



Summary of IMO Staff Recommendations to Panel on Exemption Applications for OPGI Data Monitoring Requirements

This summary contains the assessments and recommendations for OPGI *exemption applications* listed below. Details of the recommendations are to be found in the attached “Table A: IMO Staff Recommendations to Panel on *Exemption Applications* for OPGI Data Monitoring Requirements”. Together, the Summary and Table A are to be considered the entire official submission by IMO staff on the listed OPGI Data Monitoring *Exemption Applications*.

1. General Information

Market Participant Name: Ontario Power Generation Inc., (OPGI)

Role of Market Participant as it relates to the application: *Generator*

Locations: Abitibi Canyon GS, Aguasabon GS, Alexander GS, Arnprior GS, Atikokan GS, Aubrey Falls GS, Barrett Chute GS, Cameron Falls GS, Caribou Falls GS, Chats Falls GS, Chenaux GS, Decew Falls ND1 GS, Decew Falls NF23 GS, Des Joachims GS, Ear Falls GS, Harmon GS, Holden GS, Kakabeka Falls GS, Kipling GS, Little Long GS, Lower Notch GS, Manitou Falls GS, Mountain Chute GS, Otter Rapids GS, Pine Portage GS, Rayner GS, Red Rock GS, Saunders GS, Silver Falls GS, Sir Adam Beck #1 (60 Hz) GS, Sir Adam Beck #2 GS, Sir Adam Beck #1 (25 Hz) GS, Sir Adam Beck Pump GS, Smokey Falls GS, Stewartville GS, Thunder Bay GS, Wells GS, Whitedog GS.

Exemption Application ID numbers: 1066, 1098, 1094, 1045, 1093, 1097, 1096, 1047, 1048, 1116, 1112, 1113, 1134, 1091, 1121, 1079, 1043, 1117, 1084, 1029, 1119, 1076, 1063, 1082, 1007, 1008, 1039, 1064, 1099, 1100, 1071, 1092, 1002, 1003, 1110, 1124, 1107, 1030, 1101, 1102, 1077, 1069, 1041, 1073, 1108, 1109.

Description of Exemption Request: *Exemption* from the need to provide additional data monitoring beyond the monitoring presently being provided at OPGI *generation facilities*, pursuant to Appendix 4.15 and Appendix 4.19 of the “Market Rules”.

Date Exemption Application Received: All applications covered by this Assessment were submitted between Dec. 20, 2000 and May 07, 2001.

Date all relevant application information supplied by applicant: All information supporting the application was submitted by Nov. 2, 2001.

IMO Management Approval: Yes

Section of the “Exemption Application and Assessment” procedure under which this exemption application is being made:

Section 1.5.2 (*Exemptions* for specified *facilities* and equipment prior to market opening)

Market Rules or related Manual(s) from which exemption is requested: (copy of *market rule(s)* or *market manual(s)* attached: Yes

Third Party submission received (yes or no):

Supplemental Assessment information attached (yes or no): Yes

Historical or related exemption application(s) in the process: Yes, see attached Table A

2. Background

Currently, Ontario Power Generation Inc. (OPGI) provides operational data to the Independent Electricity Market Operator (*IMO*) through a variety of sources. Direct communication to OPGI *facilities* provides data to the *IMO* at high performance; communication via other systems provides data to the *IMO* at medium performance. High performance communications arrive at the *IMO* interface at a higher frequency and with greater *reliability* than medium performance.

IMO staff reviewed OPGI *exemption applications* and determined the instances of non-compliance. Only those instances have been assessed and recommendations presented in attached Table A.

3. Market Rule Requirements relevant to these OPGI Exemption Applications

The *facilities* that are the subject of these *exemption applications* have data monitoring requirements applicable to either a *major* or *significant generation facility* as specified in Appendix 4.15 of Chapter 4 in the “Market Rules”.

In one instance, a *generation facility* has been re-classified from a *minor generation facility* to a *significant generation facility*. Similarly, in several other instances, *generation facilities* have been re-classified from a *significant generation facility* to a *minor generation facility* pursuant to Section 7.8.2.2 of Chapter 4 for the purposes of Section 7.3 of Chapter 4: “Monitoring Information provided by Generators to the *IMO*”.

Major and *significant generation facilities* are required to provide all data quantities required in Appendix 4.15 to the *IMO* at high performance, as detailed in Appendix 4.19 of Chapter 4.

OPGI *facilities*, which are the subject of these *exemptions*, are non-compliant with the requirements in Appendix 4.15 and Appendix 4.19 of Chapter 4, in either the data required to be provided or the performance of that data provision. Specifically, the following areas are non-compliant:

- The provision of net Megawatts (MW) and gross Megavars (MX) at high performance as specified in Appendix 4.15.
- The provision of *generator* unit voltage (kV) or connected bus voltage at high performance , if either:
 - a *major generation facility* or
 - included within the scope of an *Ancillary Service* Contract for Voltage Support
- The provision of Automatic Voltage Regulator (AVR) and Power System Stabilizer (PSS) statuses at high performance, if either:
 - the *generation units* are equal to or larger than 100 MW, or
 - the unit AVR or PSS statuses directly affects defined *reliability* limits.
- Unit Breaker Status, at high performance
- Generating unit operating mode, at high performance.

4. Criteria used in Assessment

- Whether the *exemption* would, if granted, materially impact the ability of the *IMO* to direct operations and maintain the *reliability* of the *IMO-controlled grid (ICG)*.

When determining whether a missing data quantity or the performance of the provision of a data quantity would impact the *reliability* of the *IMO-controlled grid*, quantities at OPGI *facilities* were assessed with respect to their impact in the following areas:

- affects the ability to derive or monitor a *reliability* limit, or
- affects the ability of the *IMO* to operate the *IMO-controlled grid* with respect to Megavar *dispatch*.

- Whether the *exemption* would, if granted, materially affect the ability of the *IMO* to operate *IMO-administered markets (IAM)* in an efficient, competitive and reliable manner.

The provision of a data quantity does not impact on the operation of the *IMO-administered markets* in a competitive manner. The performance of the provision may at times impact on the *IMO-administered markets*.

When determining whether a missing data quantity or the performance of the provision of a data quantity would materially affect the ability of the *IMO* to operate the *IMO-administered markets* in an efficient and reliable manner, quantities at OPGI *facilities* were assessed with respect to their impact in the following areas:

- affects the ability of the market operating systems to accurately schedule the generating units
- affects the ability of the market operating systems to monitor compliance with or settle *Ancillary Service* contracts.

- Whether the cost or delay to the *exemption applicant* of complying with the obligation or standard to which the *exemption application* relates is reasonable, having regard to the nature of the obligation or standard, the nature of the *exemption application* and the anticipated impact of non-compliance by the *exemption applicant* in terms of the elements referred to above.
 - Where the *IMO* has recommended provision of data pursuant to the *market rule* requirements in Appendix 4.15 and Appendix 4.19 of Chapter 4, the cost has been assessed by *IMO* staff as being reasonable relative to the impact on the above two criteria.

5. Assessments, Recommendations and Expiration Dates

In recognition of the large amount of information to be assessed, this section has been divided into four main sections:

- Provision of Quantities,
- Performance of Data Quantity,
- Accuracy of Data Quantity, and
- Incremental *Exemption* Costs.

Some sections are further subdivided recognizing natural grouping of the information.

5.1 Provision of Quantities

5.1.1 Megawatts (MW)

5.1.1.1 Gross MW is provided

Assessment:

5.1.1.1 In determining whether the current provision of a *gross MW* quantity could be accepted instead of a *net MW* quantity as required by Appendix 4.15, an assessment was made of the ability of *IMO* market systems to accurately schedule the generating unit. The listed hydroelectric *facilities* have small *station service* loads, which make the difference between net and gross values negligible for the purposes of data monitoring. Therefore, accepting *gross MW* in lieu of *net MW* for the life of the equipment at the following *generation facilities* would have a negligible impact on efficient and reliable operation.

Aguasabon GS

Arnprior GS

Caribou Falls GS

Ear Falls GS

Harmon GS

Kipling GS

Little Long GS

Kakabeka Falls GS

Manitou Falls GS

Rayner Falls GS

Red Rock GS

Silver Falls GS

Smokey Falls GS

Whitedog GS

In the case of Atikokan GS, acceptance of *gross MW* in lieu of *net MW* does not impact on the *IMO*'s ability to accurately schedule the *generation unit* since the *station service* is connected to the *distribution system* and is treated as a separate withdrawal from the *IMO-controlled grid*.

Recommendation:

IMO staff recommends granting the *exemption* from the provision of *net MW* data quantities for the life of the equipment.

Condition:

The *IMO* will accept *gross MW* data quantities in lieu of *net MW* data quantities for the life of the equipment.

5.1.1.2 Neither Gross nor Net MW is provided

Assessment:

At *facilities* where neither *gross* nor *net MW* is being provided by the *applicant*, the *IMO* is receiving data from other sources that can be used to derive missing MW quantities. Provision of *net MW* is required in two years by the *applicant*. Sir Adam Beck Pump GS is the only *facility* in Table A in this category.

Recommendation:

IMO staff recommends granting the *exemption* from the provision of *net MW* data quantities for two years.

Condition:

OPGI will arrange to continue to provide data from other sources for *IMO* use to derive missing MW quantities.

Rationale for Expiration Dates:

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.1.2 Megavars (MX)

Market Rule Amendment

In reviewing these *exemption applications*, it was determined that a market amendment was the most effective means of addressing the request for *exemption* from requirement to provide *net MX*. The proposed rule amendment will require *gross MX* quantities from all *major* and *significant generation facilities* instead of *net MX*. The *market rule* requirement for *net MX* will then be required only under specified circumstances.

For all *generation facilities* that are the subject matter of these applications, where *gross MX* quantities are available, *net MX* quantities will only be required where identified by the *IMO*.

5.1.2.1 Net MX is provided

Assessment:

In determining whether the current provision of a *net MX* quantity could be accepted instead of a *gross MX* quantity as required by Appendix 4.15, an assessment was made of whether the *IMO* could accurately monitor compliance and *dispatch* reactive power. The listed hydroelectric *facilities* have small *station service* loads, which make the difference between net and gross values negligible for the purposes of data monitoring. Therefore, accepting *net MX* in lieu of *gross MX* for the life of the equipment at the following *generation facilities* would have a negligible impact on efficient and reliable operation.

The following *generation facilities* fall into this category.

Abitibi Canyon GS	Des Joachims GS
Alexander GS	Holden GS
Aubrey Falls GS	Otter Rapids GS
Barrett Chute GS	Pine Portage GS
Cameron Falls GS	Sir Adam Beck #2 GS
Chats Falls GS	Sir Adam Beck #1 (25 Hz)
Chenault GS	Stewartville GS
Decew Falls ND1 GS	Wells GS
Decew Falls NF 23 GS	

Recommendation:

IMO staff recommends granting the *exemption* from the provision of *gross MX* quantities for the life of the equipment.

Condition:

Compliance with reactive power capability and the Voltage Support Contract will be monitored using *net MX* in lieu of *gross MX*.

5.1.2.2 Neither Gross nor Net MX is provided

Assessment:

At *facilities* where neither *gross* nor *net MX* is being provided by the *applicant*, the *IMO* is receiving data from other sources that can be used to derive the missing *generator MX* quantities. Provision of *gross MX* is required in two years by the *applicant*.

The following *generation facilities* fall into this category.

Lower Notch GS
Sir Adam Beck #1 (60 Hz)
Sir Adam Beck Pump GS

Recommendation:

IMO staff recommends granting the *exemption* from the provision of *gross MX* quantities for a period of two years.

Condition:

OPGI will arrange to continue to provide data from other sources for *IMO* use to derive missing *MX* quantities.

Rationale for Expiration Dates:

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.1.3 Voltage (KV)

5.1.3.1 Facilities Contracted for Voltage Support

Assessment:

The current one-year Voltage Support contract does not require the use of kV quantities, since it acknowledges the lack of this data at this time. For the time being, MX readings are being provided and can be used to settle and monitor compliance with the Voltage Support Contract. As a competitive Voltage support *procurement market* develops, unit kV quantities may be required. The identified *facilities* may be exempted from the requirement to provide unit kV until the market requirements are more fully defined. The structure of such a market may be limited prior to the provision of this data monitoring.

The following *facilities* fall into this category.

Abitibi Canyon GS	Little Long GS
Aguasabon GS	Lower Notch GS
Alexander GS	Manitou Falls GS
Arnprior GS	Mountain Chute GS
Atikokan GS	Otter Rapids GS
Aubrey Falls GS	Pine Portage GS
Barrett Chute GS	Rayner GS
Cameron Falls GS	Red Rock GS
Caribou Falls GS	Saunders GS
Chats Falls GS	Silver Falls GS
Chenau GS	Sir Adam Beck #1 (60 Hz) GS
Decew Falls NF23 GS	Sir Adam Beck #2 GS
Des Joachims GS	Sir Adam Beck #1 (25 Hz) GS
Ear Falls GS	Sir Adam Beck Pump GS
Harmon GS	Smokey Falls GS
Holden GS	Stewartville GS
Kakabeka GS	Wells GS
Kipling GS	Whitedog GS

Recommendation:

IMO staff recommends granting the *exemption* from the provision of a Voltage data quantity for the identified *facilities* until the market requirements are more fully defined.

5.1.3.2 Major Generation Facilities

Assessment:

IMO-controlled grid operation requires a unit voltage indication for *major generation facilities*. Specifically, this quantity is required for those *facilities* where the unit terminal voltage is required for the derivation or monitoring of *reliability* limits. The following *generation facilities* are exempted from this requirement until such time as they may be required for derivation or monitoring of *reliability* limits.

Abitibi Canyon GS
Atikokan GS
Aubrey Falls GS
Barrett Chute GS
Chats Falls GS
Chenau GS
Decew Falls NF 23 GS
Des Joachims GS
Harmon GS
Holden GS
Kipling GS
Little Long GS

Lower Notch GS
Mountain Chute GS
Otter Rapids GS
Pine Portage GS
Saunders GS
Sir Adam Beck #1 (60 Hz)
Sir Adam Beck #2
Sir Adam Beck #1 (25 Hz)
Sir Adam Beck Pump GS
Stewartville GS
Wells GS

Recommendation:

IMO staff recommends granting the *exemption* from the provision of a Voltage data quantity for the identified *facilities* until such time as they may be required for derivation or monitoring of *reliability* limits.

Condition:

Unit kilovolts (kV) will be provided to the IMO by telephone as required.

5.1.4 Automatic Voltage Regulator (AVR) and Power System Stabilizer (PSS) Statuses

Assessment:

With respect to *exemption applications* for AVR and PSS statuses for *facilities* included in this summary, no long-term *exemptions* for the provision of AVR and PSS statuses are recommended. These statuses are involved in deriving or monitoring *reliability* limits. The *facilities* in this category are:

Atikokan GS
Aubrey Falls GS
Lower Notch GS
Mountain Chute GS

Sir Adam Beck #1 (25 Hz) GS
Thunder Bay GS
Wells GS

Recommendation:

IMO staff recommends granting the *exemption* from the provision of AVR and PSS statuses for the identified *facilities* for two years.

Condition:

Until the identified *facilities* are compliant, OPGI shall immediately communicate a change in status of AVR and PSS to the IMO by phone. Where this condition is not or cannot be met, the IMO will take appropriate action to ensure the *reliability* of the ICG and appropriate non-compliance actions will be taken pursuant to Chapter 3 of the "Market Rules".

Rationale for Expiration Dates:

A fair amount of engineering work will have to be completed by OPGI in order to provide AVR and PSS statuses to the *IMO*.

Discussions with OPGI have indicated to the *IMO* that two years is a reasonable amount of time for compliance.

Considering the work involved, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.1.5 Breaker Status and Generating Mode Status

Assessment:

Unit synchronizing breaker status at Smokey Falls GS and generating mode status at Beck #1 (25 Hz) *facilities* are required. These missing statuses are not used for the derivation or monitoring of *reliability* limits but are required for *IMO-controlled grid* operation.

Recommendation:

IMO staff recommends granting the *exemption* from the provision of breaker status or generating mode status for the identified *facility* for two years.

Condition:

Unit breaker status or generating mode status will be provided to the *IMO* by telephone as required. Where this condition is not or cannot be met, the *IMO* will take appropriate action to ensure the *reliability* of the ICG and appropriate non-compliance actions will be taken pursuant to Chapter 3 in the "Market Rules".

Rationale for Expiration Dates:

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.1.6 Disconnect Switch Status:

Assessment:

Sir Adam Beck #1 (60 Hz) is required to provide a Disconnect Switch Status for monitoring of *reliability* limits. Therefore, a long-term *exemption* will not be granted.

Recommendation:

IMO staff recommends granting the *exemption* from the provision of disconnect switch status the identified *facility* for two years.

Condition:

OPGI shall immediately communicate a change in Disconnect Switch Status to the *IMO* by telephone. Where this condition is not or cannot be met, the *IMO* will take appropriate action

to ensure the *reliability* of the ICG and appropriate non-compliance actions will be taken pursuant to Chapter 3 of the “Market Rules”.

Rationale for Expiration Dates:

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.2 Performance of Data Quantities

5.2.1 Performance of Quantities NOT Involved in Deriving or Monitoring Reliability Limits

Assessment:

Quantities falling into this category are not used to derive or monitor *reliability* limits. Therefore, provision of such quantities is acceptable via medium performance, instead of high performance for the life of the equipment. Pine Portage GS is the only *facility* in this group of *exemption applications* in this category.

Recommendation:

IMO staff recommends granting the *exemption* from the performance standard for the life of the equipment.

Condition:

The *IMO* will accept medium performance of data quantities in lieu of high performance for the life of the equipment.

5.2.1.1 Re-classification from Significant to Minor Generating Facility

Assessment:

The following *facilities* are not involved in determining or monitoring *reliability* limits and have been re-classified from a *significant generation facility* to a *minor generation facility* pursuant to Section 7.8.2.2 of Chapter 4 for the purposes of Section 7.3 of Chapter 4: “Monitoring Information Provided by Generators to the IMO”.

Alexander GS
Cameron Falls GS
Kakabeka Falls GS
Manitou Falls GS
Rayner GS
Red Rock GS
Silver Falls GS
Smokey Falls GS

Due to this re-classification, the above listed stations are compliant with the performance standards for data required as specified in Appendix 4.19.

5.2.1.2 Breaker Status and Generating Mode Status

Assessment:

Unit synchronizing breaker status at Smokey Falls GS and generating mode status at Aguasabon GS, Aubrey Falls GS, Beck #1 (25 Hz), Wells GS and Whitedog GS are not used for the derivation or monitoring of *reliability* limits but are required for *IMO-controlled grid* operation. However, due to the fact that these statuses are not continuously changing, the *IMO* will accept these statuses at medium performance instead of high performance.

Recommendation:

IMO staff recommends granting the *exemption* from the performance standard of breaker status or generating mode status for the identified *facilities* for the life of the equipment.

Condition:

The *IMO* will accept medium performance of data quantities in lieu of high performance for the life of the equipment.

5.2.2 Performance of Quantities Involved in Deriving or Monitoring Reliability Limits

Assessment:

Where data monitoring is required to derive or monitor *reliability* limits, there can be no *exemption* from the provision of the data. In most cases, the data is currently provided by OPGI but the provision does not meet performance requirements. The *IMO* expects that there will be times when the provision of this data at medium performance will have some impact on the *IMO-controlled grid* operations and *IMO-administered markets* such as during the more frequent and lengthy *outages* permitted with medium performance. *IMO* operational and market procedures will be developed to ensure continued reliable operation during loss of these data quantities. To the extent possible, the *IMO* will limit commercial impact of these procedures on the affected *facilities*. Where commercial operation of OPGI-owned *facilities*, not limited to those listed in this summary, are affected, and the cause is directly attributable to these *exemptions*, OPGI shall not be eligible for Congestion Management Settlement Credit. *IMO* operational and market procedures will be developed to withhold Congestion Management Settlement Credit.

Exemptions involving quantities used to derive or monitor *reliability* limits will expire in two years. During the two-year period that the *exemption* is in effect, OPGI shall continue to provide required quantities at medium performance. The quantities that fall into this category are MW, MX or Disconnect Switch Statuses and pertain to the following *facilities*.

Abitibi Canyon GS
Aguasabon GS
Aubrey Falls GS
Barrett Chute GS
Caribou Falls GS
Chenau GS
Decew Falls ND1 GS
Decew Falls NF23 GS
Des Joachims GS

Ear Falls GS
Holden GS
Otter Rapids GS
Sir Adam Beck #2 GS
Sir Adam Beck #1 (25 Hz) GS
Stewartville GS
Wells GS
Whitedog GS

Recommendation:

IMO staff recommends granting the *exemption* from the performance standard of data quantities for the period of two years.

Condition:

1. OPGI will continue to provide data quantities at medium performance until date of expiry of the *exemption*.
2. If the loss of data quantities at *facilities* listed above were to affect the commercial operation of OPGI-owned *facilities*, and the cause of this loss is directly attributable to these *exemptions*, the *facility* owner shall not be eligible for a Congestion Management Settlement Credit.

Rationale for Expiration Dates:

IMO staff assesses it is reasonable to expect that quantities that are non-compliant with performance will be compliant within two years.

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.2.2.1 Automatic Voltage Regulator (AVR) and Power System Stabilizer (PSS) Statuses

Assessments:

Exemption applications for AVR and PSS statuses included in this summary are involved in deriving or monitoring *reliability* limits. *IMO* staff assesses it is reasonable to allow these missing quantities to be provided at medium performance for the life of the equipment. This is due to the fact that these quantities are not continuously changing.

Atikokan GS
Aubrey Falls GS
Lower Notch GS
Mountain Chute GS
Sir Adam Beck #1 (25 Hz) GS
Thunder Bay GS
Wells GS

Recommendation:

IMO staff recommends granting the *exemption* from the performance standard of the AVR and PSS statuses for the life of the equipment.

Conditions:

1. The *IMO* will accept medium performance of AVR and PSS statuses in lieu of high performance for the life of the equipment.
2. If the loss of data quantities at *facilities* listed above, were to affect the commercial operation of OPGI-owned *facilities*, and the cause of this loss is directly attributable to these *exemptions*, the *facility* owner shall not be eligible for a Congestion Management Settlement Credit.

5.2.2.2 Disconnect Switch Status

Assessment:

Sir Adam Beck #1 (60 Hz) is required to provide a Disconnect Switch Status for monitoring of *reliability* limits. Therefore, this quantity is required at high performance.

Recommendation:

IMO staff recommends granting the *exemption* from the performance standard for the disconnect switch status for two years.

Condition:

OPGI will provide the Disconnect Switch Status to the *IMO* by telephone as required. *IMO* operational and market procedures will recognize the potential absence of this data quantity. If the loss of data quantities at *facilities* listed above, were to affect the commercial operation of OPGI-owned *facilities*, and the cause of this loss is directly attributable to these *exemptions*, the *facility* owner shall not be eligible for a Congestion Management Settlement Credit.

Rationale for Expiration Dates:

Considering the work involved and the impact on operation of the *IMO-controlled grid* and *IMO-administered markets*, *IMO* staff assesses two years to be a reasonable amount of time for OPGI to be compliant.

5.3 Accuracy of Data Quantity

The *facilities* that are the subject matter of these *exemption applications* are requesting *exemptions* from requirements in the “Participant Technical Reference Manual” Part 3, Section 1.3 concerning accuracy of data quantities. Recent “Participant Technical Reference Manual” changes have made the *facilities* compliant with the requirement of accuracy.

5.4 Incremental Exemption Costs

The granting of identified *exemptions* require the development and implementation of *IMO* operational and market procedures to address both system *reliability* and market operation impacts of the *exemptions*. OPGI is responsible for incremental *exemption* costs incurred by the *IMO* as a result of this *exemption*, as defined in the “Exemption Application and Assessment” procedure, Section 1.12.3.

6. Compliance Plans

OPGI plans to be compliant within two years both in terms of performance level and missing quantities. This will be accomplished through the following means:

- Utilize existing hardware to *connect* directly to the *IMO* at high performance

- Upgrade existing hardware to allow it to *connect* directly to the *IMO* at high performance
- If necessary, upgrade the performance of the existing medium performance connection between OPGI and the *IMO*, including assessment of options involving changing the way *IMO* obtains the data
- Provide missing data quantities at medium performance through existing infrastructure.

7. Costs of Compliance

A cost estimate to become compliant was provided by OPGI.

Costs to comply with the “Market Rules” at OPGI *facilities* could include one or combinations of the following:

1. Provision of missing quantity through existing infrastructure.
2. Addition of a communication port to an existing data monitoring system to be able to provide data to the *IMO* at high performance.
3. A new site Remote Terminal Unit (RTU) quality data source will be installed and made available to the *IMO*.

Specific costs per *facility* are available on attached Table A.

8. Terms and Conditions for Exemptions

Effective Date of Exemption: Date *Exemption Application* received

Date of Expiration of Exemption: Where a two-year term is specified in Section 5 of this document, these *exemptions* shall expire two years from the date of the Panel decision.

Market Rules from which Exemption is granted: Chapter 4, Appendices 4.15 and 4.19

Restriction on Manner of Operation and/or Additional Obligations to be met during time of the exemption:

Note: These restrictions and obligations are specific to assessments and recommendations and applicable *generation facilities* in Section 5 of this document and are referenced in parentheses for clarity.

Provision of Quantities

Megawatts (MW) (5.1.1)

Neither Gross nor Net MW is provided (5.1.1.2)

- OPGI will arrange to continue to provide data from other sources for *IMO* use to derive missing MW quantities.

Megavars (MX) (5.1.2)

Neither Gross nor Net MX is provided (5.1.2.2)

- OPGI will arrange to continue to provide data from other sources for *IMO* use to derive missing MX quantities.

Voltage Quantities (5.1.3)

Major Generation Facilities (5.1.3.2)

- Unit kilovolts (kV) will be provided to the *IMO* by telephone as required.

Automatic Voltage Regulator (AVR) and Power System Stabilizer (PSS) (5.1.4)

- Change in status will be reported to the *IMO* by telephone immediately.

Breaker Status, Generating Mode Status and Disconnect Switch Status (5.1.5 and 5.1.6)

- These Statuses will be reported to the *IMO* by telephone as required.

Monitoring Information Required:

OPGI is to provide a compliance plan for each *facility* and a semi-annual status update on implementation of the plan.

OPGI is to participate in a quarterly *IMO* review of *reliability* of the medium performance path. The first review shall take place before the end of January 2002.

Payment of Costs: OPGI is responsible for costs incurred by the *IMO* for development of procedures and implementation of *IMO* operational and market procedures to address both system *reliability* and market operation impacts of the *exemptions*. *IMO* will withhold payment of *settlement amounts* as cited in Section 5.4 of this document.

Reconsideration/Removal: Reconsideration or removal occurs when quantities or statuses included in this summary become part of deriving or monitoring *reliability* limits, where they were not originally used for this purpose.

Transferability:

Approval to transfer this *exemption* may occur once the following criteria have been met:

1. the transfer meets applicable terms and conditions set forth in the *exemption* itself and whether the transfer would affect the ability of the proposed transferee to comply with all of the terms and conditions of the *exemption*;
2. the proposed transferee is a *market participant* or undertakes in writing to the *IMO* to apply for authorization as a *market participant*; and
3. the extent to which the transfer of the *exemption* will impact the timely implementation of the plan to become compliant with the exempted obligation (such plan may be the *exemption* plan, modified as required by the Panel as part of the terms and conditions of the *exemption*).