

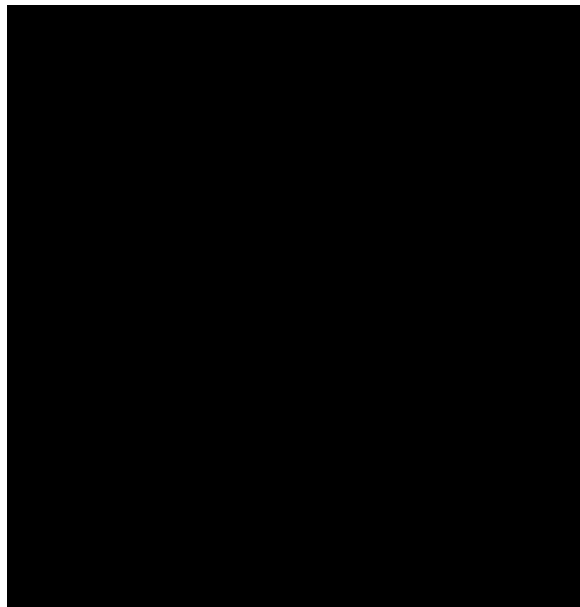
1-CCC-6

Re: Ex. 1/p. 33

London Hydro has chosen to own and operate its own Regional Network Interface and smart-Meter head-end system. London Hydro's evidence is that this approach has avoided an estimated \$610,000 per year as part of this in-sourcing arrangement. Please provide a detailed breakdown of this calculation. In addition, please explain how the \$415,000 in commercial customer community cost savings were derived.

LH Response:

The calculation of the estimated savings as a result of London Hydro's in-sourcing strategy is based on actual commercial quotes from a smart meter vendor that compares the costs between our current internally managed state against the quoted cost of a fully managed service and is provided below:



For commercial customers, London Hydro was unable to use the existing smart meter system to meet the requirements for these interval metered customers. Thus, London Hydro has provided options to customers by supporting a variety of communications methods. These methods include POTS (telephone), London Hydro provided cellular network, or modems that leverage a customer provided internet connection. The \$415,000 in estimated aggregated total savings for these customers was made by

calculating what the cost would have been if the customers otherwise paid for a monthly commercial telephone line.

1-Staff-4

Ref 1: Exhibit 1, p. 33

Ref 2: Exhibit 2, p. 131

For smart metering operations, London Hydro uses an “in-sourcing” strategy, one aspect of which is to own and operate its own Regional Network Interface and Smart Meter head-end system. London Hydro estimates \$610k in annual cost savings from its strategy.

- a) Please provide further details on this strategy; what are the other aspects aside from the Regional Network Interface and Smart Meter head-end system?
- b) How did London Hydro calculate the estimate of \$610k in cost savings?

In reference 1, it's noted that, as part of its in-house capabilities, London Hydro offers services to external clients for meter testing, certification and resealing, which results in \$40k annually in cost recoveries.

- c) In reference 2, London Hydro states that its revenue from meter sealing services is \$100k annually. Please reconcile the two amounts.

LH Response:

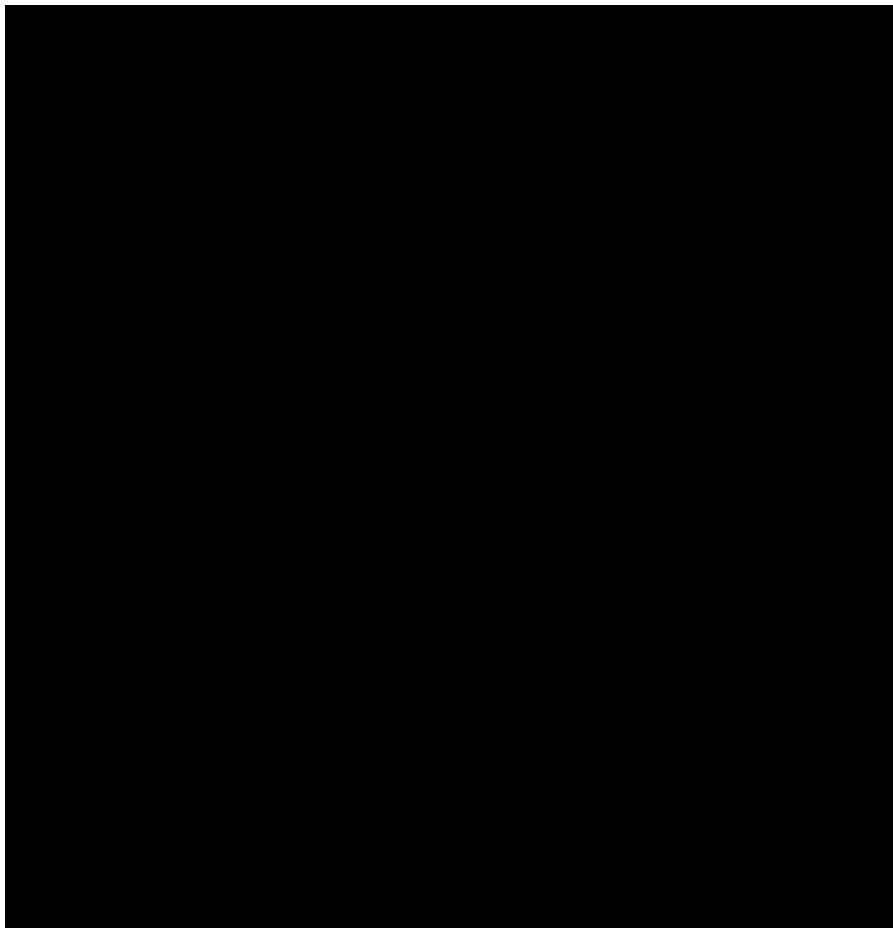
(a)

London Hydro and its customers achieve significant benefits beyond just the external expenditure reductions by operating in-sourcing systems; by being able to achieve a deeper integration between the AMCC head-end systems and other London Hydro systems and processes. Examples within the metering area include being able to more quickly identify and respond to meter failures (communications and other hardware failures) and to exchange meters without impacting customer billing or experience. Further custom integrations with VEE (Validation, Editing, and Estimation) processes with the MDM/R allows data to be automatically corrected, where there have been gaps in communication when there is a power outage at a customer location, for example. Outside of meter measurement issues, other operational integrations and processes have been created to realize further value. Examples of this include voltage monitoring that validates if transformer tap changes are made to provide compliant system or seasonal voltage quality to customers; and outage management and outbound customer

notifications that are driven off of meter power-down last-gasp and first-gasp restoral alarm notifications. In addition, London Hydro has fully integrated hot-socket alarms into the Control Room and an emergency response shift truck crew can be dispatched to catch and prevent potential customer meters from overheating as meter fires are often due to loose meter base connections. Having the metering systems and internal expertise fluent with the technical characteristics of the systems allows for a deeper integration and yields more value to London Hydro and our customers.

(b)

The calculation of the estimated savings as a result of London Hydro's in-sourcing strategy is based on actual commercial quotes from a smart meter vendor that compares the costs between our current internally managed state against the quoted cost of a fully managed service and is provided below:



(c)

The amount referenced in Exhibit 1 on page 33 represents the 2017 OEB Approved amount for meter testing, certification and resealing. Beginning in 2017, volumes for this type of service increased and the new budget for the 2022 Test Year is \$100k which is referenced in Exhibit 2 on page 131.

2-Staff-32

Ref 1: Exhibit 2, Appendix 2-3

The EY report on London Hydro's potential CIS upgrade options provides a rough cost estimate (+/- 30%) of \$14.5M - \$18.5M one-time implementation costs for migrating to SAP S/4 HANA.

- a) How did London Hydro forecast the total ACM cost of \$18.5M? Please explain how London Hydro arrived at the highest end of the range provided by the EY report.
- b) Please provide a breakdown of each component of this project.
- c) Has London Hydro obtained quotes or any engaged in any competitive pricing process for the materials/labour required for this project?
- d) The EY report notes \$0.4M - \$0.5M in ongoing operating costs. Are these amounts included in London Hydro's 2022 OM&A budget?
- e) What is the anticipated support lifetime for the S/4 HANA platform?
- f) Has London Hydro considered the option of jointly developing a CIS solution with another electricity distributor so as to share the costs?

LH Response:

a)

To develop the forecasted ACM costs, London Hydro considered the EY report and the variety of costs which will be incurred:

- External labour makes up a significant portion of the total forecasted ACM costs and it is anticipated that contractors will be charging higher rates going forward. London Hydro has experienced a significant increase in the costs of external labour from 2020 to 2021, demonstrated by the rate cards from London Hydro's vendor of record list, which have generally increased by 10% - 15% in the past year.
- In addition, it is anticipated that there will be an ongoing increased demand for IT resources as a result of the COVID-19 pandemic, as several companies have

delayed or deferred projects, and will now be in the market for contractors. This demand is anticipated to drive up the cost of external labour even further. This could also impact internal labour, as LH will have to remain competitive in its compensation rates in order to retain talented IT personnel.

- There is a limited number of vendors with S4/HANA expertise and utility experience. Allocating adequate budget for specialized and skilled resources for the Design Authority role will help minimize customization and align product capabilities.
- With ongoing supply chain disruptions due to the pandemic, it is anticipated that the prices of the necessary hardware will be higher than originally estimated at the time of the initial report.

It is prudent to weigh the above-mentioned costs against the significance of a high-impact system like this. London Hydro's CIS/CRM system is a vital system, as it maintains customer information, helps ensure compliance to regulatory requirements, contains consumption data, drives customer billing and calculations, maintains accounts receivable and payment processing, among other functions. A sufficient budget is necessary in order to ensure a quality solution and avoid any major issues (for example, avoid issues via an extended testing timeframe, utilization of parallel runs).

b)

The \$18.5M cost estimation for CIS Refresh includes: software license costs, external labour costs, infrastructure and related set up costs, travel and living and other sundry expenses, and contingency. A high-level breakdown of cost is provided below:

Internal Labour: ██████████
External Labour: ██████████
Hardware & Software: ██████████
Contingency & Expenses: ██████████

c)

London Hydro issued an RFP for IT advisory resources in September 2021. The contract is expected to be awarded in December.

d)

The change in on-going cost for refreshed CIS solution will be applicable only after go-live in 2023, therefore does not impact the 2022 OM&A budget.

e)

The anticipated supported lifecycle for S4/HANA is 10 to 15 years.

f)

London Hydro has tried in the past to work with other utilities on CIS projects without much success. Most utilities wanted their right-sized CIS system (e.g. Tier 1 or Tier 2 solutions) to align with their internal business processes and requirements. London Hydro will share project experiences with other utilities using SAP to pursue future synergies.

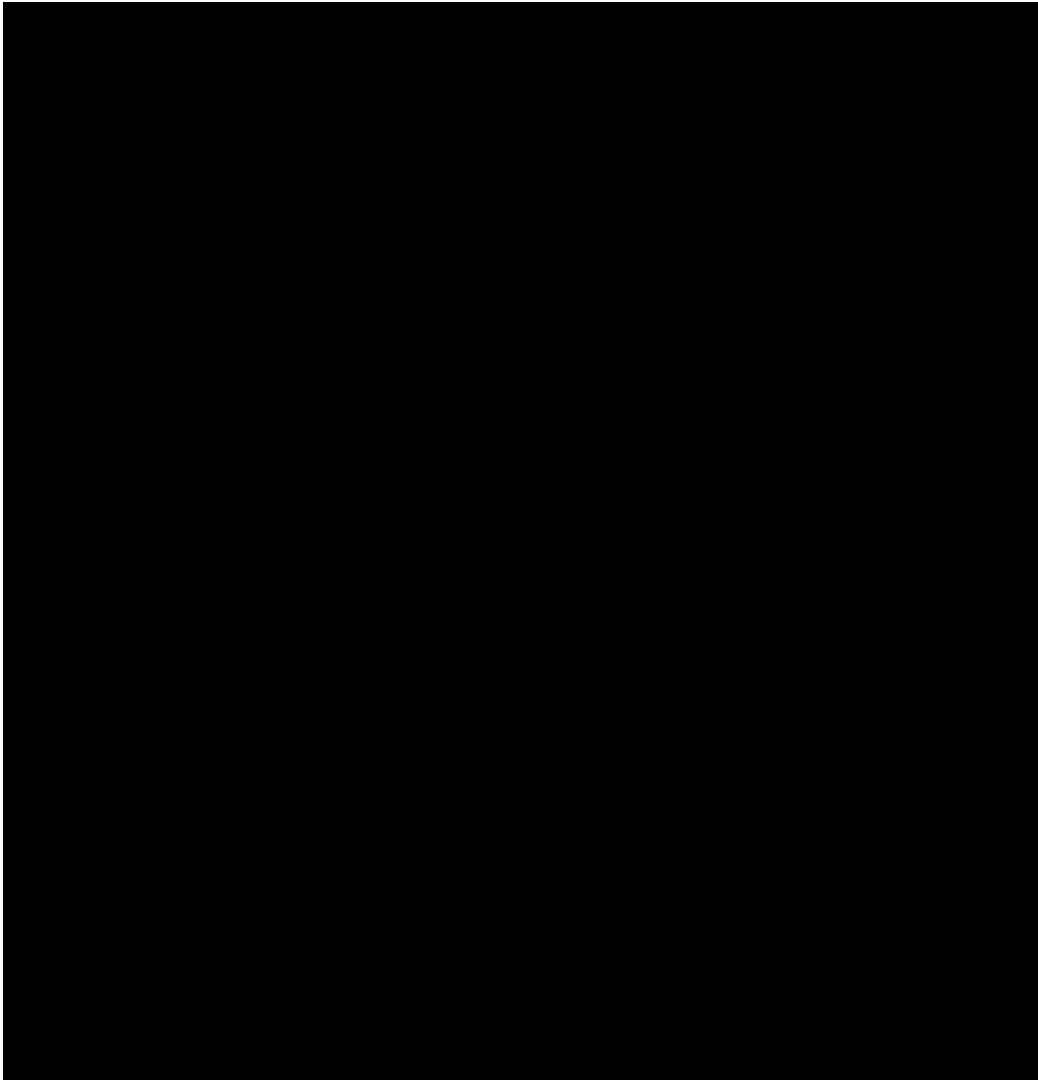
3-Staff-51

Ref 1: Exhibit 3, p. 16

A new customer is expected in the Large Use rate class in the summer of 2022. London Hydro indicates that it will have more information as 2021 closes.

- a) Please provide any information London Hydro has on the expected peak demand and connection date of the new customer.

LH Response:



- b) Is this a new customer, or an existing customer expected to increase usage enough to move up from a lower volume rate class?

LH Response:

This is a brand-new customer

- c) If this is related to the growth of an existing customer, please indicate the customer's current class and historic kW and kWh for all months from January 2017 to the most recent data available. In responding to this question, please consider whether confidential treatment is required.

LH Response:

Not applicable.