


MADE at the City of Calgary, in the Province of Alberta, on 2nd day of January 2008.	 ALBERTA ENERGY AND UTILITIES BOARD
Alberta Electric System Operator Fort Nelson Rider H Application	Application No. 1552173

1 INTRODUCTION

On December 19, 2007 the Alberta Energy and Utilities Board (the Board or EUB) received an application (the Application) from the Alberta Electric System Operator (AESO) in which the AESO requested approval of an Interim Refundable Fort Nelson Rider H, to be effective on an interim refundable basis from January 1, 2008, to December 31, 2008. The Application concerned the recovery of costs related to the provision of certain incremental contract capacity to BC Hydro to enable service to additional load at Fort Nelson, British Columbia.

In order to process this application expeditiously, it has been reviewed without the provision of notice, pursuant to Section 58 of the *Public Utilities Act*. Section 58(2) of the *Public Utilities Act* provides for the following:

58(2) A person entitled to notice and not sufficiently notified may, at any time within 10 days after becoming aware of any order or decision, or within any further time the Board may allow, apply to the Board to alter or rescind the order or decision, and the Board shall, on that application and on any notice to the other parties interested that in its discretion it thinks desirable, hear the application, and either alter or rescind the order or decision or dismiss the application as to it seems just.

2 DETAILS OF THE APPLICATION

BC Hydro is a customer of the AESO in the northwest part of Alberta. The AESO currently provides service from Rainbow Lake in Alberta to BC Hydro near the provincial border, and BC Hydro in turn serves the community of Fort Nelson as well as industrial loads in this area of British Columbia.

The AESO stated it currently provides service to BC Hydro under Fort Nelson Demand Transmission Service Rate FDS. Rate FDS was approved by the EUB through Decision 2005-096, Decision 2005-131, and Order U2005-464. It was subsequently retroactively amended to reflect applicable revisions to the Balancing Pool Consumer Allocation Rider F and to correct

an error arising from the use of an incorrect billing determinant in the calculation of the demand charge, through Order U2006-307 to be effective January 1, 2006. Rate FDS was most recently approved by the EUB in Decision 2007-106.

BC Hydro's FDS contract capacity up to early 2007 was 24.5 MW. In November 2006 BC Hydro requested the AESO to increase its contract capacity by 12 MW, to 36.5 MW. In December 2006 BC Hydro requested an additional increase of 2 MW, to 38.5 MW.

The AESO stated it approved an increase of 4 MW, to 28.5 MW, effective July 1, 2007, but delayed approving the remaining 10 MW until an assessment of operational constraints in the Rainbow Lake Area could be completed.

The assessment was completed in August 2007 and indicated that the additional 10 MW of load in British Columbia could be accommodated, but would require significant additional dispatch of transmission must run (TMR) generation in the Rainbow Lake Area. The AESO stated that, in conjunction with BC Hydro, it began discussing alternatives that would allow service to the additional load without requiring additional TMR. Eventually six separate alternatives were considered, with some having one or more variations.

The AESO stated that none of these alternatives is expected to be able to accommodate the additional BC Hydro load in less than a minimum of six months, and all require studies to be completed to determine their effectiveness, cost, and operational requirements. Some of the alternatives are expected to also require additional significant expenditures in time and resources.

None of the alternatives is therefore able to respond to the immediate needs of the BC Hydro customer. Both the AESO and BC Hydro have agreed that the only practical solution to provide service in the short term involves the additional dispatch of TMR generation and thus incurs additional TMR costs.

The AESO stated studies undertaken to evaluate the additional 10 MW FDS contract capacity increase indicate that additional TMR dispatch volumes will be required for Rainbow Lake Area loads from 111 MW to 130 MW, and a fourth TMR generator will be required when Rainbow Lake Area load exceeds 130 MW. Operating Policies and Procedures (OPP) 501 is under review to reflect the results of these studies, and will be further updated if necessary based on an evaluation of TMR requirements in the Rainbow Area after the additional 10 MW of BC Hydro load is operational.

The AESO concluded that maintaining system reliability for an FDS contract capacity of 38.5 MW requires TMR dispatch of a fourth Rainbow Lake Area generator whenever area load exceeds 130 MW. The additional TMR dispatch of the fourth generator would be the primary cause of additional costs attributable to the increase in BC Hydro load. Additional costs would also be incurred through greater TMR dispatch volumes for three generators when Rainbow Lake Area load is between 111 and 130 MW. Without the additional 10 MW FDS contract capacity, neither the dispatch of a fourth TMR generator nor greater TMR dispatch volumes for three generators would be required under normal operating conditions.

While reviewing the technical alternatives to accommodate the increased load, the AESO stated it and BC Hydro also discussed commercial terms regarding payment for the incremental service to BC Hydro. Both the AESO and BC Hydro agreed that any service by the AESO to BC Hydro load should continue to be subject to regulatory oversight as necessary by the EUB in the determination of an appropriate rate for that service.

Both parties acknowledge that the EUB reviewed and determined the structure and approach of the current Rate FDS under which service is provided to BC Hydro at Fort Nelson in the AESO's 2005-2006 General Tariff Application. In the AESO's view, that rate was based on costs consistent with a forecast contract capacity of 24.5 MW, and does not necessarily apply in perpetuity regardless of changing circumstances in the area. The AESO stated that in BC Hydro's view, however, the AESO is required to provide service under the current tariff and cannot charge BC Hydro more than the "postage stamp rate" for operating reserve charges, voltage control (TMR), and other system support charges as set out in Decision 2005-096.

Financial Impact

In view of the need to obtain a relatively quick solution to accommodate the BC Hydro customer's increased load, both parties agree that the matter should be further reviewed and considered by the Alberta Utilities Commission (AUC). In the meantime, both parties have recommended to the EUB, and requested approval of the Interim Refundable Fort Nelson Rider H. The interim rider is based on recovering from BC Hydro about 50% of the cost of incremental TMR dispatch required by the provision of an additional 10 MW of contract capacity to BC Hydro.

The AESO maintained recovery of 50% of the costs reflects a fair apportionment of the incremental TMR costs until such time as the matter is given a final regulatory review, and provides both parties incentive to cooperatively assess the long term needs of the Fort Nelson area and bring forward a longer-term tariff solution for AUC approval. The remaining 50% of the costs would, for the time being, be recovered from other AESO customers through the AESO's Deferral Account Adjustment Rider C, as these costs were not included in the AESO's 2007 revenue requirement forecast.

With respect to the financial impacts of the proposed rider the AESO stated that it expected the final rate will be settled relatively promptly, potentially within 12 months of the interim rider becoming effective. If the rider is in place for 12 months, the AESO estimated the incremental TMR costs expected to be incurred is on the order of \$6.75 million. As BC Hydro will pay about 50% of these costs, the estimated impact on other AESO customers is estimated to be about \$3.4 million for approximately 12 months. The AESO considers this a reasonable amount, representing only about 0.5% of the AESO's 2007 forecast DTS revenue requirement of \$644.9 million.

Specifically, the amount to be recovered from BC Hydro under Rider H would be 50% of the incremental cost of TMR dispatch of a fourth generator in the Rainbow Area. Costs for the TMR dispatch of a fourth generator, above those costs associated with maintaining such a generator on standby, would be determined at the end of each month; 50% of those costs would be billed to BC Hydro, in addition to charges attributable to BC Hydro's load under Rate FDS for the month.

The AESO also noted that Section 48 of the 2007 *Transmission Regulation*, A.R. 86/2007, determines that costs for the provision of ancillary services (which include TMR services) are considered to be “prudent” or “appropriate” when such costs have been approved by the ISO members (being the AESO Board). The AESO stated the AESO Board has been advised of the costs of incremental TMR dispatch associated with accommodating the additional BC Hydro load and is supportive of the proposed approach to respond to the request for increased FDS contract capacity through incremental TMR dispatch or other means as considered reasonable by the AESO.

The AESO stated both parties agreed that the approval of an interim refundable rider would accommodate the immediate need for service, allowing issues to be appropriately determined and resolved before the AUC at a future date. The AESO and BC Hydro expect to further discuss and review the commercial terms regarding payment for the incremental service to BC Hydro, prior to submitting a final rate or rider application to the AUC.

The AESO also expects to include in the final rate application further information relating to longer-term transmission supply in the Rainbow Lake Area, including the impact of the Northwest Alberta Transmission Development. However, a complete long term transmission plan for the area is not expected to be able to be developed in time for inclusion in the final rate application.

Reliability Impact

With respect to the impact upon system reliability the AESO stated the additional TMR dispatch will slightly decrease current system reliability in the Rainbow Lake Area. Under the current OPPs, three generators are dispatched for TMR service with a fourth generator on standby for backup TMR dispatch in the event of planned or unplanned outages of one of the first three generators. To accommodate the additional load, the fourth generator will sometimes be dispatched concurrently with the first three generators, which therefore means no generator will be available for backup TMR dispatch.

During any period in which four generators are dispatched on-line when Rainbow Lake Area load exceeds 130 MW, if a planned or unplanned outage of one of the four generators occurs no backup TMR generator will be available. Load services will then need to be curtailed either in accordance with a plan designed for a specific contingency or in preparation for the second contingency.

However, the AESO considered the risk of such an occurrence to be relatively small and generally comparable to the risk of interruptions in other areas of the province. In addition, the reliability reduction will occur for only about 30% of the time, namely, in those hours in which the fourth TMR generator is dispatched.

To quantify the increased risk associated with dispatch of four TMR generators, the AESO compared the existing situation to the proposed situation.

Under the existing situation, using a binomial probability calculation and assuming the average availability of the Rainbow Lake Area generation units is 94%, the probability of a second contingency (in which two or more units are off-line at the same time in any given period) is about one percent. Loss of two or more units at the same time would result in some load services curtailment in the area for that time.

For the proposed situation, using the same calculation and availability assumptions, the AESO stated the probability of losing two or more units at the same time increased to only about two percent.

The AESO stated the reliability impact of all the alternatives being considered to serve the incremental BC Hydro load will be assessed as part of the application to the AUC for a final rate determination on this matter. The reliability impact of incremental TMR dispatch under the interim rider will therefore be limited in duration, as the interim rider is expected to be replaced by a final rate or rider within a year.

The AESO also stated it has advised other large customers in the Rainbow Lake Area of the potential reliability impact of incremental TMR dispatch. Ultimately, the AESO considered that the impact on reliability would be comparable to that which would result from serving increased Alberta load in the Rainbow Lake Area, and is therefore reasonable.

3 BOARD FINDINGS

The Board has reviewed the Application and considers it reasonable for the AESO to co-operate with BC Hydro to provide the additional service requested.

With respect to the financial impacts of the rate the Board considers that on an interim basis the proposed 50/50 sharing of costs between BC Hydro and other AESO customers to be reasonable. In particular the Board notes that the forecast increase in DTS revenue requirement is only 0.5%.

The Board accepts the evidence of the AESO that the addition of this service and the interim refundable Fort Nelson Rider H will have minimal impact on system reliability.

The Board therefore considers the proposed interim rate to be reasonable and is approved as filed.

4 ORDER

IT IS THEREFORE ORDERED THAT:

- (1) The Interim Refundable Fort Nelson Rider H is approved as filed (Appendix 1), effective January 1, 2008.

APPENDIX 1

ALBERTA ELECTRIC SYSTEM OPERATOR

Rider H **Interim Refundable Fort Nelson Rider H** Page 1 of 1

Purpose: The Interim Refundable Fort Nelson Rider H is to recover 50% of the cost of the additional transmission must-run (TMR) dispatch of a fourth generator in the Rainbow Area in support of incremental load near Fort Nelson.

Applicable to: BC Hydro for demand service to Fort Nelson in British Columbia.

Effective: The rider will be effective from January 1 to December 31, 2008, and will expire unless revoked or replaced by another approved rate or rider on or before December 31, 2008.

Rate: At the end of each billing period, the AESO will determine the incremental cost of the additional transmission must-run (TMR) dispatch of a fourth generator in the Rainbow Area, beyond the dispatch that would have been required prior to the addition of an incremental 10 MW of load near Fort Nelson in January 2008. Under this rider, 50% of the incremental cost so determined will be billed to BC Hydro.

Terms: (a) Rider H is an incremental refundable charge in addition to amounts payable for demand and energy under Rate FDS.

 (b) The Terms and Conditions form part of this Rate Schedule.

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