

Stakeholder Comment & AESO Replies Matrix

Alberta Reliability Standards November 16, 2009

Date of Request for Comment: September 9, 2009
Stakeholder Consultation Period: September 9 – October 9, 2009

1.1 – MOD-016-AB-1.1		
Stakeholder	Stakeholder Comment	AESO Response
<u>Capital Power</u>	1. Capital Power would like the AESO to clarify that the requirements in MOD 016, 017, and 018 do not apply to GFOs or GOPs. Capital Power understands that the AESO uses generation SCADA data to calculate the net energy for load data (AIES) described in R1 of this standard. Although the reliability standard does not indicate applicability to these parties, the requirement for the AESO to calculate net energy for load using generation SCADA data appears to be contradictory.	The AESO agrees that requirements of MOD-016 do not apply to GFOs or generator operators. The requirement to provide SCADA data is contained in other AESO Authoritative Documents.
<u>IPPSA</u>	<p>While this standard is listed as applicable to the ISO only, forecasts of actual and forecast aggregate demand and energy needs are the basis of transmission expansion plans, reflect the ISO's expectation for future system development, and are used in many ISO processes that are of interest to stakeholders. The historical demand and energy needs and forecasts of future demand and energy needs should be publically available to stakeholders and published in a format that can be easily imported into spreadsheets or databases.</p> <p>For planning purposes AIES load rather than AIL load is often used. The AESO should publish historical hourly aggregate AIES as well as AIL load in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases.</p> <p>As well the AESO should publish the forecasts of aggregate AIES and AIL load used in its processes including transmission</p>	Historical demand and energy needs and forecasts of future demand and energy needs are published on the AESO website. If stakeholders require the data to be presented in a different manner, or require different data, they are encouraged to reference the data request process outlined at: http://www.aeso.ca/market/17609.html .

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	<p>planning cases, need applications, loss factor base cases, and annual budget development. The forecasts should be complete with hourly profiles in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases. Past forecasts should be archived and available for stakeholders to import and utilize in spreadsheets or databases.</p> <p>The AESO should publish information on an aggregated basis that protects confidentiality of individual loads.</p>	
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1.2 – MOD-017-AB-0.1

Stakeholder	Stakeholder Comment	AESO Response
<u>Capital Power</u>	<p>Capital Power would like the AESO to clarify that the requirements in MOD 016, 017, and 018 do not apply to GFOs or GOPs. Capital Power understands that the AESO uses generation SCADA data to calculate the net energy for load data (AIES) described in R1 of this standard. Although the reliability standard does not indicate applicability to these parties, the requirement for the AESO to calculate net energy for load using generation SCADA data appears to be contradictory.</p>	<p>The AESO agrees that requirements of MOD-017 do not apply to GFOs or generator operators. The requirement to provide SCADA data is contained in other AESO Authoritative Documents.</p>
<u>IPPSA</u>	<p>While this standard is listed as applicable to the ISO only, forecasts of actual and forecast aggregate demand and energy needs are the basis of transmission expansion plans, reflect the ISO's expectation for future system development, and are used in many ISO processes that are of interest to stakeholders. The historical demand and energy needs and forecasts of future</p>	<p>Historical demand and energy needs and forecasts of future demand and energy needs are published on the AESO website. If stakeholders require the data to be presented in a different manner, or require different data, they are encouraged to reference the data request process outlined at:</p>

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	<p>demand and energy needs should be publically available to stakeholders and published in a format that can be easily imported into spreadsheets or databases.</p> <p>For planning purposes AIES load rather than AIL load is often used. The AESO should publish historical hourly aggregate AIES as well as AIL load in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases.</p> <p>As well the AESO should publish the forecasts of aggregate AIES and AIL load used in its processes including transmission planning cases, need applications, loss factor base cases, and annual budget development. The forecasts should be complete with hourly profiles in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases. Past forecasts should be archived and available for stakeholders to import and utilize in spreadsheets or databases.</p> <p>The AESO should publish information on an aggregated basis that protects confidentiality of individual loads.</p>	<p>http://www.aeso.ca/market/17609.html.</p>
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1.3 – MOD-018-AB-0		
Stakeholder	Stakeholder Comment	AESO Response
<u>Capital Power</u>	<p>1. Capital Power would like the AESO to clarify that the requirements in MOD 016, 017, and 018 do not apply to GFOs or GOPs. Capital Power understands that the AESO uses generation SCADA data to calculate the net energy for load data (AIES) described in R1 of this standard. Although the reliability standard does not indicate applicability to these parties, the requirement for the AESO to calculate net energy for load using generation SCADA data appears to be contradictory.</p> <p>2. Capital Power understands that the AESO produces a number of demand forecasts ie. long term load forecast, midterm load forecast and the short term load forecast. Requirement 1.2 requires that the AESO “address assumptions, methods and manner in which uncertainties are treated in the forecasts of aggregated peak demands and net energy for load”. Capital Power understands that the assumptions and methodologies that are used in the long term forecast are discussed in the Future Demand and Energy Outlook. However, the AESO does not currently publish all demand forecasts, nor does it address the assumptions and methods as required under R1.2 for all forecasts. Will the AESO be making this information available to the public?</p> <p>3. Furthermore Capital Power is concerned that, to the extent the AESO uses the long term demand forecast as an input to other metrics produced by the AESO (such as the reserve margin long term adequacy (LTA) metrics contemplated in Rule</p>	<p>1. The AESO agrees that requirements of MOD-018 do not apply to GFOs or generator operators. The requirement to provide SCADA data is contained in other AESO Authoritative Documents.</p> <p>2. The assumptions and methodologies that support the midterm and short term load forecasts are not currently made public by the AESO. The AESO will consider the appropriateness of making such information public.</p> <p>3. The Long Term Adequacy (LTA) metrics published on the AESO webpage (Home>Market>Participant Information>Market & System Report), which were created through extensive stakeholder consultation, provide a transparent and reproducible view of long term adequacy in Alberta. As such, public data and simple methodologies are used when available to estimate the metrics. The AESO’s long term load forecast is used within the LTA metrics as it is publicly available.</p> <p>The LTA metrics present a full list of publicly known future generation projects along with the adequacy metrics. The annual reserve margin only includes existing generation capacity and capacity of projects that are under active construction, as</p>

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	<p>13), the AESO is producing and publishing inconsistent results and conclusions. For example, the LTA reserve margin metric utilizes the AESO long term demand forecast and a measure of generation based on existing generation unit capacity and new generation that is already under construction, excluding any future generation build that may be announced or approved, but not under construction. As a result, the AESO calculates a reserve margin assuming that load grows without any limitations but generation is limited to existing or under construction.</p> <p>Capital Power's concern is that the load forecast appears to have a consistent upward bias and is allowed to increase without any limitations, whereas the assumptions around generation additions are much more conservative (only those generating units that are existing or under active construction are included in the metric). As a result the reserve margin metric depicts an overly bearish view of supply adequacy in both the near and long term.</p>	<p>stated in the reserve margin description, providing a view of the minimum reserve margin that can be expected with certainty. All metrics, including the Reserve Margin, were defined through extensive stakeholder consultation. Capital Power, through their predecessor, made similar comments during the design of the metrics which were taken into account by the broad stakeholder group in defining the metrics that are published quarterly.</p> <p>The additional information on approved or announced generation projects provides context of future generation in Alberta and can be used to further interpret the reserve margin metric by allowing individual assessments of future generation developments to be incorporated. The future demand and energy outlook document, publicly available on AESO's webpage, documents the methodology and assumptions behind the future energy expectations. As the assumptions and methodology show, future energy growth is limited by population growth, Alberta economic growth and oilsands production expansion.</p>
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<u>IPPSA</u>	<p>While this standard is listed as applicable to the ISO only, forecasts of actual and forecast aggregate demand and energy needs are the basis of transmission expansion plans, reflect the ISO's expectation for future system development, and are used in many ISO processes that are of interest to stakeholders. The historical demand and energy needs and forecasts of future demand and energy needs should be publically available to stakeholders and published in a format that can be easily imported into spreadsheets or databases.</p> <p>For planning purposes AIES load rather than AIL load is often used. The AESO should publish historical hourly aggregate AIES as well as AIL load in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases.</p> <p>As well the AESO should publish the forecasts of aggregate AIES and AIL load used in its processes including transmission planning cases, need applications, loss factor base cases, and annual budget development. The forecasts should be complete with hourly profiles in a numerical format that is easy for stakeholders to import and utilize in spreadsheets or databases. Past forecasts should be archived and available for stakeholders to import and utilize in spreadsheets or databases.</p> <p>The AESO should publish information on an aggregated basis that protects confidentiality of individual loads.</p>	<p>Historical demand and energy needs and forecasts of future demand and energy needs are published on the AESO website. If stakeholders require the data to be presented in a different manner, or require different data, they are encouraged to reference the data request process outlined at: http://www.aeso.ca/market/17609.html.</p>
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1.4 – MOD-019-AB-0		
Stakeholder	Stakeholder Comment	AESO Response
<u>IPPSA</u>	<p>Forecasts of interruptible demands data on an aggregated basis that protects confidentiality of individual loads should be publically available to stakeholders and published in a format that can be easily imported into spreadsheets or databases.</p> <p>Past forecasts should be archived and available for stakeholders to import and utilize in spreadsheets or databases.</p>	<p>The AESO does not publish this data. If stakeholders require this data, they are encouraged to reference the data request process outlined at: http://www.aeso.ca/market/17609.html.</p>