

**INFORMATION DISCLOSURE PROCEDURE AND TRADING
PRACTICES GUIDELINE**

MSA WORKSHOP INFORMATION PACKAGE

**Hyatt Regency Calgary
Stephen Room A
700 Centre Street S.E.
Calgary, Alberta**

June 10, 2004

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1.0 Introduction

1.1 Welcome

1.2 Purpose of workshop

The purpose of the workshop is to solicit additional feedback from participants for the specific IDP issues where there was a divergence of comments from stakeholders. This additional feedback and any previous comments may be considered by the MSA when finalizing the IDP.

The workshop will be an excellent opportunity for all participants to become more familiar with the TPG and IDP and further discuss a number of issues related to the implementation of the IDP.

1.3 Day's activities – program choices

We may take the opportunity to work through lunch in order to cover all the discussion items and to ensure that we finish on or before 4:30 p.m. Depending on the final attendance at the workshop, we anticipate splitting into break-out sessions to have a more in depth discussion of the issues. The same issues will be addressed in each break-out session. Since a number of companies may have more than one representative attending the workshop, it may be necessary to allocate workshop attendees to different break-out sessions in order to ensure a good market cross section. We would ask for your understanding and cooperation in this regard.

2.0 Workshop Agenda Trading Practices Guideline and Information Disclosure Procedure

Date:	June 10, 2004
Location:	Hyatt Regency Calgary Stephen Room A 700 Centre Street S.E. Calgary, Alberta
8:00 a.m. to 8:30 a.m.	Coffee
8:30 a.m. to 8:45 a.m.	Introduction
8:45 a.m. to 9:45 a.m.	Overview of the Trading Practices Guideline (TPG) and Information Disclosure Procedure (IDP) <ul style="list-style-type: none">• <i>What are the TPG and IDP?</i>• <i>How do the TPG and IDP relate to the Electric Utilities Act?</i>• <i>Why do we need the guideline and disclosure procedures?</i>• <i>What are the MSA's expectations concerning market participant conduct in the market?</i>• <i>How will the MSA enforce the TPG and IDP?</i>• <i>How will the MSA measure the efficacy of the TPG and IDP?</i>
9:45 a.m. to 10:15 a.m.	Question Period
10:15 a.m. to 10:45 a.m.	BREAK
10:45 a.m. to 12 noon	<u>Summary of Participant Feedback</u> <ul style="list-style-type: none">• Issues with consensus• Issues without consensus <u>IDP Compliance Matters</u> <p>Review of consensus issues</p> <ul style="list-style-type: none">• Overview of MSA position and feedback from market participants <p>Discussion topics</p> <ul style="list-style-type: none">• <i>What are the criteria for determining who must comply with the IDP?</i>• <i>What entity should be responsible for submission of information?</i>

- 12 noon to 1:15 p.m. LUNCH BREAK (Provided by the MSA)
(Working lunch break, if necessary)
- 1:15 p.m. to 2:45 p.m. IDP Process Matters
Review of consensus issues
- Overview of MSA position and feedback from market participants
- Discussion Topics
- *How does the IDP process relate to load, transmission and inter-tie assets?*
 - *What time period should be covered by outage information?*
 - *When should outage information be submitted?*
- 2:45 p.m. to 3:00 p.m. BREAK
- 3:00 p.m. to 4:15 p.m. IDP Reporting Matters
Review of consensus issues
- Overview of MSA position and feedback from market participants
- Discussion Topics
- *What data aggregation methodology best balances the rights of asset owners and market participants?*
 - *What report format provides the most useful information about outages to market participants?*
- 4:15 p.m. to 4:30 p.m. Close
- Overview of next steps

3.0 Overview of the Trading Practices Guideline (TPG) and Information Disclosure Procedure (IDP)

3.1 Rationale behind the TPG and IDP

Objectives

The Electric Utilities Act charges the MSA with the obligation to pursue a “*fair, efficient and openly competitive*” market. It is appropriate that the MSA should reduce participant uncertainty by developing and publishing, with participant input to the extent possible, views on how *fair, efficient and openly competitive* are to be judged and the surveillance and enforcement strategies that are derived from those views.

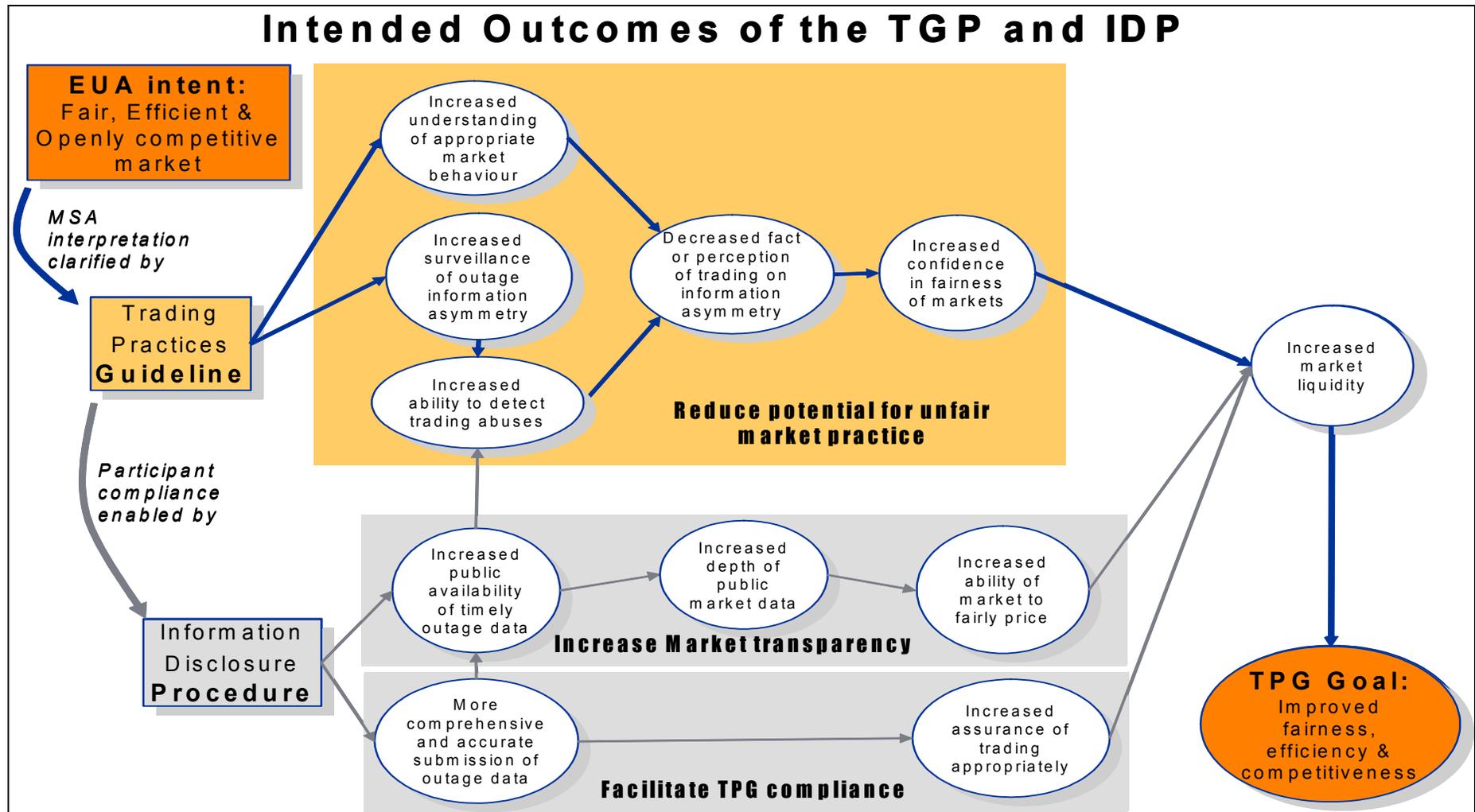
Small markets with large players present particular challenges to the maintenance of healthy competition. The Trading Practices Guideline (TPG) is intended to address part of this challenge by providing participants with guidance related to the extraction of economic value from non-public outage information through trading or operational strategies. The Information Disclosure Procedure (IDP) is intended as an adjunct to the TPG to both facilitate compliance, and increase market transparency to better enable a liquid market.

Figure 1 shows the linkage between the Electric Utilities Act (EUA) and the TPG, the enabling role that we expect the IDP to play and the manner in which both are expected to service the overall goal of fostering *fair, efficient and open competition*.

In developing the TPG, the MSA has sought to strike a balance between the needs and rights of asset owning/controlling participants and those of the marketplace as a whole. While guideline specificity and clarity of the enforcement protocol are desirable goals we have been careful to avoid a level of precision that might create loopholes that could be used to defend precisely the type of conduct that the Guideline is intended to foreclose upon. At the same time participants require reasonable clarity of the guideline’s intent as well as fair warning of the MSA’s anticipated enforcement protocol. The sections that follow are intended firstly to provide as much clarity as possible concerning the purpose, obligation and enforcement of the TPG and secondly to provide a base from which a relevant, balanced and useful information disclosure protocol (IDP) can be finalized.

The TPG, the supporting principles outlined below and the information disclosure procedure that will be developed with input from this workshop are intended, collectively, to provide a reasonable person, familiar with the objectives of the TPG, fair warning of conduct expectations as they relate to trading on non-public outage information.

Figure 1



3.2 TPG Conduct Principles

As indicated above, we believe it would not be helpful to our goal of ensuring a sustainable effective market to describe where the TPG impacts operations through specific and explicit examples. Instead, we want to provide guidance through the following set of broad principles that define expectations for sound behaviour.

Competitive Context

- Analysis is part of a competitive market; good analysis combined with risk taking deserves to have the potential for reward.
- A “risk free” transaction or one whose profitability is materially out of proportion to its risk is antithetical to a competitive market.
- Use of insider information as the basis for a transaction distorts the markets ability to fairly price the effect of the event known to the insider.

No Conflict

- Participants are expected to comply with legislation, regulations and market rules.
- TPG imposes no requirement to do or not do anything that would be in conflict with the AESO rules/tariffs or with the PPAs.

Basic Conduct Expectations

- Activities should have a legitimate business purpose.
- Participants should not conduct their market activities with the intent of circumventing the TPG.
- Market prices should be the product of competitive forces and rational behavior.

Specific unacceptable Behaviors

- Collusion.
- Creating an issue or the appearance of one with the objective of cashing in on the fix.

3.3 IDP Principles

In a similar fashion, while aspects of the IDP are open for discussion and amendment, we believe there are some fundamental principles, shown below, that should guide the implementation and use of effective information disclosure.

No Conflict

- Participants are expected to comply with legislation, regulations and market rules.
- IDP imposes no requirement to do or not do anything that would be in conflict with the AESO rules/tariffs or with the PPAs.

Information Disclosure

#6. *What is a reasonable level of obligation concerning the accuracy of outage information?*

#7. *What are reasonable alternatives concerning ways to improve the quality and certainty of outage information?*

- Leveling the “raw information” playing field is intended to facilitate analytically based competition.
- The MSA does not intend to socialize analysis or diminish the intrinsic value of assets.
- Information is submitted in good faith.
- Outage information should be prepared with reasonable diligence.
- Disclosure minimizes the probability of being offside with fair, efficient and openly competitive market.
- No liability for information disclosed which subsequently turns out to be inaccurate (assuming above).
- Information should be disclosed in a timely manner: if/when it’s good enough to act on it’s good enough to disclose (before acting).
- Outage reporting should recognize materiality of asset size and impact on market prices.

Specific unacceptable Behavior

- Knowingly submitting false or deliberately misleading information.

Record Keeping and Retention

- Suggested that participants maintain documentation on all transactions and commercial objectives for a period of two years.

3.4 Enforcement Principles

Determination of whether a particular conduct is non-compliant with *fair, efficient and openly competitive* market (the basis for the TPG) will require an assessment of its purpose (intended or foreseeable), the result and the information upon which the conduct was based. If the intended or foreseeable result was to profit from actions taken based on known but not public outage information then the MSA’s view will be that the party is not compliant. Inference of intent will be a key element of enforcement and will require careful consideration of the facts and circumstances of the conduct at issue.

Parties will be expected to apply reasonable diligence to the preparation of outage information released, or not, to the market. Reasonable diligence provides sound defense against a breach, conversely the provision of deliberately misleading information whether by omission or commission is unacceptable and will be pursued aggressively.

Inadvertent or honest errors clearly will not meet the test of intent for purposes of the TPG, nor will profiting from trades which happen to benefit from unexpected changes in the status of material generating assets.

In order to ensure that the TPG has the best chance to change the forward market trading paradigm and meet its intended goals the MSA will monitor carefully for compliance and follow up on formal or informal complaints received. The MSA's enforcement protocol will be predicated on the expectation of reasonable diligence, allowance for inadvertent or honest errors and the condition that profiting from known but non-public outage information was intended or could have been reasonably foreseen.

With this as context, the principles for MSA intervention shown below will guide our behaviour in the enforcement of the TPG and IDP.

Surveillance

- The MSA will track reporting and accuracy on a routine basis.
- We will report to the market on overall accuracy of outage reporting for the purpose of confidence building.
- The MSA will follow up on weak reporting with individual companies for the purpose of understanding reasons.
- We may conduct periodic/random surveillance/audit/etc of participant trading activity with respect to outage reporting.

Forbearance

- Enforcement should not get ahead of the rollout or clarity related to the implementation of the IDP.
- Inadvertence or honest error shall be allowed for.

Investigation and Interpretation

- MSA will respond to complaints.
- Will follow established Investigation Procedures.
- Expect a high degree of self and mutual policing.
- Intent matters.
- Outcome and transaction mechanics are secondary except to the extent that they speak to intent.
- Repetition suggests intent.

- Regular, profitable errors suggest intent.
- Riskless profit is unlikely in a competitive market.

Prosecution

- Conduct not in keeping with the TPG may be prosecuted by a tribunal convened under Section 60-69 of the EUA.

MSA Undertakings

- The MSA is taking the lead to ensure the existence of a reasonable mechanism for information disclosure.
- The MSA accepts the responsibility for shrinking the time delay between reporting and publishing to as near real time as possible.

3.5 Success Metrics

#10. What performance indicators should be used by the MSA?

TPG/IDP is aimed at improving market fairness, efficiency and competitiveness. Market liquidity is an important barometer of the collective confidence in our progress toward that objective. The MSA has undertaken to use liquidity as a measure of the efficacy of the TPG/IDP and to adjust or eliminate the Guideline based on this metric.

What are the Metrics?

Over the course of the next the MSA will monitor the market liquidity to determine if it has materially improved and is showing a positive trend. We shall consider at a minimum:

- Bid/ask spreads
- Liquidity based on term structure and size
- Number of active players
- Convergence behavior of forward and real time prices

Where will the data come from?

Data will come from the broker and exchange markets, a liquidity survey, anecdotal and solicited feedback.

Mid course corrections?

Figure 1 offers one possible route to success. The text in the balloons set out intermediate expectations which if met (or not) may offer early indications that the Guideline is working as intended or needs adjustment.

4.0 Summary of Participant Feedback

Table 1

IDP Component	Consensus Issues	Non-Consensus Issues	Covered under TPG and IDP Principles
IDP Compliance Matters	#2. What other parties, if any, should be covered by the IDP?	#1. Should certain participants be exempt from the IDP? #3. What entity should be responsible for submission of information, e.g., asset owner, affiliates or agents?	#6. What is a reasonable level of obligation concerning the accuracy of outage information?
IDP Process Matters	#4. What outage related information should be submitted to the MSA?	#5. What is the appropriate time frame for submitting outage information? #12. What is the point at which information about should be submitted?	#7. What are reasonable alternatives concerning ways to improve the quality and certainty of outage information?
IDP Reporting Matters	#11. In the long-term, what is the appropriate entity for publishing outage information, e.g., AESO, MSA or other agency? #13. Should market participants designate a Compliance Officer and file compliance plans with the MSA?	#8. What level of information publication would balance the rights and needs of individual asset owners and the rights and needs of the market at large with respect to the furtherance of a <i>fair, efficient, and openly competitive</i> forward market? #9. What are the appropriate time periods for publishing outage information?	#10. What performance indicators should be used by the MSA?

The numbering conventions on the questions contained in the matrix above are from the document “[IDP Response Matrix](#)” which can be viewed on the MSA website at http://www.albertamsa.ca/files/TPG_IDPQuestionMatrix1.pdf

5.0 IDP Compliance Matters

5.1 Review of consensus issues

#2. *What other parties, if any, should be covered by the IDP?*

MSA Proposal

The MSA proposed that the IDP apply to all generating, load, transmission, and inter-tie assets that have the potential to materially impact market prices due to an outage.

Conclusion

There was a general consensus amongst commenters that the IDP should apply to these parties.

5.2 Discussion topics

#3. *What entity should be responsible for submission of information, e.g., asset owner, affiliates or agents?*

MSA Proposal

The asset owner or its designate should be responsible for submitting outage information. Regardless of who submits the information, all parties who have knowledge of the event are still bound by the conditions of the TPG until it becomes public.

Feedback to Date

Market participants expressed divergent opinions on who should be responsible for submitting outage information. In particular, there was a difference of opinion as to what PPA party should be submitting outage information – the PPA Owner or the PPA Buyer. The MSA takes the position that market participants who are involved in existing contractual arrangements are free to determine how best to comply with the TPG.

#1. *Should certain participants be exempt from the IDP? What are the criteria for determining who must comply with the IDP?*

MSA Proposal

The MSA proposes that all generators, load, transmission facility owners, and interconnected members with assets equal or greater than 40 MW would be required to submit information about outages in excess of 40 MW. (For reporting purposes, the MSA would aggregate and publish asset outages/derates greater than 40 MW. See section 7.)

Feedback to Date

Respondents expressed divergent views concerning the capacity threshold. The MSA received comments that ranged from all participants (1 MW) up to anyone greater than 65 MW. In addition, some loads felt that they should only have to submit planned outage information rather than forced outage information.

The intent of the size discussion is that the level selected should be both material and practical. While materiality is not a black and white issue there are several ways to frame it. For the purposes of encouraging further discussion Figures 2 through 6 offer some of the potential methods of analyzing different types of market data.

For convenience the 40 MW level used by the AESO in OPP 601 is highlighted on each figure

Threshold Size Analysis

Figure 2 displays on-peak, off-peak and flat SMP price setting blocks for the January to May 2004 time period. Each column is the simple average of the block size that was setting price during each month. The average does not take into account the duration in which each observation may have been setting the price which could have ranged from 1 to 60 minutes in any given hour. Consistently the offer block size that is setting the price on average for each month is in the mid to upper 40s.

Figure 2

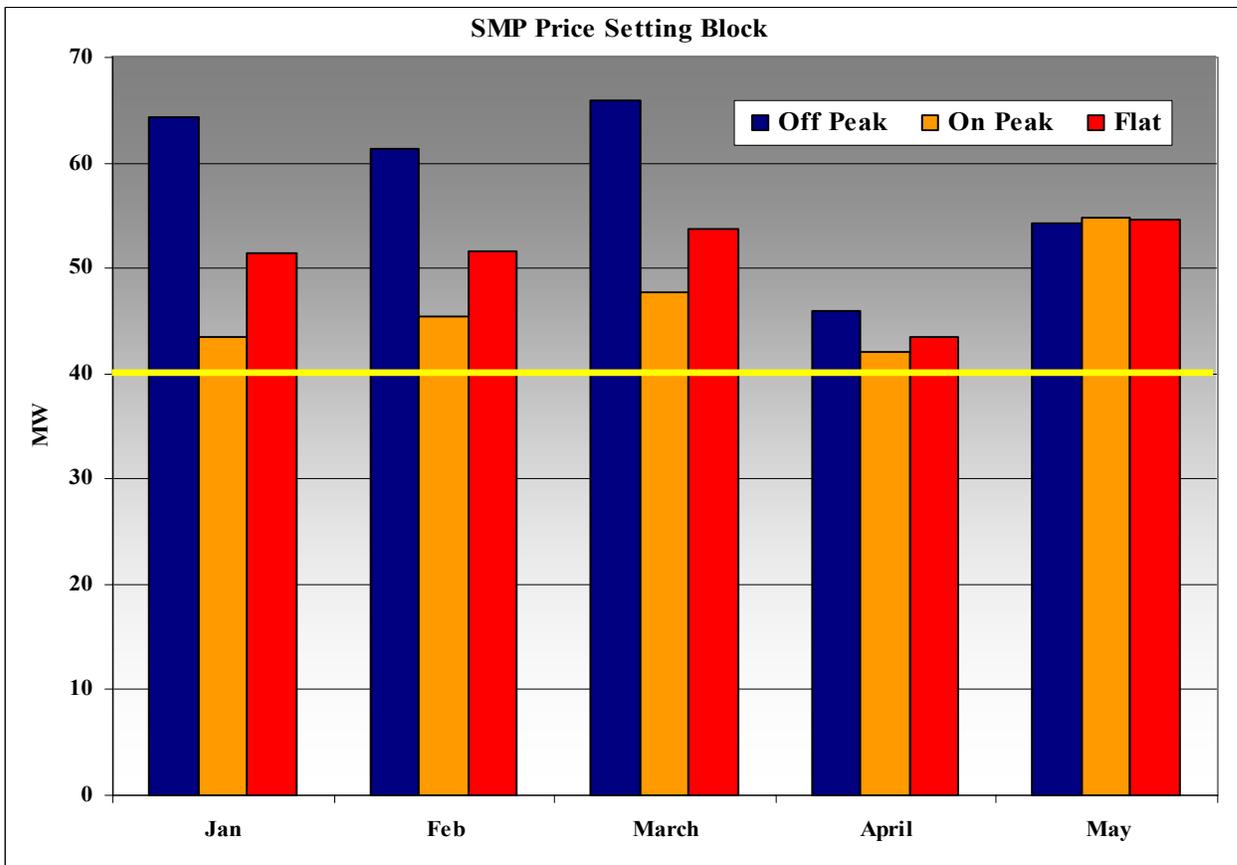


Figure 3 displays SMP price setting blocks for all hours as a duration curve. For the period of January to May 2004 there were 12,394 price setting blocks ranging from 1 MW to 363 MW. Approximately 60% of all price setting events for this period were from offer blocks of 40 MWs or less.

Figure 3

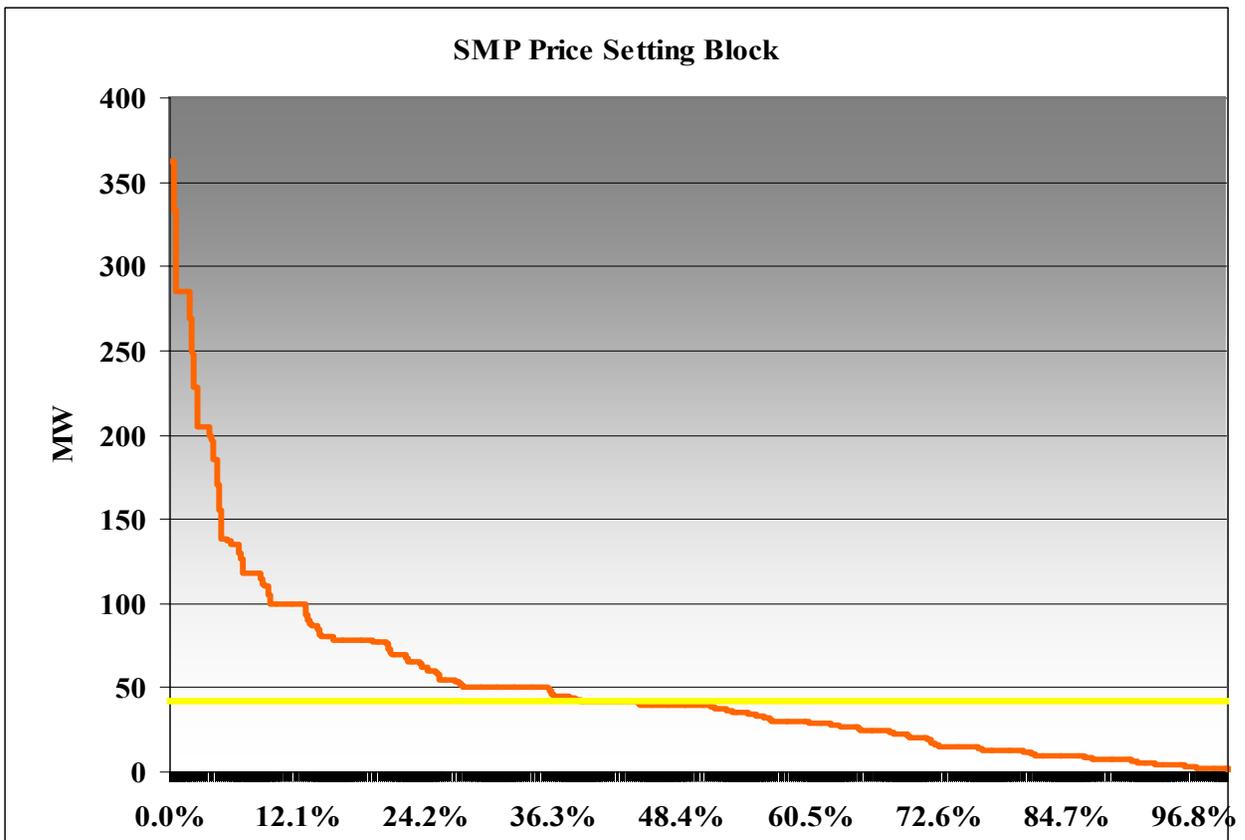
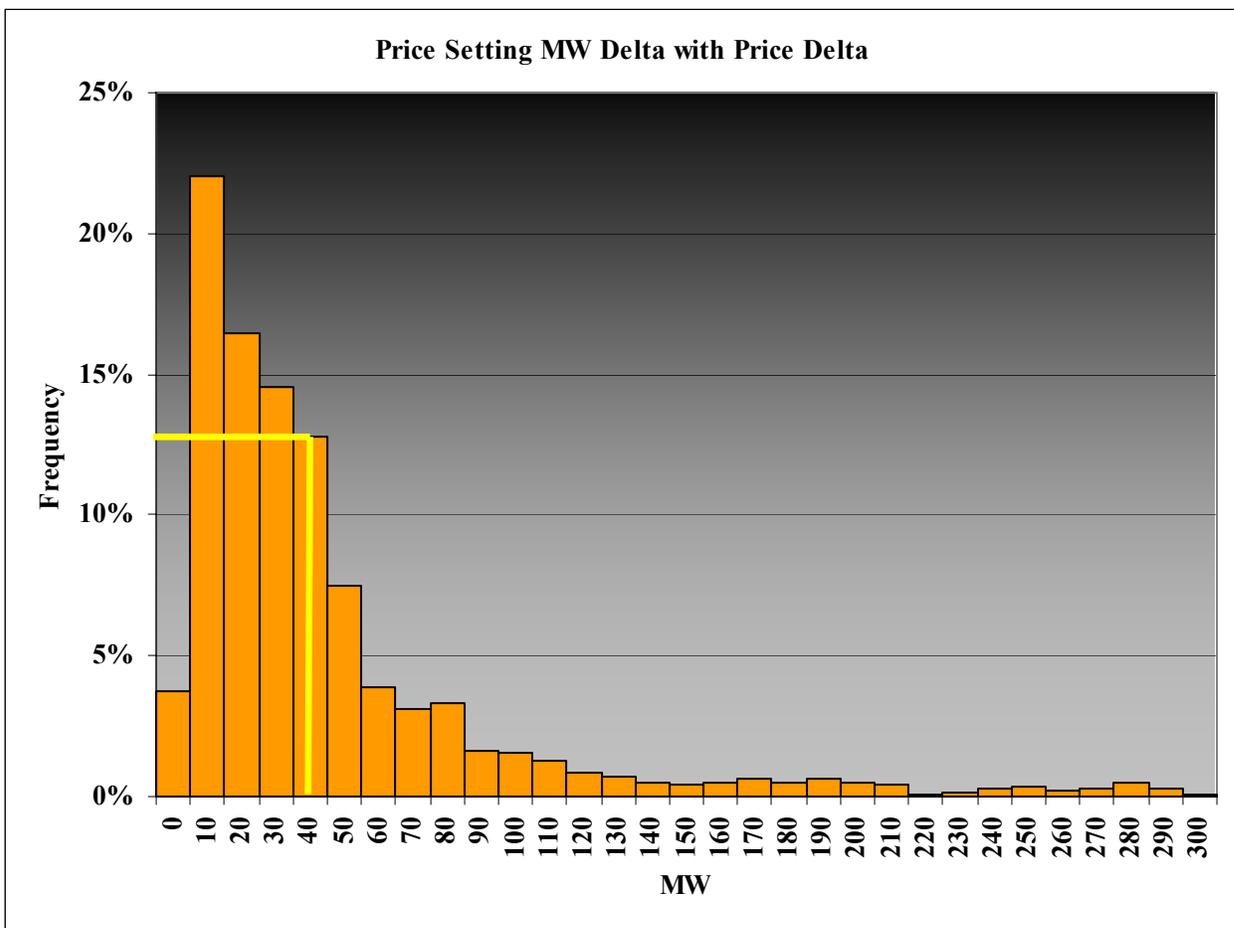


Figure 4 is a histogram of the amount of MW change in the offer block size any time there was a change in the SMP. This calculation ignores the actual offer block size that is setting the price at any one period of time but looks at the difference from the block size currently setting the price to the block size in the previous price setting period. This type of analysis maybe more useful in determining materiality than **Figure 3** as the data reflects the change in generation or load when there is a change in the prevailing SMP.

Figure 4



An interesting analysis that may have some bearing on the appropriate MW size is the concept of how aggregated outages for small assets impact market prices. A smaller sized single unit may not have a material effect on market prices. However, if a number of smaller units are having outages or scheduled planned outages on a concurrent basis, then on an aggregate basis, they may have a significant impact on market prices. **Figure 4** illustrates the quantity of outage information that could potentially be omitted depending on where the threshold is set. The analysis was conducted by simulating unit outages over a defined period of time. **Figure 5** shows the outcome of 1,600 random draws using a 5% outage rate for all units. The vertical MW axis represents cumulative outages for all assets under a specific capacity. For example, looking at the potential cumulative outages for assets less than the 40 MW capacity level on the horizontal axis shows the potential for omitting approximately 105 MW of cumulative outage. A larger block size such as 80 MW may on average result in 245 MW of cumulative outages that would not show up on the report.

Figure 5

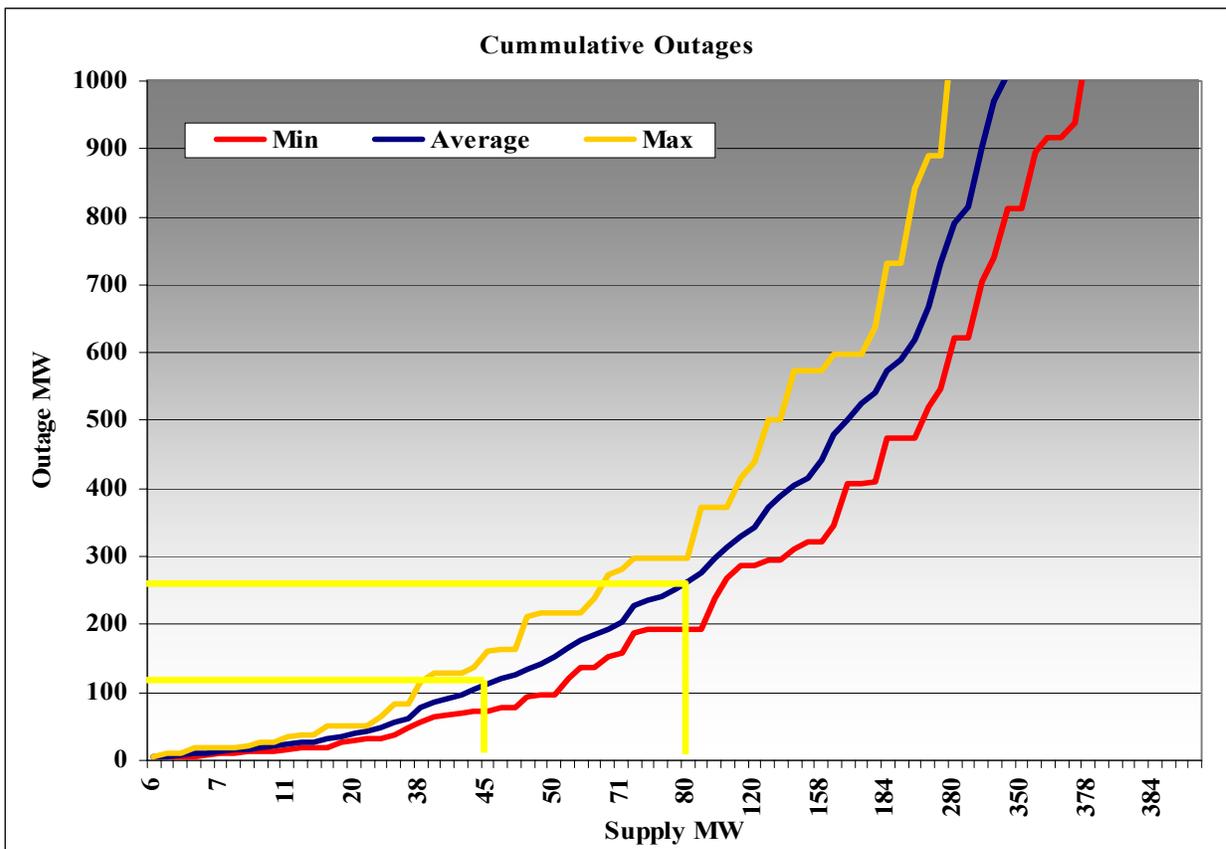
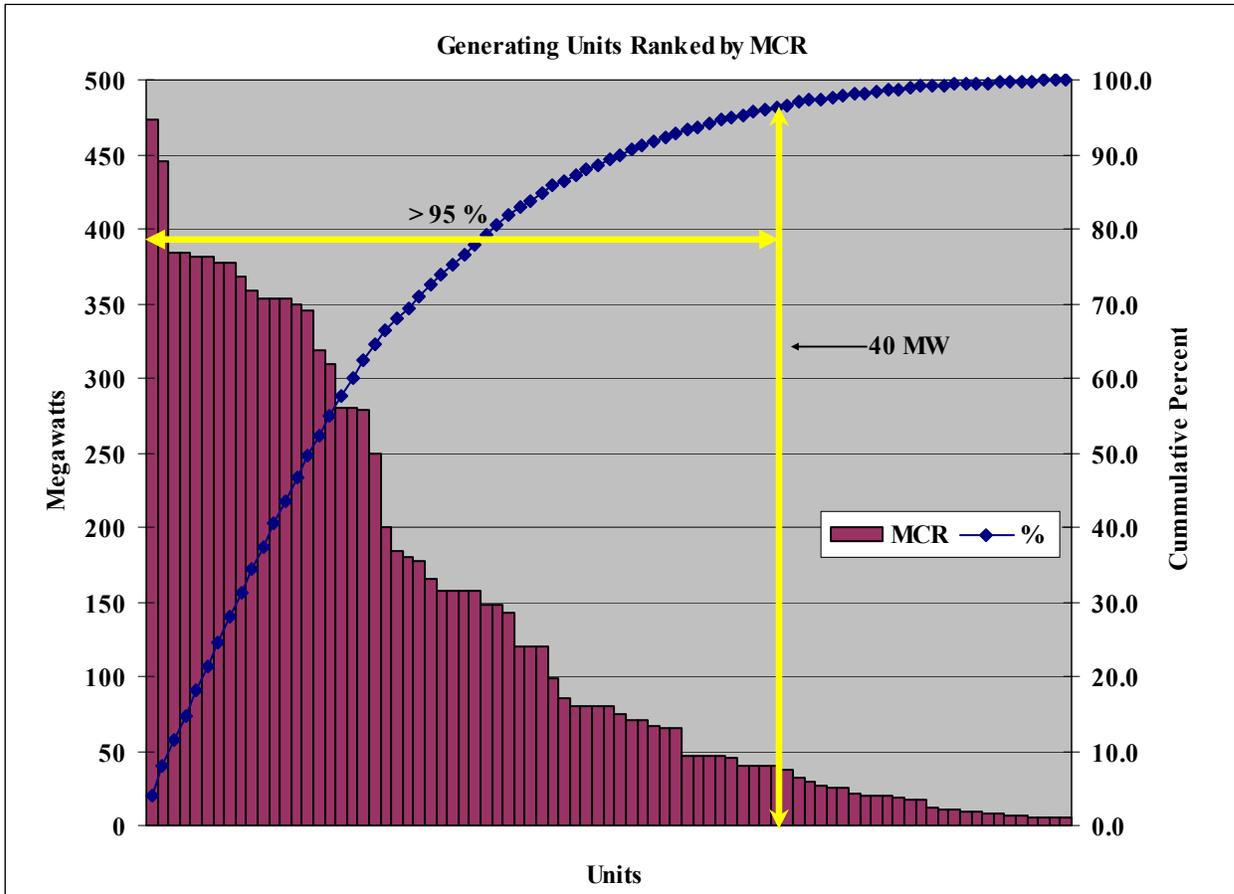


Figure 6 is based on the MCR of the generating units in the province and indicates that the 40 MW level proposed by the MSA would capture approximately 95% of the installed capacity.

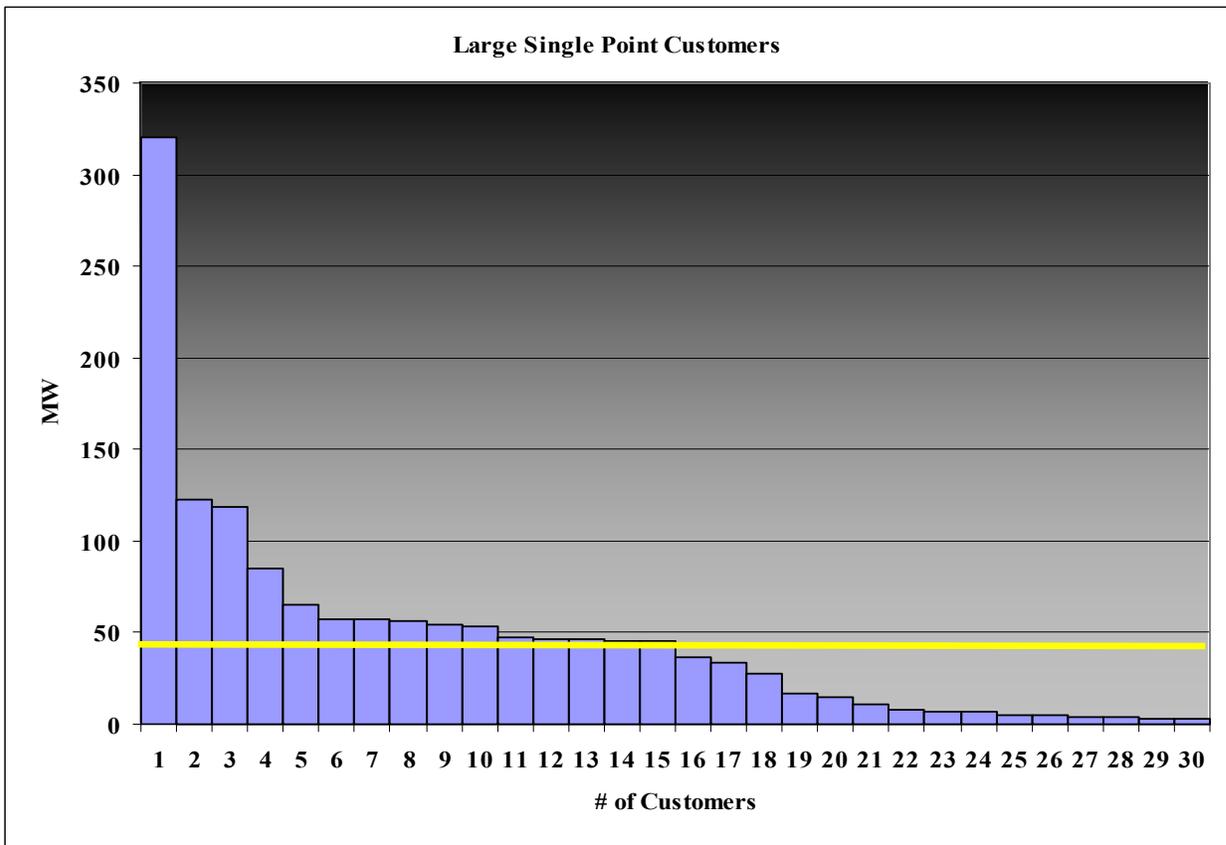
Figure 6



Load Asset Analysis

Figure 7 is a chart of significant connected loads in the province based on self-retailer and direct connects information available to the MSA. The number of loads that would be affected by a 40 MW threshold based on the chart is 15. An exact number is difficult to determine as some of the self-retailer information available to the MSA has been rolled-up from multiple sites. In addition, a great deal of load information is behind wire owner meters and not visible to the MSA.

Figure 7



Transmission and Inter-ties

Table 2 is a list of the transmission outages that result in a reduction in the ability of any one generator to supply power to the system. Pursuant to OPP 601, Transmission Facility Owners (TFO) and Interconnected Members (IM) are responsible for reporting to the AESO any outages they have scheduled for each year and further provide a more detailed preliminary schedule 30 days prior to the actual work commencing.

The annual planned outage information may not be as useful as information submitted by generation and load because the TFO is only required to identify the quarter in which the work is expected to be carried out. However, the schedules that are required 30 and 4 days prior to the outage practically could be included in the information disclosure.

Table 2

Transmission Outages Affecting Generation Output				
Transmission Line	Transmission Facility Operator	Generating Plant	Potential Impact of Line Outage	
1) 9L20	ATCO Electric	Battle River 5	Limits plant output to an undetermined amount less than MCR. (Requires real-time assessment).	
2) 9L79	ATCO Electric	Battle River 5	Limits plant output to zero, due to radial connection.	
3) 9L99	ATCO Electric	Sheerness 1	Limits plant output to zero, due to radial connection.	
4) 9L100	ATCO Electric	Sheerness 2	Limits plant output to zero, due to radial connection.	
5) 1203L or 1209L	AltaLink/EPCOR	Genesee 1 & 2	Limits plant output to a combined output of ~400 MW. This may change if new operating reserve practices are created in response to GN3.	
6) 9L990 or 9L57/56	ATCO Electric	Ft. McMurray	Limits area generation to export level of 280 MW. (See OPP-505.)	
7) 995L	AltaLink	Brazeau	Limits total plant output.	
8) Any one of 202L (61S, 62S), 801L, 828L, 841L or 844L)	AltaLink	Brazeau	Limits total plant output.	
9) 7L81	ATCO Electric	Ft. Nelson	Limits facility to balancing with local islanded load, due to radial connection.	
10) 7L64	ATCO Electric	Rainbow 5	Limits Rainbow area generation.	

The Alberta/BC inter-tie would also be covered under the IDP. The MSA would reflect the extent to which tie line capacity is not available for imports and exports relative to its maximum capability for a defined period.

6.0 IDP Process Matters

6.1 Review of consensus issues

#4. *What outage information should be submitted to the MSA? How does the IDP process relate to load, transmission and inter-tie assets?*

MSA Proposal

MSA proposed that all asset owners would submit information pursuant to the AESO’s operating policy – OPP 601.

Conclusion

There was general consensus amongst commenters that outage information should be submitted in a manner consistent with OPP 601. The information is forwarded to the MSA who then compiles the outage information in specific formats designed to illustrate the outage status of various types of units. **Table 2** is the information that is to be provided to the AESO by all asset types.

Table 2: AESO Outage Schedules

Asset ID or Unit Name	
New or Existing outage	
Start Date/Start Time:	
End Date/End Time:	
Impact on Generation:	
Type of Outage:	
Reason for Outage:	

6.2 Discussion topics

- #5. *What is the appropriate time frame for submitting outage information?
What time period should be covered by outage information?*

MSA Proposal

The information required by the MSA would be consistent with the AESO's OPP 601 which requires that planned outages be submitted out to the end of the next calendar year prior to October 31 of the current year.

Feedback to Date

The MSA is concerned that market participants may not have understood the intent of the question. Essentially the MSA was asking participants' views on how far into the future would an asset owner be required to submit outage information.

- #12. *What is the point at which information should be submitted?
When should outage information be submitted?*

MSA Proposal

Outage information is to be submitted when it becomes known by the asset owner. Depending on the type of outage (eg. changes to planned outages, maintenance and forced outages) the time frame for reporting outages is defined in OPP 601.

Feedback to Date

Most respondents agreed that the outage needs to be reported to the AESO as soon as a bona fide decision is made. A clear definition of what event or act constitutes a bona fide decision was not offered by any of the parties that provided responses.

7.0 IDP Reporting Matters

7.1 Review of consensus issues

#11. *In the long-term, what is the appropriate entity for publishing outage information, e.g., AESO, MSA or other agency?*

MSA Proposal

The MSA made no specific proposal.

Conclusion

In terms of the question posed, there was general consensus that the AESO should eventually be responsible for publishing the outage information. The MSA notes that this may require some type of “formal framework” such as a rule change. The MSA will work with the AESO to effect change if possible

#13. *Should market participants designate a Compliance Officer and file compliance plans with the MSA?*

MSA Proposal

The MSA made no specific proposal.

Conclusion

With respect to the question, there was a strong consensus that there should not be a Compliance Officer or Compliance Plan with respect to the TPG and the MSA accepts this position for now.

7.2 Discussion topics

#8. *What data aggregation methodology best balances the rights of asset owners and market participants?*

What level of information publication would balance the rights and needs of individual asset owners and the rights and needs of the market at large with respect to the furtherance of a fair, efficient and openly competitive forward market?

MSA Proposal

The MSA has suggested two different methods of aggregating the supply outage data provided to the AESO. During the trial publication period the MSA produced the outage charts with aggregation by fuel type. On April 15 the MSA included a second proposed methodology using a generator’s capacity factor. Both methods have some drawbacks but capacity factor is better at indicating materiality and disguising uniquely sized units.

Description of Fuel Type Methodology:

The total outage volume is determined using the following formula;

$$\text{Outage MW} = \text{Rounded} \left\{ \frac{\text{Sum of the MWh of the outage by time period and by fuel type}}{\text{Number of hours in the time period}} \right\}$$

Figure 7 – Short Term Outages Graph

Using the submitted outage data, the generating units are separated by fuel type and the outage volumes are then allocated to the specific hour for which the outages are scheduled to occur. These hours are then:

- Averaged by the on peak and off peak categories then further split into the 4 time blocks (Next Day, Balance of Week, Next Week, and Balance of Month).
- All units within the same fuel type category are aggregated to create one final outage amount for each fuel type for each time block.
- The aggregated volume for each fuel type is then rounded off to the nearest 10 MW.

Figure 7

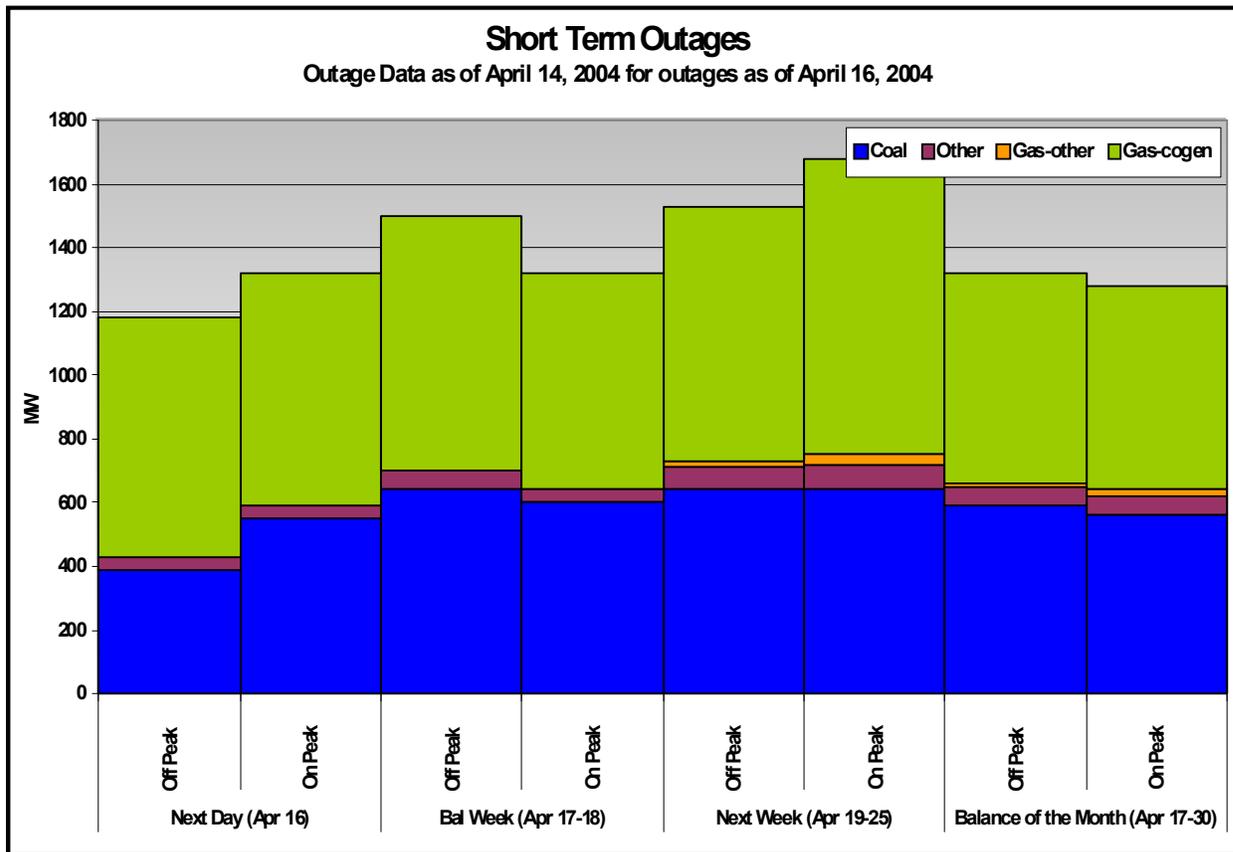
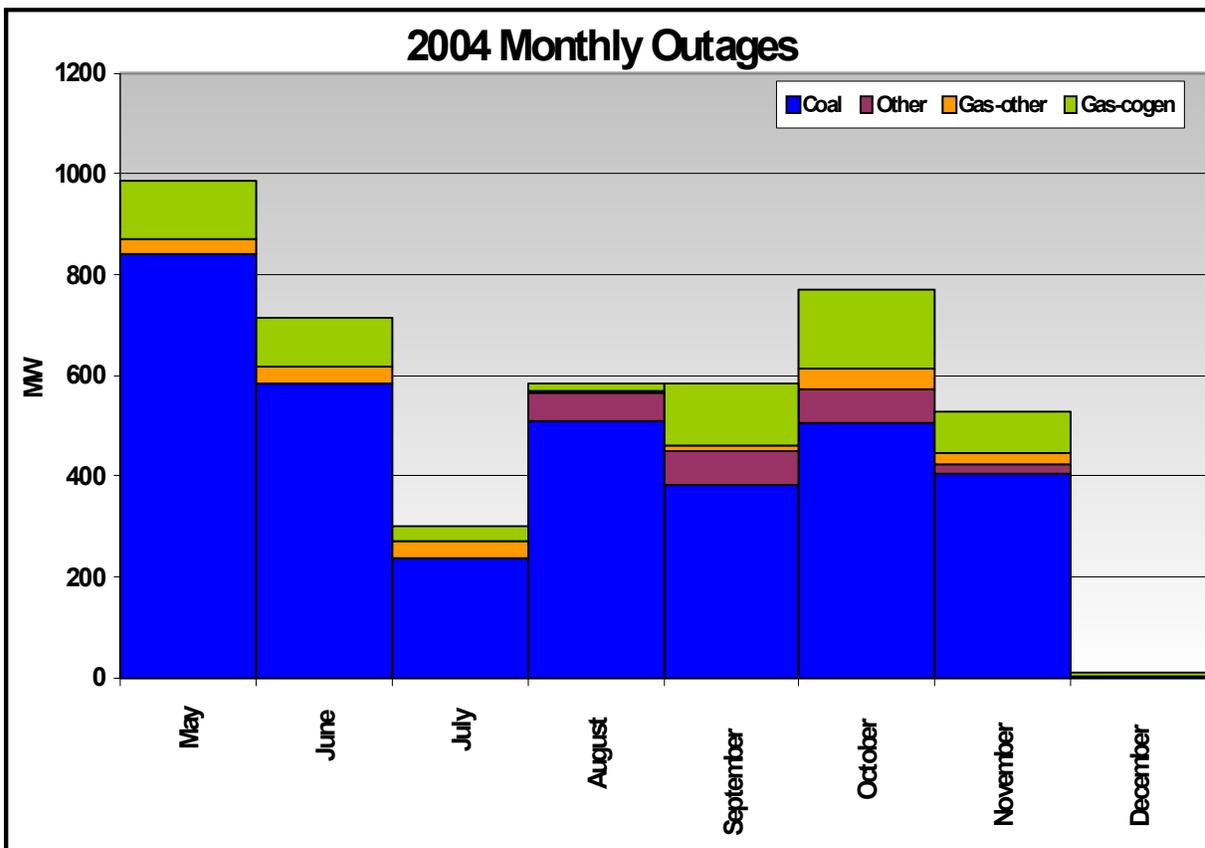


Figure 8 – 2004 Monthly Scheduled Outages

Using the submitted outage data, the generating units are separated by fuel type and the outages volumes are allocated to the specific hour for which the outages are scheduled to occur. The following then occurs:

- Each specific fuel type is aggregated for each hour.
- The hourly data by fuel type is combined in a monthly number by averaging hourly volumes for all hours of the month by fuel type.
- The aggregated volume for each fuel type is then rounded off to the nearest 10 MW.

Figure 8



Description of Capacity Factor Methodology:

The following charts are examples of two different ways of displaying the outage information. One chart is a modification of the criteria for summing generating unit outages together and the other is an example of how a chart may look with all the asset outages (generation, demand and inter-ties) graphed on one chart.

Figure 9 is similar to the published trial graphs that were posted daily to the website except that the outages are summed by capacity factor instead of fuel type. The capacity factors are based on 2003 actual numbers for all the units displayed on the AESO CS&D page. This approach attempts to alleviate the problem of summing both small and large coal outages in one category as the small capacity of these units makes it difficult to ensure that they cannot be identified from the graph when their outage does not overlap with another unit of the same fuel type. The solution in the published graphs was to assume that any time a coal unit was completely removed from service an outage of 320 MW was substituted for the MCR of the unit. This approach solved the problem of confidentiality but also introduced an undesirable error by overstating the outage MW from the very small coal units. With the Capacity factor method, the different summation buckets are now populated with different fuel types so it is not necessary to use a generic size as it would be very difficult to identify a particular unit in any one bucket. This approach should protect the identity of each unit and also send the correct signal to the market as to the materiality.

One drawback of this methodology is that it incorporates historical behavior into the development of the different summation buckets. Although most plants will operate in generally the same way, other plants sensitive to gas prices and other operational constraints (e.g., co-generation plants) will have different capacity factors from year to year. Also the calculation of capacity factor is difficult for entities that have behind the fence demand and generation. The available information only tracks their energy interchange with the system and does not reflect their true generating capability. For example a 100 MW generator that has a plant load of 80 MW and supplies an incremental 20 MW to the grid based on economic opportunity will have a low capacity factor because the capacity factor calculation will be based on 20 MW maximum. If they supplied 20 MW to the grid all hours of the year the best capacity factor they could achieve would be 20%.

Figure 9

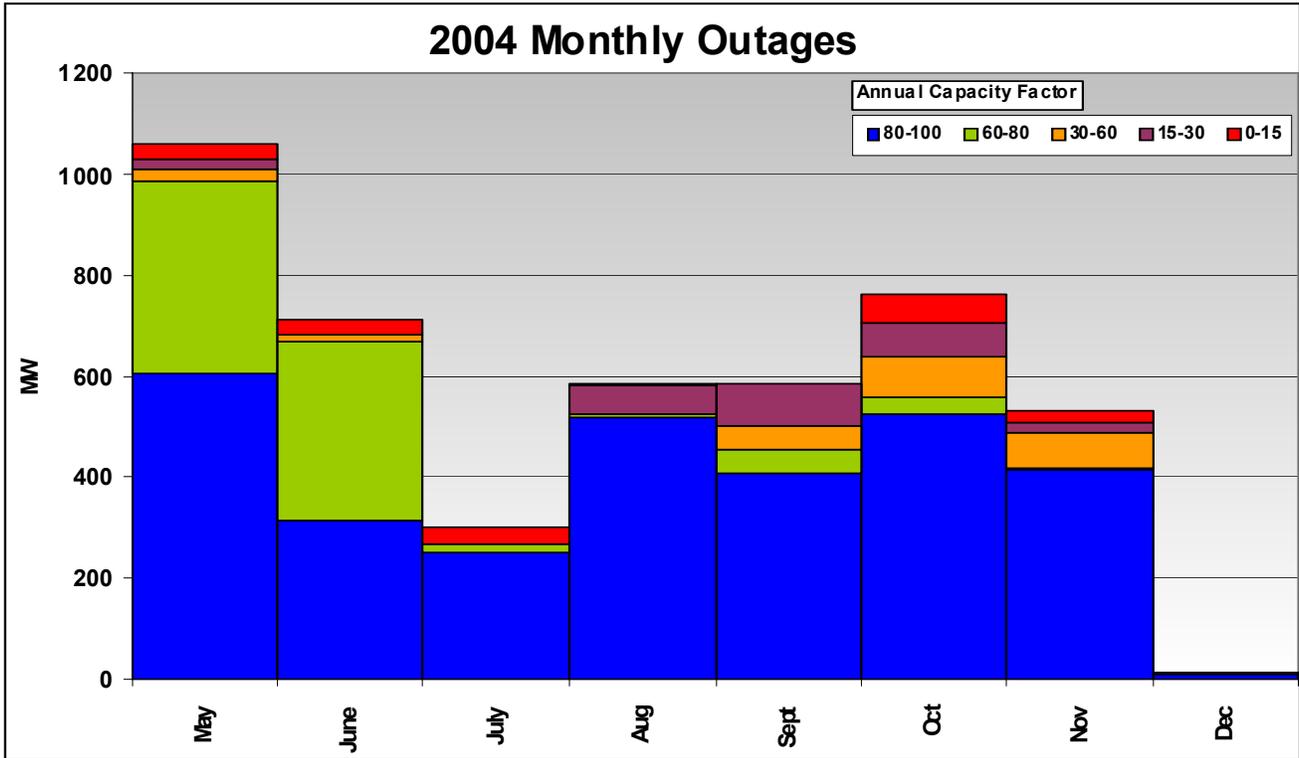
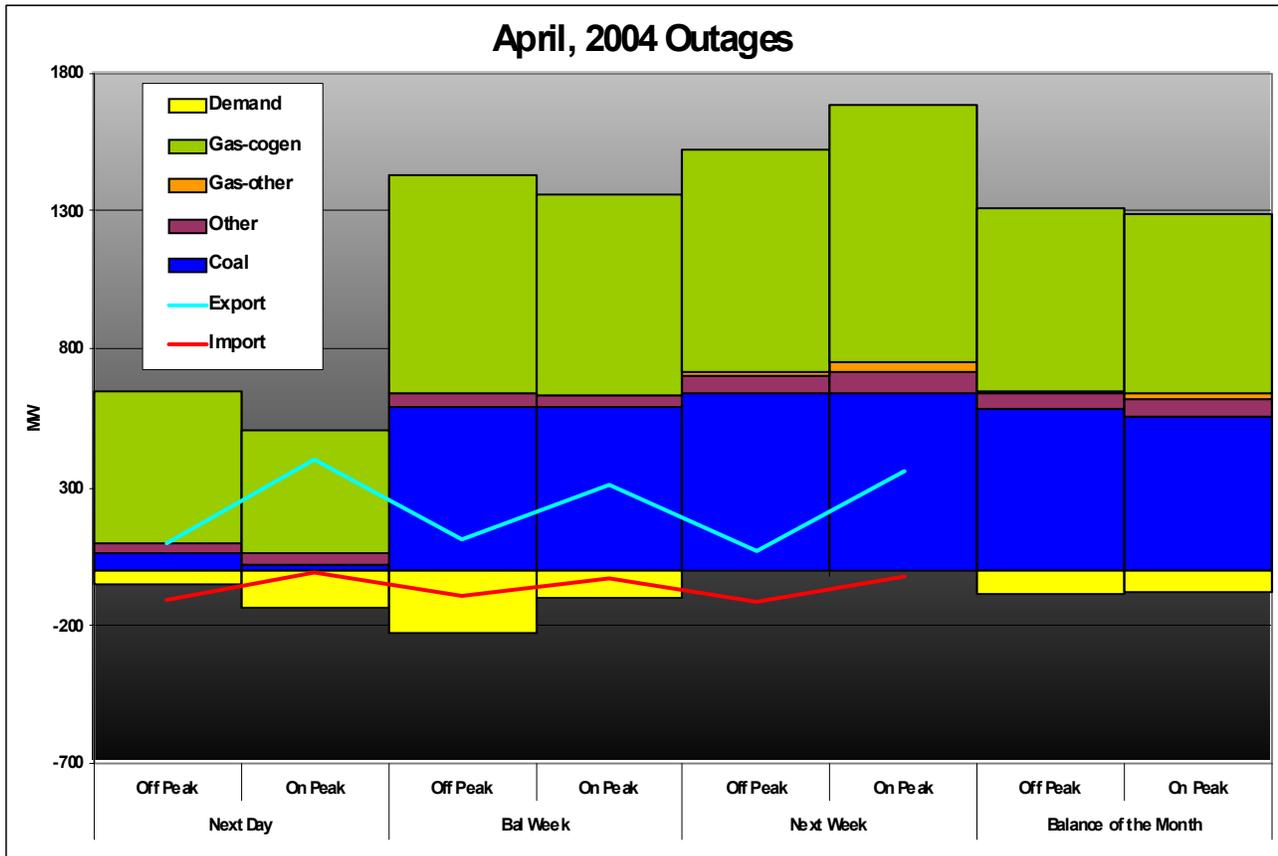


Figure 10 is a mockup of a chart with all the asset types graphed together. The Import/Export line represents the tie line capacity that is not available as compared to the maximum capability during the summation period. Exports are shown as positive “outage” MW and imports are presented as negative MW. For graphical purposes any significant demand outages have been displayed as negative numbers.

Figure 10



#9. What are the appropriate time periods for publishing outage information?

When does the MSA publish?

MSA Proposal

During the trial period the MSA published the outage information to the website by 9:00 AM each business day but ultimately the publishing of outage information would be as near real time as possible. When publishing resumes the MSA will work with the AESO to develop the required systems to facilitate a web based system capable of being updated anytime there is a change in the amount of outages scheduled.

Feedback to Date

Market participants expressed a wide range of views such as the current time periods required by AESO OPP 601 are appropriate, publishing outage information should be synonymous with such information being made public, and posting outage information six months or a year in advance will give market participants the perception of future supply/demand certainty and thereby create more conflict. A number of participants commented on the need to have reporting as close to real time as possible.

8.0 Close

8.1 Overview of next steps

9.0 Reference Documents

Trading Practices Guideline (TPG)

http://www.albertamsa.ca/files/MSAPositionPaper_InformationAsymmetry_February182004.pdf

Market Participant Responses to MSA TPG/IDP as of March 26, 2004

<http://www.albertamsa.ca/617.html>

IDP Response Matrix

http://www.albertamsa.ca/files/TPG_IDPQuestionMatrix1.pdf

Additional Responses to MSA TPG/IDP as of April 6, 2004

<http://www.albertamsa.ca/625.html>

Additional Responses to MSA TPG/IDP as of May 4, 2004

<http://www.albertamsa.ca/629.html>

Stakeholder Comments on IDP - April 30, 2004

<http://www.albertamsa.ca/files/TPGIDPQuestionMatrix043004.pdf>

AESO OPP 601

http://www.aeso.ca/files/ISO_OPP.pdf