



REPORT to COUNCIL

DATE: September 12, 2011
TO: Mayor and Councillors, City of Sault Ste. Marie
FROM: Dominic Parrella, Vice President Operations & Engineering
c.c. Joseph Fratesi, C.A.O., City of Sault Ste. Marie
Brian Curran, President & C.E.O., PUC Inc.
Larry Guerriero, Chair, PUC Inc.
Ella Jean Richter, Chair PUC Distribution Inc.
Mark Howson, Chair Sault Ste. Marie Public Utilities Commission

SUBJECT: Proposed New Building for PUC Group of Companies

Background

On September 27, 2010 City Council passed a resolution authorizing PUC to proceed with construction of a new building on property owned by PUC on Second Line immediately west of the existing facilities.

Based on this resolution PUC staff proceeded with site investigation and architectural and engineering drawings to a tender call at a cost of approximately \$1.44 million. The Finance Department arranged low interest 25 year financing with Infrastructure Ontario.

The project was tendered on July 21, 2011. Five bids were received with the low bid being \$20,200,000.

At the August 15th shareholder meeting held in open session in council chambers, Brian Curran President and C.E.O. PUC Inc. submitted a report and proposed resolution requesting the shareholder to authorize the company to borrow up to \$23,500,000 for the construction of a new integrated offices and work centre building to be constructed immediately to the west of the existing C. J. Murphy Centre.

After some deliberation, the Shareholder deferred decision to the next regular scheduled meeting date of September 12 and requested that PUC Inc. return with further information in order to facilitate an informed decision. Council expressed a number of concerns regarding the request including the following:

1. Lack of a business case for the new building
2. Loss of business in the downtown core
3. Impact on rates to customers
4. Adequacy of asset base in PUC Distribution to absorb \$23.5 million asset addition
5. Ability to recover cost in OEB rate hearing
6. Why have buildings been allowed to deteriorate?

7. Why not use the \$23.5 M to replace infrastructure?
8. Timing of project is not right!
9. What is the financial benefit to the City as sole shareholder?
10. Why not relocate Engineering to the Civic Centre?
11. Why not build a shared service garage with PW&T?
12. Additional questions submitted September 2, 2011

This report serves to provide answers to the concerns and questions raised.

PUC currently operates out of three locations; (1) the C.J. Murphy Centre at 510 Second Line East, comprising of an integrated service garage, vehicle parking garage, and limited office space and inventory/equipment storage space; (2) the Nicholas Trbovich Centre immediately to the east of the Murphy Centre which includes the Engineering Department, work shops and additional vehicle storage area; and, (3) the building on Queen Street which contains the administration offices, including Finance, Billing, Customer Service, IT, HR and Marketing.

As detailed in this report none of these facilities are adequate for current needs or future expectations. If the new building is not constructed, all three facilities will require renovation. This report will compare the cost of both options.

1) Business Case for a New Building

The first question that comes to mind is why do we need to do anything? What is wrong with the existing facilities?

There are several reasons why the status quo is not acceptable. Issues related to poor working conditions, health and safety of workers, productivity, gender equity, operating and maintenance costs, current and future space needs, all impact on the analysis of whether to renovate existing facilities or build new.

The following is a summary of the various reasons why the existing facilities are not adequate and therefore changes are required.

Murphy Centre Deficiencies

There are quite a number of deficiencies surrounding the Murphy Centre (Service Centre) that necessitate substantial and significant renovations. These include the following key issues:

1. Deficient service garage
2. Deficient vehicle parking garage
3. Inadequate welfare facilities
4. Lack of female welfare facilities
5. Deficient office area
6. Inadequate washrooms
7. Lack of work shop areas
8. Lack of meeting and training rooms

Deficient Service Garage

Dimensions of Service Bays

The existing service garage consists of two service bays. Only one can accommodate large trucks. The other can only accommodate the smaller vehicles such as pickups and vans.

Over the years since the Service Centre was first built, utility trucks and specialty equipment have gotten bigger in all respects in order to handle the taller poles and reduce labour costs. Today the PUC fleet includes bucket trucks and line trucks that barely pass through the doors and several of them are too long to fit in the service bay.

Once in the bay there is very little room to work around the trucks. Mechanics are constantly moving and relocating equipment and tools in order to work on the large trucks thereby cutting into their productivity. Furthermore, the cramped and poor working conditions expose the mechanics to higher potential for injury. Staff have already experienced several lost time accidents due to strains resulting from awkward working positions.

The height of the service bays is also inadequate. The trucks just barely clear the ceiling. Consequently there is inadequate height to raise the trucks and all work on the undercarriage must be performed lying on the floor.

Servicing of Boom Trucks

Line trucks have hydraulically actuated booms. Regular inspections are mandatory on every boom at regular intervals of 3, 6 and 12 months. Furthermore disassembly and detailed inspection is required at 5 year intervals. We have 15 boom equipped units that fall into this category.

The existing service garage does not allow for these inspections and disassembly. As a result, mechanics are compelled to perform 3, 6 and 12 month routine inspections in the parking garage or outdoors and, without suitable overhead cranes, the work requires the use of other boom trucks and staff to provide the lifting ability. This is often tricky to accomplish and not without potential hazards to both workers and equipment. It also ties up additional staff needlessly.

Why Not Contract Out?

Servicing of the boom trucks requires specially certified mechanics by law. There are none in town and there is no incentive for shops to acquire certification due to the limited market locally. Our mechanics have that certification.

As we do not have adequate facilities, the 5 year inspections must be done by the vendors rather than our own staff. As a result we lose the availability of approximately 3 of the 15 units each year for 1 to 2 months each because the trucks must be delivered to either Sudbury or Milton for servicing by the dealer. With the proper facilities, we could do this work ourselves at greatly reduced time and cost.

Number of Bays Inadequate

With only two bays available, the number of units that can be serviced concurrently is limited. Add in the fact that only one bay can accommodate the larger trucks and it is clear that the limited number of bays is a severe impediment to productivity. As a result of this bottleneck of facilities, we are compelled to send out much of the work on the smaller trucks, pickups and vans to garages in town at rates double our internal costs. With additional bays we could do much of the work in house at substantial cost savings, with the addition of more mechanics.

Other Issues

In addition to the specific deficiencies noted, there are a number of other issues that impact working conditions or productivity. The repair garage exhaust system is inadequate and although meeting all regulatory requirements, results in mechanics being exposed to higher levels of exhaust fumes than necessary. Furthermore the heating within the service bays is inadequate. This results in further inadequate working conditions as the mechanics are working in excessive cold and draft all winter long.

Also use of the wash bay area adjacent to the service garage interferes with work in the service bays. Movement of trucks and equipment is a problem and water from the wash area migrates into the service bays and freezes in winter.

Due to the limited space within the service bays, much of the equipment must be stored outside in the parking garage area. Ongoing movement of equipment in and out of the work areas creates yet more inefficiency. Furthermore, equipment is available in the market (such as lifting devices, trolleys, dollies) to improve productivity but we are not able to acquire it due to lack of space necessary to use it.

Deficient Parking Garage

Ventilation

The ventilation system in the vehicle parking garage is inadequate and ineffective in handling the exhaust fumes from the area. When the trucks are started up each morning or come in at the end of the day, the resulting high level of exhaust fumes in the parking garage is a concern for the long term welfare of personnel.

Heating

The larger trucks and equipment that use hydraulics require heat to ensure proper operation and long term care. Other specialty equipment such as the vacuum truck that carries a large amount of water used for excavation, require heat to prevent freezing.

The parking garage was originally built with electric in-floor heating. The system no longer works and is not feasible to repair or replace. Furthermore, the operating cost would be excessive.

The garage is not insulated. Addition of heating would require that the facility be insulated.

Asbestos Cladding

The parking garage is clad in metal that is coated in asbestos. Damaged areas of the cladding need repair or replacement. The coating needs to be encapsulated with proper additional coatings to ensure further aging does not release asbestos into the air.

Inadequate welfare facilities

The current change rooms are inadequate for today's numbers of staff. When first built in 1965 there was no provision for an area to hang wet work clothes to dry. Part of the lockers area was turned into a drying area. Today with the greater number of staff, there is not enough locker space available.

The existing facilities are very cramped. Furthermore the ventilation is poor which leads to ongoing problems with mold in the shower area. Old fixtures that do not work are very costly to replace.

Lack of female welfare facilities

Currently there are no showers and lockers for female workers. While this is not an issue at this time as there are no females in the Water or Lines Departments, it will not be possible to provide proper facilities in the short term should the need arise. In the meantime, existing female workers in other departments do not have access to showers and private lockers.

Deficient Office Area

The office area of the Service Centre has significant deficiencies as well. These include the following:

- ◆ Air Quality and Handling
- ◆ Insufficient Office Space
- ◆ Inadequate Washrooms

Air Quality and Handling

Vehicle exhaust generated in the parking garage currently permeates throughout the office area. This is an inherent design issue and requires extensive renovations to correct.

The supply of heating and cooling is very inadequate. Furthermore the existing equipment is original equipment and very costly to maintain. The air handling units are at end of life and need replacement.

Insufficient Office Space

When the Service Centre was built in 1965 it included 6 offices. Today with the growth in staff numbers we have 17 offices and more will be required in the future. There is no space left to add offices and there is no room for additional staff.

Department areas are inadequate for the current number of staff and cannot accommodate any more staff. There is inadequate room within those department areas to provide for planning and strategizing work plans, or to complete documentation or to access computers.

The building cannot take a second storey addition as it was not designed to do so in the first place. Furthermore, there is no room to expand to the east due to the overhead powerline and there is no room to expand to the west due to the underground watermain supplying the Zone 1 reservoir. Expansion to the north is also restricted due to the presence of the reservoir. Also there is insufficient Stores space for inventory parts and materials.

Inadequate Washrooms

There is only one female washroom and two male washrooms in the entire building, other than the locker room. Furthermore the washrooms need significant upgrades as they are inadequate in size or condition to accommodate today's numbers of male and female staff.

Lack of Workshops

There is no space at the Service Centre to allow for proper work shops. These are required primarily for the Water and Line Departments to allow for repair and maintenance of distribution system equipment and specialized departmental work tools and equipment.

There is no space for the Stations Department to perform maintenance on substation equipment or to maintain transformers.

Lack of meeting and training rooms

There are no meeting rooms or training rooms in the Service Centre nor is there any space to suitably store archives. Generally the lunch room must be used for any meetings that involve numbers too large for the manager's office area. For example the monthly meetings of the Joint Health & Safety Committee must take place in the lunch room and often run into the lunch period, interfering with staff needing to use the room.

Furthermore, any training must take place in the lunch room or off site, incurring additional cost.

Trbovich Building Deficiencies

In 2007 part of the front office area of the Trbovich building was renovated in order to accommodate the Engineering Department. Engineering had grown from 9 staff through the 80s and 90s to 13 in 2006.

With our continuing efforts to increase capital works to address replacement of aging infrastructure, we added and continue to add more engineering staff to drive the work programs. There was no room left at the Queen Street building to accommodate the increasing numbers.

The 2007 renovations to the Trbovich building were designed to accommodate Engineering numbers for approximately 5 years. If we continue to utilize the building, we will have to add additional office space to accommodate future additional staff, estimated at another 5 staff over the next 5 years.

The parking garage is heated and spacious. However the design involving many support columns makes it very difficult to maneuver large trucks. This sometimes results in damage to the equipment.

The roof over both the offices and garage is at end of life and must be replaced within 2 years. There is approximately 45,000 square feet of roof to replace.

Queen Street Building Deficiencies

While there is adequate space at Queen Street now that Engineering has moved out, there is a requirement to add several more office areas within that space to accommodate new and existing staff.

The front counter and Billing Department areas have been areas of concern for several years. The areas need significant upgrades and renovations to improve functionality and efficiency. This work had been postponed due to the understanding a new integrated facility was imminent.

Furthermore, if we are to keep the Queen Street site, the following upgrades are required:

- ◆ replace air handling equipment now at end of life
- ◆ replace all the roofing within the next 10 years
- ◆ replace all carpeting and re-paint
- ◆ replace damaged and inadequate office furniture

Present Value Cost Analysis

Based on the foregoing discussion, it is clear that significant renovations are required if we are to continue using the existing facilities. Any form of substantive renovation triggers a requirement to bring the building up to current Ontario Building Code standards.

A present value cost analysis has been performed in order to evaluate whether to renovate or build new. The present value method is an established financial technique that is often used to reach a decision on which choice is the most cost effective option in the long term.

The analysis compares the costs of New Construction for the integrated facility that would house all staff in one location to the cost of Renovations required for the three existing buildings if they are to be retained.

The cost of renovations includes all upgrades and additions required at the Murphy Centre in order to address the deficiencies noted above, including costs to bring the existing facility up to Building Code requirements. The renovation costs also include any renovations that are required to the Trbovich and Queen Street buildings within the next 20 years, in order to provide a true "apples to apples" comparison since the New Construction would not require any significant renovation or upgrades for at least the first 20 years.

In particular the analysis includes allowances for the following cost items:

- ◆ architectural, engineering, survey and legal fees,
- ◆ costs for temporary relocation of all staff to the Trbovich Centre throughout construction and relocation back to the renovated Murphy Centre,
- ◆ costs for renovations required within the next 20 years for each of the Trbovich and Queen St. sites,
- ◆ impact of property taxes on all buildings,
- ◆ impact of cost savings on heating and cooling for the New Building over the renovated three facilities,
- ◆ impact of cost savings related to efficiencies gained from having all staff under one roof, and
- ◆ impact of ongoing operational costs for both the new and renovated buildings.

The analysis was conducted for a series of time and interest scenarios as follows:

- ◆ 25 years at 6% interest,
- ◆ 50 years at 6% interest,
- ◆ 25 years at 4% interest (i.e. "real interest" of 6% less 2% inflation), and
- ◆ 50 years at 4% interest.

While the "up-front" costs to build new or renovate existing is the same for all scenarios, the ongoing costs or savings related to the different scenarios will vary with the time horizon chosen.

Moreover, we must recognize two key factors. First, subsequent to Shareholder resolutions passed September 8, 2003 and again on September 27, 2010 which authorized staff to proceed with the construction of the new building, there has been a significant amount spent to-date on architectural and engineering fees, site investigation and soils testing, survey and legal fees, and staff time. If award of the construction contract is not confirmed now, this amount (\$1.44 million) will have been wasted with no real benefit to the Company or the Shareholder.

Second, at the Shareholder Meeting last Fall where approval to construct was given, the Shareholder also requested that PUC pursue the Gold LEED Standard in constructing the new integrated facility. That requirement added approximately \$1.3 million to the building costs. In comparing the cost of the new building, it is necessary to take into account this cost item. Therefore, in order to perform a true "apples to apples" comparison, we must either subtract this amount from the cost of new construction, or add this amount to the cost of renovations for the existing facilities. The cost analysis findings are summarized below.

Cost Items	New Building	Keep Three
Cost of new build or renovations	\$ 23,500,000	\$ 17,114,083
Less proceeds from sale of three buildings	\$ (4,750,000)	--
Plus cost of Gold LEED not in renovations cost	--	\$ 1,300,000
Plus cost spent to-date on design and tender	--	\$ 1,438,213
Net Capital Cost Today	<u>\$ 18,750,000</u>	<u>\$ 19,852,296</u>
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Net present value of ongoing costs (25 yrs @ 6%)	<u>\$ 13,224,766</u>	<u>\$ 15,853,127</u>
Overall Present Value Cost	<u>\$ 31,974,766</u>	<u>\$ 35,705,423</u>
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Net present value of ongoing costs (50 yrs @ 6%)	<u>\$ 16,306,119</u>	<u>\$ 19,546,884</u>
Overall Present Value Cost	<u>\$ 35,056,119</u>	<u>\$ 39,399,179</u>
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Net present value of ongoing costs (25 yrs @ 4%)	<u>\$ 16,161,511</u>	<u>\$ 19,373,536</u>
Overall Present Value Cost	<u>\$ 34,911,511</u>	<u>\$ 39,225,832</u>
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Net present value of ongoing costs (50 yrs @ 4%)	<u>\$ 22,223,966</u>	<u>\$ 26,640,875</u>
Overall Present Value Cost	<u>\$ 40,973,966</u>	<u>\$ 46,493,171</u>

As can be seen from the summary above, it will cost at least the same amount and potentially quite a bit more in up-front capital costs to renovate and keep the existing three buildings as opposed to building a new integrated facility and selling the three.

But, more significantly, the long term costs for the renovations option are substantially greater both in the 25 year time horizon and the 50 year horizon than the build new option. Clearly, it is in the best interests of our customers to proceed with the new facility.

2) Loss of Business in the Downtown Core

Council expressed concern that vacating the Queen Street office will take approximately 40 jobs out of the downtown core of the city.

The Queen Street building will be very attractive to businesses wanting to expand or looking to consolidate into one location. Furthermore, developers have also expressed interest in this building in the past.

It is clear there is no reason to expect that the building will remain empty. The building will most likely be occupied with the same or more numbers of people as there are now.

3) Impact on rates to customers

Based on the cost analysis above, if we include provisions for LEED construction in the renovations option, the immediate cost to customers for the renovations option will be more costly than to build new. The estimated cost is approximately \$1.50 per month on each of the electric and water bills.

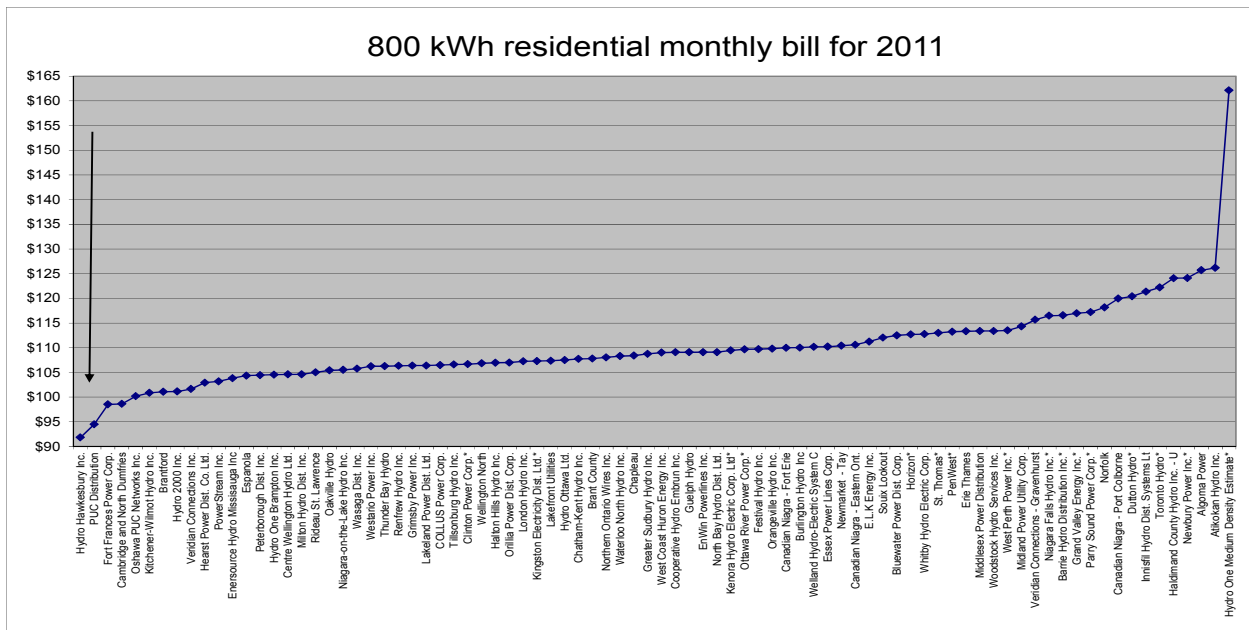
However, in all cost scenarios, the renovation option will cost customers more than \$1.50 per month when you factor in the ongoing operational costs regardless of the time frame considered, either for 25 years or for 50 years.

Just to be clear, the cost option here is not \$0 versus \$1.50 per month. Either option will cost customers about \$1.50 per month. Something has to be done now as the status quo is not acceptable.

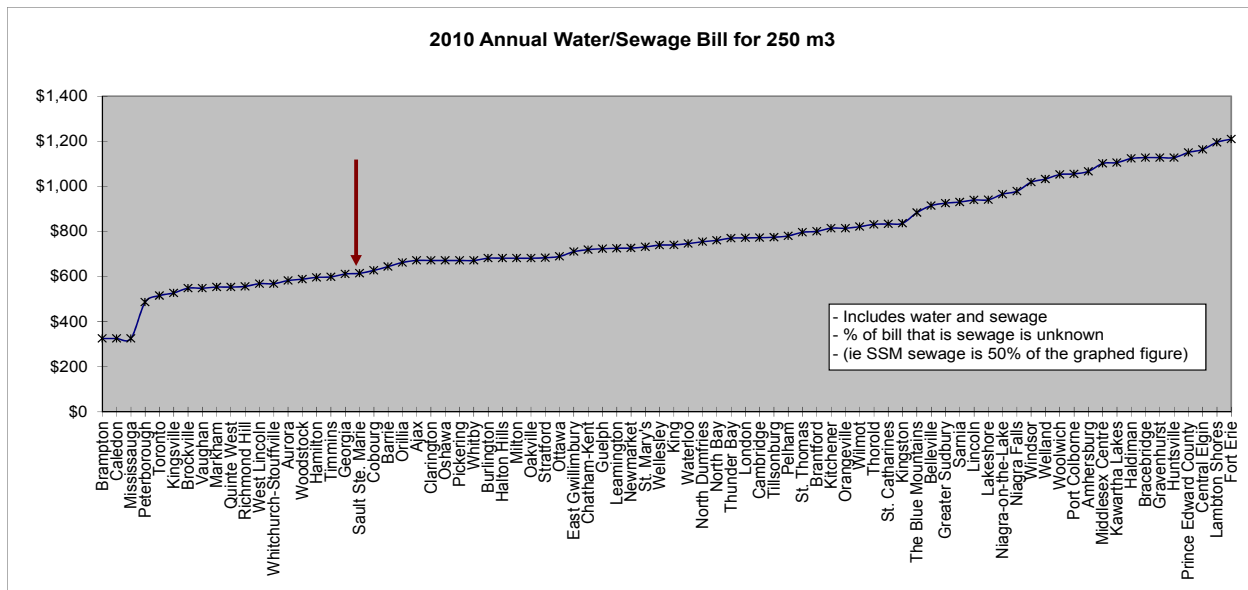
Currently, PUC customers pay the second lowest rates in the province. It should be noted that, for every dollar PUC collects from its customers, 80 cents is turned over to the Province to pay for the energy consumed and to support the transmission grid. Only 20 cents stays in Sault Ste. Marie to cover all PUC's costs.

The chart below is derived from information published by the Ontario Energy Board and compares the "typical" monthly residential customer bill for all utilities in Ontario based on 2010 rates. This includes all charges related to supply and delivery of electricity (i.e. Electricity, Delivery, Regulatory and Debt Retirement Charges).

The down arrow on the left side of the chart identifies the PUC bill. This chart is derived from data published by the Ontario Energy Board.



Also, with respect to the water bill, PUC customers compare well with other cities across the province. The chart below compares the combined water and sewage annual bills for 83 cities across the province and is provided annually by the consulting group BMA.



4) Adequacy of Asset Base of PUC Distribution to absorb \$23.5 million asset addition

Concern was raised at the August 15th meeting regarding the adequacy of PUC's asset base in relation to taking on such a significant capital addition.

PUC Distribution assets amount to \$70,974,390 for the year ending December 31, 2010. PUC Inc. which is the parent company to PUC Distribution asset base amounts to \$91,730,527 as of the same year end. In addition, total assets for the Public Utilities Commission, which will also contribute to payments for the new facility, amount to \$74,302,331 at year-end 2010. Therefore the total asset base that will support the \$23.5 million expenditure amounts to \$166,032,858.

The adequacy of PUC's asset base in relation to the proposed capital addition is not an issue.

5) Ability to Recover Cost in OEB Rate Hearing

Concern was also raised about the level of risk associated with seeking OEB approval to recover the cost of the building through electricity rates. One needs only look at a recent ruling by the OEB on a similar application by a similarly sized utility to get the answer.

In 2007 Waterloo North Hydro (WNH), an electric only utility, embarked upon construction of a new Administration and Service Centre building. WNH has 51,000 customers and the new facility cost \$23.6 million compared to the renovation option costing \$18.2 million. The utility cited very similar circumstances as those of PUC in relation to their needs and justification for a new facility in that they had outgrown the existing facility. But their building was only 30 years old.

Their key argument for building a new facility instead of renovating the existing was that they would realize significant efficiencies from a modern, energy efficient building and provide energy leadership in the community by building to the LEED standard. They performed a similar analysis as we have, and came to the same conclusion, that it is more cost effective in the long term to build an efficient facility rather than renovate existing outdated facilities.

WNH presented their business case to the OEB, just as we will make our case to them, and received approval. There is no reason to think that PUC Distribution will not be successful.

Furthermore, WHN required rate approval to cover the entire cost of the new building. We only require rate approval for approximately 50% of the total since the other 50% will be paid by the water utility. On a per-customer basis, we have 58,600 combined water and electric customers while WNH only has 51,000 total customers.

6) Why have buildings been allowed to deteriorate?

The fact is the buildings have not been allowed to deteriorate. The Queen Street building is in excellent condition. The Trbovich and Murphy Centres are also in good condition. The issue is that PUC has outgrown the buildings and the deficiencies noted herein are deficiencies related to PUC needs today and in the future versus what the buildings can offer now. Major expenditures have not been made premised on the financial analysis which favors the build new scenario.

As we continue to grow the capital works programs to address deteriorating infrastructure, we have added and will continue to add additional personnel to carry out the work. In addition, we need to construct the facilities required to support the additional staff and associated support systems.

7) Why not use the \$23.5 M to replace infrastructure?

Various people have commented the PUC should use the money to replace the aging infrastructure.

PUC Distribution intends to borrow \$23.5 M from Infrastructure Ontario at significantly low interest rates to build the new building. This building qualifies for such borrowing. The funds will be borrowed against the physical asset to be built.

PUC Distribution is regulated by the Ontario Energy Board. If we wanted to put \$23.5 million into the distribution system to replace aging infrastructure, we would have to seek OEB approval. The OEB would evaluate the need and look at such indicators as our Reliability Indices (i.e. power outage statistics) that we are required to report on annually. As reported at the August 15th Council Meeting, our Reliability Indices over the past 5 years are in line with the provincial averages and continually improving. Consequently, the OEB would not approve such an elevated level of capital spending on the distribution system as there is no demonstrated need.

Report on Power Outages August 15, 2011

At the Council Meeting of August 15th, PUC reported on the power outages since January 1, 2011 in response to a Council resolution. The resolution was triggered by a rash of multiple outages during the week of July 11th that impacted the east end of the city. We reported on the cause of the outages and noted that the circumstances surrounding those outages were quite unusual. While lightning, equipment failure and foreign intervention were the reasons for the outages, the situation was exacerbated by the unusual and complex configurations of the distribution system required to connect the Black Road solar farms and to complete major

protection system upgrades at the McNabb Street Transformer Station. Due to the unusual temporary system configuration, the outages experienced in July were substantially larger and more extensive than normal.

However, it must be emphasized here again that although the rash of outages our customers experienced during July were due to a variety of reasons, the underlying circumstances were quite anomalous and such a concentration of outages is extremely unlikely to happen again. We have recently completed the solar farm connections and the protection system upgrades at the McNabb Street TS and the system is now returned to normal configuration. The new protection upgrades will result in significant improvement to the overall system reliability.

Cause of Outages

There appears to be some misconception in the minds of our customers in relation to the primary cause of power outages in Sault Ste. Marie. There seems to be a generally accepted opinion that all outages are due to failure of aged infrastructure. This is definitely not the case and it is important to clear up this misconception now.

Our report on outages presented to Council on August 15th identified the various reasons for outages experienced since January 1, 2011. Weather events were responsible for 23.6% of the outages and scheduled work for 21.8%. Failed underground connectors caused 16.4% of the outages, 10.9% occurred because of failed disconnect switches and 7.3% due to failed insulators. The remaining balance of outages resulted from miscellaneous causes including defective equipment, undetermined causes, animal contact and vehicle collisions.

A review of outage data over the past 5 years indicates that equipment failure has typically accounted for approximately 40% of all outages. The second largest contributor has been trees on lines which has varied from 7% to 40% of total outages. Weather accounts for the bulk of the balance of outages, either as strong winds that cause overhead connectors to fail or lightning strikes on overhead lines.

But equipment failure includes failure due to defective equipment, such as the disconnect switches and insulators identified in the August 15th report to Council, and failure due to age deterioration. Typically, defective equipment accounts for approximately half of the equipment failure outages. So, in summary, approximately 40% of all outages are due to equipment failure of which approximately half (i.e. 20% of total outages) are due to defective equipment and half (i.e. 20% of total outages) are due to aged infrastructure.

For example, in 2010 CAIDI, which is the average outage duration that a customer experiences, was 45 minutes. If we could eliminate all aged infrastructure related outages (note \$23.5 million will only replace a small fraction of total infrastructure), the maximum improvement the customer would see is 9 minutes.

In addition, recently we hired a Forestry Technician with a dedicated focus on vegetation management. This greater level of attention to trees in proximity to lines will provide significantly improve reliability in the near future.

Capital Program to Address Outages and Infrastructure

The following table summarizes approximate numbers of the various components that make up the city's electric distribution system.

Asset Description	Approx. Qty
Distribution Transformers	5,500
Disconnect Switches	8,500
Lightning Arresters	10,000
Insulators	60,000
Distribution Poles	20,000
Underground Cables (equivalent 3-phase meters)	115,000
Overhead Wires (equivalent 3-phase meters)	600,000

Failure of any **one** of these items will normally cause a power interruption. Power outages are inevitable on a system of this magnitude. It is technically unrealistic and financially prohibitive to provide un-interrupted supply to every customer in the system at all times.

PUC recognized the need to address increasing outages sometime ago and started a systematic effort, approximately eight years ago, to gradually ramp up the capital spending on infrastructure renewal and replacement of defective switches and insulators. We have, over the past 8 years, undertaken to ramp up annual expenditures on capital works and system maintenance in a responsible and realistic manner. With limited resources in the area and in order to minimize the impact to customers, we have been gradually accelerating expenditure in these areas.

We have steadily grown the capital works program from \$2.76 million in 2004 to \$9.63 million in 2011. In order to achieve the higher levels of capital works, we have increased Engineering staff from 9 in 2004 to 15 in 2011 and Line Department staff from 19 to 29. Our long range plan calls for further increases in capital spending, with the associated addition of staff to support the higher level of activity.

But skilled, qualified powerline maintainers, engineers and technicians are not readily available. It takes time to develop the internal capacity to handle any substantial increase in capital works. Even if we had \$23.5 million to apply to capital works, we do not have the resources to carry out such a high level of construction. Furthermore, without additional qualified staff, we could not even contract out the work.

So it is unrealistic to think that the \$23.5 million required for the new building should be redirected to capital works. We believe we are providing a balanced approach to addressing the infrastructure needs. We believe we are taking a responsible and realistic approach that minimizes the financial impact to our customers.

Outages will continue to decline and reliability will continue to improve, but it is a long process that never really ends. It took more than 75 years to build the system we have today. One should not expect to replace it in a short time frame such as 2 or 3 years.

8) Timing of project is not right !

PUC staff first identified a need to upgrade the C.J. Murphy Centre in 1990. R.V.B Burgoyne and Proctor & Redfern Ltd. were hired to investigate and document the needs at that time and

to propose solutions. Based on their findings, the process was initiated to obtain Commission approval and to proceed with detailed design and tender.

After several years of analysis and planning, the Commission issued a tender call in 1995 to renovate the Murphy Centre. But the bids came in substantially over budget, the main reason being that the building was to be heated electrically with a ground source heat pump system. The design was re-visited and the Commission was almost ready to re-tender in 1998. Then came provincial deregulation and uncertainty of what the future would hold for the electric utility. So the plans were again put on hold until after deregulation and restructuring of the PUC.

In 1998 the Commission purchased the Nicholas Trbovich Centre from the City and used the garage portion only to store part of the fleet and for work shops. The offices section remained vacant. In the meantime, the Trbovich Centre provided additional space to relieve some of the operational pressures of limited space at the Murphy Centre.

In 2003 PUC Inc. obtained shareholder approval to proceed with preparation of design drawings and construction estimates for an extensive renovation of the Murphy Centre. Several other options were considered including: an extension of the Service Centre to accommodate all PUC office staff; less extensive renovations to the Service Centre with retention of the Trbovich Centre; and, a new integrated building.

When estimates were provided after design drawings had been prepared the cost of renovations to the Service Centre increased substantially over the original estimate. Given the significant cost increase and other more pressing issues at the time, further consideration of building renovations was not pursued.

In 2007 MGP Architects Engineer Ltd was asked to provide new estimates for a renovated Service Centre and for a new integrated corporate building. The cost analysis indicated a new integrated facility was the best option.

On September 27, 2010 the shareholder passed a resolution giving approval for PUC Inc. to proceed with the construction of a new building with a budget of \$22,180,000. In June 2011, tenders for construction were issued and five bidders submitted proposals.

The bids were all very close indicating a high degree of competition. The low bid came in at \$20.2 million which was \$2.8 million less than the pre-tender estimate of \$23.0 million.

So, after some 20 years of analyzing options and trying to find solutions, we now have a reputable contractor ready to start construction immediately, a bid price that is \$2.8 million under the estimated cost, and borrowing ready to go with Infrastructure Ontario at a very low rate for 25 years.

PUC staff have been very understanding and patient over the many years of stop and go. Since about 2003 the cramped conditions at the service centre have gotten worse with the addition of more staff required to address the increasing capital works in both the water and electric utilities.

This new building will benefit PUC and the City of Sault Ste. Marie for the next 50 years. This new building is necessary to support the operations of PUC for near and long term future.

Is the time right? Absolutely, there is no better time than now.

9) What is the financial benefit to the City as sole shareholder?

Construction of this facility will add \$23.5 million to the value of PUC Inc, which the City owns. Consequently the City will benefit from this construction with an increase in the assets it owns by \$23.5 million.

Furthermore, this project presents a unique opportunity for PUC and the City that will not be repeated. Stimulus funding has dried up some time ago and contractors are looking for work; witness the competitive bidding received. This project will provide construction jobs for many workers in Sault Ste. Marie over the next 18 months.

In addition, the new facility will provide increased property taxes for the city that will benefit all taxpayers. Taxes on the new building, based on the commercial rate, are anticipated to be \$990,000 per year, while taxes on the existing facilities that are to be sold, totaling approximately \$250,000 annually, will continue to be paid by the new owners. Assuming the city’s budgetary needs do not change, the burden on all taxpayers will be reduced by the \$990,000 that will be added to the city coffers by PUC.

It should also be noted that property taxes on the renovated Murphy Centre would also be substantially higher than the present amount and quite comparable to the new building. The table below summarizes current and estimated taxes for the different buildings and scenarios. Estimated taxes are based on the 2011 Commercial tax rate and the estimated building evaluations.

Murphy Centre	\$ 108,077
Trbovich Centre	\$ 61,270
Queen Street	\$ 80,974
<hr/>	
Total Existing Taxes	\$ 250,321
Renovated Murphy	\$ 679,994
Proposed New Build	\$ 989,767

Also, it should be noted that property taxes are in addition to the \$24.3 million in interest and dividend payments already made by PUC Inc. to the City of Sault Ste. Marie since the year 2000.

10) Why not relocate Engineering to the Civic Centre?

One of the key drivers for an integrated facility has always been the benefits, both financially and operationally, associated with housing all departments under one roof. This is particularly true for departments that are closely linked through regular, daily interaction. Engineering at the PUC is intimately involved with every aspect of daily and long term activities with the Operations Departments housed at the Murphy Centre.

When Engineering was located at the Queen Street building, the cost of lost productivity, travel time and vehicle costs associated with Engineering staff traveling up to the Service Centre or Operations staff traveling to Queen Street was a significant expense. That cost was estimated at \$80,400 per year. Now that Engineering has relocated to the Trbovich, this cost has been minimized. However there still remain associated costs related to separation from the Administration departments that are still located at Queen Street.

If Engineering were relocated to the Civic Centre, the detrimental effects of physical separation would in fact be significantly greater than when they were at Queen Street. Not only would they be separated from the Operations group, but they would also be separated from the Administration group. This is not a feasible option.

11) Why not build a shared service garage with PW&T?

The suggestion has been raised that given the similarities of equipment operated by both PUC and PW&T, that it may make financial sense to build a joint facility that would be shared by both groups. What would be the implications of such a setup and is this option worth pursuing? This option raises many questions. Some immediate questions that come to mind include the following:

How many service bays are required?

The PUC needs 4 bays to maintain its equipment. The City has a far greater number of units than PUC that need to be accommodated. Would an additional 4 bays be enough? Would the cost of the facility be twice the price or would it be more? It certainly would not be less than the 4 bays that PUC plans to build.

So how would economies of scale be realized? A shared facility does not mean that the 4 bays proposed in the new facility would be shared by the two organizations. PUC has specific issues to address that dictate the design of the garage and the number of bays required. PW&T, although similar in that it operates large equipment, has quite different needs.

The proposed design of the new building incorporates the service garage within the main building so as to share common walls. This in itself results in savings both for the initial capital cost to construct and in the ongoing costs to heat and maintain.

How would the garage be shared?

Who would decide who uses what at what time? Would the PUC mechanics work side-by-side with the City's mechanics? Or would each party have its own self-contained area and be free to plan and carry out its own work?

Would tools and equipment be shared too?

Would each party have its own tools and equipment or would equipment be purchased jointly and used jointly? If jointly, then who would decide who gets priority? What if one party uses equipment and breaks it, who would replace it?

But how would economies be realized here with respect to tools and equipment? If you have 50 units to maintain and it requires 2 mechanics utilizing 5 particular pieces of equipment to maintain those units on a regular basis, it is not feasible to double or triple the number of units to be maintained without at least double or triple the amount of equipment and mechanics. So where are the economies of scale?

How would spare parts and inventory be handled?

If we were to share work areas and tools and equipment, how would we account for spare parts and inventory of consumables? How would we account for oil and grease used by either party if it all comes from one source? Who would procure and manage inventory of spare parts?

Who would administer all this?

Based on the above questions, one big question comes to mind. Who is going to manage all this? Clearly existing staff have their hands full now. There is no spare capacity to deal with a higher level of administration that would be required to organize the logistics of using a joint facility. So, would additional staff be required to administer the operations? Where would the cost savings be?

The foregoing discussion is only a brief summary of the questions that would have to be answered before the feasibility of this option could be determined. But such an exercise would be pointless because this proposal misses the fundamental issues underlying this whole debate.

This report was prepared in order to clearly identify the issues driving the need for major upgrades to the Murphy Centre and to explain the business case for a new integrated facility. The service garage in itself does not trigger the major renovations identified above, but rather is just one of the many components of the overall picture that leads to the conclusion that a new integrated facility is the best option, both financially and operationally.

Renovations to the Murphy Centre identified herein are required, regardless whether a shared garage is built or not. If we renovate the Murphy Centre, we must also renovate the Trbovich and Queen Street buildings in order to keep all three. The costs analysis above clearly demonstrates that a new integrated facility is the best option.

We have a very competent contractor ready to start construction at a cost that is \$2.8 million below budget with a low interest loan ready to go. If this contract is not awarded, the \$1.44 million that has already been spent to-date will have been totally wasted, with no positive outcome at all.

13) Additional questions submitted September 2, 2011

Most of the questions submitted to PUC September 2 are answered above. Below are answers to several additional questions raised.

PUC Credit Rating

BDR suggested in their report of 2007 that PUC should obtain a credit rating to enable PUC to borrow in the capital markets to fund capital expenditures. This has not been necessary as financing was and is available through Infrastructure Ontario at attractive rates and terms without a credit rating.

Labourer's International Grievance

It is our understanding that Labourer's International Union filed a grievance with the City and that the City has denied the grievance.