April 22, 2019

RE: Summary of interview and survey research and analysis for Heat is On campaign.

To whom it may concern,

This note summarizes the key findings to date of a survey undertaken in support of PSAC's Heat is On campaign.

When I was initially engaged by PSAC to assist in assessing the Energy Services Acquisition Program (ESAP), the objective was to analyze the Program's business case[1] and any other financial forecasts undertaken by the government related to the Program. However, given the unavailability of this information, I suggested that we draw on the expertise and knowledge of PSAC members to help us assess the viability and desirability of ESAP.

I conducted a series of interviews with PSAC members who work in heating and cooling plants in the NCR and put forward a short survey to these members using Survey Monkey. In total, six members participated in the interviews and survey; I interviewed four individuals and two people responded to the survey distributed via Survey Monkey. This note summarizes key findings from the interviews and survey and contextualizes these findings within the claims put forward by the Government in its business case for ESAP dated August 25, 2016.

The goal of the survey was to explore two key themes related to ESAP, the proposed private-public partnership of the federal government.

1. **HR "Threat"**. In the government's business case for ESAP of August 25, 2016, it presents a "SWOT" analysis (an analysis of strengths, weaknesses, opportunities, and threats) of the "current energy infrastructure based on long term strategic planning requirements" (p. 38). The government identifies human resources problems as a potential threat to the viability of the status quo, stating that it faces a "[r]ecruitment challenge with higher private sector wages and older HR base with significant retirement forecasted in the short term".

2. **Private vs Public Maintenance and Operation (M&O)**. The business case of August 25, 2016 claims that privatization will allow the Crown to "[l]everage the private sector's innovation, capacity and expertise" (p. 45). The government does not substantiate these claims, particularly as they relate to maintenance and operation. PSAC members have limited knowledge of how private-sector M&O differs from that of public service provision, but the survey does seek to illuminate examples of public-sector service excellence so that a fair comparison between private and public sector service delivery can be made.

The findings of the interviews and survey are expanded upon in the following sections.

Summary of Findings

[1] The business case was eventually received, but with all financial information redacted, rendering it useless for a financial analysis. I do refer to assumptions and conclusions made in the case.

1. HR "Threat"

The ESAP business case provides little detail on the HR "threat" the government has identified. Appendix Z of the business case may contain information valuable in understanding the past and current HR situation of the plants in the NCR, but this appendix was not provided by the government.

The business case states that the government projected that 72% of stationary engineers working at the relevant plants would retire by 2015, suggesting a staffing shortfall of 14 staff. Indeed, at present there are 36 stationary engineers working at the relevant plants, consistent with the projected attrition rate of 72%. These numbers suggest that there has been a consistent understaffing over a relatively long period of time.

Responses from members who participated in the survey indicate that the number of stationary engineers has slowly decreased over time due to outsourcing, particularly the outsourcing of major maintenance work.[2] Staffing shortfalls are demonstrated by the amount of overtime a typical engineer works in a year. Members have said that overtime averages about 200-400, even up to 500, hours a year per engineer.[3] One member described the current level of staffing at the Cliff plant as a "skeleton crew".[4] As one member pointed out, it is important to note that technological change may also be a factor in reducing the need for staff.[5] However, technological change does not explain the large amounts of overtime many staff currently work.

Members indicate that it is possible to turn down overtime.[6] However, they also pointed out that exhaustion could have serious consequences for safety, by making it more likely for engineers to make a mistake or hurt themselves.[7] One member agreed that if the government had hired more engineers in previous years, there would certainly be less overtime worked by current engineers.[8]

Contract and agency workers had been hired at times to fill staffing shortfalls.[9] While several engineers have worked on contract or term positions for the public service, many were never hired on an indeterminant basis.[10] One member identified a general, long-term trend of not bridging student engineers into indeterminant positions.[11] Members have said that the last indeterminant staff member hired was three years ago,[12] and the last time an experienced engineer was hired was seven years ago.[13]

A contributing factor to the chronic understaffing is the very low salaries that have historically been offered by the government compared to the private sector. Despite the union having

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[2] Survey Monkey, Respondent 3
[3] Survey Monkey, Respondent 1.
[4] Survey Monkey
[5] Respondent 4
[6] Survey Monkey
[7] Respondent 3, Respondent 2.
[8] Respondent 2.
[9] Respondent 4, Respondent 3
[10] Respondent 3
[11] Respondent 3
[12] Survey Monkey
[13] Respondent 2.

negotiated a substantial wage increase a few years ago,[14] wages have still not caught up to the private sector. In 2005, one member had earned $26 in the private sector and took a pay cut to $18 or $19 to join the public service.[15] Another member described private sector wages years ten years ago being about $30, compared to $17 in the public service.[16] This large disparity between private and public sector wages did not always exist. One member stated that in the mid-1980s, the public sector paid only $1.50 less per hour than the private sector.[17]

Members indicated that had wages been higher, Public Works would have been able to retain more engineers and there would not be a staffing shortfall now.[18] As one member put it,

> *"there's been guys that we hired here that were so good. They stayed here for a short time studied for their second-class [certification]. And they left – they went off to the big bucks."*[19]

The government is right to see the current HR situation as a threat to the viability of current operations.

With fewer staff, many are required to work overtime. Members emphatically agreed that engineer exhaustion may lead to longer response times, negatively impacting service delivery, and pose safety risks. Having too few people on staff also poses a safety risk if engineers are undertaking potentially risky tasks with complex machinery: "[…] if you try to do a job here and you don't have enough staff, then it becomes dangerous […] on the high risk stuff. If the team is too small, then it becomes dangerous."[20]

The information provided in the business case and by survey respondents suggests that there has been a consistent shortage of stationary engineers over a long period of time. Members' observations suggest that this staffing shortfall and its consequences have resulted from the decisions of management. Lastly, the government has identified its current human resources situation as a threat to current plant operations. However, it points out that attrition through retirement will "address the majority of the HR impact" of privatizing M&O of the plants (P. 204).

2. Private vs Public M&O

The government claims that privatized provision of building heating and cooling offers several economic benefits. In the case of maintenance and operation of plants, the government's claim that the private sector offers "accelerated delivery of services" is most relevant (p. 46).

As mentioned previously, the government provides little evidence in the business case that private service delivery leads to better quality service. However, members have indicated that over the last 35 years, the government has been slowly contracting out plant maintenance and operation to the private sector.[21] It is not clear whether the public has access to performance metrics of these firms so that the claims of the government can be verified. The lack of evidence

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[14] Respondent 2
[15] Respondent 1.
[16] Respondent 3
[17] Respondent 2.
[18] Respondent 1, Respondent 2.
[19] Respondent 4
[20] Respondent 4
[21] Respondent 3, Survey Monkey.

may speak to the transparency and accountability problems inherent in outsourcing to the private sector.

The ability of the private sector to provide better quality of service may be uncertain, but it is clear that private sector contractors have an incentive to cut corners in order to minimize costs. One member very familiar with health and safety has observed several instances of corner-cutting by contract maintenance firms:

> *"[S]ome guys just want the money so bad that they bid so low that they get the job, and then that's where the problem lies. That's the bullshit that I've dealt with. That's the stuff that we should talk about, okay? Because when you get a low guy […] that comes in, they don't have the engineered devices [right safety equipment]. […] So systemically, that's where some of the issues start. They're bringing in the crap, and they're untrained."*
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> *[…] I've gotten security and had people kicked off site. And […] 99.9% of the time, it's because I found a [private] contractor doing something like working at heights without fall protection. So that's a big problem, and it happens. […] So, what happens is when you work for private company, all you are worried about is money. What happens is that now you've got a time crunch, right?"*
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> *[…] They're not safe. They're under the gun to get the job done quick, right there trying to make a buck. Because that's all they got to go home and feed their kids. Right? […] I look at it from the outside. I'm like, Oh, this is brutal. I got this uneducated guy here, not even bothering to follow the health and safety things. And now I have to yell at him because he's going to get himself friggin hurt."*
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> *[…] Honestly, [when I was working health and safety] I was like a policeman."*[22]

The maintenance firms described here may not be the same firms that the government is considering contracting plant operation out to as part of ESAP, and members pointed out that some firms are better than others with respect to safety and service excellence. However, cost-cutting is inherent in a profit-driven model of service delivery. No party can say with certainty whether the types of safety infractions described above will or will not occur if maintenance and operation of NCR plants is completely contracted out to the private sector. The examples described here represent a worst-case scenario. Furthermore, if maintenance and operation are contracted out to the private sector, the public will have limited means to oversee the operation of these plants due to transparency limitations (access to information, etc.).

Another potential issue with private sector management and operation of plants relates to scheduling practices. One practice is "pooling",[23] where management draws engineers from a "pool" and assigns them to work in a different plant every week or so. Another member also indicated that scheduling in the private sector can sometimes be unpredictable. Workers may be booked for multiple night shifts in a row, or their schedule may change with minimal notice.[24]

All members surveyed agreed that pooling is problematic because it undermines an engineer's ability to build deep familiarity with a plant's machinery. Having a deep familiarity with the plant

[22] Respondent 4

[23] Respondent 5.

[24] Respondent 1.

one operates in is key for providing fast service and in preventing potential safety issues. Engineers employed by the public service work in the same plant every shift, allowing them to become familiar with the plant and develop better expertise. Even private sector M&O firms recognize the expertise of the public service workers in the NCR heating and cooling plants, as stated in the August 25, 2016 business case: "The feedback gathered from private sector during the first two RFIs indicates keen interest in the knowledge, skills and experience of PSPC staff" (p. 204). As well, unpredictable scheduling is also problematic because it undermines an engineer's ability to get adequate rest.

Lack of familiarity with a plant and inadequate rest may not only impact the quality of service but can also undermine safety. Members emphasized that operating heating and cooling systems can be very dangerous work, and that all people in this trade take their jobs seriously and do their best work. It's "genuinely terrifying when things go wrong",[25] making it imperative that engineers develop a deep understanding of the plants in which they work and have enough rest to respond quickly to issues as they arise. It is not clear how prevalent pooling and unpredictable scheduling are in privately operated plants in the NCR, but members have reason to believe these practices have taken place.

In fact, members have shared that in the mid-80's the public service contemplated implementing pooled scheduling. At the time, members were able to push back against the proposed change, preventing the scheme from being implemented.[26] The actions of the union at the time highlight the importance of having an organized workforce operating these plants with sufficient influence to act as effective stewards of the infrastructure. With the loss of solidarity and anti-reprisal protections offered through a unionized environment, there is the potential for private-sector M&O to be less efficient and less safe.

The two themes addressed in this note speak to just some of the benefits claimed by the Government. Unfortunately, we could not address all the claims made by the Government regarding ESAP since we were unable to acquire sufficient information about the project through access to information requests. Had we access to more detailed information, we likely would have been better positioned to assess the validity of the Government's claims, with the ultimate goal of engaging in a rigorous, transparent discussion about the project to ensure that the concerns of both union members and members of the public are addressed.

Regards,

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[25] Respondent 4

[26] Survey Monkey, Respondent 2.