

IN THE MATTER OF

FORTISBC INC.

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY BLACK MOUNTAIN SUBSTATION PROJECT

DECISION

July 9, 2007

Before:

L.F. Kelsey, Panel Chair & Commissioner L.A. O'Hara, Commissioner

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COMMISSION ORDER NO. C-7-07

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1.0 BACKGROUND AND REGULATORY PROCESS

On December 19, 2006 FortisBC Inc. ("FortisBC", "Company") applied (the "Application") to the British Columbia Utilities Commission ("Commission") for a Certificate of Public Convenience and Necessity ("CPCN") for the Black Mountain Substation Project ("the Project") (Exhibit B-1). FortisBC proposed that the Application be disposed of by way of a written hearing. By Order No. G-4-07, the Commission ordered that a Procedural Conference regarding the regulatory process for the review of the Project be held on Monday, February 19, 2007 (Exhibit A-1).

During the Pre-hearing Conference on February 19, 2007, the Commission Panel received submissions on the format for the Hearing, the Regulatory Timetable, the Hearing Issues List and a number of submissions regarding the public consultation process undertaken by FortisBC with respect to the Application. As result of those submissions, on February 22, 2007, the Commission issued Order No. G-18-07 establishing the Regulatory Timetable and Hearing Issues List for an Oral Public Hearing commencing Wednesday, May 16, 2007 (Exhibit A-3).

The Regulatory Timetable provided for an extended regulatory schedule to enable FortisBC to carry out its commitment to convene a field trip to the proposed site for the substation and invite Intervenors, directly affected residents and attendees at the October 26, 2006 public information session. This period of time also provided FortisBC, the Regional District of Central Okanagan ("RDCO") and the City of Kelowna, if the City so desired, the opportunity for consultation on the new distribution line as proposed by FortisBC (Exhibit B-4).

Due to the nature of the concerns expressed by Intervenors regarding the communication and consultation about the Project the Commission Panel ordered an oral hearing.

The Oral Public Hearing was held on May 16, 2007. FortisBC filed Argument on May 25, Arguments were filed by Intervenors as scheduled and FortisBC filed its Reply Argument on June 8, 2007.

While the extended nature of the consultation process was a result of the submissions regarding the FortisBC public process with respect to the Application, which led to an oral public hearing instead of a written hearing as requested in the Application, it ultimately resulted in a more satisfactory yet cost-effective outcome to all parties involved, than the original proposal.

2.0 THE APPLICATION

2.1 **Project Description**

2.1.1 Transmission and Substation

The Project consists of a new substation equipped with a single 138 kV/13 kV 32 MVA transformer and three 13 kV distribution feeder circuits, and an emergency mobile substation access bay with isolation switches ("Substation"). Two of the feeders will connect into the existing distribution system that serves the Black Mountain area, whereas the third will require mostly new facilities. The new Substation will be located in east Kelowna on a new site immediately north of Highway 33 and Joe Rich Road, and under the existing right-of-way (referred to as Site 7) for transmission lines 54 and 73 and a distribution feeder line. Transmission line 57, which supplies power to the Joe Rich Valley including Big White, will be connected to the Substation (Exhibit B-6, BCUC 1.3.4, p. 16).

The Substation will include a high voltage 138 kV four breaker ring bus, four 145 kV Motor Operated Disconnect switches (MODS) for 58 Line (Black Mountain to FA Lee), 54 Line (Black Mountain to DG Bell), 57 Line (Black Mountain to Joe Rich and proposed Big White), station service transformer, station battery backup and associated equipment, metering and system control and data acquisition ("SCADA") equipment. The Substation will be constructed on an approximate 6.0 acre site complete with a control building and an access road (Exhibit B-1, p. 7).

As a result of the further consultation activity referred to above and consideration of the alternate site options for the Project, FortisBC determined that its preferred option for the construction of the Black Mountain Substation is a site known as Site 7 rather than Site 8 as identified in the Application (FortisBC Argument, p. 6).

2.1.2 Distribution

The Substation will be connected to three 13 kV distribution feeders on existing rights-of-way and approximately two kilometres of new right-of-way accessing the Gallagher Canyon's area. The distribution feeders will supply the Bell Mountain, Kirschner Mountain, Gaudie and Gallagher's Canyon areas.

In the Pre-hearing Conference, Intervenors raised concerns about the routing for the 2 kilometres of new right-of-way that was proposed in the Application. After further consultation, FortisBC proposes to route the distribution line for the most part along an expanded, existing right-of-way (Exhibit B-4; Exhibit B-6, BCUC 1.4.1, pp. 18-20).

2.1.3 Summary of Cost and Schedule

The Project was estimated in the Application to cost \$11.96 million, and was proposed to go into service in the third quarter of 2008 (Exhibit B-1, p. 5). As a result of changes to the project scope and delays in its construction, the Project is now expected to cost \$14.43 million and be in service by the first quarter of 2009 (Exhibit B-6, BCUC 1.3.5, 1.4.4, pp. 16, 20-21).

2.2 Engineering Design and Capacity

The proposed Black Mountain Substation will:

- serve the Black Mountain area;
- supply distribution load and backup capability to the central Kelowna area currently served by the Hollywood Substation;
- supply capacity and backup capability to the east Kelowna area, which is currently served by Hollywood Feeder 1;

- facilitate the removal of the distribution feeder load from the tertiary windings of FA Lee Transformer 3 and Transformer 4, thus extending the life of these units by reducing their exposure to potentially high damaging fault current; and
- create a suitable transmission network connection for the 138 kV transmission line that is presently serving the Joe Rich Substation (57 Line) which will also serve the soon to be constructed Big White Substation.

The network connection will minimize the effect of the additional exposure presented by the line extension (approximately 40 kilometres) (Exhibit B-1, pp. 8-9).

2.3 Other Aspects

The Application states that the Project is required to serve the growing load in the Black Mountain area including Joe Rich and Big White, as well as to maintain regional reliability and to reduce risk to the bulk power supply in the Kelowna area. The Project is intended to maintain a meshed network (instantaneous load transfer capability) between the FA Lee and DG Bell Terminal Stations (Exhibit B-1, pp. 5, 7).

In the event of delay, the use of the FA Lee tertiary windings would continue until the Project has been completed. Should there be a delay to the Project beyond the winter peak of 2008/2009, FortisBC will closely monitor peak period loads and enact the following measures, if necessary:

- lower voltage to emergency limits to reduce current levels during peak periods;
- request voluntary load curtailment during peak periods; and
- implement load curtailment during peak periods.

In the event of any longer delay, temporary voltage regulation may be required. It is estimated that the cost of temporary voltage regulation would be approximately \$100,000 (Exhibit B-16, pp. 39-40).

3.0 JUSTIFICATION FOR THE PROJECT

3.1 Load Forecast

Since 1991 the population in Kelowna has increased by 44 percent, with the official population growth between the census years of 1996 and 2001 set at 7.7 percent. Based on recent BC Statistics estimates, the population has grown by 13.7 percent between 2001 and 2005. This growth in population has led to a corresponding growth in electrical load, with the peak load climbing to 249 MVA in the winter of 2005/06. The peak in the Kelowna area reached 271.5 MVA on November 29, 2006.

The Black Mountain area is the third fastest growing section of Kelowna and is poised for additional growth in the years to come. This region, which includes Bell Mountain, Kirschner Mountain and Gallagher's Canyon, has experienced aggressive load growth fueled by an influx of residential development. Plans include more than 3,300 residential units to be constructed. In total, approximately 26.4 MVA of new load will be added and, considering normal regional load growth, the peak demand on the Black Mountain Substation is expected to reach approximately 45 MVA by the winter of 2026/27. This load cannot be served with the existing electrical facilities.

The load forecast was compiled in conjunction with developers based on planned residential construction up to the years of 2017-2018. Growth trends were then used to determine expected loads between 2018 and 2026. Within the 20 year planning horizon, the loads presently served by FA Lee Terminal Station and Hollywood Substation are forecast to exceed their transformer nameplate ratings and the load back-up criterion under conditions of station transformer contingency.

FortisBC states that the Project is required to serve the growing load in the Black Mountain area, as well as to maintain regional reliability and reduce the risk to the bulk power supply in the Kelowna area. An additional 138 kV/13 kV, 32 MVA distribution transformer is planned for 2015, depending on the rate of load increase in the area. Three additional distribution breakers will also be added at that time and distribution circuits will be constructed as the load dictates (Exhibit B-1, pp. 16-18).

3.2 Unloading of the FA Lee Transformers' Tertiary Windings

At present customers in the northeast area of Kelowna, including part of the Black Mountain area, have their power delivered through the tertiary windings of FA Lee Transformer 3 and Transformer 4. The FA Lee Terminal Station has two large terminal power transformers. Their function is to reduce the voltage to 138 kV level from 230 kV as supplied by transmission circuits, 72 Line and 74 Line from the BC Hydro system (Vernon Terminal). The two transformers were manufactured in 1979 and 1985 respectively. Once the power is stepped down to 138 kV, the power is then distributed to the other nine Kelowna substations. Both transformers have a third (tertiary) winding operating at 13 kV to serve a significant 13 kV distribution load (21 MVA). Normally these tertiary windings are reserved for supplying power to the substation facilities only.

This configuration puts the large and expensive power transformers at risk of damage and ultimately failure. A through fault arising on the distribution system network places stress on the core, windings and thermal insulation of the transformer. Considering that these transformers have the task of providing bulk power to the entire Kelowna area, and considering that remediation methods exist, FortisBC sees significant merit in reducing the transformer failure risk. Fewer outages are expected once the load is removed from the FA Lee transformer tertiary windings (Exhibit B-1, pp. 29-31).

3.3 Other Technical Issues

The Black Mountain Substation ring bus configuration is used to maintain system reliability, where faulty sections of lines are isolated without affecting the no-fault zones. This meshed network protection feature (ring bus) will ensure system continuity in the event of the loss of either Black Mountain-FA Lee, Black Mountain-DG Bell or Black Mountain-Big White transmission circuits and is consistent with the FortisBC plan to "mesh" the complete Kelowna area 138 kV transmission backbone (Exhibit B-1, pp. 33-34).

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3.4 Intervenor Submissions

No evidence was introduced by any Intervenor questioning the justification and need for the Project and no Intervenor cross-examined the FortisBC panel as to the evidence showing the need for the Project. Further, there was no evidence at the Hearing nor any cross-examination of FortisBC's witness panel as to the Project schedule being unreasonable in terms of meeting the justification and need for the Project.

No Intervenor took issue with the need to reinforce the power supply to the east Kelowna area (FortisBC Argument, p. 10).

3.5 FortisBC Submission

FortisBC considers that the Project will meet system needs in the following areas:

- (i) meeting capacity requirements;
- (ii) providing backup power availability;
- (iii) maintaining the reliability of the transmission supply in the Kelowna area; and
- (iv) minimizing risk to the FA Lee Terminal Station transformer.

(FortisBC Argument, p. 9)

3.6 Commission Determination

The Commission Panel concludes that:

- (i) FortisBC's load forecast is a satisfactory basis to proceed with the Project;
- (ii) Intervenors accepted FortisBC's justification for the Project; and
- (iii) FortisBC's plan to provide a ring bus to mesh the Kelowna 138kV transmission backbone to increase reliability of its system is prudent.

The Commission Panel acknowledges the risk to the FA Lee large power transformer tertiary windings currently supplying 13 kV distribution power to the area.

The Commission Panel accepts the projection of significant load growth for the area and FortisBC's conclusion that a new substation with the configuration of the proposed Black Mountain Substation needs to be built in the area in a timely fashion.

4.0 SUBSTATION LOCATION

4.1 Site Selection, Consultation Process and Evaluation

In the Application, FortisBC identifies its preferred Substation location as an approximately 6 acre site west of the distribution line and north of Joe Rich Road (Exhibit B-1, pp.8, 11). This site is later identified as Site 8. On March 14, 2007, following a written invitation to certain individual land owners and registered intervenors, FortisBC held a site visit attended by 22 people representing invitees and FortisBC. FortisBC identified a number of prospective sites for the substation and stakeholders suggested others, all of which were considered and discussed at the site visit (Exhibit B-4, p. 1, Appendix C). Attendees were provided with a map of the prospective sites and a generic substation site rendition.

FortisBC carried out an assessment of the suitability of each of the ten identified sites and provided an overview of that assessment in editorial and tabular form in response to a Commission Information Request ("IR"). As a result of this analysis, FortisBC eliminated sites 1, 2, 3, 4, 9 and 10 from further consideration (Exhibit B-6, BCUC 1.3.2).

Between the time of the filing of the Application and the Oral Hearing, based on land acquisition issues and the opportunity to improve the potential aesthetic impact of the substation FortisBC selected Site 7 as its preferred site for the Substation. Advantages of this site include:

- best electrical access to existing transmission and distribution lines;
- reasonable road access;

- located partially within existing easement;
- 300 meter transmission line to Joe Rich transmission line; and
- willing vendor.

(Exhibit B-6, BCUC 1.3.2)

On May 11, 2007 FortisBC advised that "it had concluded an Option Agreement for the property referred to in the application materials as Site 7" (Exhibit B-12).

4.2 Intervenor Submissions

Intervenors Barb and Ken Redlick and Joan Morgan ("Redlick/Morgan") state that Site 9 and Site 8 are directly adjacent to their respective properties. Site 7 is in the foreground of the Redlicks' and Ms. Morgan's view of Black Mountain. The centre of Site 7 is located approximately 470 meters from the Morgan property and approximately 420 meters from the Redlick property. The extent to which the proposed substation on Site 7 would be visible from the Redlick and Morgan residences depends on the topography and the final base elevation of the substation (Redlick/Morgan Argument, p. 1). Redlick/Morgan argue that mitigation of the potential visual impact of the substation is also potentially available. "Depending on the geotechnical assessment, the base elevation could be lowered by removal of some or all of the 'cut,' rather than using it as 'fill'. In addition, again depending on the geotechnical assessment, some of the 'cut' could be placed on the ridge beside the substation to further block the view from the west" (Redlick/Morgan Argument, p. 4).

Redlick/Morgan, in Argument state they believe that to the extent that the proposed substation, if and as constructed on Site 7, is visible from the Redlick and Morgan residences, it would be an major eyesore and would detrimentally affect the value of their properties.

Redlick/Morgan request that in the event that the Commission grants a CPCN to FortisBC for the Black Mountain Substation Project, the Commission make the CPCN conditional on the following terms:

- (a) that FortisBC is to use its best efforts to design the substation so that the building and equipment (to clarify, not including power poles) at the substation are not visible by a direct line of sight from the Redlick and Morgan residences ("substation not visible");
- (b) that as soon as possible and at least 30 days prior to beginning site preparation activities FortisBC is to file with the Commission, and provide to registered intervenors, a report addressing whether the substation will not be visible and containing the final engineering plans and corresponding elevation line of sight diagrams between the Redlick and Morgan residences and the substation ("visibility report"); and
- (c) that upon receipt of the visibility report registered intervenors are to be given 15 days within which to file with the Commission a request that the Commission establish a procedure to examine whether mitigation measures are required concerning the visibility of the substation.

(Redlick/Morgan Argument, pp. 1, 2)

In summary, Redlick/Morgan state that Site 2 is the best alternative to Site 7 however, they are content to focus on Site 7 given FortisBC's assurance regarding visual screening at Site 7 (Redlick /Morgan Argument, p. 7).

The City of Kelowna Parks Division determined, following the site visit and closer examination of Site 8 that it would not be a good location for a substation and changed its position to support Site 7, with conditions relating to berming and vegetation screening (Exhibit C8-3).

The RDCO took no position on substation site selection (RDCO Argument).

Intervenor Tim Light expressed support for Site 7 (Exhibit C9-4).

4.3 FortisBC Submission

FortisBC reports that Site 7 has the greatest support from stakeholders and Intervenors, primarily due to the benefits accruing from the natural topography which will reduce the visibility of the Substation (FortisBC Argument, p. 12).

FortisBC submits that the electrical facilities contemplated in the Application will not materially affect adjacent property values in the Black Mountain area nor property values at greater distances. In particular, FortisBC submits that the new Substation will not give rise to any quantifiable impact to any property value nor limit land use in the future and there was no evidence at the Hearing identifying any impact to the value of any real property (FortisBC Argument, p. 18).

Further FortisBC states "[G]iven that there is no evidence of any material aesthetic impact, it is submitted there is no need for any mitigation measures" (FortisBC Argument, p. 18). However, FortisBC does acknowledge that berming may be a feasible mitigation measure:

"... Depending on the final contour at the substation site, which will be determined following a geo-technical assessment at the site, it may be possible to place fill removed from the substation site on the ridge to the west of the substation at Site 7 to further reduce the visibility of the substation facilities from either the Morgan or Redlick residences" (FortisBC Argument, p. 19).

In response to the stated understanding of the City of Kelowna Parks Division with respect to berming; "FortisBC will berm the area to our satisfaction plus plant native vegetation to screen the substation" (Exhibit C8-3). FortisBC states that it "... does intend to construct a berm in the area between the substation and the highway, and to plant native vegetation consistent with the existing vegetation. However, FortisBC reserves the right to determine the specifics of both the berm and the vegetation and notes that the area in its present state is grassland, with only small shrubs that are suitable to the arid conditions" (Exhibit B-11, p. 2).

In response to the request from Redlick/Morgan, for conditions to be applied to a CPCN, FortisBC submits that the Commission should not include any conditional terms to the issuance of the CPCN for the Project. FortisBC does, however, commit to use reasonable efforts to construct the Substation at a base elevation minimizing the visibility of the Substation to the extent practical, and falling within the approved costs of the Project. The Company also agrees that it will provide Redlick/Morgan with, when available, information regarding the base elevation and line of sight. FortisBC opposes any further regulatory process which would result in further delay and increased costs of the Project. FortisBC also agrees, to the extent practical, to use suitable materials made available during site preparation as a berm

to attempt to further reduce the visibility of the Substation. FortisBC states that a further possible alternative that it would consider, again providing the costs fall within the approved costs of the Project, would be the use of privacy slats in the fencing around the Substation to, again, further reduce visibility (FortisBC Reply Argument, pp. 2, 3).

The Company submits that, over and above any mitigation resulting from the work contemplated in the preceding paragraph, any work which would involve additional costs to improve the aesthetics of the Project should be facilitated by requests to the City of Kelowna pursuant to FortisBC's Aesthetic and Environmental Upgrades Program.

4.4 EMF

The Commission Panel determined, in establishing the Issues List for the Hearing, that EMF would be considered within the context of World Health Organization and the International Commission on Non-Ionizing Radiation Protection ("WHO/ICNIRP") EMF Standards (Commission Order No. G-18-07).

Mr. and Mrs. Redlick wrote to the Commission on February 27, 2007 and requested reconsideration of the Commission's decision, Appendix B to Order No. G-18-07, insofar as the Commission should also include the EMF health effects and EMF legal issues (Exhibit C2-5). The Commission responded on February 28, 2007 advising Mr. and Mrs. Redlick of the Reconsideration Guidelines which must be followed in order for the Commission to consider their request. A summary of the requirements for Commission reconsideration was included with this letter (Exhibit A-4). Mr. and Mrs. Redlick did not respond.

In the Application FortisBC states "... the EMF levels associated with this specific project will be significantly lower than the public exposure guidelines supported by the World Health Organization" (Exhibit B-1, p. 46).

In response to Commission IR 1.7.2 FortisBC provided the actual readings from the Okanagan Mission Substation which it states is representative of the proposed Black Mountain Substation. At 0 to 50 meters from the fence line FortisBC reports the expected magnetic field to be 141.7 to 1,041.3 times

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lower than the recommended WHO/ICNIRP levels (Exhibit B-6, p. 28). In Argument FortisBC submits that the evidence shows that this project does comply with WHO and ICNIRP EMF Standards. There were no counter arguments.

4.5 Commission Determination

The Commission Panel recognizes the general support for Site 7 for the siting of the Black Mountain Substation and appreciates that this support is the result, at least in part, of the consultation undertaken by FortisBC following the Pre-Hearing Conference. FortisBC and the property owners and Registered Intervenors deserve special recognition in this Decision for engaging in this process.

The support by Intervenors for Site 7 is based almost entirely on aesthetics, or in FortisBC's words "primarily due to the benefits accruing from the natural topography which will reduce the visibility of the substation" (FortisBC Argument, p. 12). The degree of screening is dependent on the final elevation of the Substation based on the final contour at the Substation site and that will be determined following a geotechnical assessment at the site (FortisBC Argument, p. 19). In addition to the natural screening Site 7 provides, FortisBC states "it may be possible to place fill removed from the substation site on the ridge to the west of the substation at Site 7 to further reduce the visibility of the substation facilities from either the Morgan or Redlick residences" (FortisBC Argument, p. 19).

During the Oral Hearing, the Panel Chairperson noted that some of the support for Site 7 is because the terrain would act as a natural visual screen; and that the FortisBC witnesses may have expressed a lack of confidence that this natural visual screening would materialize after final engineering. The Chairperson asked what assurance FortisBC could provide.

FortisBC provided the following assurance:

"FortisBC actually is very confident that we'll be able to provide screening for the majority of the substation outside of the A-frame structures. The reference to the highest possible height, it was never intended that we would intend to go to that height. It would be impractical to go to that height in this case. The reference was to the halfway level, which would certainly provide screening as we're anticipating that's required here. So I'd like to say that we do have the confidence that we can provide the aesthetic screening, practical screening requirements on Site 7" (T2:145-146).

The Commission Panel agrees with the parties to this Hearing that Site 7 is the preferred site and approves this site for construction of the Black Mountain Substation. FortisBC is directed to use reasonable efforts to construct the Substation at a base elevation and to employ mitigation measures to the extent practical to minimize the visibility of the Substation, all falling within the approved costs for the Project

The Commission Panel is also conscious of the reason for support for this site from the Intervenor community, including Redlick/Morgan whose residences are closest to the approved site. Redlick/Morgan requested that should the Commission issue a CPCN for the Project and specifically Site 7 that it be conditional on a number of factors and that once the elevation of the Substation is determined, it provide for the Commission to establish a procedure to examine whether mitigation measures are required concerning the visibility of the Substation.

The Commission Panel in making its decision is reluctant to expose this matter to additional process. The Commission Panel is of the view that FortisBC is well aware of the reasons for Intervenor support for Site 7 and with the many assurances given by FortisBC to use reasonable efforts with respect to measures it will take to minimize the visibility of the Substation the Commission Panel expects, and is confident that, FortisBC will act in the public interest. As a courtesy to Redlick/Morgan, and in keeping with the spirit of the consultation process established earlier in this matter and referenced above, **FortisBC is directed to prepare a report on the progress and findings of the geotechnical assessment of the site and specific plans including alternatives, if they exist, with respect to the base elevation and line of sight orientation of the Substation and meet with Redlick/Morgan and discuss the report, plans and possible alternatives, as soon as possible and certainly before any construction activity begins. FortisBC is further directed to file a copy of the report with the Commission with comments on the outcome of this meeting immediately following its conclusion.**

5.0 DISTRIBUTION LINE ROUTING

5.1 Line Routing and Consultation Process

The Application describes three distribution feeders exiting the Black Mountain Substation. Feeder 1 will tie into the existing Hollywood Feeder 5 and serve the Bell Mountain and Kirshner Mountain load growth. Feeder 2 will replace the existing FA Lee Feeder 2 and a portion of Hollywood Feeder 5. It will serve the Bell Mountain area and provide backup for the area currently served by FA Lee Feeder 1. Feeder 3 will be a new feeder serving part of the Kirschner Mountain area, the Goudie area and a portion of the load in the Gallagher's Canyon area. It will also serve as a backup for the Hollywood Feeder. The Application indicates that to construct the Black Mountain Feeder 3 distribution line, approximately two kilometers of new right-of-way will be required. "While the land has not yet been secured, the identified corridor parallels rural property lines for the first section; the second portion consists of an aerial crossing of Gallagher's Canyon. Efforts have been made to prevent the bisection of private properties and limit the impact to property use in general" (Exhibit B-1, p. 48).

Following a multiple format advertising strategy, FortisBC held a public information session on Thursday, October 26, 2006, which attracted approximately 30 people (Exhibit B-1, p. 46). The focus of the advertising and the presentation was on the proposed Black Mountain Substation and it would appear from the information provided that little, if any, information was presented on the proposed feeder routings (Exhibit B-1, Appendix D).

At the Pre-hearing Conference, the RDCO expressed concern about the proposed routing of Feeder 3 which would see "towers and a power line through one of Kelowna's most popular and prized parks" (T1:90). RDCO indicated that it became aware of this aspect of the Application "only through the newspapers last week, through the diligence of one of the reporters and a park supporter" (T1:10). RDCO requested that the Hearing Issues List include "lack of public consultation, the location, and then the need at this time for this distribution line" (T1:11). This apparent lack of consultation led the Commission Panel to accept FortisBC's request that a time period in the regulatory schedule be provided for consultation (T1:52) and to suggest in its letter of February 22, 2007 that "[T]his period of

time will also provide FortisBC, the Regional District of Central Okanagan and the City of Kelowna, if the City so desires, the opportunity for consultation on the new distribution line as proposed by FortisBC (Exhibit A-3).

Following consultation with the RDCO, the City of Kelowna, the Westbank First Nation, and the Gallagher's Canyon Property Owners Association FortisBC advised by Letter dated March 22, 2007 (Exhibit B-4) that it:

"... has reviewed the proposed distribution line and has made adjustments to the plan for the line by removing the distribution line crossing in front of Layer Cake Mountain. If the CPCN Application is approved, FortisBC proposes to place the new distribution line alongside the existing transmission corridor that crosses Gallagher's Canyon. FortisBC will place new structures as close to the existing transmission structures as is reasonably possible to make every effort to reduce the visual impact to the users of the park area. The parties were informed of this plan and were supportive of these proposed changes" (Exhibit B-4, p. 2).

In response to BCUC IR 1.4.1, FortisBC provided a diagram of its proposed new routing for Feeder 3 in the vicinity of Gallagher's Canyon (Exhibit B-6, Diagram A4.1, p. 19).

During the Hearing process no concerns were expressed regarding Black Mountain Feeder 1 and Feeder 2.

5.2 Alternative Routing

FortisBC, in response to the RDCO's IR 1.1.10 provided evidence as to supplying the Gallagher's Canyon area from the DG Bell Terminal Station. A feeder from the DG Bell Terminal Station would require a distribution egress from DG Bell Terminal Station, metering at DG Bell Terminal Station, two sets of voltage regulators, approximately 10 kilometres of distribution line rebuild, approximately 1 kilometre of right-of-way, as well as brushing at an approximate cost of \$3.6 million or over 200 percent more than Feeder 3. This option would have less expansion capability, higher line losses, higher line exposure to failures and would require more maintenance. For these reasons, a DG Bell feeder is not considered a viable alternative to Feeder 3 for supplying the Gallagher's Canyon load.

In the Application, FortisBC reviewed an alternative of the addition of a new distribution source at the FA Lee Terminal Station and the construction of distribution lines to the load centre. FortisBC found that although technically feasible, this alternative was neither efficient nor cost effective for the reasons discussed in the Application (Exhibit B-1, pp. 26-29).

Fortis BC states "[There] was no evidence at the Hearing as to any option of merit for supplying the Gallagher's Canyon load other than through the Project as proposed by FortisBC" (FortisBC Argument, p. 15).

5.3 Intervenor Submissions

On April 17, 2007 Smartplans, on behalf of the owners of Layer Cake Mountain ("LCM"), wrote to FortisBC requesting clarification of the alignment on a portion of the proposed new routing of Feeder 3, passing through (using an existing right-of-way) property owned by LCM. LCM made a suggestion that existing larger corridors would be more appropriate for this section of Feeder 3 and provided a diagram of its suggestion (Exhibits C7-2, C7-3). Following a meeting with FortisBC, LCM wrote to the Commission advising "Fortis has offered an acceptable feeder alignment through our subdivision. That alignment will follow internal roads and McCulloch Rd. and will be underground for that portion of the feeder through our property. Fortis will also remove their existing above-ground local feeder poles running east-west in the existing utility ROW through the northern portion of our subdivision. On that basis we are satisfied with the feeder alignment as proposed" (Exhibit C7-4).

The RDCO, in its Argument, stated it supports the relocation of Feeder 3 to the locations shown by the yellow and blue lines in Diagram A4.1 on page 19 of BCUC IR 1. The RDCO supports relocating the green portion of Feeder 3 to an underground location within the Smartplan [LCM] subdivision either as shown in Exhibit C7-3 or as described by Mr. Martin when he described a different location on Exhibit C7-3 starting at line 25, page 73 and ending at line 25 on page 78 of the Transcript. The RDCO supports Feeder 3 exiting the Smartplan [LCM] subdivision at the point that was identified by Mr. Martin at lines 19-24, page 76 of the Hearing Transcript and then following a path that was attempted to be described as shown in the Hearing Transcript at pages 77 and 78. For greater clarity that location is shown as a solid yellow line in the attached diagram entitled "*Fortis_Feeder3_if subdivision and*

underground approved". The reason this location is important to the RDCO is that it minimizes the span across the upper portion of Scenic Canyon and uses an existing power line right-of-way.

If, however, an agreement with the developer is not reached and FortisBC proposes to revert to the location of the final leg of Feeder 3 shown by the solid green line in Diagram A4.1, the RDCO does not support that location. Instead, the RDCO supports a location shown by the solid yellow line in the attached diagram entitled "*Fortis_Feeder3_if subdivision and underground not approved*". The reason for this is because the yellow line location would minimize the span required over Scenic Canyon and utilize existing rights-of-way, including a small existing distribution span over that part of Scenic Canyon.

City of Kelowna, Recreation, Parks and Cultural Services, in a letter dated May 11, 2007 expressed its preference for the Feeder 3 route illustrated by Diagram A4.1 dated April 4, 2007 over the one originally proposed over Layer Cake Mountain (Exhibit C8-4).

5.4 FortisBC Submission

FortisBC proposes in Argument that Feeder 3 will be as shown in Diagram A4.1 on page 19 of Exhibit B-6. It will be rebuilt along existing corridors as shown in orange and green on page 19 of Exhibit B-6 and the blue portion on that same exhibit would be built 5 meters east of the existing transmission right-of-way. With respect to the section shown in green, and in response to a request from LCM FortisBC states "if that developer in the future agrees to pay the incremental cost of undergrounding a portion of that distribution feeder, along a different route, that would be acceptable to FortisBC" (FortisBC Argument, p.14).

FortisBC states that LCM requested a change to the proposed route for Black Mountain Feeder 3 through its planned subdivision development, and that Feeder 3 be placed underground within LCM property. While FortisBC does not dispute that an acceptable underground feeder alignment has been agreed to by FortisBC (Exhibit C7-4) it clarified that it is seeking approval of the Feeder 3 overhead route as described in the Application and responses to Information Requests. It is FortisBC's intention that following the Commission's approval of the Application, FortisBC will discuss changes to the

Diagram A4.1



Please see the PDF file of this Decision for a colour version of Diagram A4.1

feeder alignment with LCM provided that the objectives of the project are not compromised and any incremental costs resulting from changes will be paid by the developer (Exhibit B-11, pp. 1, 2).

FortisBC is opposed to the RDCO's proposed route arguing that the RDCO suggestion at paragraph 5 of the RDCO Argument would require FortisBC to purchase additional rights-of-way, would add to the cost of the project and would fail to make prudent use of existing right-of-way (FortisBC Reply Argument, p. 4).

5.5 EMF

FortisBC provided evidence in response to BCUC IR 1.7.5, page 31 which details the EMF profile at ground level across the section of new distribution feeder in the vicinity of Gallagher's Canyon and submits that the evidence shows that the project does comply with WHO and ICNIRP Standards (FortisBC Argument, p. 20).

5.6 Commission Determination

The Commission Panel appreciates the work of FortisBC and Intervenors to arrive at a routing for Feeder 3 that is practical and generally acceptable to all parties. With respect to the prospect of an agreement with LCM for an alignment and undergrounding of Feeder 3 on its property, the Commission Panel agrees with FortisBC that this does not form part of this Application and should be left as a matter of future agreement between FortisBC and LCM.

The Commission Panel approves the routing and alignment of Feeder 3 as proposed by FortisBC in Exhibit B-6, page 19.

6.0 **PROJECT COST**

6.1 Changes to Project Budget

The Black Mountain Project was included in the 2007/08 FortisBC Capital Plan and the estimated capital cost at that time was \$9.75 million. The Application states that the Project is now expected to cost \$11.96 million and attributes the cost escalation to four primary reasons:

- 1. Inclusion of a new distribution circuit to serve the Gallagher's Canyon area, which was initially planned as a separate project to be constructed in 2009 but has been advanced due to the rate of development in the area, at a cost (loaded) of \$1.47 million.
- 2. Marginal increase in station related costs resulting from refined estimates since the 2007/08 Capital Expenditure Plan estimated at ± 25 percent.
- 3. Marginal escalation in the estimated land cost at the present stage of negotiations for land procurement.
- 4. Costs already incurred for planning, consultations, land acquisition during 2005 /2006 that was not included in the 2007/08 Capital Expenditure Plan.

(Exhibit B-1, p. 3)

The Application breaks down these cost changes as follows.

2 Table 1 – Analysis of Project Cost Escalation							
		As in	As in	Variations			
•	Project Scope	2007/08 Capital Plan	CPCN Application	Cost (\$millions)	% Variation		
1	Station Related:	7.35	7.62	0.27	2.7%		
2	Estimated Land Cost:	0.64	0.78	0.15	1.5%		
3	Costs Already Incurred (Planning / Land Acquisition)	Not Applied	0.12	0.12	1.3%		
4	AFUDC & Other Overhead Loadings: **	1.76	1.96	0.21	2.1%		
5	Capital Plan Total & Variation (Without Distribution Component)	9.75	10.49	0.74	7.6%		
6	Additional Distribution Cost (Loaded):	1.47					
7	Net Project Cost:	11.96					
3							

4 ** Excluding AFUDC & Loadings for Distribution

The total cost of the project at the time the Application was filed is detailed below:

SL.	Scope Item	2005/06	2007	2008	TOTAL	
		(\$millions)				
1	Design and construct distribution substation with one 138 $kV/13 kV 32 MVA$ transformer and egress for three feeders	0.000	1.71	1.64	3.36	
2	Design and construct 138 kV ring bus with four high voltage circuit breakers and associated communications	0.047	2.19	2.02	4.26	
3	Design and construct connections to local 13 kV distribution feeders, including new feeder to for service to Gallagher's Canyon area	0.000	0.51	0.69	1.20	
4	Land Acquisition and Assessments*	0.020	0.77	0.00	0.78	
5	Planning, Consultation, Regulatory and Permitting Process	0.123	0.00	0.00	0.12	
SUBTOTAL		0.190	5.18	4.35	9.72	
7	AFUDC	0.008	0.17	0.41	0.59	
8	Capitalized Overhead	0.012	0.47	0.39	0.87	
9	Direct Overhead	0.011	0.41	0.35	0.77	
TOTAL CAPITAL COST		0.221	6.23	5.51	11.96	
10	10 Net Present Value		10.40			
11	11 One Time Equivalent Rate Impact		0.36%			

 Table 3: Cost Summary

* includes environmental and archaeological assessment, survey and land.

Following the Pre-hearing Conference FortisBC engaged in consultation with Intervenors on siting of the Substation and routing of Feeder 3. The physical changes to the siting of the Substation and routing of Feeder 3 resulting from these consultations have been reviewed elsewhere in this Decision. FortisBC states that the incremental cost impact of the change from Site 8 to Site 7 for the Black Mountain Substation is estimated to be minimal and will have no incremental effect on either the NPV or Rate Impact (Exhibit B-6, BCUC 1.3.5). On the other hand, the incremental impact on Project cost for the

newly proposed routing for Feeder 3, relative to the routing proposed in the Application is estimated to escalate the Project cost by approximately \$620,000 (Exhibit B-6, BCUC 1.4.3).

In response to BCUC IR 1.4.4, Fortis BC updated the cost estimate for the Black Mountain Substation Project as now proposed by FortisBC, with variance explanation relative to the CPCN Application (Exhibit B-6).

	SCOPE ITEM	TOTAL AS IN CPCN	TOTAL REVISED	REMARKS
1	Design and construct distribution substation with one 138/13 kV 32 MVA transformer and egress for three feeders	3.36	3.60	Construction Market Volatility
2	Design and construct 138 kV ring bus with four high voltage circuit breakers and associated communications	4.26	4.56	Construction Market Volatility
3	Design and construct connections to local 13 kV distribution feeders, including new feeder to for service to Gallagher's Canyon area	1.20	1.76	Additional Cost for Distribution Feeder in New Route, Construction Market Volatility & expected ROW cost escalation
4	Land Acquisition and Assessments	0.78	0.89	Expected Land Cost Escalation
5	Planning, Consultation, Regulatory and Permitting Process	0.12	0.48	Additional Cost for extended Regulatory Process
SUBTOTAL		9.72	11.30	Consequent to Items 1 to 5 above
7	AFUDC	0.59	1.22	As in Items 1 to 5 & Schedule Deferral
8	Capitalized Overhead	0.87	1.01	As in Items 1 to 5 & Schedule Deferral
9	Direct Overhead	0.77	0.90	As in Items 1 to 5 & Schedule Deferral
TOTAL CAPITAL COST		11.96	14.43	Consequent to Items 1 to 5 above
10	Net Present Value	10.40	11.42	Consequent to Items 1 to 5 above
11	One Time Equivalent Rate Impact	0.36%	0.39%	Consequent to Items 1 to 5 above

Table: A4.4

In response to an undertaking FortisBC states that the presently estimated Project cost of \$14.43 million is the estimated "as spent" based on an annual CPI inflation factor of 2 percent, in addition to an annual "Market Escalation Correction Factor" of 5 percent (Exhibit B-15, p. 2).

FortisBC confirms that since the Project cost estimate is provided in "as-spent" dollars, there is no requirement for further escalation.

In connection with the incremental cost of some \$620,000 to implement the proposed routing for Feeder 3 compared to the routing proposed in the Application, the RDCO takes the position that in the Application, FortisBC proposed a route that could not have been achieved and therefore the cost estimate of that original proposal is not a logical baseline for comparing the revised cost for Feeder 3. The reason the original Feeder 3 location was not achievable is that the City of Kelowna and Regional District, the owners of the lands necessary to support the original Feeder 3 location, were not prepared to sell. In addition, the RDCO submits both of those government authorities enjoy rights of expropriation which legally neuter FortisBC's expropriation power leaving FortisBC with no legal method to have acquired the necessary property. The RDCO argues that the \$620,000 figure is misleading if it is being used to show that the relocated Feeder 3 will cost "extra". The minimum cost of Feeder 3 should have included the \$620,000 for the new location as no other practical alternative existed (RDCO Argument, p. 3). FortisBC does not refute the position of the RDCO. The Commission Panel sees merit in the RDCO argument.

6.2 Cost Collar/Construction Incentives

The Commission, at IR 1.9.1 asked FortisBC how it would view a cost collar mechanism or an Incentive/penalty mechanism for this Project. FortisBC takes the position that all costs prudently incurred in the construction of the Project should be recovered in rates, and that periodic progress reports to the Commission, in conjunction with a prudency review, if the Commission deems one necessary, is the best and most appropriate means of ensuring cost control for this Project (Exhibit B-6, BCUC 1.9.1).

With respect to the escalation in the budget for the Project, other than the incremental cost related to Feeder 3, the Commission Panel is concerned with the changes in Project cost since the budget presented in the Application; however, it is conscious of the current volatile construction market. The Commission Panel will not impose a cost collar or incentive mechanism on this Project, nevertheless it recognizes and reminds FortisBC that a post project prudency review is always an option open to the Commission and encourages FortisBC to use all its efforts and creativity to contain Project costs and complete the Project as cost effectively as possible.

6.3 Commission Determination

The Commission Panel accepts the cost of the approved overland route and alignment for Feeder 3 as part of the Project costs but anticipates that the incremental cost of selecting other routing or of under-grounding, as suggested by some Intervenors or developers, will not be borne by ratepayers.

The Commission Panel accepts the cost estimate of \$14.43 million for the Project as proposed in Exhibit B-6, Table A4.4, page 21.

DATED at the City of Vancouver, in the Province of British Columbia, this 9^{th} day of July 2007.

Original signed by:

L.F. Kelsey Panel Chair and Commissioner

Original signed by:

L.A. O'Hara Commissioner

BRITISH COLUMBIA UTILITIES COMMISSION

C-7-07

TELEPHONE: (604) 660-4700

BC TOLL FREE: 1-800-663-1385 FACSIMILE: (604) 660-1102

ORDER NUMBER



SIXTH FLOOR, 900 HOWE STREET, BOX 250 VANCOUVER, B.C. V6Z 2N3 CANADA web site: http://www.bcuc.com

IN THE MATTER OF the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

and

An Application by FortisBC Inc. for a Certificate of Public Convenience and Necessity for the Black Mountain Substation Project

BEFORE: L.F. Kelsey, Panel Chair & Commissioner L.A. O'Hara, Commissioner July 9, 2007

CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

- WHEREAS:
- A. On December 19, 2006 FortisBC Inc. ("FortisBC") applied (the "Application") to the British Columbia Utilities Commission ("Commission") for a Certificate of Public Convenience and Necessity ("CPCN") for the Black Mountain Substation Project ("the Project"); and
- B. FortisBC states that the Project is required to serve the growing load in the Black Mountain area of east Kelowna, as well as to maintain regional reliability and reduce the risk to the bulk power supply in the Kelowna area: and
- C. The Project consists of a new distribution substation, complete with a 138 kV ring bus, 138 kV/13 kV 32 MVA transformer and three distribution feeder circuits, one of which is new and will require approximately two kilometers of new right-of-way; and
- D. During the proceeding, FortisBC revised its proposed site for the substation and the routing for the new section of distribution feeder, increased the cost estimate for the Project from \$11.96 million to \$14.43 million and extended the scheduled in-service time to the first quarter of 2009; and
- E. The Commission, pursuant to Commission Order No. G-4-07, held a Pre-hearing Conference in Kelowna on Monday, February 19, 2007 to hear submissions on the regulatory process for the review of the Project; and

BRITISH COLUMBIA UTILITIES COMMISSION

ORDER NUMBER C-7-07

- F. By Order No. G-18-07 dated February 22, 2007, the Commission established a Regulatory Timetable and Hearing Issues list for the regulatory review of the Application that included an oral public hearing on May 16, 2007; and
- G. FortisBC, the Regional District of Central Okanagan, and Barb and Ken Redlick and Joan Morgan filed Final Submissions; and
- H. FortisBC filed its Reply Submission on June 8, 2007; and
- I. The Commission has considered the Application and the evidence and submissions presented on the Application, and has determined that it is in the public interest that a CPCN be issued to FortisBC for the Project subject to the conditions and directions set out in this Order and the Decision that is issued concurrently with it.

NOW THEREFORE pursuant to Sections 45 and 46 of the Utilities Commission Act, the Commission orders as follows:

- 1. A CPCN is granted to FortisBC for the Black Mountain Substation Project set out in the Application, as revised in the proceeding and described in the Decision that is issued concurrently with this Order.
- 2. The Commission approves Site 7 for the construction of the Substation and the overhead routing of Distribution Feeder 3 generally along existing transmission and distribution rights-of-way, as revised by FortisBC and described in the Decision that is issued concurrently with this Order.
- 3. FortisBC is directed to file with the Commission quarterly progress reports on the Project showing planned versus actual schedule, planned versus actual costs, and any variances or difficulties that the project may be encountering. The quarterly progress reports will be filed within 30 days of the end of each reporting period.

BRITISH COLUMBIA UTILITIES COMMISSION

ORDER NUMBER

- 3
- 4. FortisBC is directed to file with the Commission a Final Report within three months of the end or substantial completion of the Project that provides a complete breakdown of the final costs of the Project, compares these costs to the revised cost estimate and provides a detailed explanation and justification of all material cost variances.
- 5. Subject to paragraphs 3 and 4 of this Order, the format and content of the reports required by this Order will be determined by FortisBC in consultation with Commission staff, or by determination of the Commission.
- 6. FortisBC will comply with the directions of the Commission in the Decision that is issued concurrently with this Order.

DATED at the City of Vancouver, in the Province of British Columbia, this 9^{th} day of July 2007.

BY ORDER

Original signed by:

L.F. Kelsey Panel Chair & Commissioner

COUNT 9 1-FortisBC - Black Mountain Project - Applicant & Registered Intervenors

APPENDIX A Page 1 of 1

Mr David Bennett Vice President, Regulatory Affairs & General Counsel Regulatory Affairs Department FortisBC Inc. 1290 Esplanade PO Box 130 Trail BC V1R 4L4 Tel: 8,1,250,717-0853 Fax: 8,1-866-266-7976 Email: david.bennett@fortisbc.com; regulatory@fortisbc.com

Representing

N/A

* Commission Secretary British Columbia Utilities Commission Box 250
6th Floor, 900 Howe Street Vancouver BC V6Z 2N3
Tel: 9,604,660-4700 Fax: 9,604,660-1102
Email: commission.secretary@bcuc.com OR upload via our website at:

Representing

Electronic copies of all documentation regarding this proceeding should either be uploaded via our website at www.bcuc.com **OR** sent via our e-mail address (*not both*) - 20 hard copies should also follow via regular mail/courier

Ken and Marina Doege 2401 Joe Riche Road Kelowna BC V1P 1K5 Tel: 8,1,250,765-0468 Fax: Email: kjdoege@telus.net

Representing

Ms Janet McCoy President Gallaghers Canyon Property Owners Association 14 - 3800 Pinnacle Way Kelowna BC V1W 3Z8 Tel: 8,1,250,979-0038 Fax: Email: janetmccoy@shaw.ca

Representing

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Representing

N/A

Mr Michael Brown Development Consultant Smartplans Ltd. 4480 Walker Road Kelowna BC V1W 1Z6 Tel: 8,1,250,764-5263 Fax: Email: smartplans@shaw.ca

Representing

Layer Cake Mountain Residents

Mr Joe Creron City of Kelowna 1359 KLO Road Kelowna BC V1W 3N8 Tel: 8,1,250, Fax: 8,1,250, Email: jcreron@kelowna.ca

Representing

City of Kelowna

Mr Murray Kopp Regional District of Central Okanagan 1450 K.L.O. Road Kelowna BC V1W 3Z4 Tel: 8,1,250,469-6232 Fax: 8,1,250,868-0012 Email: murray.kopp@cord.bc.ca

Representing

Regional District of Central Okanagan Board of Directors

Ms Joan Morgan 2423 Joe Riche Road Kelowna BC V1P 1K5 Tel: N/A Fax: N/A Email:

Representing N/A

IN THE MATTER OF the Utilities Commission Act, R.S.B.C. 1996, Chapter 473

and

FortisBC Inc. Certificate of Public Convenience and Necessity for the Black Mountain Substation Project

EXHIBIT LIST

Exhibit No.

Description

COMMISSION DOCUMENTS

- A-1 Letter dated January 16, 2007 and Order No. G-4-07 establishing a Procedural Conference for the Application
- A-2 Letter dated February 1, 2007 issuing request to provide a copy of the Notice(s) used and a list of all news publications which were advertised in
- A-3 Letter dated February 22, 2007 issuing Order No. G-18-07 establishing an Oral Public Hearing, Regulatory Timetable and Hearing Issues List
- A-4 Letter dated February 28, 2007 to Ken & Barb Redlick regarding their letter objecting to the Commission's Hearing Issues List (Exhibit C2-5)
- A-5 Letter dated March 30, 2007 issuing Information Request No. 1 to FortisBC
- A-6 Letter dated April 27, 2007 issuing Information Request No. 1 to the PARKS Division of the City of Kelowna
- A-7 Letter dated April 27, 2007 issuing Information Request No. 1 to Smartplans Ltd.
- A-8 Letter dated April 27, 2007 issuing Hearing Outline

APPLICANT DOCUMENTS

- B-1 Letter dated December 19, 2006 filing the Application for a Certificate of Public Convenience and Necessity for the Black Mountain Substation Project
- B-2 Letter dated February 6, 2007 responding to Exhibit A-2 request for copies of the Notice(s) used and a list of all news publications advertisements (MP3 file containing Radio spot was also provided)

Exhibit No.

Description

- B-3 Letter dated February 22, 2007, filing response to the Commission's request from the Procedural Conference of February 19, 2007, confirmation of Application delivery method and dates
- B-4 Letter dated March 22, 2007 filing the consultation activity report to the proposed substation site (Order G-18-07)
- B-5 Letter dated March 26, 2007 filing additional comments on the consultation activity report (Exhibit B-4)
- B-6 Letter dated April 13, 2007 filing response to Information Request No. 1 from the Commission and Intervenors
- B-7 **CONFIDENTIAL** Filing response to Commission's Information Request No. 1, Question 6.2, copy of Transformer Tertiary Risk Evaluation Project Report from ZE Power Engineering
- B-8 Letter dated April 27, 2007 filing notice of preparing response to supplemental Information Request (Exhibit C2-7)
- B-9 Letter dated May 7, 2007 filing Curriculum Vitaes for FortisBC's witness panel
- B-10 Letter dated May 7, 2007 filing response to Intervenor Information Request No. 2 (Exhibit 2-7)
- B-11 Letter dated May 10, 2007 filing Rebuttal Evidence
- B-12 Letter dated May 11, 2007 filing Option Agreement for Statutory Right of Way for property referred to as Site 7
- B-13 Letter dated May 11, 2007 filing Errata
- B-14 **SUBMITTED AT HEARING** Opening Statement of Mr. Frank, of FortisBC
- B-15 Letter dated May 23, 2007 filing the following Undertakings from the May 16, 2007 Oral Public Hearing:
 - Undertaking 1 at Transcript Volume 2, page 112
 - Undertaking 2 at Transcript Volume 2, page 113
 - Undertaking 3 at Transcript Volume 2, page 123
 - Undertaking 4 at Transcript volume 2, page 123
 - Undertaking 5 at Transcript Volume 2, page 124

Exhibit No.

Description

INTERVENOR DOCUMENTS

C1-1 **COALITION TO REDUCE ELECTROPOLUTIONS (CORE)** – Letter received January 16, 2007 from Hans Karow requesting Intervenor Status and filing Information Request No. 1 to FortisBC

** REMOVED AS OF FEBRUARY 16, 2007 **

- C2-1 **REDLICK, BARB & KEN** Online web registration received February 2, 2007 requesting Intervenor Status
- C2-2 Email dated February 6, 2007, filing Information Request No. 1 to FortisBC
- C2-3 Letter dated February 12, 2007, filing letter of comment
- C2-4 Email dated February 14, 2007, filing comments and area picture of proposed site
- C2-5 Email dated February 28, 2007 objecting to the Commission's Hearing Issues List attached to Order No. G-18-07
- C2-6 Letter dated March 30, 2007 from William Andrews, legal counsel, filing Information Request No. 1 to FortisBC
- C2-7 Letter dated April 26, 2007 from William Andrews, legal counsel, filing Information Request No. 3 to FortisBC
- C3-1 **MORGAN, JOAN** Online web registration received February 7, 2007 requesting Intervenor Status
- C3-2 Email received February 14, 2007 filing Letter of Comment
- C3-3 Letter dated March 30, 2007 from William Andrews, legal counsel, filing Information Request No. 1 to FortisBC
- C4-1 **DOEGE, KEN & MARINA** Online web registration received February 14, 2007 requesting Intervenor Status
- C4-2 Letter received February 14, 2007 filing Letter of Comment
- C4-3 E-mail received February 27, 2007 filing Letter of Comment from Marina Doege

Exhibit No.

Description

- C5-1 **REGIONAL DISTRICT OF CENTRAL OKANAGAN** Online web registration received from Murray Kopp on February 14, 2007 requesting Intervenor Status
- C5-2 Maps and Pictures filed at the February 19, 2007 Pre-hearing conference
- C5-3 Letter dated March 30, 2007 from Kelly A. Carins, Thomas Butler, legal counsel, filing Information Request No. 1 to FortisBC
- C6-1 **GALLAGHERS CANYON PROPERTY OWNERS ASSOCIATION** Letter and online web registration received from Janet McCoy, President on February 20, 2007 requesting Intervenor Status
- C7-1 **BROWN, MIKE/LAYER CAKE MOUNTAIN RESIDENTS** E-mail dated February 26, 2007 requesting late Intervenor Status on behalf of the owners of Layer Cake Mountain
- C7-2 Letter dated April 17, 2007 filing evidence and questions on the proposed 477MCM transmission line
- C7-3 Letter dated April 26, 2007 filing Information Request No. 1 to FortisBC
- C7-4 Letter dated May 3, 2007 responding to Commission Information Request No. 1 to Smartplans
- C8-1 **CITY OF KELOWNA** Received Online web registration dated March 5, 2007 requesting late Intervenor Status from Joe Creron
- C8-2 Letter dated March 26, 2007 from the City of Kelowna Parks Division, filing comments on its evaluation on the ten proposed sites
- C8-3 Letter dated April 30, 2007 filing response to previous comments on site for substation and support for Site 7 (Exhibit C8-2)
- C8-4 Letter dated May 11, 2007 from J. Cerron, Parks Manager, filing comments on location of the new transmission line

Exhibit No. Description

- C9-1 **LIGHT, TIM** Received Online web registration and letter dated March 20, 2007 requesting late Intervenor Status
- C9-2 Email dated March 22, 2007 filing address and contact information
- C9-3 Email dated March 27, 2007 filing comments on location of sites
- C9-4 Letter dated May 7, 2007 withdrawing as an Intervenor

LETTERS OF COMMENT

E-1

E-mail dated February 28, 2007 from Tom Masters commenting on the Application