

Manitoba Hydro Undertaking #66

If despite the general practice, a utility did engage in a major build process, say one that was to be extended over a long period of time, would it be reasonable or perhaps even expected, given no absolute proof of profitability that would result from the build, at least in the early years, that current ratepayers would bear some of the costs and risks in their current rates.

ICF Response:

There are three issues to address. The first issue is, what did I say regarding building power plants on “spec”, i.e., building speculatively? Actually, what I said regarding this issue amounts to the opposite of that implied by the question. MH’s proposed construction plan is not based on “spec”, but based heavily on long-term contracts, as is recommended. The second issue is, given uncertainty about future conditions, i.e., “no absolute proof of profitability”, would it be “reasonable or perhaps even expected” that ratepayers “bear some of the costs and risks in their ... rates?” It is reasonable, expected, and nearly ubiquitous that ratepayers bear the costs and risks of utility actions (including building power plants). Thus, risk mitigation is important, and MH has performed well in this regard. Third, what is reasonable regarding the sharing of risks and costs between current and future ratepayers? The question seems to raise this issue as well. The allocation between current versus future ratepayers usually involves a recognition that just as current domestic load benefits from past ratepayers, future ratepayers will benefit from their actions. The exact timing of ratepayer payments is a more complicated issue involving two basic options known as: (1) Construction Work In Progress (“CWIP”), and (2) deferral of costs and Interest During Construction (“IDC”) till investment is declared used and useful, and the fact that some benefits accrue immediately, while others occur later. I address these three issues in more detail below.

On the first issue concerning building power plants speculatively, I was not referring to utilities, but rather I was referring to Independent Power Producers (“IPPs”) who unlike utilities lack ratepayers and a franchised service territory. Hence, IPPs cannot be readily compared to utilities. In my testimony (excerpt provided below), I pointed out that IPPs no longer build on “spec” – i.e., they need long-term contracts with utilities to build new power plants.

MR. BOB PETERS: Is it ICF's experience that before an IPP will build an electricity plant to sell the output, those IPPs will want to have firm contracts in hand that will return to them the revenues that will cover their costs of building the power plant?

MR. JUDAH ROSE: Yes, that's a change that's occurred. One (1) of the points we discussed earlier in my direct was that a lot of IPPs built power plants without sufficient long-term firm contracts, and that caused them to go bankrupt. And today they're more likely to require a long-term contract to build a power plant, or the equivalent.

MR. BOB PETERS: They're no longer prepared to build it on spec in the vernacular.

MR. JUDAH ROSE: Yes, that's generally the case. Oh, they're willing but they can't get the financing. Let's put it that way.

MR. BOB PETERS: Or the financing is too prohibitive in terms of their costs.

MR. JUDAH ROSE: I'll go with that one as well. The main thing is it's a different situation than it was ten (10) years ago.

Source: Testimony of Judah L. Rose in Re: Manitoba Hydro's Application for Approval of New Electricity Rates for 2010/11 and 2011/12 before the Public Utilities Board of Manitoba ("Rose testimony"), p.2846

The question from Mr. Peters and my answer are in turn specifically referencing my direct testimony¹ and the September 2009 ICF report² where I discuss the current arrangements for investments in generation in the U.S. power industry (see below). There I make the point that IPP investments in generation not covered by long-term contracts for more than 50 percent of the capacity are no longer happening. Rather, IPPs require contracts covering much of their investment with utilities in nearly all cases in order to build new power plants.

Exhibit 1

Long Term Power Sales: Standard Industry Practice

(Excerpt from Manitoba Hydro Exhibit 55 – Presentation of Judah Rose)

Type	Firm U.S. Capacity (GW)
Utility Ownership	23
IPP with Long-Term Contract > 50% of Capacity	4
IPP Merchant - < 50% of Capacity Long-Term Contract	12
Total Under Construction Capacity	38

Source: Ventyx database accessed on May 5, 2009

- *MH is accelerating the construction of two new hydroelectric facilities, Conawapa and Keeyask, to provide the power under*

¹ See Rose testimony, pp. 2546-2548. See also Independent Review of Manitoba Hydro Export Power Sales and Associated Risks, ICF International, September 11, 2009 ("ICF Report"), pp. 72-73.

² ICF Report, pp.72-73

the proposed new contracts. Generally, three models exist for developing new power plants:

- *Long-term contracting with known or indexed prices*
- *Implicit long-term contracting through a regulated utility franchise, and/or government status. This often involves utilities with integrated structures which provide power on a cost plus basis*
- *Merchant structure with spot sales and primarily short-term contracts and hedges (one to five years)*
- *At this time, new power plant construction predominantly is associated with long-term explicit or implicit contracting. Of 38 GW in the U.S. that are under construction, 70 percent are under long-term contract for majority of their output, or are utility owned (see adjacent exhibit). The remainder is largely units that were insufficiently advanced to have contract information. The trend of long-term contracting is in part a reaction to the problems experienced in the U.S. during the merchant power boom in the U.S. in the 1999 to 2003 period.*
- *Hydro Quebec is also planning long-term contract sales and new hydro development and transmission construction.*
- *Entities heavily reliant on short-term transactions usually lack access to long-term contracting. MH long-term contracting opportunities should be embraced.*

Source: Manitoba Hydro Exhibit 55 (“Rose Presentation”) in Re: Manitoba Hydro’s Application for Approval of New Electricity Rates for 2010/11 and 2011/12, p.40

Setting aside MH’s advantage of having a franchised service territory, even if one were to compare MH’s proposed construction program with that of IPPs, the revenues and capacity associated with MH’s proposed construction program are primarily subject to long-term contracts and/or sales to ratepayers. Even a large portion of revenues on export sales are under long-term contracts. Thus, MH’s approach is consistent with the trend of having a large portion of capacity and revenues subject to long-term arrangements. This is especially true when MH’s revenues include the avoided costs of building transmission to the U.S. border. This revenue (or avoided cost) alone is nearly \$2 billion.

Second, MH is not an IPP, but a utility. U.S. utilities have what I refer to as an implicit contract, also known in the U.S. as the regulatory compact. They receive approval from U.S. regulators to build power plants and they expect to receive recovery of and on the invested capital. This expectation is not based on ex post market or industry outcomes, but on the extent to which the utilities prudently implement their approved plans. Thus, utilities and commissions are regularly risking 100 percent of the capacity investment (in that the investments might ex post not be the best alternative vis-à-vis the market or some other metric such as costs). If MH were, against its own recommendations, required to build natural gas-fueled power plants, and natural gas prices went through the roof, ratepayers

would still be expected to pay the costs of and on capital as well as the fuel costs. The risks and costs of the utility business generally cannot be eliminated and are ultimately primarily borne by ratepayers. The only choice is what risk should the ratepayers face.

Third, the allocation among current and future ratepayers of costs and benefits is a complex topic. In general, there is the concept of distributed burden – i.e., current ratepayers benefit from legacy investments and make contributions to future ratepayers. The timing of the ratepayer payments varies. In many cases, the CWIP provision is provided so that payments begin immediately. This provision is appropriate here since current ratepayers benefit from the contracted sales immediately. In other cases, the costs and benefits are delayed until the investment comes online – i.e., is declared used and useful.