

Reference: As well, the interconnected capacity of backup loads exceeds the concurrent usage of the transmission system as reflected in system metered data. Based on a review of billing data from June 2005 through May 2006 for low load factor customers, load capacities of less than 5% duration were about 103% of the DTS contract capacities for those customers. Transmission system costs attributed to backup loads should therefore be assessed against an amount of backup load approximately equal to normal load. (Section 4, page 38)

Request:

- (a) Please discuss the nature of use of each of the PODs that in the AESO's Appendix E analysis had a load factor of 0%. How many of these PODs would the AESO characterize as backup loads?
- (b) Please indicate which of the PODs in Appendix E the AESO would characterize as backup loads. Please indicate the sum of their maximum monthly demands over the period of 2004 and 2005.
- (c) Please provide the aggregate hourly load of the PODs identified in (b) above for 2004 and 2005. If full data for 2004 and 2005 is not available, please provide all data that is available.

Response:

Revisions to part (b-c) indicated in italics.

- (a) There are 16 PODs in Appendix E with load factors of 0%. Thirteen of these PODs provide backup or standby service for generators connected at the same substation. One POD is for an isolated community. There are no STS contracts at the substations serving the remaining two services. The AESO understands one of these services does have onsite generation. The other is a distribution utility service and the AESO is uncertain of the nature of use.

In summary, the AESO would characterize 14 of the 16 PODs with 0% load factors as backup or standby loads.

- (b) The AESO does not have sufficient information to identify all PODs in Appendix E which would be characterized as backup loads.

The AESO notes that there are 64 substations in Alberta where customers have contracted with the AESO for both load and generation service, which indicates the existence of onsite non-emergency generation. The aggregate monthly demands for PODs at those substations during 2004 and 2005 are provided below.

*Sum of Highest Metered Demands by Month
for DTS Contracts at Substations With STS Contracts*

<i>Month</i>	<i>2004</i>	<i>2005</i>
<i>January</i>	<i>713</i>	<i>674</i>
<i>February</i>	<i>567</i>	<i>696</i>
<i>March</i>	<i>696</i>	<i>594</i>
<i>April</i>	<i>682</i>	<i>793</i>
<i>May</i>	<i>600</i>	<i>748</i>
<i>June</i>	<i>677</i>	<i>702</i>
<i>July</i>	<i>698</i>	<i>614</i>
<i>August</i>	<i>541</i>	<i>629</i>
<i>September</i>	<i>561</i>	<i>703</i>
<i>October</i>	<i>626</i>	<i>819</i>
<i>November</i>	<i>648</i>	<i>808</i>
<i>December</i>	<i>748</i>	<i>656</i>

The actual amount of backup load interconnected to the transmission system for these services is about 1,206 MW, calculated as the sum over all services of the maximum metered demand for each service over the two-year period. These customers will likely be a primary user of backup service and should therefore be representative of the total backup load on the system.

The AESO notes the qualification included in response to Information Request TCE.AESO-036 (a) Revised, namely: "Utilization of a backup service would depend on the rate applicable to the service, the alternative standard rate, and any conditions which may apply to transfers from the standard rate to the backup rate." Please refer to TCE.AESO-036 (a) Revised for additional information. However, the subset of backup customers included above represents a significant portion of total backup loads and this subset can be considered representative of the total backup load on the system.

Please refer to the response to Information Request ADC.AESO-032 for additional information.

- (c) *Please refer to attached Schedules IPCAA.AESO-047 (c)-A and -B for aggregate hourly data for 2005 and 2004 respectively for loads interconnected at substations which also serve one or more STS customers, as discussed in part (b) above. The following summary table includes additional values that cannot be derived from the aggregate data.*

<i>Loads at Substations Also Serving STS Customers</i>		<i>Total AIS Loads</i>	
<i>2005</i>	<i>2004</i>	<i>2005</i>	<i>2004</i>

Sum of Coincident Hourly Loads (MW)

<i>Minimum</i>	<i>272</i>	<i>241</i>	<i>6,104</i>	<i>6,017</i>
<i>Average</i>	<i>390</i>	<i>346</i>	<i>7,565</i>	<i>7,429</i>
<i>Maximum</i>	<i>554</i>	<i>486</i>	<i>9,580</i>	<i>9,236</i>

***Sum of Coincident Hourly Loads Weighted by 240 kV Line Length
in Hours When Lines Were Loaded Above 5% Duration Loading (MW)***

<i>Length-Weighted Average</i>	<i>387</i>	<i>350</i>	<i>7,679</i>	<i>7,431</i>
--------------------------------	------------	------------	--------------	--------------

Sum of Non-Coincident Hourly Loads (MW)

<i>Maximum</i>	<i>1,139</i>	<i>1,000</i>	<i>10,064</i>	<i>9,524</i>
----------------	--------------	--------------	---------------	--------------