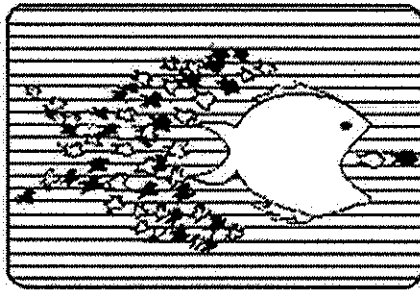


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File 7404

VIA EMAIL

December 12, 2008

Erica Hamilton
Commission Secretary
BC Utilities Commission
Sixth Floor - 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Ms. Hamilton:

Re: FortisBC Benvoulin Substation Project CPCN

1. We are writing to provide our final submission in this proceeding on behalf of the BC Old Age Pensioners' Organization, BC Coalition of People with Disabilities, Council of Senior Citizens' Organizations of BC, federated anti-poverty groups of BC, and Tenant Resource and Advisory Centre (collectively referenced as "BCOAPO *et al*").

1. Project Description

2. The Benvoulin Substation Project consists of the construction of a distribution source substation in the south/central Kelowna area together with a transmission line connected to the existing 138 kV 51 Line and the necessary distribution facilities to tie the substation into the existing distribution network (Application, p. 22). The Project also involves the construction of 1.6 km of underground duct bank to accommodate feeders from the station where additional overhead lines are not feasible (Application, p. 30; BCUC 12.1 – 12.2).

3. The station will include one 32 MVA transformer and four 13 kV breakers. There will be sufficient space for the installation of two additional 32 MVA transformers and 8 13 kV feeder breakers for future expansion (Application, page 22).

4. The four planned feeders will support the following (Application, p. 3-4):

- One will support the Hollywood Substation
- One will support the OK Mission Substation
- One will support both the OK Mission and Hollywood Substations
- One will support the DG Bell Terminal Station.

2. Project Need

a. Initial Application

i. Current Circumstances

5. The central/south Kelowna area is served primarily by two substations: the Hollywood Substation and the OK Mission Substation. The OK Mission Substation also provides backup to the DG Bell Terminal station in cases of emergency (Application, page 3).

6. According to the Application, the growing load in the area is expected to lead to overload conditions at both stations in 2010 (Application, pages 10, 12 and 14). The growth forecast for the area is based on discussions with City of Kelowna planners and developers (Application, p. 16-17; BCUC 1.1; BCUC 7.1 and BCOAPO 3.2). The forecast included an allowance for reductions based on DSM initiatives (BCUC 7.2).

7. Projected load growth means that FortisBC's backup criteria for single transformer failure is not met for either the Hollywood Substation, the OK Mission Station or the DG Bell Terminal station (Application, page 21).

8. Specifically, FortisBC's forecast shows Hollywood Transformer #3 exceeding its capacity in 2010/2011 (after allowing for the transfer of 2.7 MVA to a Glenmore feeder). In the case of the OK Mission substation, Transformer #1 is expected to exceed capacity in 2010/11 and Transformer #2 the year after (Application, p. 12-13). Parallel operation of the transformers at either station is not possible as they are not equipped with fault limiting reactors and it is not possible to install such reactors due to physical constraints. (Application, p. 12 & 14; BCUC 5.1-5.5; BCUC 8.1-8.5).

9. After the Project is complete, the current load forecast projects that the area's next needs will be in 2013/14 when the capacity is exceeded at one of the Hollywood substation transformers (Application, page 24). However, FortisBC notes that this need can be addressed through incremental load shifting to the Black Mountain substation (BCOAPO 1.1 and 9.1). The response to BCUC 16.1 suggests that the next system upgrade would be to the Benvoulin Station in 2016/17.

ii. Previous Capital Plans

10. The need to add additional transformer capacity in the central Kelowna area was identified in the Company's 2005 System Development Plan. The plan called for adding new transformers at the Hollywood and OK Mission substations as well as a new substation (Application, page 3).

b. Revised Load Forecast

11. In response to the second round of information requests, FortisBC states that it has reviewed the known developments with their proponents. The results are set out in BCUC 47.1 and 48.3. The critical date still remains as 2010/2011 but the facility is OK Mission Transformer #1. The

most recently released construction cost forecasts (October 2008) do not differ from those used in the Application (BCUC 54.2)

12. One issue that we have is that FortisBC, in response BCUC 48.1, has not specified the dates of the forecasts from the various sources found in BCUC Table 48.1a and 1b. If the forecasts from the Conference Board of Canada, Bank of Montreal, BC Real Estate Association, TD Bank Financial, Royal Bank of Canada, and the BC Ministry of Finance that are contained in the tables pre-date November, 2008, then it is possible that the forecasts provided by those sources may have been recently revised downward given deteriorating economic conditions. It would be helpful if FortisBC in its reply submission could provide the dates of the forecasts for the source data in these tables. If the forecasts have been revised downward, then it is possible that the need for the Project could be affected.

3. Project Alternatives

13. In the 2005 System Development Plan it was anticipated that the load growth in the south/central Kelowna area would initially be accommodated by transformer additions at the Hollywood and OK Mission substations (Application, page 62).

14. Further analysis has indicated that the installation of additional transformers at these stations is not cost-effective relative to the construction of a new station (BCUC 15.1 & 15.2; BCUC 38.3 & 38.4).

15. In addition, there are technical and environmental issues with the installation of additional transformers at these locations (Application, p. 62-63 and BCUC 29.1).

16. During the IR process, BCUC Staff asked about the possibility of purchasing additional land and installing the necessary reactors to allow the transformers at Hollywood and OK Mission to operate in parallel. The Company noted that this option was not practical (environmental and public aesthetics concerns) and would be more costly (BCUC 42-44). It does appear that the construction of a new station appears to be the most cost-effective alternative to meeting increased capacity needs in the Kelowna area.

4. Project Costs and Rate Impacts

17. The total capital cost of the Project is \$17.7 M (in nominal dollars – BCUC 28.8) which yields a one-time equivalent rate impact of 0.05% (Application, page 51).

18. The accuracy of the cost estimate is +/- 10% (BCUC 30.1).

5. Implementation Options

a. Site Location

19. FortisBC identified a number of potential sites for the new Substation and reviewed these with participants at local “open house” sessions (Application, p. 39-44). In total roughly 17 sites were considered and ranked (Application, page 45).

20. After the second open house FortisBC narrowed their options down to two sites: Site 2 and Site 7 (Application, page 44).

21. The costs of two options were within 5% of each other – with Site #7 being slightly higher (Application, page 51-52; BCUC 29.2 and BCUC 30.2). Also, due to its location, the line losses associated with Site #7 are higher with an estimated total cost impact for the period 2010-2020 of \$106,000 (BCUC 41.1).

22. However, Site #7 has a number of non-cost advantages and considered to have more public support (BCUC 29.1). On this basis, it was selected as the preferred option and is the basis for the Application. (Application, page 44-45).

23. The key factors tilting the decision to Site #7 are: a) the risk of delay associated with Site #2 (due to City rezoning and the ALR non-farm use process) and b) the strong public support for Site #7 (Application, p. 44 & 52; BCUC 32.5 and BCOAPO 8.1).

24. The difference in Project costs is \$17.7 M vs. \$16.9 M. The difference in terms of one-time rate impact is 0.05% vs. 0.04% (Application, p. 51 & 52).

b. Undergrounding

25. The undergrounding of two of the feeders costs \$2.9 M (BCUC 45.7) relative to a cost of \$1.85 M if installed as overhead (BCUC 45.10). However, FortisBC provides a number of reasons as to why overheading these lines is not a satisfactory design option (BCUC 45.11).

26. Undergrounding addresses the concerns of an adjacent customer (Tantalus Vineyards) – see Tantalus IR9.

27. It is our view that FortisBC has effectively engaged local stakeholders in considering a range of potential sites. Subject to our concerns about Project need, the recommended Site #7, while not the least cost site, offers advantages in term of reduced risks of delay and public acceptance, therefore making it the preferable option.

6. Project Risks

28. The key risks that could impact on the timely completion of the Project are (Application, page 61):

- Unforeseen environmental or archaeological discoveries during construction. To this end the site has already undergone environmental and archaeological assessments (BCUC 13.1) such that the risk is considered low (Application, page 61). Such risks should be considered low given the site's previous use as a gravel pit.
- Availability of labour/materials and delivery times for major equipment.
- Need for zoning changes as Site #7 is within the ALR. The risk of removal from the ALR is considered low given the site's prior use as a gravel pit (Application, page 48).

& 50). However, ALR removal is not guaranteed, and could result in delays to Project completion and changes to the cost of the Project. BCOAPO would like to ensure that residential ratepayers do not end up incurring costs for this Project if the preferred site is not removed from the ALR.

- There is also a need for City rezoning (BCUC 27.2), and there is a risk that this could result in delays to Project completion.

29. FortisBC's contingency plans to address in-service delays include use of mobile transformers and some load shifting between Hollywood and Black Mountain substations (Application p. 61 and BCUC 32.8). It is this point that contributes to Site #7 being the most cost-effective (although not the least cost) option.

30. If BCOAPO's concerns about the deterioration of current economic conditions and shielding residential ratepayers from costs related to the Project should Site #7 not be removed from the ALR can be addressed, then it is our view that this Project should be approved.

All of which is respectfully submitted.

Yours truly,

BC PUBLIC INTEREST ADVOCACY CENTRE



Sarah Khan
Barrister & Solicitor

SK:mp

c: Parties of record