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**BRITISH COLUMBIA  
UTILITIES COMMISSION**

**ORDER  
NUMBER G-114-14**

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

**and**

**Person(s) doing business as Casa Del Mila Oro Geothermal**

**BEFORE:** L.F. Kelsey, Commissioner August 11, 2014

**O R D E R**

**WHEREAS:**

- A. On July 9, 2014, by Order G-89-14, the British Columbia Utilities Commission (Commission) directed Casa Del Mila Oro (CDMO) Geothermal to file its schedule of rates, and terms and conditions of service for approval along with detailed justification of how the rates and terms established by it are not unjust, unreasonable or unduly discriminatory pursuant to section 59 of the *Utilities Commission Act* (UCA) on or before July 16, 2014;
- B. On July 23, 2014, on behalf of CDMO, Mr. Chris Stewart filed a tariff as well as calculations comparing Geothermal charges for CDMO Geothermal customer rates on a square footage basis (filing);
- C. The filing did not satisfy the directives made in Order G-89-14 and was not considered by staff to be complete in order to conduct a formal and prudent review of the rates charged to CDMO's customers in accordance with the UCA; and
- D. On August 6, 2014, CDMO's representative met at the Commission office to ascertain the information required for filing a thorough rates application; minutes of the meeting are attached as Appendix A to this Order.

**NOW THEREFORE**, pursuant to sections 45, 60 and 61 of the *Utilities Commission Act*, the Commission orders as follows:

- 1. Casa Del Mila Oro Geothermal (CDMO) must file an application for a Certificate of Public Convenience and Necessity to operate as a public utility in the province of British Columbia. The application must also include a proposed schedule of rates, terms and conditions of service for approval along with detailed justification

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of how the rates and terms established by it are not unjust, unreasonable or unduly discriminatory pursuant to section 59 of the *Utilities Commission Act*. The application must be received by the Commission Secretary by mail at 900 Howe Street, 6<sup>th</sup> Floor, Vancouver BC V6Z 2N3 or email at [commission.secretary@bcuc.com](mailto:commission.secretary@bcuc.com) on or before August 15, 2014, with a copy provided to all CDMO customers at the time of filing with the Commission.

2. CDMO must provide a copy of this order and the attached minutes to all customers of CDMO by Wednesday August 13, 2014.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 11<sup>th</sup> day of August 2014.

BY ORDER

*Original signed by:*

L.F. Kelsey  
Commissioner

Attachment

**Minutes of meeting with CDMO Geothermal**  
**August 6, 2014**

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At the request of the BC Utilities Commission (Commission), I met with Mr. Chris Stewart of CDMO Geothermal to assist him in understanding that utility's responsibilities under the Utilities Commission Act (UCA) and to provide advice to him on the form and content of the Applications he must make to the Commission. Mr. Philip Nakoneshny and Mr. Todd Smith of the Commission staff, who were available to provide technical advice related to the requirements under the UCA and inputs such as Commission approved debt to equity ratios and allowable returns on equity, but not to endorse or reject items that CDMO may put in its Applications, also attended parts of the meeting. Mr. Stewart is at liberty to and has the responsibility to craft the content of his Applications as he sees fit, including the valuations of assets and rates.

Mr. Stewart agreed to submit Applications to the Commission by August 15, 2014. The Applications will replace his initial application and will seek the following approvals from the Commission:

1. Issuance of a Certificate of Public Convenience and Necessity for the ongoing operations of CDMO Geothermal.
2. Approval of a Tariff of terms and conditions of service to customers of CDMO Geothermal (Interim approval will be requested until such time as approval on a permanent basis is received).
3. Approval of rates to be charged by CDMO Geothermal (Interim approval will be requested until such time as approval on a permanent basis is received).

**Ownership of CDMO Geothermal**

The ownership of CDMO Geothermal remains unclear. The utility assets are comingled with the other assets of Strata Lot 47. The Hudson Group foreclosed on Strata Lot 47 some years ago and it may be sold in the near future. Mr. Stewart's company that owned Strata Lot 47 is no longer functional after bankruptcy. Mr. Stewart oversees the operations of CDMO Geothermal. Until the ownership of CDMO Geothermal becomes clear, the Commission may want to address communications to both Mr. Stewart and the Hudson Group.

It would be preferable for the Commission's regulation of CDMO Geothermal if the utility assets were separated from the other commercial assets of Strata Lot 47. This action may also be beneficial to the owners of Strata 47.

**Capital Assets**

The Commission normally regulates utilities on a depreciated historical cost basis. However, the records of the original capital costs are not available and so we discussed what those costs may likely have been by individual asset. In this regard we were kindly assisted by Mr. Terry Olfert of Lakeview Geotech Ltd. who gave advice via cell phone. For one major cost item related to the 6 inch and 1 inch diameter HDP pipes, Mr. Olfert has agreed to investigate the likely cost further and advise Mr. Stewart.

Since the start of operations there have been a number of capital related additions and some retirements. The two reinjection wells have not been used and a 3 inch PVC pipe delivers water back to the lake rather than reinjection to the aquifer. Two of the well pumps have been replaced along with replacement of the wellheads and cleaning of screens.

Although Mr. Stewart recalls paying over \$800,000 for the initial utility assets we identified a preliminary estimate of original cost of about \$400,000. Mr. Stewart will refine and support those costs prior to making his Applications on August 15<sup>th</sup>.

To establish an annual revenue requirement related to the capital assets, one also needs to establish depreciation rates based on the expected useful life of each major asset. We discussed the likely useful lives of various assets and what depreciation rates other utilities have been approved to use for specific assets like wells and HPD pipe.

We then discussed the likely current depreciated cost of the capital assets, recognizing the 8 years of operations. Based on the preliminary estimate of original cost and 8 years of operation the current depreciated cost of capital assets may be about \$300,000. Again, Mr. Stewart may refine both the costs and depreciation rates as he sees fit prior to filing his Applications.

There are several key improvements to the system that would improve the cooling capability of the system, including the locating and fixing of a leak in the closed loop system. However, the level of mistrust between the strata council and Mr. Stewart coupled with the non-payment by some customers of their bills, has reached an impasse. This is unfortunate since it appears that the needed investment is modest compared to the expected improvement in cooling capability. This issue will need to be addressed by the Commission, perhaps through tariff conditions and directions to the utility.

#### **Financing of Capital Assets**

For the purpose of establishing a go forward revenue requirement and rates, we discussed the likely financing structure that CDMO Geothermal is likely to need as an ongoing utility. The Commission has recently addressed this matter in its GCOC2 Decision at page 124. It seems reasonable for CDMO Geothermal to adopt the default capital structure in that Decision until better financing may become available. The default setting would be a debt/equity ratio of 57.5/42.5 and an after-tax ROE of 9.5%. It is assumed that debt could be raised at 6% interest and the pre-tax ROE at the current 26% tax rate would be 12.8%. On the current estimated depreciated capital assets this would lead to an annual revenue requirement of just over \$27,000 for capital.

#### **Operating & Maintenance Costs**

There are a number of ongoing operating costs to be recovered in a utility revenue requirement. For CDMO Geothermal we identified clerical/administrative costs, electrical, maintenance on the heat exchanger, and general maintenance. In addition, the property taxes on Strata 47 need to be apportioned between the utility and the commercial interests. The preliminary estimate of these costs is about \$24,000/yr.

#### **Rate Design and Rates**

The overall revenue requirement for preliminary purposes may be about \$60,000/yr. It needs to be recovered from all customers, including Strata 47. Since all stratas use the geothermal heating and cooling for similar purposes, it seems reasonable to apportion the revenue requirement on a square footage basis. The areas of the 4 buildings are as follows:

- building A – 20 units @ 1570 sq. ft. = 31,400 sq. ft.
- building B – 12 units @ 800 sq. ft. = 9,600
- building C – 14 units @ 800 sq. ft. = 11,200
- building D – 6,000

CDMO Geothermal intends to apply for monthly billing. The monthly revenue requirement of about \$5,000 (\$60,000/yr divided by 12 months = \$5000) spread over the total area of 58,200 yields a rate of 8.6 cents/sq. ft./month. This is considerably in excess of the current rate of 6.3 cents/sq. ft./month.

In correspondence, Mr. Stewart provided a comparable geothermal rate for the Wilden in Kelowna. After correcting the math, the monthly average cost between all months is estimated to be \$1600/yr. for a 2000 sq. ft. townhouse. This works out to  $(1600 / 2000 / 12)$  6.7 cents/ sq. ft./ month.

I recall that one complainant thought that a comparable rate would be much lower than that currently charged by CDMO Geothermal. Perhaps that person could document that comparable.

### **Tariff Terms and Conditions**

A utility requires an approved Tariff that clearly spells out the terms and conditions of service. It includes such matters as billings and payment schedules, late payment charges, disconnection and reconnection conditions and charges, access to customer premises if needed to maintain safe reliable service, force majeure, etc. CDMO Geothermal has been provided with a copy of a typical Tariff to be modified for the service provided by CDMO Geothermal.

One significant issue is the recent strata bylaw change to allow members to install their own heating and cooling equipment. This could jeopardize the viability of the utility if some customers leave the system driving up costs to the remaining customers. Complicating matters is the need to undertake capital work to find and repair the leak and to undertake additional work to ensure higher quality and reliable service. It may be necessary to have a tariff condition to have customers commit to take service for a period of time while the investment is undertaken and service stabilized.

Mr. Stewart will file a suggested Tariff along with the other portions of the Applications on August 15<sup>th</sup>.

### **Options for the future**

Given the level of acrimony that exists and the standoff between some customers and the utility, the viability of the utility is in question. Unless this can be overcome, the Commission may have to consider dissolution of the utility. That would be unfortunate since the other options for heating and cooling may be more expensive and noisy. There are several possible outcomes:

1. Continuing the utility – CDMO Geothermal could be structured as a separate entity with approved rates and Tariff Terms and Conditions. Although this can be done by cost allocation within Strata 47, it would be preferable to have the utility as a stand alone entity. The obstacles to this are the current poor relations and finding a way to get the capital investments to provide reasonable reliable service financed and in place as soon as possible.
2. Sale of the utility to the strata – This option appears to be under consideration by the Hudson Group. If completed the Commission would still need to ensure the strata funds the necessary improvements as soon as possible and meets the conditions of the UCA.
3. Dissolution of the utility – This is a real option if the utility owners and the strata can't overcome their feud. The Commission needs to direct improvements in service and customers can't be allowed to withhold payment. The utility needs access to its physical plant to effect the improvements. If these can't be accomplished, then the Commission should consider shutting down the utility if adequate service cannot be maintained or the financial viability of the utility is undermined.

William Grant  
Utility consultant