



**BRITISH COLUMBIA
UTILITIES COMMISSION**

**ORDER
NUMBER G-172-13**

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

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

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

and

**Requiring an On-Site Examination of Silversmith Power and Light Corporation
and the Preparation of a Report Detailing the Findings of the Examination -
Appointing an Independent Technical Expert and Establishing the Terms of Reference**

BEFORE: L.F. Kelsey, Commissioner

October 21, 2013

O R D E R

WHEREAS:

- A. On December 12, 1996, the British Columbia Utilities Commission (Commission) issued Order G-116-96 approving for Silversmith Power and Light Corporation (Silversmith) Electric Tariff Terms and Conditions relating to service at Sandon, BC;
- B. On May 9, 2013, Commission Letter L-27-13 requested that Silversmith provide outstanding financial and operational information as required by sections 43 and 49 of the *Utilities Commission Act* (Act);
- C. On July 7, 2013, Silversmith provided certain items requested in Letter L-27-13. Silversmith also updated the Commission on various other matters, including its efforts to provide the remaining outstanding information;
- D. The information provided in Silversmith's July 7, 2013 letter to the Commission raised potential operational concerns with respect to Silversmith's equipment and devices in providing safety, convenience and service to the public in accordance with section 23(1) of the Act;
- E. On September 4, 2013, by Order G-138-13 the Commission ordered an examination into the conduct of Silversmith Power and Light Corporation, will appoint an independent technical expert to carry out the examination, and will establish the Term of Reference for the examination;
- F. On September 25, 2013, the Commission made a request for proposal for engineering consulting services for the examination into the conduct of Silversmith Power and Light Corporation. Subsequently, the Commission selected Maven Consulting Limited (Maven) as the independent technical expert.

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NOW THEREFORE:

1. Pursuant to sections 8 and 78 of the *Utilities Commission Act*, the Commission is appointing Maven Consulting Limited as the independent technical expert to carry out the examination. Maven Consulting Limited will undertake the on-site examination of Silversmith Power and Light Corporation and will provide a report to the Commission detailing the findings of the examination.
2. Pursuant to section 43(1) of the *Utilities Commission Act*, Silversmith Power and Light Corporation is directed to fully comply with the examination and provide information and fully respond to inquiries of the Commission and Maven Consulting Limited.
3. The Commission is establishing Terms of Reference attached as Appendix A to this Order for the examination and providing a copy to Silversmith Power and Light Corporation. The on-site examination is scheduled to occur October 23 to 25, 2013, and the report is expected to be completed before December 31, 2013.

DATED at the City of Vancouver, in the Province of British Columbia, this 21st day of October 2013.

BY ORDER

Original signed by:

L.F. Kelsey
Commissioner

Attachment

TERMS OF REFERENCE

The purpose of the inspection is to assess whether or not Silversmith Power and Light's electrical, mechanical and civil equipment/structures are both safe and reliable in accordance with Commission Order G-138-13. It is a fact finding mission, intended to gather information about Silversmith's operations. The consultant is expected to maintain neutrality and is expected to provide a well written detailed report. Any major findings are to be reported to the Commission immediately. If the situation arises that the scope of the work as outlined herein, in the opinion of the inspector, does not meet the requirements to determine if Silversmith Power and Light is operating in a safe and reliable manner, the inspectors are advised to contact Commission staff immediately.

The inspection is expected to take place October 23-25, 2013; the afternoon of October 23rd, all day October 24th, and the morning of October 25th, as required.

If, due to lack of Silversmith staff availability and/or due to weather conditions, the inspection cannot be completed October 23-25, 2013, or prior to the end of November, by mutual agreement between Maven and the Commission, the inspection work can be rescheduled for the Spring of 2014.

The submitted report shall provide a condition assessment of the Utility. The report shall include descriptions of the equipment, equipment age, rating, estimated service life, estimated remaining service life, probability of failure, consequence of failure, consequence of maintaining the status quo, any potential actions that would be necessary to make the component safe and reliable, and any other comments, including those related to maintenance/documentation, that are pertinent for evaluating the safety and reliability of Silversmith Power and Light. Pictures and videos of the equipment are to be included in the report, to aid understanding of the report.

The report shall include:

- 1) An executive summary that concisely describes the key observations, the analysis and the key recommendations;
- 2) An introduction that briefly outlines the context of the inspection;
- 3) Observations that objectively describe the main findings;
- 4) Analysis that objectively examines the main findings using relevant standards and statistics, and includes lists and comparison of alternatives; and
- 5) Recommendations that summarize the logical courses of action one might take to remediate issues, if any are identified during the inspection.

The inspection and the report are to focus on the "main components" of Silversmith's water to wire utility system: the penstock, the powerhouse building, the hydro-generator, the turbine, the unit breaker, the unit transformer, the protection systems, and the distribution equipment, including transformers, power poles, and vegetation management. However, time permitting, anything else that would be pertinent to evaluating the safety and reliability of Silversmith Power and Light must also be examined and reported on.

The following is a more comprehensive, although not exhaustive, list of potential equipment that the Commission would expect review and condition assessment of, if time permits. Note the list also includes the "main components" which are considered mandatory to meet the General Service requirements.

a. Electrical

- Generator(s), hydro-electric and diesel, if applicable, protection equipment, control equipment, transformers, circuit breakers, distribution network (including lines, transformers, meters, fuses, cut-outs, service entrances and vegetation management), grounding grid and any other electrical equipment that knowledge of the condition of that electrical equipment would significantly affect the determination of whether or not the operation of Silversmith Power and Light is safe and reliable. Please obtain and provide a drawing of the generation and distribution systems in the report. If not available, please provide sketches, to aid in understanding the report.

b. Mechanical

- Generator, turbine/Pelton wheel, nozzles and deflectors, if applicable, bearings, seals, shaft, generator drive train, spider, rim, supports, governor, scroll case, head cover, any gates or valves associated with the water passage and any other mechanical equipment that knowledge of the condition of that mechanical equipment would significantly affect the determination of whether or not the operation of Silversmith Power and Light is safe and reliable.

c. Civil

- Intakes, penstock, powerhouse building and power poles. The assessment is to include all applicable civil items associated with the water to wire operation of Silversmith Power and Light. It would be expected to include, but is not limited to, items such as weirs/dams/dykes, booms, trash racks, dredging, staves, penstock rings, penstock footings, draft tube, tailrace, powerhouse and slopes and any other civil features that knowledge of the condition of that feature would significantly affect the determination of whether or not the operation of Silversmith Power and Light is safe and reliable. Please obtain and provide a drawing of the water passage and isolation facilities in the report. If not available, please provide a sketch, to aid in understanding the report.