 - a. Dean Orbison – CBS
 - b. Paul Carson – Currents Consulting
 - c. Mort McMillen – McMillen LLC
 - d. Dan Stickney – McMillen LLC
 - e. Richard Linden – McMillen LLC
 - f.
4. A four step process was used to evaluate the bids:
 - a. **Step One** was the Individual Review. In this step, each reviewer listed above independently reviewed and rated each proposal using our Contract 9 Bid Evaluation Worksheet developed during the bid period.
 - b. **Step Two** involved the team evaluators meeting in Seattle and discussing their independent findings for each proposal. During this meeting the evaluators jointly rated each proposal and completed a comprehensive team Contract 9 Bid Evaluation Worksheet which contained the entire bid evaluation team’s combined evaluation.
 - c. **Step Three** consisted of taking the final ratings from the team meeting in step two and summarizing them including the bid evaluation team’s specific comments. Each proposal was then ranked 1 to 3 based on their total rating from step two. The proposal receiving the rank of 1 was identified as the best responsive bidder.
 - d. **Step Four** – Notification of Bid Evaluation Results: After approval by the Assembly, all Contractors submitting bids will be given a copy of the Summary document from step three.
5. The City’s Bid Evaluation Team met on August 20, 2012 to complete Step Two of the process. During this meeting, the team rated each proposer using the Contract 9 Bid Evaluation Worksheet and provided discussion/comments to support each rating.
6. First the team took the average of the individuals’ ratings from Step One to establish a basis for the Team ratings. Those average ratings were:

- a. ASI – 8.07
 - b. Barnard – 8.77
 - c. Kiewit – 8.39
 - d. From those average ratings the Team adjusted the ratings up or down and provided comment and reason for each change. The end results of the Team ratings were:
 - e. ASI – 7.79
 - f. Barnard – 8.78
 - g. Kiewit – 8.42
7. Both the Team and Individual reviews found Barnard to be the Best Responsive Bidder. The review team found several significant risks associated with ASI's proposal:
- a. ASI indicated substantial experience with Roller Compacted Concrete Dams, but did not demonstrate in their proposal significant experience with concrete arch dams, powerhouse construction, or large diameter tunnels. The review team did not believe that ASI demonstrated either adequate staff or project experience required to execute a project as complex as the Blue Lake Expansion Project.
 - b. ASI did not demonstrate that they have sufficient financial capacity to complete the project. This year ASI has a total of 10 Projects listed as active with many under 25% complete. Considering their past three years of revenue and profitability, the Blue Lake Project would comprise over 50% of ASI's total revenue in the past two years. Considering their existing workload plus the size of the Blue Lake Project, the team was concerned the Project would stretch ASI's financial capabilities.
 - c. ASI showed an incomplete grasp on the project milestone schedule or sequencing. Their work plan was not sufficiently detailed to clearly illustrate required crew sizes, schedules, and equipment requirements. As an example, ASI proposed to use a single crane for the dam and intake work where the other bidders planned on multiple cranes. Our review team felt a single crane in the dam and intake area is simply inadequate for the work. Also, if their single crane was out of service, the team believed that ASI would fall behind schedule. This arrangement would also limit their ability to accelerate work activities. Similar assumptions in the ASI work plan showed ASI's proposal did not adequately reflect the required effort.
8. In short, ASI did not demonstrate a firm understanding of the work required. For ASI to address the work plan issues, the evaluation team believes a significant cost and schedule increase would be required.
9. Barnard submitted a well-organized and detailed proposal which demonstrated a clear understanding of the Project requirements. The combination of their proposal and price resulted in Barnard receiving the highest evaluation scores from the team.
10. The bid evaluation process has been reviewed with legal counsel for avoidance of potential bid protests.
11. The Bid Evaluation Team recommends offering a Notice of Award to Barnard Construction, Inc.

D. Option for Canceling the Project

1. The City could reject all construction contract bids and cancel the Blue Lake Expansion Project. We are not yet financially obligated to any construction contractor and would not incur any direct cost from them.
2. Cancelling the project would also involve early termination of the Project supply and service contracts. It is possible we could cancel the contracts we have (with a total current obligation of \$33 million) for something less than \$15 million. It is unclear what risk or obligation we might have for the suppliers' lost profit or cancellation charges. Combined with the engineering and licensing costs, the City and Borough would suffer a net sunk cost of about \$20 million to \$30 million to cancel the Expansion Project.
3. Canceling the project would require the City to conduct discussion with State of Alaska regarding grant monies already expended. Whether repayment to the state would be required is unknown.
4. The Blue Lake Expansion Project has been under planning and design for six years. If we cancel the Project we must re-define a less costly expansion of Blue Lake or we must pursue another electric generation resource for the Sitka community. It is likely that a new resource could not be planned, licensed, designed and developed for 5 to 15 years.
5. We could possibly add new diesel generating units in 3 to 5 years. We have determined that the current cost of diesel generation to the ratepayer is about \$0.43/ kWh. This is about 2-3 times the power cost anticipated with the present, unexpected bid prices of the Blue Lake Expansion Project.
6. Constructing the Takatz Lake hydroelectric project could require 10 to 20 years and considerably more money than the Blue Lake Expansion cost we are now faced with.
7. Other electric generating resources, including modifications to the Blue Lake Expansion plan, new diesel generation, or new hydropower generation could experience increases in capital cost as the U.S. economy improves, prices increase, and contractor bidding opportunities increase.
8. Bids for the Blue Lake Expansion are valid for 60 days. We should decide what to do before mid-September, if we want to preserve the chance to go to construction in 2013. The City Assembly needs to take action at the September 11, 2012 Assembly meeting if we are to reasonably expect completion of the project in late 2014.

E. Option for Rejecting bids and Re-bidding the Construction Contract

1. Re-bidding the project would certainly not be a feasible option if our current selection of the second low bidder is revealed at this time (in September 2012).
2. The City could reject the current bids and re-advertise for new contractor bids. If we re-bid the existing design we have no reason to expect that bid prices will be lower. Our construction management firm, McMillen LLC has noted an up-tick in steel, fuel, and cement prices in the past few months that we would expect to increase the project cost on a re-bid. McMillen's opinion is that this same project could cost up to \$10 million more if bid a year from now.
3. If we re-bid with sufficient time to allow new contractors to bid the project (other than the 4 bidders we had in July) we expect that the contract award cannot be made before spring, 2013. This would mean that we will lose a year in the project schedule as the selected contractor needs to start work at the site in the winter so they can be in full swing during the low lake level period of April and May.
4. The hidden costs of delaying a complicated construction project of this nature for a year is significant. When the project is delayed the supporting engineering and administration efforts do not completely stop. The construction management effort will continue to respond to equipment supplier's RFIs, comments and requests from agencies, and additional requests from the FERC. Demurrage must be paid on equipment or special equipment mobilized to off load and store equipment at the Project site. The most significant cost of a one year delay in construction is the loss of continuity in every aspect of the work. When you back burner a project the thought process stops and if the people working on it don't move on to other work they forget the details of the work and are not able to pickup where they left off. We estimate that this hidden costs of delaying the project would range from \$3 million to \$9 million.
5. Overall, we expect a re-bid to result in higher, not lower, bid prices. We believe that reducing the project cost will require either:
 - a. Modifying (reducing) the project scope, by re-engineering the design, or
 - b. Working with a selected contractor after contract award to "value engineer" the contract to reduce the cost of construction. This would be a combination of changes in scope and schedule and risk sharing to reduce the construction cost.
6. The Construction Management team has identified only a few elements of the project that could be redesigned to lower the project cost. These include details such as the surge chamber arrangement and the tunnel concrete liner. The CM team feels that these changes could result in only a modest reduction in the Project cost.

F. Option for Proceeding with the Construction Bids We Have

1. The Electric Department and our Construction Management consultant have reviewed the three bid proposals received on July 31, 2012. The proposals included a bid price and a proposal outlining the work plan, staffing, schedule, and experience.
2. ASI submitted the lowest bid price with a price of \$84 million. After close review of ASI's proposal, the City's bid review team determined that the work plan and schedule proposed by ASI did not meet the Contract Specification requirements. We believe the oversights and inconsistencies within the ASI work plan and schedule present significant risk to the project execution in terms of schedule and cost. The bid evaluation team also have significant concerns related to the proposed ASI staff and team members, financial resources, and their overall capabilities related to executing the Blue Lake Project.
3. Barnard submitted the second low bid price with a price of \$93 million. Barnard's proposal was very complete with a well thought out work plan and schedule. The proposed work plan clearly identified critical path work elements, outlined a risk management plan to mitigate potential project risks, and presented a clear understanding of the Project construction. The combination of price and a well developed proposal was the reason the bid evaluation team recommends Barnard as the Best Responsive Bidder.
4. As described earlier in this Assembly Work Session document, the City's bid evaluation team recommends that the construction contract be awarded to Barnard Construction.
5. We believe there are limited opportunities for reducing the project cost. These cost savings would be realized by either reducing the scope of some of the Project features, or through a value engineering process. Immediately following the contract award, we will evaluate opportunities for reducing the project cost through both reduced scope items, reduced risk and value engineering proposals from the selected contractor.
6. If a Notice to Proceed can be issued to the selected contractor by November 1, 2012, we will be able to meet the November 2014 startup date for the Project. A Notice of Award must be issued to the selected Bidder in mid September, 2012, if we are to meet the November 1, 2012 Notice to Proceed date. It is this Notice of Award that the Electric Department requests the Assembly approve at the September 11, 2012 Assembly meeting.

G. Project Financing and Electric Rate Impacts

1. Economic Justification for Increased Hydroelectric Power

The City and Borough of Sitka received an unpleasant surprise on July 31 when bids for the major construction contract for the Blue Lake Hydroelectric Dam and Powerhouse were opened and found to be far in excess of the engineer's estimate. Even though this caused unanticipated complications in the project and its financing, this increased cost has not changed the compelling underlying justification for increased hydroelectric power.

It is widely accepted that the City and Borough of Sitka has been approaching maximum electricity production capacity, and consumption, for some time. The proximity to capacity has been a limiting factor in the continued economic development of Sitka. One major private sector expansion in Sitka, with associated jobs, was cancelled due to the unavailability of guaranteed power. A commonly shared view by civic leaders is that electric power will be the cornerstone to any meaningful future economic development.

Given this shared view, it then becomes a question of not if, but how, to acquire additional electricity generation capacity in Sitka. At this point in time, there are realistically two viable options for generation – burning fuel oil in our diesel generators or adding new hydroelectric resources. The characteristics of fuel oil generation make it a much less desirable option.

While the cost of the physical plant for fuel oil generation, that being diesel generation units, is much lower in cost than hydroelectric dams, diesel generators require expensive fuel. The cost of producing extra generation capacity through diesel generation would be very expensive given existing diesel prices. Also, the purchase of diesel fuel can't be financed through the issuance of bonded indebtedness, which would allow the cost to be evenly spread over decades of time. Finally, the cost of diesel fuel, when forecasted over the decades approximating the life of a hydroelectric dam, is expected to rise continuously and significantly.

The high cost of generating electricity through the burning of fuel oil is masked by the fact that hydroelectric generation is low cost and we presently generate power through a combination of the two. If the cost of fuel oil generation is isolated to just itself, the cost per kilowatt hour generated is excessive – 43 cents per kWh at a fuel cost of \$4.10 per gallon, with an inevitable rise in the future. Even in a worst case funding scenario, hydroelectric generation can be fixed at a cost of 15 cents per kWh provided power consumption is not decreased below existing levels.

For these reasons, hydroelectric is the lowest cost source of additional electricity generation. Its fuel, water, is essentially free and will remain so. The cost of the hydroelectric infrastructure can be locked in at today's prices, and at today's low interest rates, avoiding escalating future costs for fuel.

In summary, additional hydroelectric generation capacity is the best and most viable solution for Sitka's energy needs in the long run. This is because the cost of other viable alternatives is prohibitive and subject to uncontrollable escalations in the future.

2. History of Project Financing To Date

Prior to the opening of bids for Contract 9, the main construction contract for the Blue Lake Dam Hydroelectric Project, the City and Borough of Sitka (CBS) was anticipating the overall cost of the Blue Lake Dam construction project to be \$102 million dollars. This was based on the Design engineer's estimate.

In planning for the financing of a total project cost of \$102 million, the CBS had anticipated issuing \$32 million in additional electric revenue bonds in the late summer of 2013 (FY2014). In preparation for the issuance of these bonds, the CBS had participated in preliminary meetings with the Alaska Municipal Bond Bank Authority (AMBBA) and its Bond Counsel, K&L Gates, LLP. The CBS had also engaged a consulting firm, Utility Financial Solutions, LLC, to complete a Cost of Service Study and Rate Structure Analysis, both of which were instrumental in determining the rate structure and required rate increases, necessary to pay for the increased debt service which would arise from the anticipated additional bonding. The rate increase presented to, and subsequently passed by the Assembly was the first of five anticipated rate increases necessary to pay for the debt service required to fund a project at a total cost of \$102 million dollars.

When the bids for Contract 9 were opened and it was apparent that the cost of construction on the project was far in excess of the Engineer's Estimate, it was readily apparent that the existing financing plan would no longer be sufficient to pay for the increased cost of the project. After conferring with its Bond counsel, the CBS acted upon the advice of its counsel and engaged an independent financial advisor recommended by Counsel, A. Dashen & Associates from Bellevue, Washington. A. Dashen & Associates has a specialty in financing electric utility generation projects and has both worked in Southeast Alaska (with the Southeast Alaska Power Agency) and has an existing working relationship with the AMBBA and its financial advisor, Western Financial Group. In engaging A. Dashen and Associates, the CBS specifically asked them to investigate options for project financing that would allow the project to go forward without placing undue rate burdens on the utility's rate payers.

Following the July 31, 2012 construction contract bids and the Bid Evaluation team's selection of Barnard Construction as the best responsive Bidder, the estimated total construction cost for the Project is now estimated at \$145 million. This includes approximately \$5 million in contingencies for cost increases in procurement and construction during construction. Based on this revised total project cost, and total additional funding of \$71 million needed, A. Dashen and Associates developed possible financing scenarios as outlined in the next section.

3. Alternative Project Financing Scenarios

Evaluation by A, Dashen & Associates, led to discussions with AMBBA and its legal counsel over the past several weeks. These analyses and discussions have identified three possible funding alternatives for the Blue Lake Expansion Project. There has not been enough time since the July 31 bid opening to resolve which funding scenario is most likely. A final funding program will be determined by the amount of any additional State support for the Project along with responses from the AMBBA and its legal counsel. Consequently, the three scenarios are described below, with the understanding that the final funding arrangement will be selected over the coming months.

Scenario	Description
1	\$18 million added state grant, future rate increases allowed for the “Bond Test”
2	No added state grant, future rate increases allowed for the “Bond Test”
3	No added state grant, no future rate increases allowed for the “Bond Test”

Note: The “Bond Test” is a confirmation that net revenues from electric sales will be at least 1.25 times the bond debt service payments.

Scenario 3 is the most onerous alternative which assumes no added state support and requires that all needed electric rate increases are in place at the time of the bond sale. City staff are pursuing added state funding which, if obtained at the 50% matching rate, would be \$18 million. Also staff is investigating with the help of the AMBBA, opportunities for different bond sale programs which would allow a series of bond sales and a sequence in electric rate increases.

The impact on Sitka’s electric rates for each of these scenarios are described below:

4. Impacts on Electric Rates in Sitka

All scenarios assume an additional \$71 million will be needed to complete the Project.

Scenario 1 - Bond sales with \$18 Million added state funding and future rate increases allowable.

<u>Fiscal Year</u>	<u>Rate required to meet bond test</u>
2012	\$0.098/kWh (old rate prior to Sept. 2012 rate increase)
2013	\$0.110/kWh (current average rate following Sept 2012 rate increase)
2014	\$0.124/ kWh
2015	\$0.132/ kWh
2016	\$0.142/ kWh
2017	\$0.147/ kWh

Scenario 2 - Bond sales with no additional state funding and future rate increases allowable.

<u>Fiscal Year</u>	<u>Rate required to meet bond test</u>
2012	\$0.098/kWh (old rate prior to Sept. 2012 rate increase)
2013	\$0.124/kWh
2014	\$0.138/ kWh
2015	\$0.153/ kWh
2016	\$0.158/ kWh

Scenario 3 - Bond sales with no additional state funding and no future rate increases allowable.

<u>Fiscal Year</u>	<u>Rate required to meet additional bond test</u>
2012	\$0.098/kWh (old rate prior to Sept. 2012 rate increase)
2013	\$0.124/kWh
2014	\$0.137/ kWh
2015	\$0.150/ kWh
2016	\$0.155/ kWh
2017	\$0.158/ kWh

In the worst case scenario our electric rates would rise to \$0.158/kWh in 2017. This assumes no added State state funding, no reductions in cost for the project (through negotiations with the selected contractor), and no increase in energy sales within the City's electric system. Any of these additions in funding, energy sales, or cost reductions would reduce the electric rates indicated above.

5. Comparison of Electric Space Heating vs. Oil Heat in Sitka

The present cost of No.2 heating oil used for space heating in Sitka is \$4.13/gal. This is equivalent to a cost of \$0.13/kWh for electric space heating . As we have seen over the past three years, if it is cheaper to heat with electricity than with fuel oil, our electric loads will grow. Conversely, if our electric rates rise above 13 cents per kWh and fuel oil costs remain the same, we should expect that electric consumption in the City to decrease. Therefore, an electric rate of \$0.13/kWh is a key threshold above which we should expect electric power demand in our system would decrease. As fuel oil prices increase, the electric threshold sale would also rise.

6. Opportunity for Additional Power Sales

For all the cost that the City might endure for this Project, we will end up with a hydroelectric system that can generate about 154 million kWh in an average water year. This 154 million kWh annual energy exceeds our fiscal year 2012 system energy demand of 112 million kWh by 42 million kWh, This increased capacity will not be consumed by our existing customer base for a number of years, until we see population and industrial growth or until more of our customers convert from fuel oil to electric heat.

In the early years of the Expansion Project's operation the City will have a key opportunity to increase our power sales to increase revenues. These higher revenues could be used to add to the

City's Electric reserve fund or to moderate our customers' electric rates. Specifically, we believe the City should pursue an expansion of the number of interruptible/ surplus electric heating customers. A possible target of 10 million kWh of interruptible sales at \$0.10/kWh should be considered. This target sale amount represents:

- \$1 million additional annual electric system revenue
- Replacement of about 314,000 gallons of Sitka area fuel purchases each year with hydro-electric power (314,000 gallons of fuel oil = 10 million kWh).
- An average interruptible load of about 1.1 MW (this would be an average increase in system load of about 9%, from 12.8 ave MW to 13.7 ave MW).

In our present electric system we have only 3 interruptible power sales customers. These customers have a connected heating plant capacity of about 2 MW. When interruptible power is available we sell 5,000,000 kWh of interruptible power to them.

The City could also consider using the additional energy capacity of the system to attract economic development by offering reduced electric rates for new or expanded loads. The City might also consider selected adjustments in the electric rate structure to temporarily increase customer electric useage over the first few years of Project operation.

Note that none of the bonding and electric rate analyses in this Assembly information package consider the possible increased electric system enegy sales. Any additional sales via load growth or interruptible sales could be used to bolster the City's electric reserve fund or to possibly reduce electric rates in the future. Also, if these sales are via the interruptible sales program these sales can be cut off in low water years or if the underlying system electric consumption grows to match the new generating capacity.

H. Recommended Plan Going Forward

1. The City's Construction Management Team and Electric Department Staff recommend that the City Assembly, at its September 11 meeting, approve a motion to issue a Notice of Award to Barnard Construction Company for the Blue Lake Expansion General Construction Contract. Following that Notice of Award the following steps would be taken to optimize the project cost and minimize the electric rate increases for our community.
 - a. In late September we would meet with Barnard to identify cost-reduction opportunities to lower the total contract price. These opportunities will be a combination of reductions in the scope of project construction and value engineering changes and risk reductions that may be suggested by Barnard.
 - b. By mid-October a revised project arrangement and cost would be defined.
 - c. Notice to Proceed would be issued to Barnard by November 1, 2012, allowing construction of the project to be completed as planned at the end of 2014.
 - d. Concurrent with the cost reduction negotiations, City staff will petition the state of Alaska for approximately \$18 million in matching State grants.
2. Our Engineering consultants and Electric Department staff are convinced that this recommended course of action is best for the City and Borough of Sitka. The Blue Lake Expansion is clearly the best new generating resource for the City and should be constructed. The only viable alternative to awarding a contract now is to reject the current bids and rebid the project. We believe that rejecting bids and rebidding could easily result in higher construction costs for the Project and at least a one-year delay in its completion.
3. Once the project is constructed the City should embark on an expansion of the surplus power sale program, to boost surplus energy sales and help in cash flow for the City. Overall, there will be 20 to 40 million KWH available each year that the City might use for surplus sales, economic development, attraction of industry and for jobs. For all the expenditure to build the Expansion, the City will have a major increase in generating capability, which can be used effectively on several fronts to increase the Electric Department revenue by up to \$2 million each year.