## Friday, July 22

In the morning, I met with Fred Martin again. He mentioned that I am working for the PUB and should be focusing on determining if NF is doing the work necessary to prepare the load forecast in a reasonable and comprehensive fashion. He wants me to communicate with Paul Wilson and himself if I have any informational gaps that need to be addressed. He also communicated that all information that I receive should be passed through the PUB, so they can determine if the information should be made available to the public or kept confidential. This discussion took place just before I read Paul Wilson's email that was outlining the same concerns. Fred reviewed the draft memo that I sent yesterday and was in agreement with the content after making a few minor corrections.

For the remainder of the day, I met with Paul Stratton again to discuss and clarify a number of outstanding issues:

- 1. When Paul Stratton is away for the next three weeks, I should contact Paul Humphries (737-1211) or Terry Humphries (737-4172).
- 2. I should schedule my return visit for Aug 17-19, when Mr. Stratton will definitely be back from vacation.
- 3. The NF rate structure is available on their website (nlh.nl.ca).
- 4. As far as staffing goes, the load forecasting process is performed by Paul Stratton. He only has the support of one staff. He does a great job considering the lack of resources.
- 5. Paul reviewed the draft memo that I sent yesterday and was in agreement with the content after making a few minor corrections.
- 6. I did not receive the data files that I expected today. Again confidentiality and protocol concerns have arisen. Paul has produced the data and has sent it to Dave Harris (737-1964), who is coordinating things from the Nalcor perspective. If I do not receive this material by this coming Monday, Paul suggested that Paul Wilson and Fred Martin should coordinate things through his manager, Paul Humphries (737-1211), to get the ball rolling.
- 7. If I were to suggest that the Residential forecast be performed using an end-use model, it would have to a joint effort with NP. To build an end-use model, you must have access to account billing data and survey data. Both these data sources reside at NP.
- 8. NF does not estimate weather adjustments for their Residential and General Service customer classes, but NP does. NF uses the NP adjustments if they want to analyze weather-adjusted sales or total island energy requirements. I asked Paul why NF did not weather-adjust sales for variance analysis reports pertaining to the monthly revenue forecast. He said that NF does not have any revenue issues requiring a variance analysis. I guess he doesn't have Bob Brennan as the CEO. He mentioned something about NF selling power to NP below the marginal cost. This is confusing maybe Mack can find out and explain.
- 9. The load forecast is prepared annually using an iterative process. An initial forecast is prepared by the Market Analysis section of System Planning using the latest historical & forecast information. The resulting forecast is sent to Generation Expansion department of System Planning to determine the future capital requirements. These requirements are sent to

- Investment Analysis to determine if the Wholesale, Residential and General Service rates must change. If the change is significant then the entire process is repeated.
- 10. The load forecast is prepared to 2029, but the period of entire analysis for our assignment extends to 2067. The last few forecast years are averaged and projected as annual growth beyond 2029. In the extended long term, the annual load growth is reduced to 62 GW.h after the electric space heating requirement is assumed to be saturated.
- 11. The only new customer addition to the Industrial class occurs in the 2013-15 for the Vale smelter. Since the load forecast assumes no new customer additions in 2016-2029, therefore the extrapolation assumes that there will be no new large Industrial additions during the extended analysis period ending in 2067. This seems like a very long time with no large Industrial load growth.
- 12. I anticipate that when I analyze the forecast accuracy by sector, that the Residential and General Service econometric models will perform well and that most of the forecast error will be associated with over-forecasting the Industrial class. I saw some historical Industrial sales data today that showed the Industrial class consumed about 2,700 GW.h in 2001. The 2010 load forecast is projecting this class to use 1,278 GW.h in 2010. That's one hell of a drop in ten years. Most of this drop will come from the closure of two Abitibi pulp & paper mills in Stevenville (2006) and Grand Falls (2009). Having said that, the 2010 load forecast assumes that the pulp & paper mill at Cornerbrook will continue operation throughout the entire period of analysis. Someone told me that the government had to bail out Cornerbrook twice already. I was also told that Cornerbrook is a low cost producer, but it's difficult to think that this operation will make it long term. NF doesn't make a determination as to a customer's viability in the future, even though the largest source of forecast error in the past is the failure of the pulp & paper industry. Very interesting.
- 13. The fact of the matter is that the closure at Cornerbrook is a game changer. Cornerbrook consumes 970 GW.h of energy, of which 870 GW.h is self-generated and only 100 GW.h is supplied by NF. They also use about 140 MW, of which 120 MW is self-generated and only 20 MW is supplied by NF. Now, if their self-generation was from wood chips then the company could close and the NF load would only drop 100 GW.h and 20 MW. But their generation is hydro-based, so if the company goes out of business, NF would potentially take over the plant. This means that the load forecast would be reduced by 970 GW.h and 140 MW, which would negate the need for Muskrat Falls for quite some time. I would assume that NF has probably conducted some kind of a sensitivity analysis regarding this situation. I need to discuss this critical issue with you because I am quite confused as to rationalizing this whole situation.

Yours truly,

Very Confused Expertito