



# ISO Rules

---

**Effective: December 1, 2007**

---

## **PREFACE**

The ISO Rules Document is a combination of the previous Pool Rules, the Pool Code, the Transmission Administrator Operating Procedures (“TAOPs”) and the Settlement System Code. In addition, the new Electric Utilities Act (SA 2003 cE-5.1) (“EUA”) on June 1<sup>st</sup>, 2003, requires the ISO to establish schedules of fees and charges (s.20) and administrative penalties (s.22). While schedules are not considered rules, they are included in the ISO Rules Document for convenience.

In addition to a generally applied section that includes ISO rule definitions, the ISO Rules Document contains two broad categories: the first is Market Participation Rules; the second is Operating Policies and Procedures (“OPPs.”) The Market Participation Rules represent the combination of the Power Pool Rules and the Settlement System Code. The Operating Policies and Procedures combine the TAOPs and Pool Code, so they are now functionally one document.

Prior to the proclamation of the new EUA, the Transmission Administrator established Transmission Administrator Operating Policies or TAOPs, subsequent to consultation with industry. In conjunction with the establishment of TAOPs, the Power Pool Council established complimentary implementation procedures, as part of the rules of the power pool. These were referred to as the Pool Code. The authority to establish the TAOPs has been derived from the tariffs of the transmission facility owners. That tariff also contains a procedure for the parties to utilize in the event of a dispute regarding a TAOP. It is acknowledged that, notwithstanding that the TAOPs are now part of the ISO Rules through inclusion in the OPps, matters dealing with the enforcement of TAOPs will continue to be dealt with through the TFOs tariff and not through the ISO Rules.

The objective of the ISO Rules Document was to create a single document that would comply with the new EUA. The ISO Rules Document also reduces duplication between previous rules and operating procedures. A consolidation of the definitions and terminology has also been included to ensure the language of the ISO Rules Document is consistent with the EUA.

The ISO Rules Document does not include either the ISO’s regulated transmission tariff, associated Terms and Conditions or the System Access Service agreements, given that these are beyond the scope of the rules process and are subject to the regulatory oversight of the Alberta Energy and Utilities Board (EUB). In the future, the AESO may consider consolidating all key AESO documentation in one “Manual” for ease of reference including the tariff related items and the Pool Participant manual.

---

## TABLE OF CONTENTS

### ***PART ONE - GENERAL***

<b>G1</b>	<b>DEFINITIONS .....</b>	<b>1</b>
<b>G2</b>	<b>ELECTRIC UTILITIES ACT DEFINITIONS.....</b>	<b>28</b>
<b>G3</b>	<b>INTERPRETATION .....</b>	<b>29</b>
<b>G4</b>	<b>OBJECTIVE AND LEGAL NATURE OF THESE RULES .....</b>	<b>30</b>
<b>G5</b>	<b>ISO POWERS TO CHANGE RULES .....</b>	<b>31</b>
<b>G6</b>	<b>RULE EXEMPTIONS.....</b>	<b>32</b>
<b>G7</b>	<b>OPERATION OF THE ISO.....</b>	<b>33</b>
<b>G8</b>	<b>LIMITATION OF LIABILITY.....</b>	<b>34</b>

### ***PART TWO - MARKET PARTICIPATION RULES***

<b>1.</b>	<b>POOL PARTICIPANTS .....</b>	<b>2</b>
1.1	REQUIREMENTS OF BECOMING / APPLICATION TO BECOME A POOL PARTICIPANT .....	2
1.2	POOL PARTICIPANT AMENDMENT REQUIREMENTS .....	3
1.3	POOL PARTICIPANT LIST AND ISO ASSET LIST .....	3
1.3.1	<i>Pool Participant List.....</i>	<i>3</i>
1.3.2	<i>ISO Asset List.....</i>	<i>3</i>
1.3.3	<i>Public Availability of Lists.....</i>	<i>4</i>
1.4	DISCIPLINE BY ISO .....	4
1.5	TERMINATION OF PARTICIPATION BY A POOL PARTICIPANT .....	4
1.6	EFFECT OF TERMINATION .....	5
1.7	REINSTATEMENT OF PARTICIPATION .....	5
1.8	APPOINTMENT OF AN AGENT .....	5
1.9	RENEWAL PROVISIONS.....	6
1.10	MARKET PARTICIPANT BEHAVIOUR GUIDELINES .....	6
1.10.1	<i>Purposes and Background of Rule.....</i>	<i>6</i>
1.10.2	<i>Undesirable Practices.....</i>	<i>6</i>
<b>2.</b>	<b>PRUDENTIAL REQUIREMENTS AND ISO FEES .....</b>	<b>8</b>
2.1	PRUDENTIAL REQUIREMENTS .....	8
2.1.1	<i>Setting of Prudential Requirements .....</i>	<i>8</i>
2.1.2	<i>Review and Reassessment .....</i>	<i>8</i>
2.1.3	<i>Confidentiality.....</i>	<i>8</i>
2.2	ISO FEES .....	8
2.2.1	<i>Submission and Approval of Budgeted Costs .....</i>	<i>8</i>
2.2.2	<i>Determination of Annual Pool Participation Fees .....</i>	<i>9</i>
2.2.3	<i>Registration Fee.....</i>	<i>9</i>
2.2.4	<i>IT Service Charge .....</i>	<i>9</i>
2.2.5	<i>Other Services.....</i>	<i>9</i>

2.2.6	<i>Load Settlement Costs</i> .....	9
<b>3.</b>	<b>OFFERS, BIDS, ANCILLARY SERVICES AND ASSET DECLARATIONS</b> .....	<b>10</b>
3.1	PURPOSE OF RULE.....	10
3.2	WHO SUBMITS AN OFFER OR BID .....	10
3.3	HOW TO SUBMIT AN OFFER, BID, OPERATING CONSTRAINT OR ANCILLARY SERVICE DECLARATION.....	10
3.4	SUBMISSION PROTOCOLS .....	10
3.5	OFFERS AND BIDS .....	11
3.5.1	<i>Block Allocations</i> .....	11
3.5.2	<i>Submission Timing</i> .....	11
3.5.3	<i>Offers</i> .....	11
3.5.4	<i>Bids</i> .....	13
3.5.5	<i>Dispatch Down Service</i> .....	14
3.6	ANCILLARY SERVICE DECLARATIONS .....	15
3.6.1	<i>Purpose of Rule</i> .....	15
3.6.2	<i>Ancillary Service Provider Declaration</i> .....	16
3.6.3	<i>Restatements</i> .....	16
3.6.4	<i>Records of Ancillary Service</i> .....	16
3.7	<i>STANDING OFFERS AND BIDS</i> .....	17
3.8	REGISTRATION OF AGGREGATE ASSETS .....	17
3.9	VALIDITY OR INVALIDITY OF OFFERS AND BIDS .....	17
3.10	REFERENCE PRICE.....	17
<b>4.</b>	<b>NET SETTLEMENT INSTRUCTIONS</b> .....	<b>19</b>
4.1	PURPOSE OF RULE.....	19
4.2	ACCEPTANCE OF NET SETTLEMENT INSTRUCTIONS .....	19
4.3	SUBMITTING NET SETTLEMENT INSTRUCTION DATA.....	19
4.3.1	<i>Data Provided Directly from Pool Participants</i> .....	19
4.3.2	<i>Data Provided by Forward Market Operators</i> .....	20
4.4	ACKNOWLEDGING NET SETTLEMENT INSTRUCTION DATA.....	20
4.5	DE-REGISTERING NET SETTLEMENT INSTRUCTIONS .....	20
4.5.1	<i>Pool Participant Initiated De-registration</i> .....	20
4.5.2	<i>Compulsory Pool Participant Initiated De-registration</i> .....	21
4.5.3	<i>ISO Initiated De-registration</i> .....	21
4.6	NET SETTLEMENT INSTRUCTION PROTOCOLS .....	21
<b>5.</b>	<b>ENERGY MARKET SCHEDULING</b> .....	<b>23</b>
5.1	ADEQUACY ASSESSMENT.....	23
5.2	FORECAST DISPATCH PRICE.....	23
5.2.1	<i>Determination of Forecast Dispatch Price</i> .....	23
5.2.2	<i>Determination of Forecast Asset Marginal Price</i> .....	23
<b>6.</b>	<b>DISPATCH AND DIRECTIVES</b> .....	<b>24</b>
6.1	ASSET DISPATCHING.....	24
6.2	FORM OF DISPATCH AND DIRECTIVES .....	24
6.2.1	<i>Form of Communication</i> .....	24
6.2.2	<i>Communication Systems</i> .....	24
6.2.3	<i>Receiving and Implementing Directions</i> .....	24
6.2.4	<i>Dispatch and Directive Records</i> .....	25
6.2.5	<i>Monitoring</i> .....	25
6.2.6	<i>Requests for Records</i> .....	25
6.3	ENERGY MARKET DISPATCH AND DIRECTIVES .....	25

6.3.1	<i>Factors to Take Into Account</i> .....	25
6.3.2	<i>Energy Market Dispatch Content</i> .....	26
6.3.3	<i>Interconnection Dispatching</i> .....	26
6.3.4	EQUAL PRICE OFFERS OR BIDS .....	27
6.3.5	<i>Long Lead Time Energy Dispatch</i> .....	27
6.3.6	<i>Dispatch Down Service Dispatch</i> .....	27
6.3.7	<i>Supply Shortfall Directive</i> .....	29
6.3.8	<i>Supply Surplus Directive</i> .....	29
6.3.9	<i>Declaration of Pool Price</i> .....	29
6.4	ANCILLARY SERVICE DISPATCH .....	30
6.4.1	<i>Factors to Take into Account</i> .....	30
6.4.2	<i>Ancillary Service Dispatch Content</i> .....	30
6.4.3	<i>Ancillary Service Provider Discretion</i> .....	31
6.5	ANCILLARY SERVICE DIRECTIVE.....	32
6.5.1	<i>Ancillary Service Directive Content</i> .....	32
6.5.2	<i>Ancillary Service Provider Discretion</i> .....	33
6.5.3	<i>Ancillary Service Expectations</i> .....	33
6.6	POOL PARTICIPANT NON-COMPLIANCE WITH ENERGY MARKET DISPATCH AND DIRECTIVES .	34
6.7	SYSTEM SECURITY .....	35
6.7.1	<i>Independent System Operator</i> .....	35
6.7.2	<i>Market Participant</i> .....	35
6.8	INVOLUNTARY LOAD CURTAILMENT.....	35
6.9	ENERGY MARKET SUSPENSION.....	36
6.9.1	<i>Objective</i> .....	36
6.9.2	<i>Initiating an Energy Market Suspension</i> .....	36
6.9.3	<i>Declaration of Energy Market Suspension</i> .....	37
6.9.4	<i>Pricing of Energy During Energy Market Suspension</i> .....	37
6.9.5	<i>Ending of Energy Market Suspension</i> .....	38
<b>7.</b>	<b>LOAD SETTLEMENT</b> .....	<b>39</b>
<b>8.</b>	<b>POWER POOL FINANCIAL SETTLEMENT</b> .....	<b>40</b>
8.1	SOURCE ASSET CALCULATIONS.....	40
8.1.1	<i>Settlement at Pool Price</i> .....	40
8.1.2	<i>Payment to Suppliers on the Margin</i> .....	40
8.1.3	<i>Dispatch Down Service Payment</i> .....	41
8.1.4	<i>Dispatch Down Service Charge</i> .....	41
8.2	SINK ASSET CALCULATIONS .....	42
8.2.1	<i>Settlement at Pool Price</i> .....	42
8.2.2	<i>Post Final Adjustment Mechanism Financial Allocation for Energy Consumption</i> .....	42
8.2.3	<i>Post Final Adjustment Mechanism Financial Allocation for Energy Production</i> .....	42
8.2.4	<i>Settlement for Supplier on the Margin Payments</i> .....	43
8.3	OTHER CALCULATIONS AND INFORMATION REQUIREMENTS.....	44
8.3.1	<i>Import/Export Transactions</i> .....	44
8.3.2	<i>Submitting Metering Data</i> .....	44
8.4	PAYMENTS RELATING TO ELECTRIC ENERGY PURCHASED AND SUPPLIED.....	44
8.4.1	<i>Preliminary Pool Statement</i> .....	44
8.4.2	<i>Final Pool Statement</i> .....	45
8.4.3	<i>Pool Settlement Date and Payments</i> .....	48
8.4.4	<i>Interest and Other Charges</i> .....	49
8.5	POWER POOL DISPUTES .....	50
8.6	DEFAULT PROCEDURE AND CHARGES .....	50
8.6.1	<i>Default</i> .....	50

8.6.2	<i>Levy to Pool Participants</i> .....	51
8.6.3	<i>Consequence of Applying Security Deposits</i> .....	52
8.7	GOODS AND SERVICES TAX REGISTRATION .....	52
<b>9.</b>	<b>TRANSMISSION</b> .....	<b>53</b>
9.1	TRANSMISSION FACILITY PROJECTS .....	53
9.1.1	<i>Eligible TFO</i> .....	53
9.1.2	<i>TFO Obligation to Provide Estimates and Proposals</i> .....	54
9.1.3	<i>Project Reporting by Designated TFOs</i> .....	55
9.1.4	<i>ISO Projects Reporting</i> .....	57
9.1.5	<i>Project Procurement</i> .....	57
9.1.6	<i>Confidentiality</i> .....	59
9.1.7	<i>Interpretation</i> .....	59
9.2	TRANSMISSION LOSS FACTORS .....	59
9.2.1	<i>Purpose of Rule</i> .....	59
9.2.2	<i>Establish and Maintain Loss Factors</i> .....	59
9.2.3	<i>Recovery of Costs of Transmission Losses</i> .....	61
9.2.4	<i>Loss Factor Modeling and Assumption Details</i> .....	61
9.3	THIS SECTION IS TO BE DEVELOPED .....	61
9.4	THIS SECTION IS TO BE DEVELOPED .....	61
9.5	ANNUAL PERFORMANCE CRITERIA FOR REFUND OF SYSTEM CONTRIBUTION .....	61
9.5.1	<i>Purpose of Rule</i> .....	61
9.5.2	<i>Annual Performance Criteria</i> .....	62
9.5.3	<i>Reduction or Forfeiture of Refunds</i> .....	62
9.5.4	<i>Reporting Requirements</i> .....	63
9.5.5	<i>Payment of Annual Amounts</i> .....	63
9.5.6	<i>Dispute Resolution</i> .....	63
9.6	MERCHANT TRANSMISSION FACILITY OPEN ACCESS.....	64
9.6.1	<i>Purpose of Rule</i> .....	64
9.6.2	<i>Open Access</i> .....	64
9.6.3	<i>Merchant Transmission Terms and Conditions</i> .....	64
9.6.4	<i>Compliance Review Right of ISO</i> .....	65
<b>10.</b>	<b>INFORMATION EXCHANGE</b> .....	<b>66</b>
10.1	INFORMATION DISCLOSURE PRINCIPLES.....	66
10.2	FORECAST SCHEDULING PERIOD DATA, SIX DAY FORECAST .....	66
10.3	DAY AHEAD, TRADING DAY FORECAST .....	66
10.4	NEXT TWO SETTLEMENT INTERVALS FORECAST .....	67
10.5	SETTLEMENT INTERVAL FOLLOWING .....	67
10.6	TRADING DAY HISTORY.....	67
10.7	ISO RECORDS AND REPORTS .....	68
10.8	ANCILLARY SERVICES INFORMATION PROVISION .....	68
10.9	CONFIDENTIALITY.....	68
10.9.1	<i>Obligations</i> .....	68
10.9.2	<i>Exceptions</i> .....	68
10.9.3	<i>Conditions</i> .....	69
<b>11.</b>	<b>MEDIATION AND DISPUTE RESOLUTION</b> .....	<b>70</b>
11.1	MEDIATION COMMITTEE.....	70
11.2	MEDIATION PROCESS .....	70
11.2.1	<i>Dispute Notification</i> .....	70
11.2.2	<i>EUB Related Disputes</i> .....	70
11.2.3	<i>Role of the ISO Board</i> .....	71

11.2.4	<i>Mediator</i> .....	71
11.2.5	<i>Mediation Sessions</i> .....	71
11.2.6	<i>Authority to Terminate Mediation</i> .....	72
11.2.7	<i>Privacy and Confidentiality</i> .....	72
11.2.8	<i>Costs and Expenses</i> .....	73
11.3	ACCESS TO INFORMATION.....	73
<b>12</b>	<b>ISO COMPLIANCE MONITORING, SANCTIONS AND ENFORCEMENT .....</b>	<b>74</b>
12.1	INTRODUCTION.....	74
12.1.1	<i>Purpose</i> .....	74
12.1.2	<i>Scope</i> .....	74
12.1.3	<i>Authority</i> .....	74
12.1.4	<i>Application of Other Remedies</i> .....	74
12.2	COMPLIANCE MONITORING .....	74
12.2.1	<i>Extent of Compliance Monitoring</i> .....	74
12.2.2	<i>Primary Information Sources</i> .....	74
12.3	ISSUE ASSESSMENT .....	75
12.3.1	<i>Monitoring, Referrals and Complaints</i> .....	75
12.3.2	<i>Communications to the ISO and Confidentiality</i> .....	76
12.3.3	<i>Preliminary Assessment</i> .....	76
12.4	COMPLIANCE REVIEW .....	77
12.4.1	<i>Notification to Market Participant</i> .....	77
12.4.2	<i>Compliance Review Guidelines</i> .....	77
12.4.3	<i>Compliance Review Process</i> .....	77
12.4.4	<i>Recommendations Made as a Result of a Compliance Review</i> .....	78
12.4.5	<i>Proposed ISO Rule Changes</i> .....	79
12.5	ISO ADJUDICATION.....	79
12.5.1	<i>ISO Senior Management Adjudication Process</i> .....	79
12.5.2	<i>Written Decision with Reasons</i> .....	80
12.5.3	<i>ISO Orders</i> .....	80
12.6	SANCTIONS.....	81
12.6.1	<i>Introduction</i> .....	81
12.6.2	<i>Sanction Process</i> .....	81
12.6.3	<i>Levels of Non-Compliance</i> .....	81
12.6.4	<i>Sanctions Matrix</i> .....	82
12.6.5	<i>Mitigating Factors</i> .....	82
12.6.6	<i>Posting of an Administrative Penalty</i> .....	83
12.6.7	<i>Order to Deny, Suspend, Restrict or Terminate the Right to Exchange Energy</i> .....	83
12.6.8	<i>Posting an Order to Deny, Suspend, Restrict or Terminate the Right to Exchange Energy</i> 83	
12.7	APPEAL OF SANCTIONS .....	83
12.7.1	<i>Introduction</i> .....	83
12.7.2	<i>Appeal of a Warning Letter</i> .....	83
12.7.3	<i>Appeal of a Non-Compliance Letter</i> .....	84
12.7.4	<i>Complaints to the EUB</i> .....	84
12.8	ADMINISTRATION AND ENFORCEMENT.....	84
12.8.1	<i>Administration and Payment of Administrative Penalties</i> .....	84
12.8.2	<i>Enforcement of ISO Orders</i> .....	84
12.8.3	<i>Time Guidelines</i> .....	84

## **PART THREE - POLICIES AND PROCEDURES**

<b>P1</b>	<b>ISO OPERATING POLICIES AND PROCEDURES .....</b>	<b>1</b>
-----------	--	----------

---

***PART FOUR - APPENDICES***

**APPENDIX 1 - APPLICATION FORM..... 1**

**APPENDIX 2 – POOL PARTICIPANT AGREEMENT ..... 5**

**APPENDIX 3 - POOL PARTICIPANT PRUDENTIAL REQUIREMENTS..... 9**

**APPENDIX 4 - COMMUNICATIONS WITH ISO..... 13**

**APPENDIX 5 - INFORMATION TO BE PROVIDED THROUGH THE ISO..... 15**

**APPENDIX 6 - TRANSMISSION LOSS FACTOR METHODOLOGY & ASSUMPTIONS ..... 17**

**APPENDIX 7 - SUMMARY OF RULE CHANGES ..... 18**

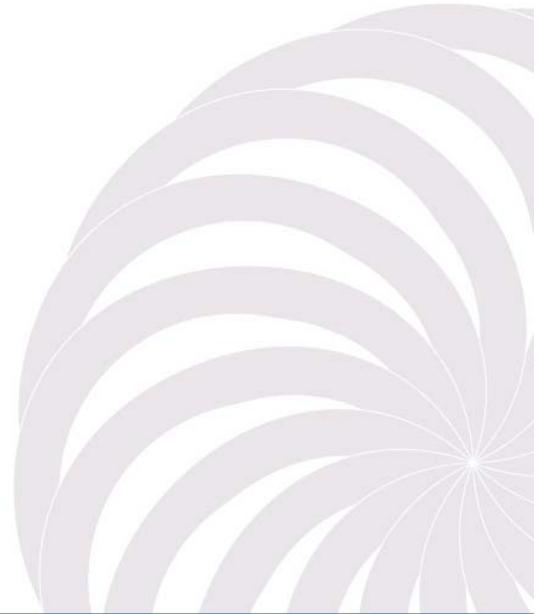
***PART FIVE - SCHEDULES***

**SCHEDULE OF ISO FEES ..... 1**

**SCHEDULE OF ADMINISTRATIVE PENALTIES..... 2**



# Part One General



---

## G1 DEFINITIONS

In the **ISO rules**:

“**acceptable operational reason**” means with respect to an **asset**, any one or more of the following:

- i) a circumstance related to the operation of the **generating asset** which if it operated could reasonably be expected to affect the safety of the **generating asset**, the environment, personnel working at the **generating asset** or the public; or
- ii) re-positioning an **asset** within the energy market due to the need to meet a **dispatch** given to that **asset** from the **system controller** to serve the stand-by **ancillary services** market; or
- iii) re-positioning a **generating asset** within the energy market to manage physical or operational constraints associated with the **asset**; or
- iv) re-positioning an **importer’s** or **exporter’s asset** within the energy market to manage physical or operational constraints associated with an **interconnection** or a neighbouring **control area**; or
- iv) a circumstance directly resulting in the **generating asset** not being capable of operation, which circumstance was solely caused by an occurrence of **force majeure**; or
- vi) re-positioning a **generating asset** for electric energy that is:
  - a) produced on the property of which a person is the owner or a tenant; and
  - b) consumed solely by that person and solely on that property.

“**Act**” means the *Electric Utilities Act* (Alberta), as amended from time to time.

“**adequacy**” means the ability of the electric system to supply the aggregate electrical demand and energy requirements of the **system access customers** at all times, taking into account scheduled and reasonably expected unscheduled **outages** of system elements.

“**advance energy dispatch**” means a **dispatch of one or more blocks** of energy for a specified future time. Advance energy dispatches are issued in anticipation of expected demand changes or to spread workload. Under normal operating conditions, interconnected **control areas** do not allow changing of **interchange schedules** without an advance energy dispatch.

“**affiliate**” has the same meaning given to it in the Alberta Business Corporations Act.

“**AGC unit**” means a **generating unit** equipped for **Automatic Generation Control** operation.

“**agent**” means a representative of a **market participant**, duly appointed and authorized by the **market participant** in accordance with rule 1.8.

“**aggregation**” means a collection of particulars into a whole mass or sum; total; combined.

“**AIES**” means Alberta’s “Interconnected Electric System” as that term is defined in the Act.

---

“**AIES demand**” means the aggregate or total, AIES demand for electric energy, including exports and associated **AIES losses**.

“**Alberta Internal Load**” (**AIL**) means the total energy Alberta consumes including behind-the-fence load. AIL represents the total domestic consumption of AIES connected loads in Alberta and include industrial loads served by on-site generation, and the City of Medicine Hat’s load served by the city’s generators.

“**alert**” means a communication issued by the **system controller** requesting readiness of the **market participants** to take urgent and timely actions to maintain the Alberta **control area** in a secure state with regard to energy balance. The alert also serves as information to interconnected **control areas** regarding the increased risk of the **AIES** to require obligation energy and its limitations in delivering such energy to others.

“**ancillary service declaration**” mean the ancillary service declarations identified under **rule 3.6**.

“**ancillary service directive**” means direction given to an **ancillary service provider** by the **system controller** with the understanding that the provider must comply, accepting that the facility owner retains the right and duty to take any action it deems prudent to protect the facility, its personnel, the public or the environment.

“**ancillary service dispatch**” means direction given to an **ancillary service provider** by the **system controller** to request the provider to supply **ancillary services** within those criteria agreed upon between the **system controller** and the **ancillary service provider**.

“**ancillary service exchanges**” means market entities for the purpose of buying and selling contracts for **ancillary services**.

“**ancillary service merit order**” means a list of all qualified **ancillary service provider assets** and resources for each type of **ancillary service** sorted in order of preference for **ancillary service dispatch**.

“**ancillary service provider**” means the **pool participant** holding the **ancillary service dispatch** rights for an **asset**.

“**ancillary services**” has the same meaning as that provided in the **Act**.

“**apparent power**” means the product of the volts and amperes, comprising both real and **reactive power**, usually expressed in kilovoltamperes (“kVA”) or megavoltamperes (“MVA”).

“**area control error**” (**ACE**) means the instantaneous difference between actual and scheduled interchange, taking into account the effects of frequency bias, time error and unilateral **inadvertent interchange** if automatic correction is part of the **AIES**’s **AGC**, and a correction for **metering error**.

“**asset**” means a **generating asset, load, import volume, export volume** or other **power pool** transaction represented by an **ISO** identifier that enables a **pool participant** to submit **bids, offers, operating constraints, ancillary service declarations** and/or identify specific settlement information.

“**asset addition form**” means the form, as established by the **ISO**, which **ISO** applicants or **pool participants** indicate their intent to add an **asset**, and includes a description of that **asset**.

---

"**asset marginal price**" means the price in \$/MWh of a **pool participant's asset** determined in accordance with **rule 6.3.9.2**.

"**asset minimum off time**" means the minimum time in hours, following de-synchronization that must elapse prior to accepting a **dispatch** to start-up and synchronize the **asset** to the transmission system.

"**asset minimum on time**" means the minimum time, in hours, which must elapse following synchronization before being able to accept a **dispatch** to de-synchronize the **asset**.

"**asset schedule**" means a schedule that in part identifies which **assets** are planned to receive an **energy market dispatch** to meet the forecast **AIES demand** for a **trading day**.

"**automated dispatch and messaging system**" means the **software and procedures** used to communicate between the **system controller** and **market participants** for real time management of the **AIES**.

"**automatic generation control**" (**AGC**) means equipment that automatically adjusts a **control area's** generation to maintain its frequency or **interchange schedule** plus or minus frequency bias.

"**automatic voltage regulator**" (**AVR**) means the automatic control equipment that adjusts the excitation level of a **generating unit** to maintain voltage levels.

"**available capability**" (**AC**) means with respect to the following:

- for a **generating asset**, the maximum quantity (**MW**) that the **generating asset** is physically capable of providing during each **settlement interval** of the **trading day**.
- for an import **source asset**, the maximum quantity (**MW**) that the **importer** is prepared to provide during each **settlement interval** of the **trading day**.
- for an export **sink asset**, the maximum quantity (**MW**) that the **exporter** is prepared to consume during each **settlement interval** of the **trading day**.
- For a **bid** (excluding an export **sink asset**), the maximum quantity (**MW**), after accounting for any restatements to the **asset's** availability to which the asset may receive an **energy market dispatch** in real time operations

"**available capacity factor**" means the percentage of time that a generating unit is available at full machine capacity.

"**available transfer capability**" (**ATC**) means a measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. Mathematically, **ATC** is defined as the **total transfer capability (TTC)** less the **Transmission Reliability Margin (TRM)**, less the sum of existing transmission commitments (which includes retail customer service) and the **capacity benefit margin**.

"**bank value**" means that the **power pool** has sufficient funds in its bank account on the date of settlement in order to meet obligations relating to payment of funds.

"**bid**" means a submission made by a **pool participant** in accordance with **rule 3.0**.

"**bid load**" means the **price responsive load bid** into the **ISO** that can be **dispatched** for **interruption** at a set price to avoid high purchaser energy supply costs.

---

“**billing capacity**” shall have the meaning given to that term in rate schedule **DTS**.

“**black start capability**” (**BSC**) means the ability of a power plant or **generating asset** to start up without external electric supply and serve to provide power to the **AIES**.

“**blackout**” a condition where a major portion or all of the **AIES** is de-energized.

“**block**” see **operating block**.

“**budget**” means the budget prepared by the **ISO** under rule 2.2.

“**business day**” means a **day** other than a Saturday, a Sunday or a statutory or non-statutory holiday in the Province of Alberta during which financial banking privileges in Alberta are suspended.

“**business hours**” means the normal business hours of the **ISO**.

“**calibration factor**” means an adjustment to the loss charges ensuring that the actual cost of **losses** is reasonably recovered through charges and credits under the **ISO** tariff on an annual basis.

“**capacity benefit margin**” (**CBM**) means that amount of transmission transfer capability reserved by **load**-serving entities with generation on the **AIES** up to the purchased/owned amount of transmission, to ensure access to generation from interconnected systems to meet generation reliability requirements. **CBM** is currently not utilized in Alberta.

“**capital contribution**” means a one time payment required to be made by a **system access customer** for the provision of **transmission facilities** required for **system access service**.

“**commercial operation**” means the date upon which a **load** or **generating unit** begins to operate on the transmission system in a manner which is acceptable to the **ISO** and which is expected to be normal for it to so operate, after **energization** and **commissioning**.

“**commissioning**” means the process by which a facility is test, tuned and ultimately accepted for **commercial operation**.

“**commissioning certificate**” means the formal document signed by the owner of a project being constructed under the terms of the **ISO** request for proposal process (or his representative) and also by representatives of **ISO**. The purpose of the document is to certify that all **commissioning** tests have been completed and accepted by the **ISO**, and all deficiencies have been resolved, or will be resolved by a specified date. Any deficiencies are specifically listed. The date indicated on this certificate marks the start of **commercial operation** for the facilities and thus must be very specific.

“**complaint**” means a submission to the **ISO** regarding compliance with an **ISO rule** by a **market participant** or an interested party. A **complaint** must be in writing and contain, at a minimum, the following:

- a) The name, address, telephone number (and email address, if available) of the **market participant** or interested party making it;
- b) Whether the submission is made on a confidential basis;
- c) The particulars of the **complaint**;
- d) Any facts or information that support the **complaint**;

- 
- e) The signature of the individual or authorized representative of the **market participant** or interested party making the **complaint**.

“**complainant**” means the **market participant** or interested party who submits a **complaint**.

“**compressed loss factor**” means the **loss factors** determined by applying compression to the annualized **loss factors** to comply with the **loss factor** limitations described in the **TR** section 19(2)(f).

“**confidential information**” means:

- information provided to the **ISO** that has been specifically identified as being confidential in nature by the provider of such information; or
- information required by these **rules** or the **ISO tariff** to be kept confidential; or
- where disclosure of such information by the **ISO** could reasonably be expected to result in a material loss or gain to that provider; or could reasonably be expected to prejudice the provider's competitive position; or
- is financial, commercial, scientific or technical information, which if disclosed would put the supplier of the information at financial risk or competitive disadvantage.

Information is not confidential information if it is provided as a requirement of being a **pool participant** and identified in these **rules** or the **ISO tariff** as being required to be published by the **ISO** or otherwise required to be made available to others to ensure a fair, efficient and competitive market for electric energy.

“**confirmation notice**” is a notification from the **ISO** to a **system access customer** that the **system access customer’s system access service** application is complete and will be processed.

“**constrained down**” means, in respect of any **generating unit**, being directed to a lower **MW** output than the **in merit MW** output, as a result of a **directive** by the **system controller**.

“**constrained on**” means, in respect of a **generating unit**, being directed on while **not in merit**, as a result of a **directive** by the **system controller**.

“**contingency**” means an event occurring on the **AIES**; a “single-contingency” means the loss of a single system element under any operating condition or anticipated mode of operation.

“**contingency reserve**” means the reserve used to recover the **area control error** according to **WECC** criteria.

“**contingency reserve obligation**” to the **NWPP** means the provision of capacity and energy from one **NWPP** member to another following a **contingency** in accordance with **NWPP** guidelines.

“**contract capacity**” means the peak demand or supply capability (expressed in **MW**), as set out in the **system access service agreement**; it may change only in accordance with the provisions of that agreement.

“**control area**” means a geographic area comprised of an electric system or systems, bounded by **interconnection metering** and telemetry, capable of controlling generation to maintain its **interchange schedule** with other **control areas**, and contributing to frequency **regulation** of the **interconnection**, all in accordance with the requirements of the **WECC**.

---

**“control area operator”** means the entity that has responsibility for maintaining a **control area’s AGC** functionality to ensure frequency levels and interchange are maintained per **WECC** standards.

**“Crown”** has the same meaning as that provided in the **Act**.

**“current DDS submission”** means a valid **DDS offer** submitted in accordance with **rule 3.5.5** and includes any revision of prices and quantities in **MW** submitted for such **DDS offer** in accordance with **rules 3.5.5.2** and **3.5.5.3**

**“current submission”** means a valid **offer** or **bid** submitted in accordance with **rule 3.5.1** and includes any revision submitted of prices and quantities in **MW** for that **offer** or **bid** in accordance with **rule 3.5.3.2 b), 3.5.3.3, 3.5.4.2 b) or 3.5.4.3** .

**“customer’s facilities”** means all facilities interconnecting with the **AIES** on the **system access customer’s** side of the **POD** or **POS**.

**“data model”** means facts, figures, measurements and information pertaining to the power system. This data includes, but is not limited to, physical and electrical information associated with generators, transmission facilities and **load**.

**“day”** means the period in Alberta:

- in the case of a day on and from which time is to be one hour in advance of mountain standard time (first Sunday in April), 23 hours; or
- in the case of a day on and from which time is no longer to be one hour in advance of mountain standard time (last Sunday in October), 25 hours; and
- in all other cases, 24 hours;

beginning and ending at midnight.

**“day-ahead submission”** means a valid **offer** or **bid** submitted for the next **trading day** in accordance with **rule 3.5.1** and includes any revision submitted using a **locking restatement** for that **offer** or **bid** in accordance with **rule 3.5.2 a)** or **rule 3.5.3 a)**.

**“deemed profiles”** mean the pre-specified **load** shapes agreed to in advance. Commonly, this method has been used for **loads**, such as street lighting, with predictable, essentially flat shapes. However, a deemed shape could be developed for other applications based on engineering analysis and/or **load** shapes from other territories.

**“demand customers”** are **load system access customers** and generation **system access customers** that consume power, the latter for the purposes of obtaining their back up supply.

**“demand opportunity service” (DOS)** means service under any one of rate schedules demand **opportunity service (DOS 7 minutes)**, demand **opportunity service (DOS 1 hour)**, demand **opportunity service (DOS standard)**.

**“Demand Transmission Service”(DTS)** means service under rate schedule demand transmission service.

---

“**Designated TFO**” means with respect to a **Project**, the **TFO** whom the **ISO** has determined pursuant to **rule 9.1.1**, to be the **TFO** eligible to be issued a **Direction** or to whom the **ISO** has issued a **Direction**, as the case may be;

“**direct sales agreement**” is an agreement, contract or arrangement that has the same meaning as that provided in the **Act**.

“**Direction**” means the **Direction** issued or to be issued by the **ISO** to a **Designated TFO** to submit a transmission facility proposal to the **EUB** for approval pursuant to the **HEEA** of a **Project**, or portion of a **Project**, consistent with the **Service Proposal** and **Service Proposal Estimate** for such **Project** provided by such **Designated TFO**, including without limitation the **Project** cost, in service date and functional specifications;

“**directive**” means a direction given to a **market participant** by the **system controller** with the understanding that the **market participant** must comply, accepting that the facility owner retains the right and duty to take any action it deems prudent to protect the facility, its personnel, the public or the environment. A directive may instruct a **market participant** to curtail or restore **load**, or to stop planned work on a transmission or generation element and restore the element to service as quickly as possible.

“**dispatch**” has the same meaning as that provided in the **Act**, which means a direction from the **ISO** to a **pool participant** to cause, permit or alter the exchange of electric energy or **ancillary services**.

“**dispatch down service**” (**DDS**) means a voluntary service offered by a **source asset** to be **dispatched off**, in accordance with **rule 6.3.6**.

“**DDS block**” means the discrete **MW** level as identified within an **offer** and is the basis by which an **asset** receives a **DDS dispatch**.

“**DDS dispatch**” means a direction given by the **system controller** to a **pool participant** to provide **DDS**.

“**DDS dispatched off**” means a **DDS dispatch** has been issued for the termination of the provision of **DDS**.

“**DDS dispatched on**” means a **DDS dispatch** has been issued for the provision of **DDS**.

“**DDS merit order**” means a list of all valid **DDS offers** by **DDS** providers for a **settlement interval** consisting of **DDS blocks** sorted in order of price.

“**DDS offer**” means a submission made by a **pool participant** in accordance with **rule 3.5.5**

“**dispatch log**” means the permanent written or electronic record entered by the **system controller** that logs all **dispatches** and operational activities having been undertaken during a **trading day**.

“**dispatch time**” means:

- for intra-Alberta generation and **load energy market dispatches**, the time to start increasing or decreasing supply or demand volume (**MW**);
- for **interconnection energy market dispatches**, the **interchange schedule** start time;

- 
- for **ancillary service dispatches**, the time when an **ancillary service** resource is to be in position to provide the amount (MW) of **ancillary service dispatched** or the time when the **ancillary service** is no longer required.

“**dispatched off**” means, when applied to **bids** in the **energy market merit order**, a **dispatch** has been issued for the termination of **energy consumption**. When applied to **offers** in the **energy market merit order**, it means a **dispatch** has been issued for the termination of energy delivery.

“**dispatched on**” means, when applied to **bids** in the **energy market merit order**, a **dispatch** has been issued for the consumption of electrical energy. When applied to **offers** in the **energy market merit order**, it means a **dispatch** has been issued for the delivery of electrical energy.

“**dispute submission period**” means the 20 **business days** after the final **pool statement** is issued that includes the **final reconciliation settlement** for a **settlement period**.

“**distributor**” means a party providing “distribution access service” as defined in the Act.

“**disturbance**” means an unplanned event which produces an abnormal system condition or the effects experienced by a power system following a **contingency**, such as high or low frequency, abnormal voltage, or oscillations in the system.

“**disturbance control standard**” (**DCS**) means a performance measure applied to a **control area** (CA) or reserve sharing group (RSG) for recovering from a **disturbance** within 15 minutes by restoring **area control error** (ACE) to 0 or to its pre- **disturbance** level.

“**DOS One (1) hour**” means **opportunity service** to **system access customers** who are recallable within one (1) hour and which is provided when sufficient transmission capacity exists to accommodate the capacity scheduled for **opportunity service**.

“**DOS request**” means the document that is faxed to the **system controller** requesting **opportunity service**.

“**DOS seven (7) minutes**” means **opportunity service** to **system access customers** who are recallable within seven (7) minutes and which is provided when sufficient transmission capacity exists to accommodate the capacity scheduled for **opportunity service**.

“**DOS standard**” means **opportunity service** to **system access customers** which is provided when sufficient transmission capacity exists to accommodate the capacity scheduled for **opportunity service**.

“**dynamic estimates**” are the results of a profiling method using **load** research data from the **day** of interest.

“**dynamic VArS**” means **reactive power** that is generated or consumed by an **asset** as part of the **asset’s** inherent response during system **disturbances**.

“**E&GI Act**” means the *Electricity and Gas Inspection Act* (Canada) and regulations made thereunder, as amended from time to time, or such replacement legislation as may be enacted.

“**electrical islands**” a condition in the electrical system where geographical areas of the **AIES** electrically separate from the **AIES**, resulting from system **disturbances**, such that there exists both generation and **load** in these separated areas.

“**electronic submission facilities**” means the electronic facilities through which a **pool participant** interacts with the **ISO**, and as described in the **pool participant manual**.

---

“**electronic tag**” (**e-tag**) means an electronic form which contains information and data necessary for **control areas** and other operating entities to assess, confirm, approve or deny, implement, and curtail **interchange transactions** as stipulated by **NERC**.

“**emergency assistance**” means energy provided to the party experiencing a **system emergency**, by the other party.

“**emergency limit**” means the maximum operating limit of a system element permitted by the owner of the element for a predefined duration.

“**energization**” means the electrical connection of the facilities to the **AIES**.

“**energization certificate**” means the formal document signed by representatives of the party requesting permission to connect transmission facilities, a **load** or a generator and also by representatives of the **ISO**. The purpose of the document is to certify that all requirements for interconnection either have been met or will be met. Any deficiencies are specifically listed.

“**energy consumption**” means for all **pool participants**

- not exporting from the **AIES** through use of an interconnection, the **metered MWh** value for the **settlement interval** representing the deemed electric energy received by the **pool participant** as recorded in the **ISO** data base.
- exporting from the **AIES** through use of an interconnection, the **energy market dispatch MW** volume to be transferred across that interconnection during the **settlement interval** and as recorded in the **dispatch log**.

“**energy market dispatch**” means a direction given by the **system controller** to a **pool participant** to cause a specified amount of electric energy to be provided to or taken off the **AIES** based on the **energy market merit order** and includes an instruction to synchronize, desynchronize, increase or decrease electrical output.

“**energy market merit order**” means the list of all valid offers and bids for a settlement interval sorted in order of offer and bid price blocks.

“**energy market suspension**” means an action which involves interrupting the normal method of calculating the **system marginal price** as outlined in the **ISO rules**, and the **system controller** issuing generation, **load** and transmission **dispatches** and **directives** in order to return the **AIES** to a reliable and secure state.

“**energy production**” means for all **pool participants**

- not importing to the **AIES** through use of an **interconnection**, the **metered MWh** value for the **settlement interval** representing the actual electric energy supplied by the **pool participant** as recorded in the **ISO** data base.
- importing to the **AIES** through use of an **interconnection**, the **energy market dispatch MW** volume to be transferred across that **interconnection** during the **settlement interval** and as recorded in the **dispatch log**.

“**energy production uplift**” means an amount that may be paid to a **pool participant** with a **source asset** that has received an **energy market dispatch**, subject to the conditions and calculations provided for in **rule 8.1.2**.

---

**“Energy Trading System” (ETS)** means the Internet-based system used to manage electricity market transactions.

**“enforcement escalation notice”** For purposes of load settlement, a formal notice provided to a stakeholder who, as a result of not completing the requirements stated in a Non-Compliance Notice, is being escalated to the next enforcement level.

**“enforcement withdrawal notice”** For purposes of load settlement, a formal notice provided to a stakeholder who has completed the requirements for withdrawal from enforcement.

**“EPA approval”** means the approval or approvals required under the Environmental Protection Act (Alberta) for the construction of a facility.

**“EUB”** means the Alberta Energy and Utilities Board established under the *Alberta Energy and Utilities Board Act* (Alberta).

**“exception”** means an error requiring special attention has occurred. To raise an exception means the act of detection of the problem and flagging the problem for remediation whether by automated or manual means.

**“export service”** means service under rate schedule export service.

**“exporter”** means a consumer of electric energy for delivery out of Alberta.

**“external referral”** means a submission to the **ISO** regarding compliance with an **ISO rule** by a **market participant** or an interested party that does not comply with the requirements of a **complaint**.

**“external spinning reserves”** means spinning reserves obtained from a host control area.

**“Final Cost Report”** means a document to be completed substantially in the form of the “Final Cost Report” posted by the **ISO** on its website;

**“final reconciliation settlement”** means the final settlement calculations provided by load settlement agents.

**“final statement”** means the accounting statement issued pursuant to a default action in accordance with rule 8.5.1.

**“financial obligations”** means the **power pool** financial obligations of a **pool participant** actually incurred or likely to be incurred, including the net dollar value of the transactions plus any charges expected or to be owed to the **ISO**.

**“financial year”** means the 12 calendar **month** period beginning on January 1 in each year and ending on December 31 in the same year.

**“firm interchange transaction”** means an import or export **interchange transaction** for which the **source control area** carries the associated **operating reserve**.

**“firm load”** means the **load** that the **ISO** and **system members** will use reasonable best efforts to supply without **interruption**.

**“firm load responsibility”** means the Alberta **control area’s firm load** demand served under **Demand Transmission Service (DTS)**, plus **AIES losses**, plus firm export transactions, minus

---

firm import transactions, minus that **firm load** under the **ISO's DTS** which is under contract to provide **operating reserves**.

**“flexible block”** means a **block** of energy that may be partially or fully **dispatched on**.

**“force majeure”** means any occurrence which is beyond the reasonable control of the **market participant**, which could not have been avoided by the exercise of reasonable diligence and which prevents a **market participant** from performing its obligations under the **ISO rules**; provided that the foregoing **force majeure** shall not include a lack of finances or any occurrence which can be overcome by incurring reasonable additional expenses.

**“forced outage”** means a necessary, automatic or emergency removal of the facility directly caused by defective equipment, adverse weather, adverse environment, system condition, human element or foreign interference to avoid risk of danger or damage to personnel, the public, or physical plant.

**“forced supply reduction”** means a non-elective reduction in the supply of energy, including **ancillary services**, to an electric system or a forced extension to an **outage** or derate, caused by an unplanned failure of a generator or supply from another electric system, or an automatic or manual action taken to secure the electric system, or unusual or abnormal operating conditions, which results, in real time, in one of the parties lacking or being projected to lack, after drawing on all available resources, sufficient supply, including **ancillary services**, on its electric system to securely meet its **load** requirement, or obligations to **WECC** or **MAPP**.

**“forecast asset marginal price”** means the price of a **pool participant's asset** in \$/MWh determined in accordance with **rule 5.2.2**.

**“forecast dispatch price”** means the price in \$/MWh calculated for each **settlement interval** in accordance with **rule 5.2.1**.

**“forecast pool price”** means the price in \$/MWh calculated for each **settlement interval** in a **forecast scheduling period** in accordance with **rule 5.3.1**.

**“forecast schedule”** means a schedule of the kind referred to in **rule 5.2.1** that in part identifies which **assets** are planned to receive an **energy market dispatch** to meet the forecast **AIES demand** for **day 2** through **day 7** of the **forecast scheduling period**.

**“forecast scheduling period”** means the **7 day** period starting with **HE 1** of the next **trading day** and ending **HE 24**, of the **6th day** following the next **trading day**.

**“forward contract”** has the same meaning as given in the **Act**.

**“forward market operator”** means a person that provides **net settlement instruction MWh volumes** on behalf of **pool participants**, and has entered into an operating agreement with the **ISO**.

**“generating asset”** has the same meaning as **generating unit** as defined in the **Act**.

**“generating facility owner” (GFO)** has the meaning as that provided for “owner” in the **Act**, of a **generating unit**.

**“generating unit”** has the same meaning as given in the **Act**.

**“generating year”** means the period from **commercial operation** to December 31 in the calendar year in which a **generating asset** reaches **commercial operation**, and the period from January 1 to December 31 in all subsequent calendar years.

---

“**generic stacking order**” means the ISO’s annual forecast of the operational dispatch of **generating units** and their respective operating blocks based on historical data and other information provided to the ISO expressed on a seasonal basis.

“**good electric operating practice**” means, in respect of a party, the standard of practice attained by exercising that degree of knowledge, skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of undertaking under the same or similar circumstances. Good electric operating practice is not restricted to the optimum practice or course of action to the exclusion of all others but rather comprises the spectrum of reasonable practices, methods or acts applicable to the circumstances, and having regard to economic considerations.

“**governor**” or “**governor system**” means automatic control equipment with speed droop characteristics to control generating unit speed and/or electric power output.

“**gross MVar**” means 1 million VArS or 1000 kiloVArS of **reactive power** measured at the **generating unit** voltage terminals.

“**gross MW**” means 1 million watts or 1000 kilowatts of **real power** measured at the **generating unit** voltage terminals.

“**HEEA**” means the Hydro and Electric Energy Act (Alberta).

“**hh**” refers to the current clock hour.

“**high net regulating limit**” means the maximum hourly average **net MW** that an **asset** is capable of producing while performing **AGC** services.

“**host control area**” means the **control area**, outside the Alberta **control area**, within whose **metered** boundaries the resources utilized by the external supplemental/spinning reserve provider to provide the **spinning reserve** are located.

“**hour ending**” or “**HE**” means the 60 minute period ending that hour. For example, HE 24 includes the time between 23:00 and 24:00. For **pool price** and **dispatch** purposes, the hour starts at **hh:00:00** and ends **hh:59:59** for **hh+1**.

“**hybrid estimates**” are the results of a profiling method combining modeling of historical **load** research data with **load** research data from the current **day**.

“**import load remedial action scheme**” (**ILRAS**) means a service provided by one or more **ancillary service providers** that consists of a transfer tripping scheme between the 500 kV circuit breakers at Langdon and Cranbrook on the 500 kV tie-line between Alberta and British Columbia and one or more **system access customer load** breakers. The **remedial action scheme (RAS)** is so designed that the tripping of the tie line causes the **load** breaker(s) to open automatically, within 8 cycles of the trip initiation of the 500 kV breaker(s).

“**import service**” means service under rate schedule import service.

“**importer**” means an importer of electric energy to Alberta.

“**in merit**” means a designation applied to an **asset dispatched** by the **system controller** that qualifies the **asset** as eligible to set the **system marginal price**.

---

**“incapability Factor” (ICBF) = 1 – available capacity factor**

**“inadvertent interchange”** or **“inadvertent energy”** means the difference between the **control area’s** net actual interchange and net **interchange schedule**.

**“incremental loss factor”** means the total increase in **AIES losses** experienced as a result of a specific energy transfer for a specified period of time divided by the amount of such transfer over the same period of time. “Specific energy transfer” takes into consideration locational effects.

**“Independent System Operator” (ISO)** has the same meaning as that provided in the **Act**.

**“inflexible block”** means a **block** of energy that may be **dispatched on** or **dispatched off**, but not partially **dispatched on**.

**“initial daily settlement”** is a calculation of **load** settlement conducted within 5 **business days** after the **day** of flow. Initial daily settlement, by virtue of its timing, does not use consumption information from cumulative **meter** readings, nor does it use interval data retrieved on a monthly basis.

**“initial monthly settlement”** is a calculation of load settlement for the preceding **month**.

**“interchange schedule”** means the planned interchange of energy between two adjacent **control areas** that results from the implementation of one or more **interchange transaction(s)**.

**“interchange transaction”** means an energy transaction that crosses one or more **control area** boundaries.

**“interconnected electric system”** has the same meaning as that provided in the **Act**;

**“interconnected members”** means any organization external to the **AIES** being an owner of transmission facilities which are directly connected to facilities of the **AIES**.

**“interconnection”** means the electrical connection of the **AIES** with any electric system in a jurisdiction bordering Alberta.

**“intermediary control area”** means a **control area** on the **interchange transaction** path between the **source control area** and **sink control area**.

**“internal referral”** means a submission to the **ISO** regarding compliance with an **ISO rule** by the **ISO board**, an **ISO** employee or a contractor of the **ISO**.

**“interruption”** means any action causing partial or full curtailment of electrical power flow.

**“ISO asset list”** means the list of **assets** as maintained by the **ISO** as contemplated by rule 1.3.2, which identifies current **assets**.

**“ISO board”** means members of the **Independent System Operator** created under section 7 (1) of the **Act**.

**“ISO fees”** means the fees established by the **ISO** pursuant to the **Act**.

**“ISO load forecast”** means a twenty-year **load** forecast for the **AIES** established and updated by the **ISO** not less than once each year.

---

“**ISO rules**” means the rules made by the **ISO** pursuant to the **Act**.

“**ISO tariff**” means the tariff prepared by the **ISO**, that has been approved by the **EUB**, pursuant to the **Act**.

“**load**” means the instantaneous amount of electric energy delivered or required at any specific point or points on the **AIES**.

“**load profile**” is a series of **load** or consumption amounts for each interval over a particular time period. In this document, the intervals are one hour, so that the profile may be considered either as average **load** (kW) or total consumption (kWh) for each interval. The profile may be expressed either as the average per customer or as the total **load** for each interval.

“**load profile shape**” is a normalized **load profile**. Specifically, the **energy consumption** in each interval (hour) is expressed as a fraction of the total **energy consumption** for the time span of the profile.

“**load settlement agent**” (**LSA**) is the party conducting **load settlement calculations** for a particular **settlement zone**.

“**load settlement calculations**” are the calculations conducted by a **load settlement agent**.

“**load settlement system**” is a computer system and associated operations and interfaces operated by **load settlement agents** used to determine the **load** responsibility at each unit of the **settlement interval** for each **retailer** operating within the **settlement zone**.

“**Load Shed Service**” (**LSS**) means a **block** of **load** contracted by the **ISO** to provide instantaneous 59.5 Hz **underfrequency load shedding (UFLS)**. The magnitude of this **load** will vary and will be telemetered to the **ISO** by the service provider.

“**locking restatement**” means a revised daily **offer** or **bid** for a **trading day**, which restates the **MW** volume of an **asset’s** individual **blocks**.

“**loss factors**” means a number determined by the **ISO**:

- for each **generating unit** connected to **the interconnected electric system**, which when multiplied by the **MW** output of the unit reasonably represents the unit’s impact on average **transmission system losses**,
- for each demand opportunity service connected to **the interconnected electric system**, which when multiplied by the **MW** demand reasonably represents the service’s impact on **transmission system losses**,
- for each opportunity import and export transaction scheduled on **the interconnected electric system**, which when multiplied by the **MW** demand of the transaction reasonably represents the impact on **transmission system losses**, and
- for firm import transactions (service not currently available) scheduled on **the interconnected electric system**, which when multiplied by the **MW** demand of the transaction reasonably represents the import transaction’s impact on average **transmission system losses**.

“**loss factor methodology**” means the detailed **methodology** for determining **loss factors** set forth in Appendix 7.

---

“**losses**” means the energy that is lost through the process of transmitting electric energy.

“**low net regulating limit**” means the minimum hourly average **net MW** that an asset is capable of producing while performing **AGC** services.

“**maneuverability**” means the ability of a resource to change its real- or reactive-power output over time. Maneuverability is characterized by the **ramp rate** (e.g., **MW/minute**) of the resource and, for **regulation**, its acceleration rate (e.g., **MW/minute<sup>2</sup>**).

“**MAP buyer**” means the entity purchasing a **MAP product** from the Balancing Pool under a Balancing Pool Power Sale Agreement of December 2000 and any permitted assignee or transferee of those rights.

“**MAP product**” means the energy rights purchased, under a Balancing Pool Power Sale Agreement of December 2000 for the Market Achievement Plan (MAP), by a **MAP buyer**.

“**market participant**” has the same meaning as that provided in the **Act**.

“**marketer**” means an **importer**, an **exporter**, or a person trading within Alberta registering **net settlement instructions**.

“**Market Surveillance Administrator**” (**MSA**) has the same meaning as given in the **Act**.

“**material adverse change**” means a downgrade in the credit rating of a **pool participant** by any credit rating agency, or an event that may result in the materially weaker creditworthiness of a **pool participant** as reasonably determined by the **ISO**.

“**maximum capability**” means:

- for a **generating asset**, the maximum quantity (**MW**) that the **generating asset** is physically capable of providing under optimal operating conditions for that **asset** while complying with all applicable **ISO rules** and terms and conditions of the **ISO tariff**; or
- for an import **source asset**, the **available capability**.

“**maximum continuous rating**” (**MCR**) means the maximum net power output that can be sustained by a generator.

“**measurement data**” is data that has been collected from **meters**, compensated and aggregated appropriately, and has been subjected to the required **VEE** checks, included in load settlement rules.

“**measurement point data**” is the data associated with a **metered** measurement point.

“**measurement point definition record**” is a specification that defines the physical arrangement of the **metering systems** as well as any algorithms used to manipulate the **metering data** to produce the **measurement data** associated with the measurement point to which the specification applies.

“**mediation committee**” means the committee formed under rule 11.0.

“**merchant facility proponent**” means the person proposing a **merchant transmission facility**;

“**merchant transmission facility**” means a transmission facility as defined in s.15(1)(a) of the Transmission Regulation;

---

“**merchant transmission terms and conditions**” means terms and conditions set by a **merchant facility proponent** which provides standards, classifications, regulations, practices, measures and terms and conditions applicable to a person who obtains transmission capacity on a **merchant transmission facility** pursuant to this rule 9.6;

“**meter**” means the apparatus which measures active energy, reactive energy or both, including any internal recorder, or clock, which is normally tested as part of the apparatus.

“**meter data manager**” (**MDM**) means an entity responsible for collecting **metering data**, correcting and validating interval **metering data**, storing historic data, and reporting **load** and consumption data and corresponding time periods to appropriate parties.

“**meter service provider**” (**MSP**) means an entity that performs installation, removal, repair, and maintenance of **meters**.

“**metered demand**” means the rate at which electric energy is delivered to a **POD**, or from a **POS**, expressed in kW or **MW**, averaged over a 15-minute or shorter interval as deemed necessary by the **ISO**.

“**metered energy**” means the quantity of energy reflected by the relevant **metering equipment** as having been transferred in a particular period of time.

“**metered quantity**” means **apparent power, reactive power, real power**, time tagging and any other quantity that may be measured by **metering equipment** and that is required by the **ISO** in connection with the performance of its duties or functions under the **Act**.

“**metering data**” means the data associated with a **metering** point.

“**metering equipment**” means any current transformers, potential transformers, interconnecting wiring, **meters**, remote **metering** communication facilities and records used by the owner of the **metering equipment** in connection with the **ISO tariff** to measure **metered demand**.

“**metering system**” means a **metering system** is the devices required for **metering a site**, and the apparatus includes **meter**, CT/PT and communications.

“**minimum stable generation**” means the minimum generation level that an **asset** can be continuously operated at without becoming unstable.

“**modeled estimates**” are the results of a profiling method using historical **load** research data, together with weather or other conditions from the **day** of interest.

“**month**” means a calendar month.

“**month-at-a-time (MAAT) settlement**” is a process of conducting settlement for all **days** of a **month** at once.

“**Mountain Prevailing Time**” means Mountain Standard Time when Daylight Saving Time is not in effect, and Mountain Daylight Saving Time when Daylight Saving Time is in effect.

“**Mega VAR**” or “**MVAR**” means 1 million **VARs** or 1000 kilo**VARs** of **reactive power**.

“**MW**” means megawatt(s) or means 1 million watts or 1000 kilowatts of real electrical power.

---

“**MWh**” means megawatt hour(s). A unit of energy.

“**MW capacity**” means an **asset's MW** capacity is defined as the highest **MW** value, after accounting for any restatements to the **asset's** availability to which the **asset** may receive an **energy market dispatch** in real time operations.

“**N minus 1**” (N-1) means a single transmission **outage**, or the first **contingency**, when all other transmission lines are in service.

“**NERC**” means the North American Electric Reliability Council.

“**net MW**” means the megawatt(s) produced by an **asset** as measured or calculated on the high voltage side of the unit transformer.

“**net settlement instruction**” means a **direct sales agreement** or **forward contract** registered with the **ISO** by a **pool participant** or **forward market operator** under the requirements of rule 4.2, which will be netted out of **meter** volumes for purposes of calculating **power pool** settlements.

“**net settlement instruction MWh volume**” means **net settlement instruction** quantities of energy in **MWh**, registered with the **ISO** that a seller has agreed to sell or to provide a purchaser for a specified **settlement interval**.

“**net system load shape**” (NSLS) is the shape of a total **load** of a **settlement zone**, minus interval **metered loads**, deemed **loads**, **loads** based on specific **load**-research-based profiled classes and known **losses**.

“**NID**” means a needs identification document referred to in s. 34 of the **Act** and the **TR**;

“**NID Estimate**” means a document to be completed substantially in the form of the “**Needs Application Cost Estimate**” posted by the **ISO** on its website;

“**non-compliance notice**” For purposes of load settlement, a formal notice provided to a stakeholder who has not complied with an ISO Rule.

“**non-dispensated metering equipment**” means **metering equipment** installed after May 31, 1998 which is not the subject of a waiver or dispensation by Industry Canada of requirements under the **E&GI Act**.

“**non-spinning reserve**” means that **operating reserve** not connected to the **AIES** but capable of serving demand within a defined period, or interruptible **load** that can be removed from the **AIES** within a defined period all in accordance with **WECC** criteria.

“**non-zero block**” means any block of energy with volume that is not 0 MW.

“**normalized annual loss factor**” or “**Final Loss Factor**” is set as the weighted average of the four seasonal shifted **loss factors**.

“**NWPP**” means the North West Power Pool.

“**off peak**” means those periods of time which are not **on peak**.

“**offer**” means a submission made by a **pool participant** in accordance with **rule 3.0**.

---

“**on peak**” means the period of time from **HE 9** to **HE 21** inclusive, **Mountain Prevailing Time** during a **business day**. For the **BC interconnection**, this means **HE 0800** to **HE 2300 Mountain Prevailing Time**, Monday to Saturday, except for additional off-peak **days** identified in **NERC Operating Policy 1, Appendix 1F**. For the **Saskatchewan interconnection**, this means **HE 0700** to **HE 2200 CST** (no Daylight Saving Time), Monday to Saturday, except for **Alberta and Saskatchewan statutory holidays** as agreed by the **ISO** and **SaskPower**. Exceptions to this definition may be used for purposes of **WECC** reporting, or as otherwise noted.

“**open access**” means providing **market participants** and other interested parties wishing to obtain transmission capacity on a **transmission facility**, the right to do so in an open and non-discriminatory manner;

“**operating block**” means the discrete **MW** level as identified within an **offer** or **bid** and is the basis by which an **asset** receives an **energy market dispatch**.

“**operating constraint**” means a constraint as identified in **electronic submission facilities**.

“**operating reserves**” means the capability above system demand required to provide for **regulation, load** forecasting errors, equipment forced and scheduled **outages** and local area protection. It consists of **spinning reserve** and **non-spinning reserve**.

“**operating transfer capability**” (**OTC**) means means the maximum amount of actual power that can be transferred over direct or parallel transmission elements comprising an **interconnection** from one **control area** to another **control area**, and as further defined by the **WECC**.

“**operating week**” means the period from 00:00 Saturday to 24:00 Friday.

“**opportunity capacity**” means the incremental amount of transmission capacity that is available under a **system access service agreement** for **demand opportunity service** to provide capacity in addition to **contract capacity** for **DTS**.

“**opportunity service**” means **system access service** offered to any **system access customer** who can establish to the **ISO’s** satisfaction that it would not take **system access service** pursuant to rate schedule **DTS** and with respect to which, therefore, the service requirement presents the opportunity for incremental revenue with which the **ISO** can offset transmission costs, subject to the availability of transmission capacity.

“**opportunity service customers**” means those **system access customers** which meet the criteria for **opportunity service**, as defined in the **ISO** tariff.

“**outage**” means any full or partial unavailability of equipment.

“**overfrequency**” means the abnormal operating state or system condition that results in a system frequency above the normal 60-HERTZ.

“**owner**” has the same meaning as that provided in the **Act**;

“**participation factor**” means a number between 0 and 100 which describes the nature and the extent of the response of an **AGC unit** during a control cycle. **AGC units** recording participation factors from 0.1 to 100 are providing non-emergency **AGC** service. **AGC units** recording a participation factor of zero provide **AGC** service only during a **system emergency** or **disturbance**.

---

**“peak metered demand waiver”** refers to the process by which the **ISO** may, in its sole discretion, disregard the peak **metered demand** for a **settlement period**, for the purposes of calculating the **billing capacity**.

**“physical capacity”** means the maximum amount of electric power which a **transmission facility**, as rated by a **TFO**, is able to transmit.

**“point of delivery”(POD)** means a conceptual point of delivery from the transmission system. A **POD** is the point at which energy is deemed to be delivered from the transmission system to the distribution system. A **POD** is a collection of one or more interval **meters (metering points)** aggregated according to **measurement point definition records**.

**“point of distribution interchange” (PDI)** is a conceptual point of interchange between distribution systems.

**“point of distribution supply” (PDS)** is a conceptual point of supply onto a distribution system. A **PDS** is the point at which energy is deemed to be supplied on to the distribution system. This is the interconnection point between a distributed generator and a distribution system.

**“point of interconnection” (POI)** is a conceptual point of exchange with non-**AIES control areas** at transmission voltages. A **POI** is a collection of **PODs** and **POSs** aggregated according to a fixed formula to create a real or virtual point of energy delivery or receipt from outside the transmission system.

**“point of supply” (POS)** is a conceptual point of supply onto the transmission system. A **POS** is the point at which energy is deemed to be supplied to the transmission system.

**“pool participant”** means a **market participant** who is registered to transact, listed in the **pool participant list**.

**“pool participant agreement”** means the form of agreement, as established by the **ISO**, which a person must enter into in order to become a **pool participant** as contemplated by rule 1.1 and shown in Appendix 2.

**“pool participant list”** means the list of **pool participants** as maintained by the **ISO** as contemplated by rule 1.3.1 which identifies current **pool participants** and details **pool participant** information such as mailing locations.

**“pool participant manual”** means the **ISO** reference document that provides both technical guidance to **pool participants** wishing to execute **ISO** electronic interactions with the **ISO** and specific directions in using **ISO** sanctioned **software and procedures**.

**“pool participation fee”** means any annual participation fees determined under rule 2.2.2.

**“pool price”** means the price for electric energy in **\$/MWh** reported by the **ISO** for each **settlement interval** of the **trading day** in accordance with **rule 6.3.9.1**.

**“pool settlement date”** means the **business day** on which financial settlements relating to the **pool statement** will occur in accordance with rule 8.4.3.

**“pool statement”** means the accounting statement issued pursuant to rule 8.4.

---

“**post final adjustment mechanism**” (**PFAM**) is a process that **market participants** must follow when final settlement data is being disputed and the **market participants** are requesting financial adjustments be made as a result of the dispute.

“**power factor**” means the ratio of **real power** to **apparent power**.

“**power pool**” means the power pool within the meaning of the **Act**.

“**power purchase arrangement**” (**PPA**) means those instruments setting forth the rights and obligations of the parties in relation to operation of **generating units** and entitlements to electricity and **ancillary services** and approved by the **EUB** under provisions of the **Act**.

“**power system data**” means a compilation of electrical characteristics in an integrated format representative of the physical system.

“**power system monitor**” means a data acquisition system that detects **disturbances** and stores the voltage and/or current and/or watt and/or VAR and/or frequency response information.

“**power system stabilizer**” (**PSS**) means automatic control equipment that modulates the **generating unit** excitation through an **AVR** to dampen electric power swings.

“**PPA buyer**” means the entity holding energy rights as acquired from the original purchase of a **power purchase arrangement** as contemplated in the **Act**, or as subsequently transferred or assigned in whole per Article 18 of the thermal **power purchase arrangements**.

“**PPA effective date**” means January 1, 2001 or such other date as the **power purchase arrangements** become effective.

“**price block**” means the discrete **block** identified in \$/MWh for which a **pool participant** has placed an **offer** or **bid** within a defined **MW** level (see **operating block**).

“**price responsive load**” means **load** which, by owner discretion, may be removed or connected to the **AIES** as a function of the **system marginal price** for electricity.

“**profile segmentation**” is the method of dividing sites into profiling classes.

“**profiling cap**” is the size level above which a **site** is required to have interval-metering data.

“**profiling class**” is a group of **sites** that will be settled using a common **load profile**.

“**Project**” means the project generally described as any one of the following:

- (i) the means or manner by which a constraint or condition affecting the operation or performance transmission system could be alleviated as identified in a **NID** approved by the **EUB** pursuant to s. 34(3) of the **Act**;
- (ii) the request for system access service pursuant to s. 5(5)(b) of the **TR**;
- (iii) all the transmission facility proposals referred to in s. 35(1)(a) of the **Act** with respect to a specific approved **NID**; or
- (iv) the “transmission line”, as defined in the **HEEA**, which has been approved by the **EUB** pursuant to the **HEEA**;

---

“**Project Change Proposal**” means a document to be completed substantially in the form of the “**Project Change Authorization Form**” posted by the **ISO** on its website;

“**Project Energization**” means the date on which a **project**, including a **project** that is energized in stages, is fully energized and operational, as specified in an **energization certificate** or **energization** checklist of the **ISO**.

“**Project Material**” means with respect to a **Project**, all equipment, material and construction, installation, testing and commissioning services required for the construction of the **Project** and provided by a third party, but excluding any engineering services;

“**Project Progress Report**” means a document to be completed substantially in the form of the “**Monthly Project Progress Report**” posted by the **ISO** on its website;

“**prudential requirements**” means the requirements related to power pool settlement established by the **ISO** pursuant to rule 2.1 and as detailed in Appendix 3.

“**Quarter**” means each consecutive three months of a calendar year commencing January 1;

“**Quarterly Projects Report**” means a document to be prepared by the **ISO** substantially in the form of the “**Quarterly Projects Report**” posted by the **ISO** on its website;

“**ramp rate**” means the rate at which an **asset** will change its level of supply or demand in **MW** per minute in response to an **energy market dispatch** or **directive**.

“**ratchet level**” shall have the meaning ascribed thereto in rate schedule **DTS**.

“**rated capacity**” means the maximum amount of electric power which a **transmission facility** is rated by the manufacturer to be able to transmit.

“**raw loss factor**” means the **loss factor** calculated for each **generating unit** for each base case **load** flow condition prior to applying a **shift factor** or compression;

“**reactive power**” is the portion of electricity that establishes and sustains the electric and magnetic fields of alternating current equipment, usually expressed in kiloVAr (“**kVAr**”) or megaVAr (“**MVAr**”).

“**real power**” means the rate of producing, transferring, or using electrical energy, expressed in kilowatts (“**kW**”) or megawatts (“**MW**”).

“**receiving control area**” means the **control area** importing the **interchange schedule**.

“**reference price**” means the price in \$/MWh calculated and determined by the **ISO** in accordance with **rule** 3.10.

“**registered aggregate asset**” means:

- in relation to multiple **generating assets** physically located at a single site, that a single **offer** must be submitted for the cumulative capability of the generators located at the site; or
- in relation to certain run of river hydro generation schemes that a single **offer** must be submitted for the cumulative capability of the registered group of generators; or

- 
- in relation to certain **generating assets** or demand management processes that are operated via a single command and control scheme, that a single **offer** or **bid** must be submitted for the cumulative capability of the management scheme.

“**regulated rate provider**” (**RRP**) has the same meaning as that provided in the **Act**.

“**regulating reserve**” (**RR**) means the amount of **spinning reserve** responsive to **automatic generation control** that is sufficient to provide normal regulating margin.

“**regulation**” means the provision of generation and **load** response capability, including capacity, energy, and **maneuverability**, that responds to automatic controls issued by the **system controller**.

“**reliability**” means the combination of **adequacy** and **system security**.

“**reliability compliance committee**” (**RCC**) means the committee established by the **WECC** pursuant to the **WECC Reliability Criteria Agreement**. The responsibilities of the **RCC** are set out in the **WECC Reliability Criteria Agreement**.

“**reliability management system**” (**RMS**) means the contractual reliability management program implemented through the **WECC Reliability Criteria Agreement**, the **WECC RMS Agreements** and the **Generator RMS Agreements**.

“**remedial action scheme**” (**RAS**) means protection schemes designed to perform pre-planned corrective measures following a **disturbance** to provide for acceptable **AIES** performance or equipment protection.

“**retailer**” has the same meaning as that provided in the **Act**.

“**retailer of record**” is the single entity, either the **retailer** or the **regulated rate provider**, that the **load settlement system** recognizes as providing service to a given **site** for a given **day**.

“**rules**” see **ISO rules**.

“**scheduling program**” means the computer program used to develop the **asset schedule**, and as described in rule 5.1.3.

“**self retailer**” means a person that is a “customer” as defined in the **Act**, which is carrying out the functions of a **retailer** to obtain electricity for the customer’s own use.

“**sending control area**” means the **control area** exporting the **interchange schedule**.

“**service area**” means any of the geographic areas determined by the **EUB** as the area of an electric distribution system pursuant to ss. 28 and 29 of the **HEEA**;

“**Service Proposal**” means a document to be completed substantially in the form of the “Proposal to Provide Service” posted by the **ISO** on its website;

“**Service Proposal Estimate**” means a document to be completed substantially in the form of the “Service Proposal Estimate” posted by the **ISO** on its website;

“**settlement interval**” means a period beginning on the hour and ending 60 minutes later and is the time increment that **MWh** amounts are settled financially by the **ISO**. A settlement interval is the time increment at which distinct **load** estimates are calculated by **load settlement systems**.

---

“**settlement period**” means the period beginning at **HE 01** on the first day of each **month** and ending **HE 24** on the last day of the same **month**.

“**settlement ready data**” is data that is ready for use in load settlement. Data shall be validated, estimated and edited as outlined in the standards, and aggregated or totaled to measurement point data as per the **measurement point definition** records.

“**settlement timing**” is the frequency at which **load** settlement is calculated and reported to the **ISO** and to **retailers** by **load settlement agents**.

“**settlement zone**” is the collection of **sites** that are jointly settled by a **load settlement system** and over which **UFE** is calculated and allocated.

“**shift factor**” means the correction that must be made to the **loss factor** for each individual **generating unit** to account for all of the **MW losses** in the system that are not assigned by the **loss factor methodology**.

“**shift log**” means an electronic form used by the **system controller** to record significant events related to the real time operation of the **AIES**.

“**shortage of energy supply event**” a state the power system may get into due to either insufficient reserves or actual shortage of energy to meet the demand. At times such an event can be anticipated through a scheduling process, at other times it may take place due to a sudden change in **load** (error in the **load** forecast) or due to the unplanned **outage** of generation or transmission elements.

“**signoff letter**” an official **ISO** correspondence detailing **power pool** settlement dispute information including, but not limited to:

- **ISO** dispute number
- **settlement period** in dispute
- settlement summary of adjustments and **pool participant** signoff provision.

“**sink asset**” means a **load**, export volume or other **power pool** transaction represented by an **ISO** identifier that enables a **pool participant** to submit **bids**, **operating constraints**, **ancillary service declarations** and/or identify **net settlement instruction MWh volumes** bought from a seller to be settled in the **power pool**.

“**sink control area**” means the **control area** in which the **load** is located for an **interchange transaction**.

“**site**” means a unique end-use service delivery point. This is the finest level at which load settlement recognizes **retailer** assignments, and receives consumption data.

“**socket**” is normally a point at which a physical **meter** is installed, or a point at which a **site load** is calculated.

“**software and procedures**” means any and all technical software used for **ISO** communications and specific directions in applying such software.

---

“**source asset**” means a **generating asset**, import volume, or other **power pool** transaction represented by an **ISO** identifier that enables a **pool participant** to submit **offers, operating constraints, ancillary service declarations** and/or identify **net settlement instruction MWh volumes** sold to a purchaser to be settled in the **power pool**.

“**source control area**” means the **control area** in which the generation is located for an **interchange transaction**.

“**spinning reserve**”, means the amount of unloaded generation that is synchronized to the **AIES** and ready to serve additional demand;

“**standing offer**” or “**standing bid**” means those **offers** or **bids** submitted in accordance with rule 3.7.

“**static estimates**” are the results of a profiling method using historical **load** research data without input from conditions on the **day** of interest.

“**STS Capacity**” has the same meaning as in the **ISO tariff**.

“**STS contracting party**” means the party holding the **STS** contract for a given **generating asset**. For those **assets** governed by a **PPA**, the **PPA buyer** will be the **STS** contracting party. For other **generating assets**, the **GFO** will be the **STS** contracting party.

“**supplemental governor response**” means the ability of a **governor system** to respond more than that normally required for steady state **asset** operation. Normal **governor** response ensures that the **governor** valves open and close in response to frequency deviations caused by normal moment to moment **AIES load** fluctuations. Supplemental governor response ensures that the **governor** valves will move faster than normal or that **governor** valve movement will create a change in the electrical power output of an **asset** in response to a significant frequency deviation caused by a **disturbance**.

“**supplemental reserve**” means generation that is capable of being connected to the **AIES** and loaded within 10 minutes, or **load** that can be reduced within 10 minutes.

“**supply shortfall directive**” means a **directive** issued for **supply shortfall energy** as part of the **ISO** supply shortfall operating policy and procedures.

“**supply shortfall energy**” means a **generating asset’s** maximum available electric energy in excess of what is offered in **operating blocks** and active **ancillary services**, the **asset** is providing, which could be made available to the **AIES** for each **settlement interval**.

“**Supply Transmission Service**” (**STS**) means service under rate schedule supply transmission service.

“**sustained outage**” means the automatic removal of a power system element whereby attempts to restore the element by automatic means, such as automatic reclosing, fails or is not successful.

“**system access customer**” means a **market participant** who takes, or applies to take, **system access service** from the **ISO**.

“**system access service**” has the meaning ascribed to the term “system access service” in the **Act**.

---

“**system access service agreement**” means that contract, entered into between the **ISO** and a **system access customer**, which establishes the specific terms pursuant to which each individual **system access customer** obtains **system access service**.

“**system average loss factor**” means the **losses** experienced for all energy transferred during a specified period of time divided by the total of all energy transferred over the same period of time.

“**system controller**” means the **ISO** scheme to carry out the **ISO** duty to direct the safe, reliable and economic operation of the **AIES**, pursuant to the **Act** and includes the **dispatching** of the **energy market merit order** and the **ancillary services merit order**.

“**System Contribution**” has the same meaning as in the **ISO tariff**.

“**system coordination plan**” means the plan which the **ISO** provides to the **TFOs** and the **system controller** three (3) **days** in advance of the **operating week** which amalgamates all planned maintenance **outages** and **commissioning** activities that the **ISO** has been advised of, and which are scheduled to take place in the next **operating week**, and have been determined to pose an acceptable level of risk to **system security** from an operational planning perspective.

“**system demand ramp**” means the instantaneous **MW** to serve the sum of a) **AIES load + losses** plus, b) Alberta-BC **interchange schedule** plus, c) Alberta-Saskatchewan **interchange schedule**.

“**system emergency**” is a situation in which there is systemic equipment malfunctions, including widespread transmission or generation **outages** and derates, a complete loss of communication with the **system controller**, or a loss of the **system controller’s** market management tools.

“**system interval meters**” are all interval meters that are defined to be part of the transmission system, and are used by the **ISO** in determining the energy flows of the transmission system.

“**system level**” is hourly values for distribution interchange, distributed generation, and border customer consumption that are needed to describe the total hourly energy flow on the **AIES** at the transmission level and the inputs and outputs to each and every distribution **settlement zone** for each hour.

“**system marginal price**” (**SMP**) means the price in **\$/MWh** determined for each minute of a **settlement interval** in accordance with **rule 6.3.9.2**.

“**system member**” means any organization or individual being an owner of any or all of transmission, generation and distribution facilities.

“**system security**” means the safe scheduling, operation and control of the **AIES** on a day-to-day basis in accordance with the specified technical, security and operational standards to withstand events such as electric short circuits, unanticipated loss of **AIES** components and switching operations without experiencing cascading loss of **AIES** components or uncontrolled loss of **load**.

“**TFO terms and conditions**” means the document which sets forth the terms and conditions of service upon which the **TFO** will provide transmission services to the **ISO**.

“**total declared energy**” means for an **asset** in a particular **settlement interval**, the total offered energy in an **asset’s operating blocks** plus the **asset’s supply shortfall energy** including **ancillary services**.

“**total trading charge**” means the amount calculated pursuant to rule 2.2.3.

---

**“total transfer capability” (TTC)** means the amount of electric power that can be transferred over the interconnected transmission network in a reliable manner while meeting all of a specific set of defined pre- and post-**contingency** system conditions.

**“TR”** means *Transmission Regulation*, Alberta Regulation AR 174/2004;

**“trading day”** means the **day** to which an **offer** or **bid** relates starting with **HE** 1 and ending **HE** 24.

**“trading limit”** means the maximum **financial obligations** to which a **pool participant** is or is expected to be owing the **ISO** where such limit is determined by the **ISO** or is the amount of financial security provided in accordance with Appendix 3.

**“transmission constraint”** means a limitation imposed by one or more transmission elements to normal economic merit operation of generation, **load** and **interchange transactions** or to the flow of electrical energy from one part of the **AIES** to the other.

**“Transmission Customer”** means, with respect to a specific **Project**, the customer, as defined in the **ISO tariff**, who has made application for **system access service**;

**“transmission facility”** has the same meaning as that provided in the **Act**.

**“transmission facility owner” (TFO)** has the same meaning as that provided for “owner” and “transmission facility” in the **Act**.

**“transmission must-run” (TMR)** means a generator is **constrained on** to operate at a minimum specified **MW** output level in order to maintain **system security**.

**“Transmission Operations Coordination Committee” (TOCC)** means the committee accountable to the **ISO**, with membership made up of **transmission facility owners**, charged with ongoing review and upgrading of all operating standards and guidelines for coordinated operation of the **control area** and transmission system.

**“Transmission Regulation”** means *Transmission Regulation*, 174/2004.

**“transmission reliability margin”(TRM)** means that amount of transmission transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.

**“transmission system average loss factor”** means the total **energy** of **transmission system losses** divided by the total net to grid **energy** produced for a given calendar year for **the interconnected electric system**.

**“transmission system losses”** means, for each year, the total of the **transmission system losses** on **the interconnected electric system**.

**“unaccounted for energy” (UFE)** is the difference between (a) the distribution system total **load** for the hour and (b) the sum of the allocated hourly **loads** at the customer **meters**, plus their allocated **losses**.

**“under voltage load shed” (UVLS)** means a protection scheme that enables pre-configured devices to automatically shed **load** to stabilize voltage when voltage falls below predetermined limits.

---

**“underfrequency”** refers to the abnormal operating state or system condition that results in a system frequency below the normal system operating frequency of 60-HERTZ.

**“underfrequency load shedding” (UFLS)** means the automatic or manual actions required to shed system **load** when the system frequency falls below the normal system operating frequency of 60-HERTZ in order to allow for the return to a secure state.

**“Vars”** means volt-amp reactive, a measure of **reactive power**.

**“virtual metering point”** is an effective point of measurement, that may or may not be physically locatable, where active energy or reactive energy is deemed to have been transferred through the point that is derived from one or more metering points.

**“wire owner” (WO)** has the meaning as that provided in the **Act** for “owner” and “electric distribution system”. Wire owners maintain the responsibilities as that provided in the **Act** and the Roles, Relationships and Responsibilities Regulation.

**“wire services provider” (WSP)** is a person authorized by a **wire owner** to act on behalf of that owner.

**“western interconnection”** means the area comprising those states and provinces, or portions thereof, in western Canada, northern Mexico and the western United States in which members of the **WECC** operate synchronously connected transmission systems.

**“WECC”** means the Western Electricity Coordinating Council.

**“WECC emergency assistance”** means the provision of capacity and energy at the time of a **system emergency** by one **WECC** member to another as required by **WECC** guidelines.

---

**G2 ELECTRIC UTILITIES ACT DEFINITIONS**

Unless the contrary intention appears, words and phrases defined in the **Act** have the same meanings when used in these **rules**.

---

**G3 INTERPRETATION**

In these **rules**, unless the context otherwise requires:

- (a) headings, underlining and bold italicized topic sentences are for convenience only and do not affect the interpretation of these **rules**;
- (b) words referring to the singular include the plural and vice versa;
- (c) words referring to a gender include any gender;
- (d) all times shall be in accordance with the prevailing mountain standard or mountain daylight time in the Province of Alberta;
- (e) words and phrases in bold type have the meanings given to them in the definitions outlined in G1.

*This document sets out the ISO rules. These rules are designed to promote an efficient, fair and openly competitive market for electricity in Alberta. All market participants are expected to comply with the Act and the rules.*

The objective of these **rules** is to provide and promote an efficient, fair and openly competitive markets for electric energy. The **ISO rules** have whatever force they are given by the **Act**.

Each **market participant** is bound by and will comply with all provisions of the **Act** and its regulations and is subject to, and attorns to the jurisdiction of, the Courts of the Province of Alberta in respect of all matters relating to the **Act**, its regulations and the **ISO** notwithstanding the jurisdiction of incorporation or residence of the **market participant**.

The **ISO** has no obligation to connect electric services to **market participants**.

A person who is not a **market participant** will not be recognized, or entitled to any rights or benefits, under these **rules**, except as provided herein. A person who is a **market participant** but is not a **pool participant** may have their rights and benefits limited and their obligations extended, pursuant to the **Act** and the **ISO rules**.

*The ISO may change the rules.*

The **ISO** may exercise its powers under the **Act** to change the **ISO rules** from time to time as it considers desirable and appropriate. The **ISO** may only make changes to either the specific responsibilities of the **ISO board** provided for within the rules or any other rules specified by the **ISO board** with **ISO board** approval.

Other than what in the opinion of the **ISO** are emergencies such changes may be made after giving at least 5 **business days** written notice to affected **market participants**.

---

G6    RULE EXEMPTIONS

This section is to be developed.

*The ISO will ensure that it is administered and operated according to these rules.*

The **ISO** will be administered and operated in accordance with these **rules** and will appoint appropriate resources to ensure that systems required for the operation and administration of the **ISO** function properly.

The **ISO** will use reasonable endeavors to ensure that procedures are available respecting the use of any software, that when followed by a **pool participant**, will result in the **pool participant** entering a valid **bid, offer, ancillary services declaration, operating constraint** or **net settlement instruction**.

The **ISO** will give **pool participants** reasonable notice of any modifications that affect the use of the software.

*The ISO and certain of its related parties have a limited liability. Market participants have certain obligations.*

Pursuant to the **Act**, no action lies against an “Independent System Operator person” for an “Independent System Operator act” where such person is not an individual unless such act constitutes wilful misconduct, negligence, or breach of contract. Where such person is an individual, liability only accrues if such act is not carried out in good faith. If an “Independent System Operator person” is liable to another person for an “Independent System Operator act”, then such person is liable for only direct loss or damage suffered and incurred by that other person, in accordance with the **Act**.

No person has any liability to another as a result of scheduling or determination of the **energy market merit order, DDS merit order** or the **ancillary service merit order** by or for the **ISO, dispatch or DDS dispatch** by the **system controller**, or a failure by the **system controller to dispatch or DDS dispatch an asset**, or failure of a **pool participant** to provide electric energy pursuant to an **offer** and in accordance with an **energy market dispatch**, or failure of **pool participant** to provide a service pursuant to a **DDS offer** and in accordance with a **DDS dispatch**, or a failure of a **pool participant** to take electric energy pursuant to a **bid** nor has any person any liability to another as result of the use of information made available or published through the **ISO** in accordance with these **rules**. The obligations of the **market participants** are limited to:

- (a) being bound by a **bid** or **offer** which is specified by these **rules**, or otherwise, to be binding and settling their accounts in accordance with these **rules**. Failure to pay an account by the dates prescribed by these **rules** will entitle the **ISO** to commence legal proceedings to collect the same and to realize upon any letters of credit or other security which may have been provided;
- (b) conducting themselves in accordance with these **rules**. Failure to comply with these **rules**, including those with respect to settlement of accounts and in addition to the collection of such accounts, will subject the **market participant** to disciplinary proceedings in accordance with the **rules** and the obligation to comply with an **ISO** order pursuant to the **Act**.

Notwithstanding the foregoing, nothing herein prevents the **ISO**, the **Market Surveillance Administrator** or any **market participant** from initiating or pursuing an action or claim for non-monetary relief, such as injunction order and orders to deliver up documents, against each other or others for failure to observe these **rules** with respect to the disclosure of **confidential information**.

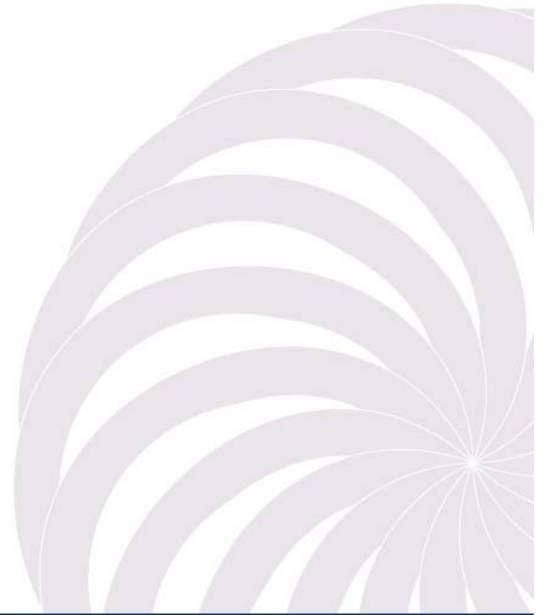
The foregoing is subject to the provisions of the **Act**, as amended or extended from time to time, and to the extent that the **ISO rules** are inconsistent with the **Act**, the latter shall prevail.



# Part Two

# Market Participation

# Rules



---

## 1. POOL PARTICIPANTS

### 1.1 Requirements of Becoming / Application to Become a Pool Participant

*The ISO will approve pool participants, subject to certain conditions.*

Except as otherwise provided in the **Act** or these **rules**, no person will exchange electric energy through the **power pool** or provide **ancillary services** as contemplated in the **Act** unless that person is a **pool participant**.

An application for participation shall be made to the **ISO** in a form as set out in Appendix 1, and shall be accompanied by the required documents and appropriate fees as set out in these **rules**.

The **ISO** shall acknowledge to the applicant receipt of an application within 5 **business days** following such receipt.

On application to the **ISO** and upon payment of the appropriate fees and, if in the reasonable opinion of the **ISO**:

- a) that applicant will exchange electric energy through the power pool as a **market participant**, that applicant will provide **ancillary services**, or any other **market participant** subject to specific approval by the **ISO**; and
- b) that applicant is of sufficient financial standing to meet its **financial obligations** under these **rules**, including compliance with the **prudential requirements** for it, as determined pursuant to these **rules**; and
- c) that applicant will be able to maintain compliance with and agrees to be bound by the **ISO rules** by executing a **pool participant agreement** as set out in Appendix 2; and
- d) that applicant will make arrangements for **metered** volumes to be provided to the **ISO** by a **meter data manager, load settlement agent** or a source otherwise approved by the **ISO**; or the applicant, if it intends to act as an **importer** and/or **exporter**, has a valid system access service agreement with the **ISO**; and
- e) that applicant has satisfied any **financial obligations** attributable to its previous registration which remain outstanding; and
- f) that applicant has provided facility requirements as set out in the ISO Operating Policies and Procedures, according to specifics of that applicant's particular facility; or
- g) if the applicant has requested to become a **pool participant** solely to provide **ancillary services**, that applicant must have either entered into a contractual arrangement with the **ISO**, or meet the applicable standards for **ancillary services** set by the **ISO**.

The **ISO** will endeavor within 20 **business days** after receiving the application to accept the applicant as a **pool participant** on the conditions permitted under these **rules**.

The **ISO** shall forthwith upon making the decision advise the applicant and, if the application is approved, enter that **pool participant's** name on the **pool participant list** and enter that **pool participant's assets** on the **ISO asset list**. If the **ISO** is of the opinion that the applicant has not satisfied the requirements specified, an explanation as to why the applicant has not satisfied the requirements shall be provided the applicant. If not satisfied with the **ISO's** decision the applicant may, within 30 **business days**, file an appeal to the **ISO board**.

---

Where further information or clarification is required by the **ISO**, the 20 **business day** period referred to above ceases running until that information or clarification is provided to the **ISO**, at which time that period commences to run again.

## 1.2 Pool Participant Amendment Requirements

*A pool participant must provide specific information and/or meet certain requirements in order to amend their information.*

Unless otherwise approved by the **ISO**, a **pool participant** requesting an amendment to the **pool participant list** or **ISO asset list**, must satisfy the **ISO** by meeting the following conditions:

- (a) Submitting an **asset addition form** for a request to amend or add **assets**;
- (b) Submitting a request to amend company contact information. The **ISO** may request proof of employment prior to accepting an amendment to **pool participant** contact information;
- (c) Written notice for a company name change or an **asset** ownership change. Legal proof of submitting the change must be provided.
- (d) Where applicable to the request, the amendment satisfies rule 1.1.

Having satisfied the foregoing requirements, the **ISO** will endeavor within 20 **business days** for those amendments that must adhere to the facility requirements as set out in the or 10 **business days** for all other amendments, to accept the amendment to the **pool participant** on the conditions permitted under these **rules**. The **ISO** will advise the applicant if the amendment is approved, and will amend the **pool participant list**, the **ISO asset list** or any other necessary modification. If the **ISO** has not approved the amendment, an explanation as to why the **pool participant** has not satisfied the requirements shall be provided. If not satisfied with the **ISO's** decision the applicant may, within 30 **business days**, file an appeal to the **ISO board**.

## 1.3 Pool Participant List and ISO Asset List

*The ISO is responsible for maintaining public lists of pool participants and assets.*

### 1.3.1 Pool Participant List

*The pool participant list contains specific information.*

The **ISO** will maintain a **pool participant list**. The list will contain the following information.

- a) **pool participant's** name, mailing address, facsimile number;
- b) Contact individual's name(s), phone number(s), facsimile number(s);
- c) Where applicable, the **agent's** name, mailing address, facsimile number;
- d) Such other information that the **ISO** considers appropriate.

A **pool participant's** name will remain on the list of **pool participants** until the **ISO** directs that it be removed.

### 1.3.2 ISO Asset List

---

The **ISO** will maintain an **ISO asset list**. The list will contain all of the **assets** and the **pool participant** that possesses each **asset**.

### 1.3.3 Public Availability of Lists

The **pool participant list** and the **ISO asset list** are available on the Alberta Electric System Operator website.

## 1.4 **Discipline By ISO**

*The ISO may apply sanctions, penalties or both, as deemed appropriate.*

Subject to a participant's rights of appeal and notwithstanding rule 2.2.2(c), where a **complaint** is received that a **pool participant** has ceased to meet the requirements for participation contained in rule 1.1 or a **market participant** has contravened any provision of these **rules** or an **ISO** order except as otherwise provided in rule 12 and it is determined by the **ISO** to warrant inquiry, the **ISO** will notify the **market participant** of the nature of the **complaint** and set a time and date for the matter to be heard. Upon hearing the **complaint**, including representations from the **market participant**, the **ISO** may, where it is of the opinion that the **pool participant** has ceased to meet the requirements for a **pool participant** or a **market participant** has contravened any of these **rules** or an **ISO** order except as otherwise provided in rule 12:

- a) deny, suspend or terminate the **pool participant** 's registration as a **pool participant**; or
- b) order the imposition of administrative penalties and other sanctions, including terms and conditions pursuant to which the **market participant** must conduct itself.

Immediately upon termination of participation, the **ISO** will issue a notice of involuntary termination regarding the terminated **pool participant** to all remaining **pool participants** and the **system controller**. The **ISO** will remove the **pool participant's** name from the **pool participant list** and deactivate the **assets** on the **ISO asset list** effective the date of termination specified in the **ISO's** notice.

The **ISO** has the right to suspend or terminate a **pool participant's** privilege to transact in the **power pool**

- a) in the event of default pursuant to rule 8.5; or
- b) if the level or manner of financial security provided is insufficient in accordance with **prudential requirements** pursuant to Appendix 3.

## 1.5 **Termination of Participation by a Pool Participant**

*Pool participants no longer wishing to participate in the power pool must notify the ISO.*

Subject to rule 1.6, any **pool participant** may terminate its participation by:

- a) notifying the **ISO**, in writing, that it wishes to cease participation;
- b) by specifying in the notice, a date upon which it will cease to be a **pool participant**; and
- c) by meeting any unfulfilled **financial obligations** as determined by the **ISO**.

---

Immediately upon receipt of such notice, the **ISO** will issue a notice of voluntary termination regarding the **pool participant**, including the date of termination specified in the **pool participant's** notice to all remaining **pool participants** and the **system controller**. The **ISO** will remove the **pool participant's** name from the **pool participant list** and deactivate or transfer ownership of the **assets** on the **ISO asset list** for that **pool participant** effective the date of termination specified in the **pool participant's** notice, or date as otherwise determined by the **ISO** to meet the unfulfilled **financial obligations**.

## 1.6 Effect of Termination

*Pool participants will remain subject to liabilities after they cease to participate in the power pool.*

A **pool participant** which is or may become subject to a liability under these **rules** in connection with its activities as a **pool participant** shall become or remain subject to that liability after and despite ceasing to be a **pool participant**.

Any securities provided by the **pool participant** shall be released 30 **days** after the last **financial obligations** are settled.

## 1.7 Reinstatement of Participation

At the discretion of the **ISO**, a **pool participant** may be reinstated subject to the terms set out in rule 1.1.

## 1.8 Appointment of an Agent

*Upon approval from the ISO, a market participant may appoint an agent to represent them in dealings with the ISO.*

A **market participant** may, with the approval of the **ISO**, appoint an **agent** to act on behalf of that **market participant** in respect of some or all of their **power pool** or **ancillary service** transactions.

The **ISO** shall be provided with an agent approval request form outlining the proposed appointment, including proof that the appointment has been duly authorized by:

- i) the owner, operator, manager, lessee or **PPA buyer** of a **generating asset**; or
  - ii) the **pool participant** for all other **assets** possessed by the **pool participant**
- b) The **ISO** will, upon receipt of such notification and of proof to its satisfaction that the appointment is duly authorized and upon being satisfied that the authority of the **agent** to act on behalf of and bind the **market participant** is clear, approve the authorization. The **ISO** may deny the appointment of an **agent**, or revoke agency status, if it has determined that the agency appointment would not be in the best interests of a fair, efficient and openly competitive market. In accordance with rule 1.10.2 a), **ISO** approval is subject to the limitation of information sharing between the **market participant** and its **agent**.
- c) The **market surveillance administrator** will be notified of **agent** appointments. The **ISO** or **market surveillance administrator** may require additional information prior to making any determination with respect to the appointment of an **agent**.
- d) The **pool participant** shall be bound by, and fully responsible for all acts or omissions, even if the actions or omissions are those of an approved **agent** acting within its actual or apparent authority.

---

## 1.9 Renewal Provisions

All **pool participants** will normally have the term of their **pool participant agreement** extended by one year on an annual basis subject to the payment of **pool participation fees** in accordance with rule 2.2.2.

## 1.10 Market Participant Behaviour Guidelines

### 1.10.1 Purposes and Background of Rule

*The following guidelines are intended to assist market participants in avoiding anti-competitive behaviour.*

The **ISO's** mandate is to promote an efficient, fair and openly competitive market for electricity and to ensure that the **rules**, guidelines and conventions that govern the Alberta electric industry are sufficient to discourage anti-competitive practices. The **market participant** behaviour guidelines are intended to outline the types of activities that constitute anti-competitive behavior so **market participants** may avoid them.

In monitoring the market, the **ISO** will, to the extent possible, avoid interfering with competitive price signals. Prices will be allowed to rise to levels determined by competition in periods of scarcity, and to fall to levels determined by competition in times of surplus. However, **market participants** who violate the **market participant** behaviour guidelines and thereby impair or threaten to impair the efficiency, fairness or competitiveness of the Alberta electricity market will be subject to administrative penalties, **ISO fees** and other sanctions as the **ISO** deems appropriate.

Efficiency requires that there be no misallocation of resources. Fairness requires that everyone is working on a level playing field. Competitiveness requires that **market participants** act independently of one another in terms of pricing and output decisions and in such a way that their actions do not interfere with another **market participant's** access to the Alberta electricity market.

Market power is the ability of a particular **market participant** or group of **market participants** to influence the market price. The **ISO** is concerned that the abuse of market power could distort the market price and render it less effective as a market signal. In turn, this could upset the competitiveness and efficiency of the entire market.

**Market participants** are responsible for ensuring that their employees and agents comply with these **market participant** behaviour guidelines.

### 1.10.2 Undesirable Practices

*Specific behaviours and activities can have an adverse impact on the electricity market.*

Undesirable practices involve various behaviours and activities that may impact adversely upon the fair, open and efficient operation of the market. If it is determined that a **market participant** has attempted to, or has compromised, directly or indirectly, the fair, open or efficient operation of the market, the **ISO** will take the most appropriate action in the situation, within the authority granted in the **Act**, and the **ISO rules**. Undesirable practices include, but are not limited to the specific practices below:

- a) Sharing Competitive Information

---

A fair, efficient and openly competitive market requires that there be no preferential sharing of non-public information. Non-public information includes, but is not limited to, financial, technical or operational information, business plans and strategies or policies and procedures that could influence the market decisions of other **market participants**. Non-public information shall not be passed to, or obtained from, other **market participants, affiliates** or agents, either directly or indirectly (through common personnel or otherwise) unless specifically permitted by the **ISO**.

Permission may be received through the appointment of an **agent** under rule 1.8, or may be permitted through other **ISO rule** provisions. If the preferential sharing of non-public information is not between a **market participant** and its **agent**, or it is not otherwise permitted under the **ISO rules**, then a **market participant** may request specific permission from the **ISO**. The request must outline the nature of the information being shared, the reason for sharing the information and the request must be duly authorized by all parties sharing information. The **ISO** will either approve the request or the **ISO** may deny the request if it has been determined that the sharing of information would not be in the best interests of a fair, efficient and openly competitive market. Where the **ISO** has approved the request for special permission, the **ISO** will publish the names of the parties receiving approval.

Unless specifically permitted by the **ISO**, any information to be shared with other **market participants, affiliates** or agents shall be made available to all other **market participants** simultaneously and on a non-preferential basis.

b) Abuse of a Dominant Position

When a **market participant** in a dominant position exploits its market power in a way that adversely impacts upon the efficient, fair and openly competitive operation of the market, it will be considered an abuse of dominance. Acts which constitute an abuse of dominance include, but are not limited to, the following:

- i) Preemption of or physical withholding of facilities or energy required by another **market participant** to participate in the Alberta market, so as to adversely impact upon the efficient, fair and openly competitive operation of the market;
- ii) economically withholding energy by employing **offering** strategies so as to adversely impact upon the efficient, fair and openly competitive operation of the market.

c) Other Practices

Any other behavior or activity which may impact adversely upon a fair, open and efficient market could be considered an undesirable practice. If the **ISO** detects conduct that appears inconsistent with a competitive market, and which would cause a material change in price, the **ISO** may impose conditions to prevent the **market participant** from engaging in such conduct.

---

## 2. PRUDENTIAL REQUIREMENTS AND ISO FEES

### 2.1 Prudential Requirements

#### 2.1.1 Setting of Prudential Requirements

*The ISO is responsible for determining what a pool participant must provide to the ISO for financial assurance for transactions related to power pool settlement.*

A **pool participant** will meet and maintain such financial and other **prudential requirements** as the **ISO** deems appropriate to ensure that the **pool participant** is and remains of sufficient financial standing to meet its **financial obligations**. The **prudential requirements** include, without limitation, those set out in Appendix 3.

#### 2.1.2 Review and Reassessment

*A pool participant may be required to provide replacement or additional security.*

The **ISO** may review and reassess the adequacy of the financial security or credit rating provided by a **pool participant** from time to time and may direct the **pool participant** to provide replacement or additional financial security in accordance with its new determination as to the adequacy of the **prudential requirements** for that **pool participant**. The replacement or additional financial security must be provided within 2 **business days** of the direction.

#### 2.1.3 Confidentiality

All information provided by a **market participant** in relation to its financial standing and designated by the **market participant** as confidential will be treated by the **ISO** as **confidential information** in accordance with **rule 10.9**.

### 2.2 ISO Fees

#### 2.2.1 Submission and Approval of Budgeted Costs

*Each year, the ISO prepares and submits a budget to the ISO board.*

- a) Prior to the beginning of each **financial year**, the **ISO** will prepare and submit to the **ISO board** a **budget** for the **financial year**.
- b) In preparing the **budget**, the **ISO** will take into account the following:
  - i) any revenue shortfall or excess from the previous **financial year**;
  - ii) anticipated capital, and operating and maintenance costs for the **ISO** for the forthcoming **financial year**,
  - iii) amounts collected under the **ISO tariff**; and
  - iv) such other costs as the **ISO** considers appropriate.
- c) The manner in which the **ISO** recovers the approved **budget** costs, other than those included in the **ISO tariff**, is defined in **rules 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.9** and the Schedule of **ISO fees**.

---

## 2.2.2 Determination of Annual Pool Participation Fees

*An annual participation fee may be charged to pool participants at the beginning of each year.*

- a) In order to recover, in whole or in part, projected costs pursuant to an approved **budget**, the **ISO** may determine an annual **pool participation fee** for **pool participants** for the forthcoming **financial year**. An annual **pool participation fee** as set shall not be a barrier to participation in the **power pool**. The **pool participation fee** is detailed in the Schedule of **ISO fees**.
- b) The **ISO** will collect such **pool participation fee** in a lump sum payment at the beginning of the **financial year**.
- c) The **ISO** shall suspend the existing **bids** or **offers** of, and shall cease to accept further **bids** or **offers** from, any **pool participant** who has not paid the required annual **pool participation fee** required for a year, within twenty **business days** after the **ISO** has issued the **pool statement** including such fee to the **pool participant**. If, within a further twenty **business day** period the **pool participant** has not paid the outstanding amount of the annual **pool participation fee**, then the **pool participant** shall cease to be a **pool participant** under these **rules**.

The issuance of the **pool participation** fee on an annual basis is outlined in **rule** 8.4.2 c). The **pool participation fee** is detailed in the Schedule of **ISO fees**.

## 2.2.3 Registration Fee

*A non-refundable fee may be charged upon application to the ISO.*

The **ISO** may also set and levy a registration fee to be applied to recover the costs of processing an application for participation. The fee is non-refundable whether or not the application is granted. The registration fee is detailed in the Schedule of **ISO fees**.

## 2.2.4 IT Service Charge

The **ISO** may charge a fee to provide information system queries on data that may be provided to interested parties as permitted within the **ISO rules**. The **ISO** must provide the interested party an estimated date for when the information may be provided. The fee is detailed in the Schedule of **ISO fees**.

## 2.2.5 Other Services

The **ISO** may charge fees for other services, on a cost recovery basis, based on the agreement or terms specified between the **ISO** and the other party.

## 2.2.6 Load Settlement Costs

The **ISO** shall collect costs associated with load settlement duties as described in the **Act**. The costs will be allocated proportionately to each **LSA** on a forecast annual basis, and reconciled to actual costs and proportions at the end of each year. The forecast will be based on **ISO** budgeted costs and proportions will be based on the percentage of **load** settled by each **LSA** in the prior calendar year.

---

### 3. OFFERS, BIDS, ANCILLARY SERVICES AND ASSET DECLARATIONS

#### 3.1 Purpose of Rule

The purpose of this rule is to prescribe the process and conditions by which a **pool participant** submits **offers, bids** and provides other **asset** declarations.

#### 3.2 Who Submits an Offer or Bid

*Pool participants submit offers and bids for an asset opposite their name in the ISO asset list.*

- a) In accordance with **rule 3.5.3.1 a)**, a **pool participant** with an active **source asset** must submit an **offer** to the **power pool**. In accordance with **rule 3.5.4.1**, a **pool participant** with an active **sink asset** may submit a **bid** to the **power pool**.
- b) **Pool participants** submit **offers** or **bids** in respect to an **asset** listed opposite their name in the **ISO asset list** but not otherwise, unless they are representing a **pool participant** as an **agent**, approved under **rule 1.8**.

#### 3.3 How to Submit an Offer, Bid, Operating Constraint or Ancillary Service Declaration

*Submissions are done in accordance with protocols.*

- a) **Offers, bids, operating constraints** and **ancillary service declarations** must be submitted in accordance with the manner prescribed by the **pool participant manual** and **rule 3.4**.
- b) **Offers, bids, operating constraints** and **ancillary service declarations** submitted to the **ISO** by means other than the primary electronic means must be compatible, in the **ISO's** opinion, with the **ISO's** computer **software and procedures** and in accordance with alternative means listed in **rule 3.4**.

#### 3.4 Submission Protocols

*Pool participants provide submissions electronically. To submit by other means (i.e., facsimile, telephone, courier), ISO participants must follow certain protocols.*

Unless otherwise agreed by the **ISO**, **pool participants** must submit information according to the **ISO rules** by the following means:

- a) by **electronic submission facilities**; or
- b) if it is not possible to do so by **electronic submission facilities**, then by facsimile only if the **ISO** is advised by telephone to expect the facsimile prior to it being sent; or
- c) if it is not possible to do so by **electronic submission facilities** or by facsimile, then by telephone only if the content of the telephone conversation is confirmed by facsimile within one half hour after the telephone conversation takes place; or
- d) if it is not possible to do so by **electronic submission facilities**, by facsimile or telephone, then by courier.

The electronic address of the **ISO**, the facsimile number, and telephone number of the **system controller**, are detailed in Appendix 4.

The **pool participant** sending the information is responsible for ensuring and confirming that the

---

ISO received the revised information.

### 3.5 Offers and Bids

#### 3.5.1 Block Allocations

The ISO will allocate to:

- a) each **pool participant** who has registered a **source asset**, one **asset per source asset** or **registered aggregate asset**, comprised of seven **blocks** and one **DDS block**.
- b) each **importer**, one **asset per interconnection**, with each **asset** comprised of one **block** with a \$0.00 **offer** price.
- c) each **pool participant** with **energy consumption** within a **settlement zone**, at least one **asset** for each such zone, with each **asset** comprised of seven **blocks**.
- d) each **exporter**, one **asset per interconnection** with each **asset** comprised of one **block** with a \$999.99 **bid** price.

#### 3.5.2 Submission Timing

- a) Any **pool participant** submitting an **offer** or **bid** for an **asset** must submit such **offer** or **bid** for the next **trading day** to the ISO before 12:00 hours of the day before the next **trading day**.
- b) A **pool participant** may submit an **offer** or **bid** for the **forecast scheduling period**.
- c) In accordance with **rule 3.7**, a **pool participant** may submit a **standing offer** or **standing bid**.
- d) Any **pool participant** submitting a **DDS offer** for an **asset** may submit such **offer** to the ISO at any time prior to two hours before the start of any **settlement interval**.

#### 3.5.3 Offers

A **pool participant's offer** for each **source asset** must consist of price in \$/MWh and quantity in MW for each **block** allocated to the **source asset**.

##### 3.5.3.1 Submitting Offers

- a) A **pool participant** with a **source asset** that has a **maximum capability** of 5 MW or greater must submit an **offer** for such **asset**.
- b) The quantity in MW of each such **offer** must total the **maximum capability** of the **source asset**.
- c) The **available capability** (MW) for each **source asset** must be stated. **Available capability** must equal the **maximum capability**, unless the **pool participant** has submitted an **acceptable operational reason** with the **offer**.
- d) A **pool participant** must submit whether each **block** of its **offer** is a **flexible block** or

---

**inflexible block.**

3.5.3.2 Mandatory Energy Restatements

- a) A **pool participant** who has submitted an **offer** must submit an energy restatement restating the **available capability** of the source **asset** for the applicable hours in the **trading day**, as soon as reasonably practicable, if there is a change to the **available capability**.

The energy restatement is subject to the following conditions:

- 1) If the restated **available capability** is reduced, then the quantity (**MW**) reduction will be applied to the **blocks** in the **current submission** in order of descending price;
  - 2) If the restated **available capability** is increased, then the quantity (**MW**) increase will be applied to the **blocks** in the **current submission** in order of ascending price.
- b) A **pool participant** who has submitted an **offer** must submit a revised **offer** for its **asset** redistributing the quantity (**MW**) to represent the operating state of the **asset**, as soon as reasonably practicable, if all of the following conditions are met:
- i) the **asset** can no longer comply with the **pool participant's current submission**;
  - ii) an energy restatement under a) cannot reasonably accommodate the **asset's** operating state; and
  - iii) the **pool participant** can no longer submit a price restatement in accordance with **rule 3.5.3.3**.
- c) A **pool participant** must submit the reason or reasons for submitting an energy restatement in accordance with **rule 3.5.3.2**. A **pool participant** must record and provide to the **ISO**, if requested and within a reasonable time from such request, the basis on which it determined that there was an **acceptable operational reason**.

3.5.3.3 Voluntary Price Restatements

- a) A **pool participant** who has submitted an **offer** may submit a price restatement prior to two hours before the start of a **settlement interval** within the **trading day**.
- b) A price restatement is a revised **offer** of an **asset** which restates the price in \$/MWh or the quantity in **MW** or both, for each **block** allocated to a **pool participant's source asset**. Notwithstanding the foregoing, a price restatement cannot result in a change to the **maximum capability** or the **available capability** of the **asset**.

3.5.3.4 Additional Information

- a) Each **pool participant** who has submitted an **offer** must submit **operating constraints** with respect to each **generating asset**, including the following:
- i) **ramp rate**;
  - ii) the time required by the **generating asset** to synchronize with the **AIES** from

- 
- its off-line state;
  - iii) **minimum stable generation**; and
  - iv) other, as reasonably requested by the **ISO**
- b) A **pool participant** must submit to the **ISO** any changes to the **operating constraints** of such **generating asset** as soon as reasonably practicable.

#### 3.5.3.5 Implementation of Offers

- a) The **ISO** will implement revisions to **offers** in the manner outlined in **rules** 3.5.3.2 and 3.5.3.3.
- b) When a **source asset** has been issued both an **ancillary service dispatch** and an **energy market dispatch** for the same period, the **ISO** will deduct the quantity of **MW** in such **ancillary service dispatch** from the **available capability** of such **asset** for the purposes of determining the quantity of **MW** of the **energy market dispatch**. Such determination will be undertaken in the same manner as energy restatements pursuant to **rule** 3.5.3.2 a).
- c) When a **source asset** has been issued a **DDS dispatch**, the **ISO** will deduct the quantity of **MW** in such **DDS dispatch** from the **in merit** amount in the **source asset's offer** for the purposes of determining the quantity of **MW** of the **energy market dispatch**. The **ISO** will deduct such quantity from the **offer** in ascending order starting with the lowest priced **block** of such **source asset**.

#### 3.5.4 Bids

A **pool participant's bid** for each **sink asset** must consist of price in \$/MWh and quantity in **MW** for each **block** allocated to the **sink asset**.

##### 3.5.4.1 Submitting Bids

A **pool participant** with a **sink asset** may submit a **bid** for such **asset**.

##### 3.5.4.2 Mandatory Energy Restatements

- a) A **pool participant** who has submitted a **bid** must restate the **available capability** of the **asset** for the applicable hours in the **trading day**, as soon as reasonably practicable, if there is a change to the **available capability**.

The energy restatement is subject to the following conditions:

- 1) If the restated **available capability** is increased, then the increase will be added to the **current submission's** lowest priced **operating block**;
- 2) With the exception of the **current submission's** lowest priced **operating block** submitted for the **asset**, each of the remaining **block** sizes may not be increased beyond the amount of each specified in the **current submission**;
- 3) If the restated **available capability** is decreased, then the **MW** reduction will be applied to the **asset's operating blocks** in the **current submission** in order of ascending price;

- 
- 4) Subsequent energy restatements which:
    - i) increase the **available capability** at which the **asset** will be available, will be re-applied to the **current submission blocks** in order of descending price;
    - ii) decrease the **available capability** will continue to be applied to the **current submission blocks** in order of ascending price;
  - b) A **pool participant** who has submitted a **bid** and whose **asset** meets all of the following conditions, must submit a revised **bid**, as soon as reasonably practicable, redistributing the quantity (**MW**) to represent the operating state of the **asset** if:
    - i) the **pool participant** or **asset** cannot comply with the **bid**
    - ii) an energy restatement under a) cannot reasonably accommodate the change to the **bid**; and
    - iii) the **pool participant** can no longer submit a price restatement in accordance with **rule 3.5.4.3** for such **asset**.
  - c) A **pool participant** must submit the reason or reasons for submitting an energy restatement of an export **asset** in accordance with **rule 3.5.4.2**. A **pool participant** must record and provide to the **ISO**, if requested and within a reasonable time from such request, the basis on which it determined that there was an **acceptable operational reason**.

#### 3.5.4.3 Voluntary Restatements

- a) A **pool participant** who has submitted a **bid** may submit a price restatement prior to two hours before the start of a **settlement interval** within the **trading day**.
- b) A price restatement is a revised **bid** of an asset, which restates the price in \$/MWh or the quantity in **MW** or both, for each **block** allocated to a **pool participant's sink asset**

#### 3.5.4.5 Additional Information

- a) A **pool participant** must submit **operating constraints** with respect to each **bid** for an intra-Alberta **sink asset**, including the following:
  - i) **ramp rate**;
  - ii) the time required to respond to a **dispatch**; and
  - iii) other, as reasonably requested by the **ISO**
- b) A **pool participant** must submit to the **ISO** any changes to the **operating constraints** of such intra-Alberta **sink asset** as soon as reasonably practicable.

#### 3.5.4.5 Restatement Implementation

The **ISO** will implement revisions to **bids** in the manner outlined in **rules 3.5.4.2** and **3.5.4.3**.

### 3.5.5 Dispatch Down Service

---

A **pool participant's DDS offer** for each **source asset** must consist of price in \$/MW, in accordance with **rule 3.9 c)** and quantity in **MW** for the **DDS block** allocated to the **source asset**.

If a **DDS offer** for a **settlement interval** is determined by the **ISO**, as per **rule 6.3.6.1**, to be ineligible to provide **DDS** for such **settlement interval**, no **DDS** payment shall be payable by the **ISO** to the **pool participant** for such **settlement interval**.

#### 3.5.5.1 Submitting Dispatch Down Service Offers

- a) A **pool participant** with a **source asset** may submit a **DDS offer**. Such **offer** quantity must not be less than 10 **MW**.
- b) The quantity (**MW**) of each such **DDS offer** must not total more than the **available capability** less the **minimum stable generation** of the **source asset**.
- c) The **DDS block** of a **DDS offer** must be a **flexible block**.

#### 3.5.5.2 Mandatory Dispatch Down Service Energy Restatements

- a) A **DDS** energy restatement is permitted within two hours before the start of any **settlement interval** and only for an **acceptable operational reason**.
- b) A **pool participant** who has submitted a **DDS offer** must submit a **DDS** energy restatement restating as soon as reasonably practicable, if there is a change in the **pool participant's** ability to comply with a **current DDS submission** or **DDS dispatch**.
- c) A **pool participant** must record and provide to the **ISO**, if requested and within a reasonable time from such request, the basis on which it determined that there was an **acceptable operational reason**.

#### 3.5.5.3 Voluntary Dispatch Down Service Price Restatements

- a) A **DDS** price restatement is only permitted prior to two hours before the start of any **settlement interval**.
- b) A **DDS** price restatement is a revised **DDS offer** of an **asset** which restates the price in \$/MWh or the quantity in **MW** or both, for the **DDS block** allocated to a **pool participant's source asset**.

### 3.6 Ancillary Service Declarations

#### 3.6.1 Purpose of Rule

*Certain processes and procedures for ancillary services must be followed to ensure the AIES is operated in a safe, economic and reliable manner.*

In order to ensure the system controller is able to operate the AIES in a safe, economic and reliable manner, the system controller has expectations that services will be provided, from those pool participants that have agreed to supply ancillary services. These expectations are based on the declarations provided by and the ancillary service dispatches accepted by ancillary service providers. The purpose of this rule is to define the process whereby the ancillary service providers declare to the system controller the services they are capable of

---

providing and the performance capabilities that the system controller can expect.

### 3.6.2 Ancillary Service Provider Declaration

*Ancillary service providers are obliged to declare the availability of the services that they can provide.*

**Ancillary service providers** must declare to the **system controller** on an ongoing basis for each **asset** from which they intend to provide **ancillary services**, the abilities of that **asset** to provide **ancillary services**. **Ancillary service providers** are required to submit an initial declaration for each **asset** and thereafter are required to restate changes in the capability of the **asset** to deliver the service. Information, which has been declared, remains in effect until the **pool participant** submits a change through the restatement process. The services to be declared are as follows:

1. **Spinning reserve (SR)**
2. **Supplemental reserve generation (SUPG) or supplemental reserve load (SUPL)**
3. **Regulating reserve (RR)**
4. Voltage support (VS)
5. **Power system stabilizers (PSS)**
6. **Automatic voltage regulator (AVR)**
7. Fast acting **remedial action scheme for loads (RASL)**
8. **Black start capability (BSC)**
9. **Transmission must-run service (TMR)**
10. **Remedial action scheme for generators (RASG)**

### 3.6.3 Restatements

*Pool participants will restate ancillary service capabilities under certain circumstances.*

- a) **Pool participants** may restate the declared capabilities of an **asset** prior to an **ancillary services directive** being issued by the **system controller**.
- b) **Pool participants** must restate the capability of an **asset**, in a timely manner, if there is a material change in capability to supply the **ancillary service**.
- c) **Pool participants** must restate in the manner prescribed in **software and procedures**.

### 3.6.4 Records of Ancillary Service

*The system controller will maintain ancillary service records for auditing and verification purposes.*

The **system controller** is responsible for ensuring there is a record of **asset** declarations

---

and restatements sufficient to meet audit and verification requirements of the **ISO**.

### 3.7 *Standing Offers and Bids*

*Pool participants submit offer and bids that stand, unless otherwise changed by the pool participant.*

- a) A **pool participant** submits a **standing offer** or **standing bid** to the **ISO** by submitting an **offer** or **bid** for the last day in the **forecast scheduling period**. The **standing offer** or **standing bid** is valid until changed by the **pool participant**.
- b) The **ISO** will use the last **standing offer** or **standing bid** and the **available capability** submission data for the day following the **forecast scheduling period**.
- c) An **asset** for which a **pool participant** does not submit a **bid** in accordance with **rule 3.5.4** will receive a default **standing bid** and be declared unavailable for the next **trading day** and for the **forecast scheduling period** by the **ISO**. The **ISO** will assign a \$999.99 price and zero **MW** volume to **bid assets** for all **settlement intervals** of the next **trading day**. **MW** volume and price of the **asset** may be adjusted during the **trading day** in accordance with **rules 3.5.4.2** and **3.5.4.3**.

### 3.8 **Registration of Aggregate Assets**

A **pool participant** may, upon formal notification and with the approval of the **ISO**, submit single **offers** or **bids** for a **registered aggregate asset**.

### 3.9 **Validity or Invalidity of Offers and Bids**

*To be considered valid, offers and bids must meet specific price tests, and be acknowledged by the ISO.*

- a) Any **offer** price or **bid** price must be specified to the nearest cent per **MWh**, must be greater than or equal to \$0/**MWh** and must be less than \$1000/**MWh**.
- b) The **ISO** will, as soon as reasonably practicable following the receipt of an **offer** or **bid** send to the **pool participant** who submitted the **offer** or **bid**:
  - i) Acknowledgment of receipt of the **offer** or **bid**; and
  - ii) notification that the **offer** or **bid** is either valid or invalid with respect to these **rules** and the information required in accordance with **software and procedures**. If an **offer** or **bid** is, in the opinion of the **ISO**, invalid, such notification will include explanation why the **offer** or **bid** is not accepted.
- c) A **pool participant's DDS offer** for each **source asset** must consist of price which shall be an amount not lower than -\$999.99 nor higher than \$0.00.

### 3.10 **Reference Price**

- a) The **system controller** may, when the **system marginal price** is below or equal to the **reference price, dispatch DDS** in accordance with **rule 6.3.6**. In no event may the **reference price** be used to set the **system marginal price**.
- b) The **reference price** is calculated by the following formula:

---

**reference price** = 12.5 gigaJoules multiplied by the Gas Price

Where:

Gas Price is the monthly Canadian natural gas price for the **month** in \$/gigaJoule at AECO C and Nova Inventory Transfer, the Alberta Bidweek Spot Price, as published on [www.ngx.com](http://www.ngx.com), and also in the “Canadian Gas Price Reporter.” The **ISO** will use reasonable endeavors to use the current **month’s** Gas Price beginning at midnight on the second **business day** of the same **month**. The previous **month’s** Alberta Bidweek Spot Price will be used until the Gas Price for the current **month** can be updated by the **ISO**.

- c) If the Gas Price is no longer available on [www.ngx.com](http://www.ngx.com), the “Canadian Gas Price Reporter”, or otherwise, then the **ISO** shall approve a reasonably equivalent gas price that is to be used by the **ISO** for purposes of determining the **reference price**. Subsequently, the **ISO** shall change the **rules** to indicate the report from which the Gas Price shall be used to determine the **reference price**.
- d) The ISO will use reasonable endeavors to ensure that the correct Gas Price is used to calculate the reference price. If a price other than the Gas Price identified in rule 3.10 a) is used to calculate the reference price, then the ISO will correct the Gas Price as soon as practicable. The pool price will not be modified due to any errors in the reference price.

---

## 4. NET SETTLEMENT INSTRUCTIONS

### 4.1 Purpose of Rule

The purpose of this rule is to prescribe the process and conditions by which **net settlement instructions** of eligible parties will be carried out.

### 4.2 Acceptance of Net Settlement Instructions

*If an eligible pool participant meets submission requirements for registering net settlement instructions, then the ISO will net the MWh volume against metered volumes for purposes of settlement.*

For the purposes of **power pool** settlements, the **ISO** will net out **net settlement instruction** data prior to calculating the **power pool** settlements with **pool participants**. The **ISO** shall carry out settlement taking into account **net settlement instructions** as set out in rule 8.

To register a **net settlement instruction** the following conditions must be met:

- a) The **net settlement instruction** is registered for a **pool participant** in good standing.
- b) **Pool participants** and **forward market operators** must submit **net settlement instruction** data to the **ISO** complying with the requirements of rule 4.3, 4.4 and 4.6.
- c) The **net settlement instruction** is registered for a **pool participant** in respect to an **asset** listed opposite its name in the **ISO asset list** but not otherwise.
- d) A **net settlement instruction** may be registered with the **ISO** for any **asset**, provided that:
  - i) the **net settlement instruction** is submitted by a **forward market operator**; or
  - ii) both the **source asset** and the **sink asset** are **metered assets**; or
  - iii) either the **source asset** or the **sink asset** is a **metered asset**; or
  - iv) the **asset** is being used in the direct transfer of a **MAP product** by a **MAP buyer** or the transferee of a **MAP buyer**.

### 4.3 Submitting Net Settlement Instruction Data

#### 4.3.1 Data Provided Directly from Pool Participants

*Specific information about the net settlement instruction must be provided to the ISO not less than 20 minutes before the beginning of the related settlement interval.*

The seller or purchaser must submit **net settlement instruction** data not less than 20 minutes before the beginning of the **settlement interval** in which the **net settlement instruction** is to take effect. **Net settlement instruction** data shall include the following:

- a) the **pool participant** who is the seller;
- b) the **source asset** designated by the seller;
- c) the **pool participant** who is the purchaser;
- d) the **sink asset** designated by the purchaser;

- 
- e) the **net settlement instruction MWh volume**;
  - f) the beginning date and **settlement interval** of the **net settlement instruction**; and
  - g) the end date and settlement interval of the net settlement instruction.

#### 4.3.2 Data Provided by Forward Market Operators

*The ISO and forward market operator agree to a data submission format.*

The **net settlement instruction** data is to be received by the **ISO** in the format agreed to within the context of the operating agreement arranged between the **forward market operator** and the **ISO**.

#### 4.4 **Acknowledging Net Settlement Instruction Data**

*The pool participant who is counter-party to the net settlement instruction must acknowledge the information not less than 20 minutes before the beginning of the related settlement interval.*

For **net settlement instruction** data provided by **pool participants**, the purchaser or seller who did not submit the **net settlement instruction** pursuant to rule 4.3.1, must acknowledge the **net settlement instruction** not less than 20 minutes before the beginning of the **settlement interval** in which the **net settlement instruction** is to take effect.

Net settlement instructions provided by forward market operators do not have to be acknowledged by the pool participants.

#### 4.5 **De-registering Net Settlement Instructions**

##### 4.5.1 Pool Participant Initiated De-registration

*Pool participants must provide relevant net settlement instruction information at least 3 days prior to a net settlement instruction de-registration taking effect.*

The seller, the purchaser, or both may submit an electronic notice to de-register a **net settlement instruction** at least 3 **business days** prior to the **day** which the **net settlement instruction** de-registration is to take effect. The notice must clearly state:

- a) that the **net settlement instruction** is to be de-registered;
- b) the **net settlement instruction** number;
- c) the **pool participant** who is the seller;
- d) the **source asset**;
- e) the **pool participant** who is the purchaser;
- f) the **sink asset**; and
- g) the date and **settlement interval** the de-registration is to take effect.

When only one **pool participant** has sent a notice to de-register the **net settlement instruction**, the **ISO** will notify the other **pool participant** that the **net settlement instruction** is being de-registered within one **business day** of receiving such notice.

---

#### 4.5.2 Compulsory Pool Participant Initiated De-registration

*A pool participant must de-register a net settlement instruction if the asset ownership changes or if a pool participant terminates participation in the ISO.*

A **pool participant** is required to provide an electronic notice of the de-registration of a **net settlement instruction** at least 3 **business days** in advance of:

- i) An **asset** ownership change; or
- ii) A voluntary termination of participation by a **pool participant** under rule 1.5.

#### 4.5.3 ISO Initiated De-registration

*The ISO will de-register net settlement instructions under specific violations of the ISO rules.*

For purposes of **power pool** settlements, the **ISO** may initiate the de-registration of **net settlement instructions** under specific circumstances:

- a) Involuntary termination of participation under rule 1.4;
- b) A **pool participant** fails to comply with the compulsory de-registration of a **net settlement instruction** under rule 4.5.2;
- c) A **pool participant** defaults on payment under rule 8.5.1; or
- d) For **net settlement instructions** impacting **prudential requirements**, a **pool participant** fails to comply with an **ISO** request to increase financial security requirements within 2 **business days** of such request under rule 2.1.2. The **ISO** will use reasonable efforts to allow the **pool participant** to specify which **net settlement instruction(s)** is/are to be de-registered and de-register them accordingly. If the **ISO** is unable to obtain direction from the **pool participant** on demand, then the **ISO** will de-register the **net settlement instructions** registered for the **pool participant** beginning from the most recent date(s) the **net settlement instructions** were registered to the earliest date, only until the **prudential requirements** have been met.

The **ISO** will use reasonable efforts to notify both **pool participants** 2 **business days** prior to a **net settlement instruction** de-registration to take effect.

#### 4.6 Net Settlement Instruction Protocols

*Pool participants must submit net settlement instructions electronically. To submit net settlement instructions by other means (i.e. electronic notice, facsimile, courier), pool participants must follow certain protocols.*

Unless otherwise agreed by the **ISO** or provided for in these **rules**, **pool participants** must submit **net settlement instruction** information by the following means:

- a) by **electronic submission facilities**;
- b) if it is not possible to do so by **electronic submission facilities**, then by e-mail only if the **ISO** is advised by telephone to expect the electronic notice once it has been sent;

- 
- c) if it is not possible to do so by **electronic submission facilities** or by e-mail, then by facsimile only if the **ISO** is advised by telephone to expect the facsimile once it has been sent; or
  - d) if it is not possible to do so by **electronic submission facilities**, e-mail or facsimile, then by courier.

The communication information for the **ISO** is detailed in Appendix 4. The **pool participant** sending the information is responsible for ensuring and confirming that the **ISO** received the revised information, and ensuring that the other party has submitted an acknowledgement for the acceptance of the **net settlement instruction** to the **ISO**, where required.

---

## 5. ENERGY MARKET SCHEDULING

### 5.1 Adequacy Assessment

An **adequacy** assessment will be prepared by the **ISO** for each **settlement interval** for the **trading day** and for the 6 remaining **days** of the **forecast scheduling period** on the **day** preceding that **trading day**.

The **ISO** will:

- a) review the **offers, bids** and forecasted **load** for the **trading day** as soon as practicable and will use reasonable efforts to review it no later than 18:00 of the preceding **day**.
- b) assess the forecasted **load** requirement against the available supply throughout the preceding **day** and the **trading day** to account for changes in **adequacy**.

In accordance with the **ISO** supply shortfall operating policies and procedures, the **ISO** may direct or request **generating assets** if the the forecasted **load** requirement exceeds the available supply in any **settlement interval**.

### 5.2 Forecast Dispatch Price

The **ISO** will use reasonable efforts to publish a **forecast dispatch price** for each **settlement interval** no later than 70 minutes prior to the start of such **settlement interval**.

#### 5.2.1 Determination of Forecast Dispatch Price

The **forecast dispatch price** for a **settlement interval** is the highest **forecast asset marginal price** of all **assets** forecast to be required to meet the forecast **load** requirement, using the expected **energy market merit order** for the **settlement interval** including **importer operating blocks** and the **ISO** expected import **ATC** for the **interconnections** for the **settlement interval**.

#### 5.2.2 Determination of Forecast Asset Marginal Price

The **forecast asset marginal price** for a **pool participant's asset** for each **settlement interval** will be set at the price specified for the **price block** in the **pool participant's offer** or **bid** which corresponds to the forecast **energy market dispatch** level of the **asset** to meet the forecast **load** requirement.

---

## 6. DISPATCH AND DIRECTIVES

### 6.1 Asset Dispatching

*The system controller will dispatch assets according to the rules and the terms and conditions of the bids and offers.*

An **asset** will be **dispatched** within the terms and constraints set out in the **ISO rules** and the respective **offer** or **bid** associated with that **asset**.

### 6.2 Form of Dispatch and Directives

*The system controller will follow specific guidelines in delivering a dispatch and a directive.*

The specific communication form of a **dispatch** and an **ancillary service directive** is set out as follows:

#### 6.2.1 Form of Communication

The system controller may, at any time, dispatch and give ancillary service directives in accordance with the rules. The primary form of dispatch and ancillary service directives from the system controller will be through the automated dispatch and messaging system. Secondary means of communication will be by voice, if the automated dispatch and messaging system is unavailable.

#### 6.2.2 Communication Systems

*Pool participants must provide acceptable methods of communication.*

Unless otherwise authorized by the **ISO**, each **pool participant** must comply with the ISO Operating Policies and Procedures' technical standards for operational voice communications and **automated dispatch and messaging system**.

If communication systems become unavailable, the **pool participant** and **system controller** shall take action to identify the cause of the interruption, and to restore the communication system.

#### 6.2.3 Receiving and Implementing Directions

*Each pool participant receiving dispatches must ensure that persons are available to receive and implement a dispatch.*

**Pool participants** receiving **dispatches** shall ensure that persons are available to receive, and implement a **dispatch** delivered via the communication system described in rule 6.2.2, within the time period specified in the ISO Operating Policies and Procedures. The **pool participant** shall confirm a **dispatch** or **directive** by responding to the automated message, or in the case of a voice **dispatch** or **directive**, by repeating the **dispatch** or **directive** to the **system controller**.

---

#### 6.2.4 Dispatch and Directive Records

*The system controller will retain dispatch and directive records for a specified period.*

The **system controller** shall retain an electronic record of all **automated dispatch and messaging system dispatches, directives** and responses suitable for audit purposes. In the case of voice **dispatches**, the **system controller** shall record on tape all voice conversations that occur on the communication systems. **Dispatch** and **directive** records shall be kept for no less than 45 **days**, and may be used to audit **dispatches**.

The **system controller** is responsible for ensuring there is a record of **dispatches** and **directives** sufficient to meet audit and verification requirements of the **ISO** and will retain electronic records for no less than one year.

#### 6.2.5 Monitoring

*The system controller reports and tracks the performance of ancillary service providers.*

- a) The **ISO** will monitor the declarations from **ancillary service providers** and the response to **ancillary service dispatches** and **ancillary service directives** for any significant changes, unusual activities or failures to comply.
- b) The **system controller** will consult with **ancillary service providers** whose actions has not met the expectations as defined in rule 6.5.3.
- c) The **system controller** will prepare regular reports on **ancillary services**.

#### 6.2.6 Requests for Records

*Pool participants may request to audit records for specific assets.*

**Pool participants** may make a written request to audit a record of a **dispatch** or **directive**. The **pool participant's** request shall specify the **asset** or **assets** affected, and the approximate date and time of the **dispatch** or **directive** which is to be audited. The request must be received by the **ISO** no more than 45 **days** from the date of the **dispatch** or **directive**.

In the case of voice **dispatches** and **directives**, the **ISO** shall copy the pertinent portions of the voice record, which shall be sent to the requesting **pool participant**. If the portion of the voice recording is unsatisfactory to the **pool participant** in the audit, the **pool participant** may request, in writing to the **ISO**, that the full voice recording be subject to a dispute.

Voice records that have been requested for an audit will be stored by the **ISO** until any disputes arising from that **dispatch** or **directive** have been resolved.

### 6.3 **Energy Market Dispatch and Directives**

#### 6.3.1 Factors to Take Into Account

*The system controller must take certain information into account when determining an energy market dispatch.*

---

In determining an **energy market dispatch**, the **system controller** must take into account:

- a) All information submitted in the **offers** and **bids** for all **assets** in the **energy market merit order**;
- b) The parameters submitted for **assets** under the requirements of the **rules**.

### 6.3.2 Energy Market Dispatch Content

*The system controller will provide the pool participant specific information in the energy market or DDS dispatches.*

The information provided to the **pool participant** receiving an **energy market dispatch** or **DDS dispatch** shall include the information set out below, but shall not include any information that the **system controller** deems to be competitive market information:

- a) Name of the **asset**;
- b) The instruction (**dispatch on**, **dispatch off**, **DDS dispatch on**, or **DDS dispatch off**) for the **asset**;
- c) Specific **MW** value to which the **asset** is receiving an **energy market dispatch** or **DDS dispatch**;
- d) Date and time the **energy market dispatch** or **DDS dispatch** is to take effect.

### 6.3.3 Interconnection Dispatching

*Interconnection scheduling is subject to the operating procedures of other control areas. Energy market dispatch will be in the same form for all pool participants. NERC e-tags are required for interchange transactions.*

An **energy market dispatch** on the **interconnections** must take these procedural conditions into account:

- d) The physical scheduling of energy on an external **interconnection** is governed by the operating procedures agreed to by the **ISO** with the **control area operator** at the other end of the **interconnection**.
- e) The **system controller** will use the same form of **energy market dispatch** as provided in **rule 6.3.2**.
- c) **Importers** and **exporters** must make reasonable efforts to procure transmission service for the **offered available capability**.
- d) The **pool participant** must submit **electronic tags (e-tags)** for each **interchange transaction**.
- e) The sum of the **importer's e-tag** quantities may only be less than the **available capability** stated two hours before the start of the **settlement interval** if the **importer** has an **acceptable operational reason**. Each **importer** who **offers** energy must submit an energy restatement in accordance with **rule 3.5.3.2** prior to the **settlement interval** in which the **offer** is to take effect, if the sum of the **importer's e-tag** quantities (**MW**) for such **settlement interval** is less than the

- 
- available capability.** Unless otherwise requested by the **system controller** under **rule 6.3.7**, the sum of the **e-tag** quantities (**MW**) cannot be greater than the **available capability offered** two hours before the start of a **settlement interval**.
- f) The sum of the **exporter's e-tag** quantities may only be less than the **available capability** stated two hours before the start of the **settlement interval** if the **exporter** has an **acceptable operational reason**. Each **exporter** who bids energy must submit an energy restatement in accordance **rule 3.5.4.2** prior to the **settlement interval** in which the **bid** is to take effect, if the sum of the **exporter's e-tag** quantities (**MW**) for such **settlement interval** is less than the **available capability**. Unless otherwise requested by the **system controller** under **rule 6.3.7**, the sum of the **e-tag** quantities (**MW**) cannot be greater than the **available capability offered** two hours before the start of a **settlement interval**.

#### 6.3.4 Equal Price Offers or Bids

*The ISO will follow certain guidelines to manage equal price offers or bids for assets during a settlement interval.*

If a price of an **offer** or **bid** submitted in respect of an **asset** for a **settlement interval** is identical to the corresponding price of another **offer** or **bid** in respect of another **asset** for the same **settlement interval**, the **ISO** will:

- a) Determine the **energy market dispatch** by considering applicable constraint information for each of the **assets**, and
- b) If equal **offers** or **bids** remain; then as necessary proportioning participation amongst the **assets** within the **settlement interval** to the extent that identified **offer** or **bid** constraints allow and in a manner determined appropriate by the **ISO**.

#### 6.3.5 Long Lead Time Energy Dispatch

- a) A **pool participant** with a **generating asset** that requires more than one hour to synchronize must submit to the **ISO** the time of day that such **generating asset** will be synchronized to the AIES.
- b) Such time of day must represent the physical condition of the **generating asset** as determined by either the time of the last notice of the **generating asset's** intention to start or the time of the last **dispatch off**, as it relates to the **operating constraint** submitted to the **ISO** under **rule 3.5.3.4**. The time of day must be submitted at least two hours prior to the beginning of the **settlement interval**.
- c) In accordance with **ISO** operating policies and procedures, the **system controller** may request a **pool participant** to start up a **generating asset** that requires greater than one hour to start up by a specified **settlement interval**, if the **adequacy** assessment pursuant to **rule 6.3.6** forecasts insufficient supply to meet **AIES demand** during and after such **settlement interval**.
- d) A **pool participant** who has received a request pursuant to **rule 6.3.5 c)** must notify the **system controller** as soon as reasonably practicable after the request whether it intends to start up the **generating asset**.
- e) A **generating asset** that has indicated its intention to start may withdraw its intention to start up to two hours prior to the start of the **settlement interval**.

#### 6.3.6 Dispatch Down Service Dispatch

---

#### 6.3.6.1 Eligibility

Eligibility may be determined at the sole discretion of the **ISO**.

- a) Subject to **rule 6.3.6.1 b)**, a **source asset** is eligible to be **dispatched off** in the **energy market merit order** for **DDS** when the **pool participant** submits an **offer** for **DDS** to the **ISO** in accordance with **rule 3.5**.
- b) A **source asset** is not eligible to be **dispatched off** in the **energy market merit order** for **DDS** when:
  - i) such **dispatch** would cause **transmission must-run** to be required.
  - ii) such **dispatch** would be in an area where one or more **source assets** are **constrained down**.
  - iii) such **dispatch** would impair the **source asset's** ability to comply with an **ancillary service dispatch** or **directive**.
  - iv) the **pool participant** is unable to respond to such **dispatch**.

#### 6.3.6.2 Conditions for Dispatch Down Service Dispatch

- a) If at any time:
  - i) the **system marginal price** is less than or equal to the **reference price**, and
  - ii) a **source asset** has been issued a **transmission must-run dispatch** or **directive**, and
  - iii) the **transmission must-run** quantity (**MW**) is greater than **constrained down directive** quantity (**MW**) as calculated by the **system controller**.

then the **system controller** will **dispatch off operating blocks** in the **energy market merit order** that have offered eligible **DDS**.

- b) **Operating blocks** will not be **dispatched off** in the **energy market merit order** for **DDS** when the **system marginal price** is greater than the **reference price**.

#### 6.3.6.3 Determining Dispatch Down Service Dispatch Quantity

- a) Subject to **rule 6.3.6.3 b)**, the **DDS dispatch** quantity (**MW**) is the lesser of:
  - i) the **transmission must-run** quantity (**MW**) less the **constrained down directive** quantity (**MW**). The **DDS dispatch** quantity (**MW**) cannot be less than zero **MW**.
  - ii) the eligible quantity of **DDS offers**.

- b) **Operating blocks** in the **energy market merit order** that have been **dispatched off** for **DDS** will be **dispatched on** by the **system controller** prior to **dispatching operating blocks** that are greater than the **reference price**.

#### 6.3.6.4 Dispatching Dispatch Down Service

---

The **system controller** will use the same form of **dispatch** as provided in **rule 6.3.2**.

The **system controller** will determine which **source assets** will be **dispatched** for **DDS** in order of relative economic merit and eligibility considerations outlined in **rule 6.3.6.1**.

If a **DDS** offer is determined by the **ISO** to be ineligible to provide **DDS** and it is next in the order of economic merit, then the **system controller** will **dispatch** the next **operating block** in the **energy market merit order** for **DDS** that is eligible to provide **DDS**.

#### 6.3.7 Supply Shortfall Directive

If during the **trading day** the **system controller** determines that the forecasted **AIES load** requirement exceeds the available supply in any **settlement interval**, the **system controller** will use **ISO** supply shortfall operating policies and procedures to issue **directives** as required.

#### 6.3.8 Supply Surplus Directive

If during the **trading day** the **system marginal price** is determined by a \$0 **operating block**, the **system controller** will use **ISO** operating policy and procedures to issue **directives** as required for the applicable **settlement intervals**. **Pool participants** shall provide the **ISO** with **asset** information necessary to carry out the operating policy and procedure.

#### 6.3.9 Declaration of Pool Price

##### 6.3.9.1 Pool Price Determination

The **pool price** for any **settlement interval** will be based on the time weighted average of the 60 one minute **system marginal price** values determined for each minute of the **settlement interval**. The **system marginal price** at each minute is:

- a) the highest eligible **asset marginal price** of all **assets** required to meet **AIES demand**; or
- b) \$1000/MWh, if to maintain **system security** the **system controller** had directed an involuntary curtailment of non-**price responsive load** in accordance with rule 6.8; or
- c) as prescribed in **rule 6.9** in the event of an **energy market suspension**.

##### 6.3.9.2 Determination of Asset Marginal Price

The **asset marginal price** for a **pool participant's asset** for each minute of a **settlement interval** will be set at the price specified for the **price block** in the **pool participant's offer** or **bid** for such **asset** which corresponds to the **energy market dispatch** of such **asset** at the time the **energy market dispatch** was issued and accepted by the **pool participant**, pursuant to the following conditions:

- a) The **asset** is not used to calculate the **system marginal price** if the **price block** for that **asset** has not received an **energy market dispatch** in the **settlement interval**;
- b) The **asset marginal price** of an **interchange transaction** is not used to set the **system marginal price**.
- c) The **reference price** is not used to set the **system marginal price**.

---

## 6.4 Ancillary Service Dispatch

### 6.4.1 Factors to Take into Account

*The system controller will consider the necessary information to determine an ancillary service dispatch.*

In determining the **ancillary service dispatch**, the **system controller** will take into account:

- a) All information submitted in the declarations for all **assets**;
- b) The applicable **ancillary service merit order**;
- c) Any information supplied to the **ISO** in regards to **ancillary services** or **transmission constraint** information; and
- d) The energy market, under extraordinary conditions or emergency procedures as outlined in the ISO Operating Policies and Procedures.

### 6.4.2 Ancillary Service Dispatch Content

*The system controller will provide ancillary service dispatches to ancillary service providers specifying required services.*

- a) The **system controller** will, through an **ancillary service dispatch**, notify the **ancillary service provider** that they are “on notice” to supply an **ancillary service**. The specific form and content of the **ancillary service dispatch** will include the following information for:
  - i) Spinning Reserve (SR) (OPP 402)
    - a) The **asset** being given an **ancillary service dispatch**
    - b) The type of **ancillary service** to be supplied (SR)
    - c) The amount of SR to be supplied (**MW**)
    - d) The time the **ancillary service dispatch** is to take effect
  - ii) Supplemental Reserve Generation (SUPG) or Supplemental Reserve Load (SUPL) (OPP 402)
    - a) The **asset** being given an **ancillary service dispatch**
    - b) The type of **ancillary service** to be supplied (SUPG or SUPL)
    - c) The amount of SUPG or SUPL to be supplied (**MW**)
    - d) The time the **ancillary service dispatch** is to take effect
  - iii) Regulating Reserve (RR) (OPP 401)
    - a) The **asset** being given an **ancillary service dispatch**

- 
- b) The type of **ancillary service** to be supplied (**RR**)
  - c) The amount of **RR** to be supplied (**MW**)
  - d) The time the **ancillary service dispatch** is to take effect
  - iv) Voltage Support (VS)
    - a) The **ancillary service dispatch** is deemed to have been issued when an **asset** is synchronized to the **AIES** and the **AVR** is placed in automatic
  - v) Fast Acting Remedial Action Scheme for Loads (RASL)
    - a) The type of **ancillary service** to be supplied (RASL)
    - b) The amount of RASL to be supplied (**MW**)
    - c) The time by which the RASL must be armed.
  - vi) Black Start Capability (BSC)
    - a) The **ancillary service dispatch** for BSC is deemed to have been issued when a declaration is submitted stating the **asset's** BSC availability.
  - vii) Remedial Action Scheme for Generators (RASG)
    - a) The **asset** being given an **ancillary service dispatch**
    - b) The type of **ancillary service** to be supplied (RASG)
    - c) The time by which the RASG must be armed.

The **system controller** shall notify the **ancillary service provider** when they are no longer required to provide a specific **ancillary service**.

- b) The **system controller** will, through an **ancillary service dispatch**, notify the **ancillary service provider** that they are to supply **transmission must-run (TMR) ancillary services**. A **TMR ancillary service dispatch** will include the following information:
  - i) The **asset** being issued an **ancillary service dispatch**
  - ii) The type of **ancillary service** to be supplied (**TMR**)
  - iii) The amount of **TMR** to be supplied (**MW**)
  - iv) The time the **ancillary service dispatch** is to take effect

The **system controller** shall notify the **ancillary service provider** when they are no longer required to provide **TMR**.

#### 6.4.3 Ancillary Service Provider Discretion

---

*Ancillary service providers may decline an ancillary service dispatch.*

- a) The **ancillary service provider** may decline an **ancillary service dispatch** but must restate in a timely manner, the new capability of the **asset** to provide these services. The decline of an **ancillary service dispatch** will be recorded by the **system controller** and the **ancillary service provider** must provide reasons for declining the **ancillary service dispatch**.

The SC will record the declined **ancillary service**.

- b) Acceptance of the **ancillary service dispatch** by the **ancillary service provider** is a commitment to provide the **ancillary service** requested by the **system controller** from the **asset** at the **ancillary service dispatched** capability. The owner of a facility retains the right to operate his facility as it deems prudent consistent with **good electric operating practices**.

## 6.5 Ancillary Service Directive

*The system controller will issue directives for ancillary services to ensure the safe and reliable operation of the AIES.*

- a) When the **system controller** determines that the delivery of **ancillary services** are required to ensure the safe and reliable operation of the **AIES**, the **system controller** will issue an **ancillary service directive** to those **ancillary service providers** that have accepted an **ancillary service dispatch**.
- b) Following an **ancillary service directive** for the delivery of **spinning reserve** or **supplemental reserve**, the **system controller** will, as soon as practicable, issue **energy market dispatches** to recover reserves. Within one hour of an **ancillary service directive** the **system controller** will either issue the **ancillary service provider** an **energy market dispatch** for the **asset** that received the **ancillary service directive** or notify the **ancillary service provider** that they are no longer required to provide for the **ancillary service directive**.

### 6.5.1 Ancillary Service Directive Content

*The system controller will follow certain protocol when issuing an ancillary service directive.*

The **ancillary service directive** will include the following information for:

- a) Spinning Reserve (SR) (OPP 402)
  - i) The **asset** being issued an **ancillary service directive**
  - ii) The type of **ancillary service** to be supplied. (SR)
  - iii) The amount of SR to be supplied (MW).
- b) Supplemental Reserve Generation (SUPG) or Supplemental Reserve Load (SUPL) (OPP 402)
  - i) The **asset** being issued an **ancillary service directive**

- 
- ii) The type of **ancillary service** to be supplied (SUPG or SUPL)
  - iii) The amount of SUPG or SUPL to be supplied (**MW**)
  - c) Regulating Reserve (RR)
    - i) This type of **ancillary service directive** is an automatic electronic signal that will ramp the **asset** within the **ancillary service dispatch** parameters.
  - d) Voltage Support (VS)
    - i) The **asset** being issued an **ancillary service directive**
    - ii) The amount of VS to be supplied (e.g. bus voltage setting)
  - e) Remedial Action Scheme for Loads (RASL)
    - i) This type of **ancillary service directive** is an automatic electronic signal that must immediately trip at least the amount of **MW** issued in the **ancillary service dispatch**.
  - f) Black Start Capability (BSC)
    - i) The **asset** being issued an **ancillary service directive**.
  - g) Remedial Action Scheme for Generators (RASG)
    - (i) This type of **ancillary service directive** is an automatic electronic signal that must immediately trip the generator issued the **ancillary service dispatch**.

The **system controller** will notify the **ancillary service provider** when the **ancillary service provider** is no longer required to provide a specific **ancillary service**.

#### 6.5.2 Ancillary Service Provider Discretion

*Ancillary service provider must comply with an ancillary service directive, unless there is an immediate risk to personnel or equipment safety.*

**Ancillary service providers** are obligated to comply with an **ancillary service directive** unless there is immediate risk to personnel or equipment safety. If for any unforeseen reason an **ancillary service directive** cannot be complied with, the **ancillary service provider** will notify the **system controller** as soon as practicable and give the **system controller** the reason the **ancillary service directive** cannot be complied with. The **system controller** will log any non-compliance and the reasons for the non-compliance.

#### 6.5.3 Ancillary Service Expectations

*When accepting an ancillary service dispatch and receiving an ancillary service directive, ancillary service providers must meet specific service expectations.*

The **system controller** will expect from the **ancillary service providers** that have accepted an **ancillary service dispatch**, that, when the **system controller** directs them to deliver an **ancillary service**, it will be delivered up to the **ancillary service dispatched** level.

---

In the management of ancillary service the system controller will expect the ancillary service providers to deliver:

- a) **Spinning reserve, supplemental reserve** generation and **supplemental reserve load (SR, SUPG, SUPL)** – The amount of **MW** stated in the **ancillary service dispatch** will be provided within 10 minutes of an **ancillary service directive** unless there is immediate risk to personnel or equipment safety.
- b) **Regulating reserve (RR)** – The **ancillary service provider** will provide the **MW** range at the **ramp rate** stated in the **ancillary service dispatch** for **RR** unless there is immediate risk to personnel or equipment safety.
- c) **Voltage Support (VS)** – The **ancillary service provider** will provide voltage support within the **MVA<sub>r</sub>** range stated in their declaration when the **system controller** issues an **ancillary service directive** for **VS** unless there is immediate risk to personnel or equipment safety.
- d) **Power System Stabilizers (PSS)** – The **asset PSS** will be in the state declared in their declaration at all times.
- e) **Automatic Voltage Regulator (AVR)** – The **asset AVR** will be in the state declared in their declaration at all times.
- f) **Remedial Action Schemes for Loads (RASL)** – The amount of **MW** stated in the **ancillary service dispatch** will be armed and trip when an **ancillary service directive** is issued.

## 6.6 Pool Participant Non-Compliance with Energy Market Dispatch and Directives

*A pool participant may only supply energy if it has received either an energy market dispatch or a directive. A pool participant who has not received an energy market dispatch or a directive and supplies energy may be subject to sanction.*

**Pool participants** must only deliver energy to the **AIES** pursuant to a **dispatch** or a **directive** issued by the **system controller**. **Pool participants** must not deliver energy to the **AIES** when the **system controller** has not issued a **dispatch** or a **directive** to do so.

In any circumstance where an **energy market dispatch** is not followed, the **pool participant** will be considered in non-compliance with the **energy market dispatch**. The **pool participant** must advise the **system controller** as soon as practical that the **energy market dispatch** will not be complied with and the **pool participant** will as soon as practicable submit a new **offer** or **bid** restating the status of the **asset** to reflect the non-acceptance of the **energy market dispatch**.

The **pool participant** must ensure that the **generating asset** is operated to the quantity (**MW**) **dispatched** or directed. The **pool participant** is in non-compliance when the quantity (**MW**) delivered varies by greater than  $\pm 5$  **MW** from the highest **energy market dispatch** quantity (**MW**) or the **directive** quantity (**MW**). In the case of a **generating asset** that is supplying **regulating reserve**, the **pool participant** is non-compliant when the quantity (**MW**) delivered is less than the **energy market dispatch** quantity (**MW**) minus 5 **MW** or greater than the **energy market dispatch** quantity (**MW**) plus the regulation range plus 5 **MW**.

The **pool participant** is responsible for coordinating their energy and **ancillary services** submissions to ensure that such **pool participant** is able to comply with an **ancillary service dispatch** or **energy market dispatch** issued pursuant to such submissions.

---

Any non-compliance with an **energy market dispatch** or a **directive** is subject to review and may be subject to sanction by the **ISO**.

As an exception, energy delivered to the **AIES** while a **pool participant** is testing and/or **commissioning**, a **generating unit** will be considered compliant, provided however, that the **pool participant** has complied with the **ISO** Operating Policies and Procedures and has received approval from the **system controller**.

## 6.7 System Security

### 6.7.1 Independent System Operator

*The ISO has certain responsibilities for ensuring system security.*

The **ISO**:

- a) Must schedule to prevent a threat to **system security**.
- b) May schedule out of the **energy market merit order** to prevent a threat to **system security**.

The **system controller** acting reasonably:

- a) Shall at all times **dispatch** in a manner to prevent a threat to **system security** from occurring.
- b) May **dispatch** out of the **energy market merit order** to prevent a threat to **system security** or to return the **AIES** to a safe and reliable state.
- c) Will issue **directives** to **market participants** as required to prevent a threat to **system security** or to return the **AIES** to a safe and reliable state.
- d) Must use reasonable efforts to promptly advise the **transmission facilities owners** in the event of a **system emergency**.
- e) Must use reasonable efforts to promptly advise all **pool participants** in the event of a **system emergency**.

### 6.7.2 Market Participant

*Market participants have certain responsibilities for ensuring system security.*

The **market participants** must:

- a) Use reasonable efforts to promptly advise the **system controller** upon becoming aware of any circumstance with respect to its facilities that could be expected to adversely affect **system security** or the **AIES**'s ability to deliver energy.
- b) Use reasonable efforts to comply with **directives** from the **system controller** to prevent a threat to **system security** or to assist in the recovery from or return the **AIES** to a safe and reliable state.

## 6.8 Involuntary Load Curtailment

---

*Wire owners will curtail demand when directed by the system controller.*

During **AIES** conditions when **AIES demand** and **regulating reserve** cannot be met through **dispatches** within **bid** and **offer** constraints, the **system controller** may direct involuntary curtailment of demand by some or all **wire owners**. **Wire owners** will share the involuntary curtailment of demand based on the following:

$$\text{Wire Owner Curtailment} = \frac{\text{Total Curtailment Required}}{\text{Wire Owner Demand}} \times \frac{\text{Total Demand of all Pool Purchasers}}{\text{Total Demand of all Pool Purchasers}}$$

A **wire services provider** may be authorized by a **wire owner** to act on behalf of that owner.

## 6.9 Energy Market Suspension

### 6.9.1 Objective

*Under extraordinary circumstances, the system controller may suspend the normal operation of the energy market.*

The purpose of this rule is to prescribe the conditions under which the energy market may be suspended and the process to be used by the **system controller** to suspend the energy market.

The suspension of the energy market means that the **system controller** is not obliged to follow the **energy market merit order** nor the **ancillary services merit order** in issuing **dispatches** and that the **system marginal price** will be predefined and set in accordance with **rule 6.9.4**.

### 6.9.2 Initiating an Energy Market Suspension

*If deemed necessary, the system controller may suspend the energy market under specific events or conditions.*

In the determination of the **system controller**, the energy market may be suspended if any of the following conditions apply:

- a) **AIES** has experienced a **blackout**;
- b) The **AIES** breaks up into two (2) or more **electrical islands**;
- c) The **AIES** is not in a secure operating state and in the judgement of the **system controller** is on the verge of a **system emergency**.
- d) The **system controller** is unable to issue **dispatches** under normal market operations because the:
  - i) **system controller** is forced to abandon the workplace;
  - ii) **system controller** is unable to access or utilize the market management tools such as the **energy market merit order**.
- e) An order is received from the **EUB** to suspend market operations;

- 
- f) Circumstances that, in the judgement of the **system controller**, warrant the suspension of the energy market.

### 6.9.3 Declaration of Energy Market Suspension

*The system controller will issue a notice that the market has been suspended, and will notify pool participants using certain methods of communication.*

The **system controller** will issue a notice that the energy market has been suspended. As soon as possible the **system controller** will update the notice indicating the reason for the suspension and, if practical, an expected time of return to normal energy market operation. In the case of a **system emergency**, the **system controller** will issue **directives to market participants**, as required, to return the **AIES** to a safe and reliable state.

If the **system controller** suspends the energy market for any of the reasons listed in rule 6.9.2, the **system controller** will notify **pool participants**. Communication prioritization will be to use methods that attempt to contact **pool participants** simultaneously. The **system controller** will use one or more of the following methods, to notify the **pool participants** that the energy market has been suspended:

- a) **Alberta Electric System Operator** website through the **system controller** real time shift report and/or other message.
- b) Fax to all **pool participants**.
- c) Phone notifications via regular phone communication systems.
- d) Phone notifications via back up phone communication systems to **pool participants** with this capability.
- e) **Automated dispatch and messaging system**.

### 6.9.4 Pricing of Energy During Energy Market Suspension

*During an energy market suspension, the ISO will follow certain protocol to set the system marginal price.*

During periods of **energy market suspension** the **system marginal price** will be set at the following levels for the duration of the suspension, dependent upon the reason for the suspension:

- a) The **system marginal price** will be set at \$50/MWh in the event of a blackout;
- b) The **system marginal price** will be set at the price of the last **block** receiving an **energy market dispatch** that was eligible to set **pool price** using the last available **energy market merit order** prior to the **energy market suspension** in the event that:
  - i) The **system controller** suspends the energy market for reasons of **system security**;
  - ii) The **system controller** is forced to abandon the workplace;
  - iii) The **system controller** is unable to access or utilize market management

---

tools such as the **energy market merit order** list;

- iv) The **AIES** breaks up into two (2) or more **electrical islands**
- v) In the judgement of the **system controller** circumstances warrant the suspension of the energy market.

If an order from the **EUB** to suspend market operations occurs, the **system marginal price** will be set at the price ordered by the **EUB**, or lacking this direction, at the price of the last **block** receiving an **energy market dispatch** that was eligible to set **pool price** using the last available **energy market merit order** prior to the **energy market suspension**.

#### 6.9.5 Ending of Energy Market Suspension

*The system controller will notify pool participants when an energy market suspension has ended, and a report will be published.*

The **energy market suspension** will end as soon as normal energy market operations are possible and the **AIES** can be operated reliably, as determined by the **system controller**. The **system controller** will issue a notice that the **energy market suspension** has ended and normal energy market operations have resumed. A report outlining the nature of the suspension and which may also include recommendations as to possible revisions to these **energy market suspension rules** would be made available to **pool participants** following such a suspension.

The **ISO** will publish a preliminary report, on the **ISO** website, within 5 **business days** following an **energy market suspension**. The **ISO** will publish a final report, on the **ISO** website, within 20 **business days** following an **energy market suspension**.

---

7. LOAD SETTLEMENT

Please [click here](#) to see load settlement rules.

---

## 8. POWER POOL FINANCIAL SETTLEMENT

### 8.1 Source Asset Calculations

#### 8.1.1 Settlement at Pool Price

For each **source asset** and for each **settlement interval** the **pool participant** will receive the amount calculated by the following formula:

Energy payment in \$ = ((**energy production in MWh**) minus (**net settlement instruction MWh volumes in MWh**)) multiplied by (**pool price in \$/MWh**)

where:

“**energy production in MWh**” is the **metered MWh** value for **generating assets** or the interchange **MWh** schedule across the **interconnection** for importing **assets**.

If the **energy production in MWh** is less than the **net settlement instruction MWh volume** then the **pool participant** is deemed to have purchased the **MWh** volume difference from the **power pool**. The **pool participant** must pay to the **ISO** in respect of electric energy received by it in a **settlement interval** an amount equal to the energy payment.

Payment for emergency energy production installed and producing during an emergency transmission outage outside of an energy market suspension event will be paid based on the energy payment calculation noted above.

The calculation of payment for emergency energy production installed and producing during an emergency transmission outage outside of an energy market suspension event will be based on metered energy submitted to the **ISO** as per **rule 8.3.2 b)**.

#### 8.1.2 Payment to Suppliers on the Margin

a) A **pool participant** with a **source asset** that has delivered energy pursuant to an **energy market dispatch** during a **settlement interval** is eligible to receive **energy production uplift** for the **settlement interval** if the following conditions are met:

- i) An **operating block** receives an **energy market dispatch**;
- ii) The **offer** price associated with the **operating block** is greater than the **pool price**; and
- iii) The average rate of **energy production** of the **source asset** is greater than the sum of the quantity (**MW**) of all **blocks** of such **offer** below the **block** referred to in i) and ii).

b) In the event the foregoing conditions have been met, then the **pool participant** will be paid by the **ISO energy production uplift** in \$ calculated as follows:

- i) If during such **settlement interval** (A minus B) is less than or equal to [(C minus B) multiplied by marginal dispatch time divided by 60 minutes], then

**energy production uplift in \$ = (A minus B) multiplied by (D minus pool price)**

- ii) If during such **settlement interval** (A minus B) is greater than [(C minus B) multiplied by marginal dispatch time divided by 60 minutes], then

**energy production uplift** in \$ = (C minus B) multiplied by (D minus **pool price**) multiplied by marginal dispatch time divided by 60 minutes

Where for purposes of this **rule 8.1.2**, the following applies:

A = the average rate (MW) of **energy production** of such **source asset**

B = sum of the quantity (MW) of all **dispatched blocks** of such **source asset** with **offer prices** less than the **offer price** of the **block** that is eligible for **energy production uplift** for the same **source asset**

C = the **energy market dispatch level** (MW) up to the **block** eligible for **energy production uplift** for such **source asset**

D = the **offer price** associated with the **energy market dispatch MW level** in C  
 “marginal dispatch time” means the number of minutes that the **block** that is eligible for **energy production uplift** is **dispatched**

- c) In any case where there is more than one **dispatched block** greater than **pool price**, the **pool participant** will be paid **energy production uplift** calculated by the formula(s) in b) for each such **dispatched block**.

#### 8.1.3 Dispatch Down Service Payment

The **ISO** will calculate and include payments for **DDS** on the **pool statement**.

A **pool participant** with a **source asset** that has provided **DDS** pursuant to a **DDS dispatch** during a **settlement interval** is eligible to receive a **DDS** payment for the **settlement interval**, the amount calculated by the following formula:

$$\frac{\text{DDS price (\$)} \times \text{DDS quantity (MW)} \times \text{DDS time (minutes)}}{60 \text{ minutes}}$$

Where for purposes of this **rule 8.1.3**, the following applies:

**DDS price** is the **system marginal price** plus the **DDS offer price** for the **settlement interval**, **DDS price** is greater than or equal to zero.

**DDS quantity** means the amount (MW) a **pool participant** is **dispatched** for **DDS** in the **settlement interval**.

**DDS time** means the number of minutes a **source asset** was **dispatched** for **DDS** in the **settlement interval**.

#### 8.1.4 Dispatch Down Service Charge

The **ISO** will calculate and include charges for **DDS** on the **pool statement**.

A **pool participant** with a **source asset** that has generated during a **settlement interval** will receive a charge for the **settlement interval**, the amount calculated by the following formula:

$$\frac{\text{energy production (MWh)}}{(\text{sum of all energy production (MWh)})} \times \text{sum of all DDS payments}$$

---

where:

“**DDS payment**” is as prescribed under **rule 8.1.3**.

“**energy production in MWh**” is the **metered MWh** value for a **source asset** that has generated during a **settlement interval**.

## 8.2 Sink Asset Calculations

### 8.2.1 Settlement at Pool Price

A **pool participant** must forward to the **ISO** in respect of electric energy received by it in a **settlement interval** the amount calculated by applying the following formula:

energy charge in \$ = ((**energy consumption in MWh**) minus (**net settlement instruction MWh volumes in MWh**)) multiplied by (**pool price in \$/MWh**)

Where:

**Energy consumption in MWh** is the **metered MWh** value for **load assets** or the interchange **MWh** schedule across the **interconnection** for exporting **assets**.

If the **energy consumption in MWh** is less than the **net settlement instruction MWh volume**, then the **pool participant** is deemed to have sold the **MWh** volume difference to the **power pool**. The **ISO** will pay the **pool participant** in respect of electric energy supplied in a **settlement interval** an amount equal to the energy charge.

### 8.2.2 Post Final Adjustment Mechanism Financial Allocation for Energy Consumption

The **ISO** will calculate and include post final adjustment mechanism payments and charges on the **pool statement**.

- a) **PFAM** adjustment calculations submitted by the **LSA** to the **ISO** pursuant to **rule 7, 5.3.8 a)** will be included on the **ISO**'s preliminary statement. Where these timelines are not met, the adjustment will be made on the following month's preliminary statement from the **ISO**.
- b) The **ISO** shall accept the **PFAM** adjustments submitted by the **LSA** and apply the relevant historic **ISO pool price** to the data in order to arrive at the applicable financial adjustment(s) for the **RSA, RAM and TAA**.
- c) The financial adjustments and allocations will be included on the relevant **ISO** statements and shall be payable by each party in accordance with the provisions of **rule 8**.

### 8.2.3 Post Final Adjustment Mechanism Financial Allocation for Energy Production

**PFAM** for **energy production** relates to adjustments for **metering data** for **source assets** that occur outside of the final **pool statement** issued in accordance with **rule 8.4.2 a) iii)**.

- a) The **ISO** will calculate and include **PFAM** for **energy production** for financial settlement. **PFAM** for **energy production** shall only be applicable to transactions dating from and after January 1, 2001. Periods prior to January 2001 have been deemed closed for dispute.

---

**Pool participants** with **energy production** disputes will be required to file a dispute in accordance with **rule 8.5** to initiate a review of the **metering data** previously financially settled and the **metering data** expected.

Upon acceptance of the **energy production** dispute, **PFAM** for **energy production** outside of the final **pool statement** issued in accordance with **rule 8.4.1 a) iii)** will be submitted to the **ISO** in the format designated in **ISO** under **rule 7**, Schedule B 6.2.4.2. The **metering data** is to be submitted to [settlement@aeso.ca](mailto:settlement@aeso.ca).

Payment or charges for the adjusted **energy production metering data** will be calculated in accordance with **rule 8.1** and issued in accordance with **rule 8.4.2 d) iii)**.

#### 8.2.4 Settlement for Supplier on the Margin Payments

For any **settlement interval** where a **pool participant** has been paid a **energy production uplift** in accordance with **rule 8.1.2**, a **pool participant** with **energy consumption** in the same **settlement interval** must pay an amount to the **ISO** calculated using the following formula:

Energy production uplift share charge in \$ = (sum of all **energy production uplifts**) multiplied by the **pool participant's energy consumption** divided by (sum of all **pool participant's energy consumption**)

---

### 8.3 Other Calculations and Information Requirements

#### 8.3.1 Import/Export Transactions

*The ISO reports import and export transactions.*

For purposes of facilitating financial settlement for **system access service** and managing import and export **inadvertent energy**, the billing determinants as set out in the **rules** for transactions involving use of an **interconnection** are to be calculated by the **ISO**.

#### 8.3.2 Submitting Metering Data

*Certain organizations may supply the ISO with meter volumes for the purpose of power pool settlement.*

- a) **Metering data** must be provided to the **ISO** by the **load settlement agent, meter data manager** or other source as approved by the **ISO**.
- b) **Metering data** for emergency **energy production** installed and producing during an emergency transmission outage outside of an **energy market suspension** event will be submitted to the **ISO** in the format designated in **rule 7**, Schedule B 6.2.4.2. The **metering data** is to be submitted to [settlement@aeso.ca](mailto:settlement@aeso.ca).

### 8.4 Payments Relating to Electric Energy Purchased and Supplied

#### 8.4.1 Preliminary Pool Statement

*For each settlement period, the ISO will issue preliminary pool statements describing electric energy purchases, sales and associated charges.*

- a) Within 5 **business days** after the end of each **settlement period**, the **ISO** will issue each **pool participant** a preliminary **pool statement** through the **ISO software and procedures** showing:
  - i) the amount of electric energy purchased from and supplied to the **power pool** in that **settlement period**;
  - ii) the amount of electric energy purchased from and supplied to the **power pool** determined on an interim basis in the third month following the initial **settlement period**;
  - iii) the amount of electric energy purchased from and supplied to the **power pool** determined on a final basis in the seventh month following the initial **settlement period**;
  - iv) amounts owing or owed as calculated in accordance with **rules 8.1 and 8.2**;
  - v) the **total trading charge** calculated in accordance with **rule 8.4.2 b) ii)**;
  - vi) any levy pursuant to **rule 8.6.2** or refund in respect thereto;
  - vii) such other information as the **ISO** considers appropriate.

- 
- b) The **ISO** will provide to that **pool participant** the supporting data used in determining the amounts of any preliminary **pool statement** such information being limited to that identified in **rule 10.0**.
  - c) In the event a **pool participant** has an energy charge and an energy payment in a **settlement period**, the preliminary **pool statement** will reflect separately the amount of electric energy purchased, the amount of electric energy supplied, and the net amount owing or owed for all transactions with the **power pool**.
  - d) In the event the **ISO software and procedures** or **ISO** internet connections are not available on the 5<sup>th</sup> **business day**, the **ISO** will endeavor to issue to **pool participants** the preliminary **pool statement** utilizing facsimile delivery or other alternative means specified by the **ISO**.
  - e) It is the responsibility of each **pool participant** to notify the **ISO** if it fails to receive the preliminary **pool statement** on the date specified. Each **pool participant** shall be deemed to have received the preliminary **pool statement** on the 5<sup>th</sup> **business day** of a **month** unless it notifies the **ISO** to the contrary.
  - f) In the event a **pool participant** notifies the **ISO** that it has failed to receive the preliminary **pool statement** on the 5<sup>th</sup> **business day**, the **ISO** will utilize **rule 8.4.1 d)** to forward the **pool statement** to the **pool participant**, in which case the preliminary **pool statement** shall be considered to have been received on the date the re-sent **pool statement** is sent to the **pool participant**.

#### 8.4.2 Final Pool Statement

*The ISO will issue a final pool statement for each settlement period.*

- a) Not later than 15 **business days** after the end of the **settlement period** the **ISO** will issue a final **pool statement** through **software and procedures** for the relevant **settlement period**.
  - i) the amount of electric energy purchased from and supplied to the **power pool** in that **settlement period**;
  - ii) the amount of electric energy purchased from and supplied to the **power pool** determined on an interim basis in the third **month** following the initial **settlement period**;
  - iii) the amount of electric energy purchased from and supplied to the **power pool** determined on a final basis in the seventh **month** following the initial **settlement period**.

Additional items that may appear on the final pool statement include, but are not limited to, items b) through k) in **rule 8.4.2**:

- b) If a dispute is resolved by mutual agreement of all interested parties before the final **pool statement** for the associated **settlement period** has been issued, the final **pool statement** will include any adjusted amount payable by or to the **pool participant**.

*The ISO will collect a charge on trading activities from pool participants to recover costs of operating the ISO.*

---

i) In addition to the collection of the fees, if any, set by the **ISO** under **rules 2.2.2, 2.2.4, and 2.2.5** and revenue from other sources as approved by **ISO**, the balance of the costs of operating the **power pool**, the costs of the **ISO**, costs of the **Market Surveillance Administrator** and costs and expenses of other powers, duties, responsibilities of the **ISO**, except costs and expenses recovered under the **ISO tariff** will be recovered by a charge (the "**total trading charge**") on each **pool participant's** trading activities. The **ISO** may recover expenditures for capital **assets** over a period comparable to the useful life of those **assets**.

ii) The **ISO** shall collect for each **settlement period** a **total trading charge** from each **pool participant**, where the **total trading charge** shall be calculated as follows;

***Total trading charge** = Trading Charge/MWh multiplied by MWh's taken to physical delivery through the **power pool** by the **pool participant**. This includes energy imbalances related to net settlement instructions, and*

*Trading Charge/MWh = (Budget costs less projected Annual **pool participation fees**, projected revenue from other sources and capital costs to be recovered in future **financial years**) divided by the total estimated number of **MWh's** expected to be traded on both supply and purchase in the forthcoming **financial year**.*

iii) The Trading Charge/MWh is detailed in the Schedule of **ISO fees**.

iv) The **total trading charge** calculated in accordance with b) will be invoiced with the **pool statement** defined in **rule 8.4** and payment made in accordance with **rule 8.4**.

c) Pool Participation Fee

Annual **pool participation fees** will be issued to **pool participants** and appear on the final **pool statement**. The **pool participation fee** is detailed in the Schedule of **ISO fees**.

d) Resolved Disputes

i) If a dispute is resolved by mutual agreement of all interested parties before the final **pool statement** for the associated **settlement period** has been issued, the final **pool statement** will include any adjusted amount payable by or to the **pool participant**.

ii) If a dispute is resolved by mutual agreement of all interested parties after the final **pool statement** for the associated **settlement period** has been issued, any adjusted amount payable by or to the **pool participant** will be included in the next final **pool statement**.

---

iii) If a dispute is resolved by a dispute resolution process after the final **pool statement** for the associated **settlement period** has been issued, any amount directed to be payable by or to the affected **pool participant (s)** shall be included in the next final **pool statement**.

e) Late Payment Charges

The **pool participant** is liable to pay any costs of collecting amounts owed, including costs on a solicitor and own client basis for legal services. The **ISO** may charge a fee to recover bank charges or legal services incurred due to a **pool participant's** late payment. This may include interest charges at the **ISO's** bank rate, overdraft bank processing fees, or any other fee charged by the bank as a result of the late payment.

f) Software Security Charge

*A fee may be charged for security software.*

The **ISO** may also set and levy a fee to recover the costs of procuring and processing security software required for **pool participant** interface with **software and procedures**. This fee is detailed in the Schedule of **ISO fees** and described as digital certificates.

g) Supply Shortfall Costs

The **ISO** may charge an **ISO fee** to recover the costs associated with a **supply shortfall directive**. The contribution paid by a **pool participant** shall be determined by prorating the amount paid to the **pool participant** for the **generating asset** issued the **supply shortfall directive** over the total **energy consumption** of each **pool participant** during the **settlement intervals** where the supply shortfall energy was required. Where the **supply shortfall energy** was subsequently not required, the contribution paid by a **pool participant** shall be determined by prorating the amount paid to the **pool participant** for the **generating asset** issued the **supply shortfall directive** over the total **energy consumption** of each **pool participant** during the **settlement intervals** where the energy was forecast to be required. The supply shortfall costs will be invoiced with the **pool statement**.

h) The **ISO** will provide the **pool participant** with the supporting data used in determining the amounts of any final pool statement such information being limited to that identified in **rule 10.0**.

i) In the event the **ISO software and procedures** or **ISO** internet connections are not available on the 15<sup>th</sup> **business day**, the **ISO** will endeavor to issue to **pool participants** the final **pool statement** utilizing facsimile delivery or other alternative means specified by the **ISO**.

j) It is the responsibility of each **pool participant** to notify the **ISO** if it fails to receive the final **pool statement** on the date specified. Each **pool participant** shall be deemed to have received the final **pool statement** on the 15<sup>th</sup> **business day** of a **month** unless it notifies the **ISO** to the contrary.

k) In the event a **pool participant** notifies the **ISO** that it has failed to receive the final **pool statement** on the 15<sup>th</sup> **business day**, the **ISO**, in accordance with **rule**

---

8.4.2 i), will forward the **pool statement** to the **pool participant**, in which case the final **pool statement** shall be considered to have been received on the date the resent **pool statement** is sent to the **pool participant**.

#### 8.4.3 Pool Settlement Date and Payments

*Financial settlement generally occurs 20 business days following the end of each settlement period. Financial settlement may occur 18 or 19 business days following the end of a settlement period for pool participants who have defaulted on a payment.*

- a) Settlements relating to **pool statements** shall occur on the 20th **business day** following the end of the **settlement period**. The following exceptions may apply:
- i) Settlements shall occur on the 19<sup>th</sup> **business day** following the end of the **settlement period** for **pool participants** that were required to pay on the 20<sup>th</sup> **business day** if they have defaulted twice in the past 12 calendar months or if the participant has defaulted once and they have not been a participant for the past 12 calendar months. The **pool settlement date** for amounts owing will remain at the 19<sup>th</sup> **business day** for the following 6 **pool settlement dates** provided that the 6 **pool settlement dates** have passed without an incident of default by the **pool participant**; or
  - ii) The 18<sup>th</sup> **business day** following the end of the **settlement period**, for **pool participants** that were required to pay on the 19<sup>th</sup> **business day** and they have defaulted. The **pool settlement date** for amounts owing will remain at the 18<sup>th</sup> **business day** for the following 12 **pool settlement dates** provided that the 12 **pool settlement dates** have passed without an incident of default by the **pool participant**; or
  - iii) As otherwise determined by **ISO**.

The date in which settlement is to occur is the “**pool settlement date**” for the **pool participant**.

- b) Each January the **ISO** will publish the **pool settlement dates** for the following **financial year**. These dates will be in effect for the financial settlement of both the **pool statement** and transmission tariff settlement determined under the **ISO tariff**.
- c) To ensure that the **power pool** has **bank value** on the **pool settlement date**, payments made to the **ISO** will be deposited through electronic funds transfer or wire transfer to the bank account specified by the **ISO**.
- d) On the **pool settlement date** as identified on the **pool statement** for each **pool participant**, in accordance with **rule 8.4.3 a)**,
  - i) each **pool participant** will forward to the **ISO** any amounts stated to be owing by that **pool participant** in the final **pool statement** issued pursuant to **rule 8.4.2**; and
  - ii) the **ISO** will direct to each **pool participant** any amount stated to be owing to that **pool participant** in the final **pool statement** issued pursuant to **rule 8.4.2**.

- 
- e) Full payment must be made in accordance with the final **pool statement** issued pursuant to **rule 8.4.2** whether or not any amount is under dispute.
  
  - f) A **pool participant** may pay at an earlier date than the participant payment specified on the final **pool statement** issued in accordance with **rule 8.4.2 a)**. Prepayment shall be made in accordance with the following:
    - i) notification must be given to the **ISO** prior to submitting such prepayment or before converting an existing overpayment by the **pool participant** into a prepayment;
    - ii) a prepayment notification shall specify the dollar amount being prepaid;
    - iii) a prepayment by the **pool participant** shall be deposited through electronic funds transfer or wire transfer into the bank account specified by the **ISO**.
    - iv) prepayment funds received by the **ISO** on behalf of a **pool participant** may be applied by the **ISO** to any outstanding financial obligations of that **pool participant** to the **ISO** for transactions carried out in the **power pool**.
  
  - g) Default and interest and other charges associated with non-payment of **pool statements** shall be administered in accordance with rule 8.6.

#### 8.4.4 Interest and Other Charges

*Interest and late payment fees will be charged to defaulting pool participants.*

- a) Any party who has failed to make payment to the **ISO** in accordance with **rule 8.4.3** is liable to pay:
  - i) late payment charges and penalties where such an amount is equal to 2 **days** interest on the outstanding amount owing. Such interest will be calculated on the **day** following the applicable **pool settlement date**. For **pool participants** whose **pool settlement date** was scheduled to be 20<sup>th</sup> **business day** following a **settlement period**, the interest will be calculated at the Bank of Montreal Canadian prime rate plus 6%. For **pool participants** whose **pool settlement date** was scheduled to be the 19<sup>th</sup> **business day** following a **settlement period**, the interest will be calculated at the Bank of Montreal Canadian prime rate plus 12%; and
  - ii) interest to pay late payment charges and penalties on the amount owing for the duration that funds are outstanding. For **pool participants** whose **pool settlement date** was scheduled to be the 20<sup>th</sup> **business day** following a **settlement period**, the interest will be calculated at the Bank of Montreal Canadian prime rate plus 6%. For **pool participants** whose **pool settlement date** was scheduled to be the 19<sup>th</sup> **business day** following a **settlement period**, the interest will be calculated at the Bank of Montreal Canadian prime rate plus 12%. Interest will be calculated from the due date to the date on which **bank value** is received.

---

## 8.5 Power Pool Disputes

*Specific guidelines are to be followed when a pool participant disputes a pool statement.*

- a) Disputes relating to **load settlement calculations** are required to abide by the dispute resolution process and data revision described under **rule 7**.
- b) Any **pool participant** who disputes the net amount in the final **pool statement**, except those amounts relating to **load settlement calculations**, shall notify the **ISO** in writing during the **dispute submission period**. Such dispute shall be resolved either by mutual agreement between the **ISO** and the **pool participant** or through the mediation process described under **rule 11.0**.
- c)
  - i) Subject to d) no adjustments of accounts will be made after the **dispute submission period**, unless such adjustments are made as a result of a mediation or dispute settlement initiated during the **dispute submission period**.
  - ii) A **signoff letter** will be sent to all parties affected by the resettlement of a disputed **settlement period**.
  - iii) All parties will have 10 **business days** from the date of the **signoff letter** to return the letter with a signature indicating their agreement to the information enclosed in the **signoff letter**. Failure to respond within the 10 **business days** with an official sign off will be regarded by the **ISO** as acceptance of the settlement results and closure of the **settlement period** dispute. If an affected party remains in dispute of the resettlement results they are required to formally communicate their position to the **ISO** within these 10 **business days**. It will remain at management's discretion as to how the **ISO** will proceed.
- d) Subject to other provisions of **rule 8.5**, the **ISO** has the right to authorize the review and settlement of a dispute arising after the **dispute submission period**, but in any event no more than 26 **months** following the end of the **settlement period**.
- e) Any disputes raised in accordance with b) or d) and relating to **metering data** provided to the **ISO** by a **meter data manager** or other source as approved by the **ISO** shall be communicated to the respective information source. The respective information source may participate in the resolution of such disputes.
- f) Any disputes raised in accordance with b) or d) and relating to a **net settlement instruction MWh volume** provided by a **forward market operator** shall be communicated to the applicable **forward market operator**. The **forward market operator** shall participate in the resolution of such disputes.
- g) Disputes relating to **EUB** orders or directions relating to regulations under the **Act** shall be referred directly to the **EUB** for resolution.
- h) Each January, the **ISO** will publish the **dispute submission periods** for the following **financial year's settlement periods**.
- i) Notwithstanding the above, in the event a dispute is unable to be resolved, the financial settlement dispute will be referred to **rule 11**.

## 8.6 Default Procedure and Charges

### 8.6.1 Default

---

*The ISO will take certain actions on a pool participant who defaults on payment.*

- a) If amounts owing the **ISO** are not received in full and in accordance with payment schedules identified in **rule 8.4.3** the **ISO** will:
  - i) assess the defaulting **pool participant** interest and other charges specified in **rule 8.4.4**; and
  - ii) revise the **pool settlement date** for the defaulting **pool participant** in accordance with **rule 8.4.4**.
- b) If amounts owing the **ISO** are not received in full and in accordance with payment schedules identified in **rule 8.4.3**, the **ISO**, in addition to any other remedies available at law or under these **rules**, may apply money from the defaulting **pool participant's** cash security deposit, letter of credit and/or other form of financial security provided under **rule 2.1** in satisfaction or part satisfaction of the amount outstanding including any interest and other charges incurred under **rule 8.4.4**.
- c) If a **pool participant** defaults on payment on three occasions within a 24 **month** period, or twice if the participant has not been a participant for the previous 12 months, the **pool participant** will not be granted an unsecured **trading limit** and will be required to satisfy the **prudential requirements** in Appendix 3.
- d) If a **pool participant** defaults on payment, and their **pool settlement date** is on the 18<sup>th</sup> **business day** following a **settlement period**, then the **ISO** will immediately refer the matter for action under **rule 1.4**.
- e) In addition to **rule 8.6.1 b)**, and if determined to be appropriate by the **ISO**, then the **ISO** shall:
  - i) prepare and render a statement (the "**final statement**") for all amounts owed the **ISO** on the date of the direction by the defaulting **pool participant**, and to immediately apply money from the defaulting **pool participant's** cash security deposit, letter of credit and/or other form of financial security provided under **rule 2.1** in satisfaction or part satisfaction of the amount owing on the **final statement**. Amounts owing the **ISO** on the **final statement** shall be due immediately; and
  - ii) suspend the **pool participant's** existing **bids** or **offers** and cease acceptance of further **bids** or **offers** from the defaulting **pool participant**; and
  - iii) for the purposes of **power pool** settlements, cease acceptance of and/or de-register **net settlement instructions**, if either **pool participant** to a **net settlement instruction** defaults on payment.

**8.6.2 Levy to Pool Participants**

*The ISO will impose a levy prorated to pool participants in good standing in order to recover amounts owing from defaulting pool participants.*

- a) If full payment including any interest or other charges incurred under **rule 8.4.4** is not received from the defaulting **pool participant** within 10 **business days** following the applicable **pool settlement date**,
  - i) for amounts owing in accordance with a final **pool statement**, the **ISO** will

---

in the next **pool statement** apply to all those **pool participants** that had exchanged electric energy during the **settlement period** for which full payment was not received a one time levy in respect of each default in the amount owed, including interest, and which shall be used to repay any amounts outstanding and owed. The contribution shall be determined by prorating the shortfall amount owed over the total of the **energy production** and **energy consumption** of each **pool participant** during the affected **settlement period**.

- b) In assessing levies under rule a) the **ISO** does not excuse the defaulting **pool participant's** default or lose any right or remedy the **ISO** might otherwise have.
- c) Any full or partial recovery of outstanding indebtedness including interest will be reimbursed to those parties that complied with the levy contemplated in a) above on a prorated basis according to the amount contributed. Any reimbursement is not to exceed the actual amount contributed by the parties together with interest thereon.

#### 8.6.3 Consequence of Applying Security Deposits

*Pool participants defaulting on payment must restore financial security.*

- a) If the **ISO** does apply money under rule 8.6.1 b), the **ISO** shall immediately notify all **pool participants** including the defaulting **pool participant** of the action taken.
- b) Within 2 **business days** of receiving notice under a), the defaulting **pool participant** must replenish its security deposit, letter of credit, and/or other form of financial security provided as required for that **pool participant** under **rule 2.1**.
- c) If the defaulting **pool participant** does not replenish the security deposit or other form of financial security in accordance with **rule 8.6.1 b)** the **ISO** will immediately refer the matter for action under **rule 1.4**.

### 8.7 **Goods and Services Tax Registration**

Each **pool participant** will provide the **ISO** with a GST registration number or notification of exemption as defined by the Canada Revenue Agency.

---

## 9. TRANSMISSION

### 9.1 Transmission Facility Projects

#### 9.1.1 Eligible TFO

##### 9.1.1.1 Eligibility by Service Area

Subject to **rule** 9.1.1.2 b), c) and d), each **service area** shall have one **TFO** eligible to apply for the construction or operation, or both, of **transmission facilities** in such area. For purposes of this **rule** 9.1.1.1, the following **TFOs** are eligible for the referenced **service area**:

<b>TFO</b>	<b>Service area</b>
AltaLink L.P.	FortisAlberta Inc.
ATCO Electric Ltd.	ATCO Electric
ENMAX Power Corporation	ENMAX Corp.
EPCOR Transmission Inc.	EPCOR Distribution Inc.
City of Red Deer	City of Red Deer
City of Lethbridge	City of Lethbridge

##### 9.1.1.2 Directions

- a) Subject to **rules** 9.1.1.2 b), c) and d),
- i) the **ISO** will issue a **Direction** to the **TFO** eligible in the **service area** where the **Project** is located;
- ii) with respect to a **Project** located in more than one **service area**, the **ISO** will issue a **Direction** to each **TFO** for that part of the **Project** located in its service area;
- b) With respect to transmission facilities that exist as of August 12, 2004, the owner of such facilities, or its successors and assigns, shall be the **TFO** eligible to receive a **Direction** with respect to any enhancements or upgrades to such facilities, subject to the **ISO** being satisfied that the operation of such facilities will result in the safe, reliable and efficient operation of the facilities. For purposes of this rule 9.1.1.2 b), owners include the following:

<b>Owners</b>
AltaLink L.P.
TransAlta Utilities Corp
ATCO Electric Ltd.
ENMAX Power Corporation
EPCOR Transmission Inc.
City of Red Deer
City of Lethbridge

- c) The **ISO** may issue a **Direction** to a **TFO** other than the **TFO** that is eligible pursuant to **rule** 9.1.1.1. if such **TFO** and the **TFO** in whose **service area** the **Project** is located, have entered into an arrangement or agreement which would result in the safe, reliable and efficient operation of the **transmission system** and

---

such arrangement or agreement has been filed with the **EUB**;

- d) with respect to a **Project** all but a small portion of which is located in one **service area** with the small portion located in an adjacent **service area**, the **ISO** may issue a **Direction** to the **TFO** in whose **service area** the largest portion of the **Project** is located, if, in the **ISO**'s opinion, acting reasonably, such **Direction** will result in the safe, reliable, efficient and economic operation of the **interconnected electric system**.

#### 9.1.1.3 Directions - Interconnections to Jurisdictions outside Alberta

- a) If the **ISO** has obtained approval of a **NID** for a **Project** contemplated by s. 15(1)(a) of the **TR**:
  - i) the **ISO** may issue a **Direction** to the **TFO** eligible in the **service area** where the connection of the **Project** to the **interconnected electric system** will be located if the proponent of the **Project** has submitted an application under the **HEEA** for a permit and license for the remainder of the **Project**; or
  - ii) the **ISO** may issue a **Direction** to the **TFO** eligible in accordance with rule 9.1.1.1 if the **Project** is proposed by the **ISO**.

#### 9.1.2 TFO Obligation to Provide Estimates and Proposals

##### 9.1.2.1 Request for a NID Estimate

- a) The **ISO** may request a **NID Estimate** with respect to a **Project** from the **Designated TFO**.
- b) The **ISO** shall provide to the **Designated TFO** with such request, information required regarding the **Project** which the **Designated TFO** would reasonably require from the **ISO** to complete a **NID Estimate**.

##### 9.1.2.2 Obligation to Provide NID Estimate

A **Designated TFO** to whom a request for a **NID Estimate** has been made must prepare and submit the **NID Estimate** to the **ISO** on or before the date mutually agreed to by the **ISO** and the **Designated TFO**, acting reasonably. The **NID Estimate** must include, without limitation, the following:

- a) a cost estimate for the **Project** within the accuracy range of plus 30% to minus 30% of the final costs;
- b) assumptions used; and
- c) the period of time the estimate is valid.

##### 9.1.2.3 Requirement for a Service Proposal

- a) The **ISO** may request a **Service Proposal** with respect to a **Project** from the **Designated TFO**.
- b) The **ISO** shall not issue a **Direction** to a **Designated TFO** with respect to a **Project** unless it has received a **Service Proposal** from the **Designated TFO** for

---

such **Project**.

- c) The **ISO** shall provide to the **Designated TFO** with such request or to a **Designated TFO** referred to in the foregoing **rule b)**, information regarding the **Project** which the **Designated TFO** reasonably requires to prepare a **Service Proposal** and a **Service Proposal Estimate**.

#### 9.1.2.4 Obligation to Provide Service Proposal and Service Proposal Estimate

A **Designated TFO** to whom a request for a **Service Proposal** has been made must prepare and submit the **Service Proposal** and a **Service Proposal Estimate** to the **ISO** on or before the date mutually agreed to by the **ISO** and the **Designated TFO**, acting reasonably. The **Service Proposal Estimate** must include, without limitation, the following:

- a) a cost estimate for the **Project** within the accuracy range of plus 20% to minus 10% of the final costs;
- b) assumptions used;
- c) the period of time the estimate is valid; and
- d) identify any proposed capital maintenance costs included within any **EUB** approval.

#### 9.1.2.5 Obligation to Provide Service Proposal Estimate Update

A **Designated TFO** who has submitted a **Service Proposal Estimate** pursuant to **rule 9.1.2.4** must prepare an update of such **Service Proposal Estimate**. The **Designated TFO** must submit such update to the **ISO** on or before 180 days from the date that the **EUB** has issued to the **Designated TFO** all permits and granted all licences pursuant to the **HEEA** required for the facilities associated with the **Project**. Such update must include an updated cost estimate for the **Project** within the accuracy range of plus 10% to minus 10% of the final costs.

### 9.1.3 Project Reporting by Designated TFOs

#### 9.1.3.1 Monthly Reporting

Unless agreed otherwise, each **Designated TFO** with respect to a **Project**, the cost of which is estimated to be more than one million dollars, shall provide to the **ISO** on or before the 15<sup>th</sup> **Business Day** of each month commencing the month after the **ISO** has issued a **Direction** to such **Designated TFO(s)**, a **Project Progress Report**.

#### 9.1.3.2 Project Variance Reporting

In addition to any other obligations it has with respect to a **Project**, the **Designated TFO** shall notify the **ISO** as soon as reasonably practical in the event of any of the following:

- a) if the in service date of the **Project** is forecast by it to be delayed from the in service date specified in the **Direction**; or
- b) if the forecast costs of the **Project** are expected to vary by more than 10% from the amount specified in the **Direction** or if applicable, the amount agreed to by the **ISO** in an amendment to the **Direction**; or

- 
- c) if the **TFO** has determined that a material amendment to the scope of the **Project** is required to meet the need identified with respect to the **Project**.

#### 9.1.3.3 Project Variance Explanation

The **Designated TFO** shall include with the notice given in **rule 9.1.3.2**, the reason or reasons for any or all of the variances, including schedule delays, cost trends and scope change.

#### 9.1.3.4 Project Change Proposal

The **Designated TFO** shall prepare and submit to the **ISO** a **Project Change Proposal** to address the delay, cost trends, or scope change, as the case may be, identified in a notice pursuant to **rule 9.1.3.2**. The **Designated TFO** shall prepare and submit such proposal to the **ISO** as soon as reasonably practical and in any event no later than **15 days** from the date of the notice pursuant to **rule 9.1.3.2**.

#### 9.1.3.5 Project Change Proposal Review

The **ISO** shall review the **Project Change Proposal** submitted by the **Designated TFO** pursuant to **rule 9.1.3.4**. As soon as reasonably practical, and no later than **15 days** following receipt of the **Project Change Proposal**, the **ISO** must do one or more of the following:

- a) approve such proposal, with or without amendments, in which event the **Project** shall be deemed amended;
- b) reject such proposal with or without requesting a revised **Project Change Proposal**;
- c) cancel the **Project**; and/or
- d) recommend that the **TFO** apply to the **EUB** for an amendment to any approval it may have obtained pursuant to the **HEEA**.

#### 9.1.3.6 Final Cost Report

Unless agreed otherwise, a **Designated TFO** shall provide to the **ISO**;

- a) on or before the 60<sup>th</sup> day from the last day of the month after the **Project Energization** of the **Project**, an estimate of the final cost of the **Project** substantially in the form of the **Final Cost Report** and specifying the accuracy range of the estimate, as a plus % to a minus % of the final costs; and
- b) as soon as practical, and in no event later than the first **day** of the sixth full month after the **Project Energization** of the **Project**, a **Final Cost Report** of the **Project**.

#### 9.1.3.7 Notification – Transmission Customer Projects

Notwithstanding any other provision within this **rule 9.1.3**, if a **Transmission Customer** has made an application for **system access service** for a specific **Project**, or portion of a **Project**, the **ISO** shall notify the **Designated TFO** in that regard. Subject to such notification;

- 
- a) the **Designated TFO** shall provide to the **Customer** at the same time it is required to provide or submit to the **ISO**, any and all notifications and documents it is required to provide or to submit pursuant to this **rule 9.1.3**; and
  - b) the **ISO** and the TFO shall review any **Project Change Proposal** with the **Customer**, and thereafter the **ISO** acting reasonably, must do one of the things identified in rule 9.1.3.5.

#### 9.1.4 ISO Projects Reporting

No later than the last day of the month following each **Quarter**, the **ISO** shall make available on its website the **Quarterly Projects Report**.

#### 9.1.5 Project Procurement

##### 9.1.5.1 Project Material Procurement by Designated TFO

A **Designated TFO**, shall, in carrying out the construction of the **transmission facilities**, comply with the procurement requirements contained in this **rule**.

##### 9.1.5.2 Major acquisitions

Where the cost of a specific item or type of any **Project Material** required for a **Project** is forecast by the **Designated TFO**, acting reasonably, to exceed \$50,000, the **Designated TFO** shall solicit written bids to provide such material from not less than 3 arm's length suppliers.

##### 9.1.5.3 Minor acquisitions

Where the cost of all of any specific item or type of any **Project Material** required for a **Project** is forecast by the **Designated TFO**, acting reasonably, to exceed \$10,000 but be less than \$50,000, the **Designated TFO** shall solicit written bids, including short form written bids, to provide such material from not less than 3 arm's length suppliers.

##### 9.1.5.4 Standing Bids

The **Designated TFO** may obtain from a supplier a written bid, including a short form written bid, that is in effect for a specified period of time and utilize such bid for purpose of making a determination in accordance with the following **rule 9.1.5.5**.

##### 9.1.5.5 Lowest Priced Compliant Bid

Subject to rule 9.1.5.6 a), in the event the **Designated TFO** receives one or more compliant bid pursuant to **rule 9.1.5.2** or 9.1.5.3, it shall award the contract to the party that has submitted the lowest priced, fully compliant bid.

##### 9.1.5.6 Exceptions

- a) In the event the **Designated TFO** has awarded a contract to a party from whom it has received a bid pursuant to **rules 9.1.5.2** or 9.1.5.3, and such party did not submit the lowest priced, fully compliant bid such **TFO** shall;

- 
- i) demonstrate to the **ISO**, if requested, that it was commercially reasonable to do so;
  - ii) with respect to a contract awarded where bids were received pursuant to **rule 9.1.5.2** include in the next **Project Progress Report** for the **Project**, its reasons for not awarding such contract in compliance with **rule 9.1.5.5**; and
  - iii) with respect to all such contracts, include in its books and records its reasons for not awarding such contracts in compliance with **rule 9.1.5.5**.
- b) A **Designated TFO** may award a contract to a party without obtaining a bid pursuant to **rule 9.1.5.2** or **9.1.5.3** if the **Designated TFO** can demonstrate to the **ISO** that it was reasonable not to obtain competitive bids, based on any of the following:
- i) that the party awarded the contract was the only entity capable to provide the **Project Material**;
  - ii) that given reasonable **Project** schedule requirements, there was insufficient time to solicit bids; or
  - iii) that there was insufficient information on which to base a bid.

#### 9.1.5.7 Maintenance of Procurement Books and Records

Subject to any other obligation or duty a **Designated TFO** has, including without limitation any obligations it has pursuant to the **ISO Tariff** or the terms and conditions contained in the current version of the **EUB** approved tariff of such **TFO**, the **Designated TFO** shall maintain all written bids relating to the procurement of **Project Material** for each **Project** regarding which it has been issued a **Direction** for not less than one year from the date that the **ISO** has received the completed **Final Cost Report** for the **Project**.

#### 9.1.5.8 Compliance Review Right of ISO

The **ISO** shall have the right exercisable upon reasonable prior notice to the **Designated TFO** to examine the books and records of the **Designated TFO**, including all written bids relating to the procurement of **Project Material**, to the extent reasonably necessary to verify, with respect to any **Project** compliance by the **TFO** with this **rule 9.1.5**; provided, that such right shall only continue for a period of one year from the date it has delivered the **Final Cost Report** of such **Project** to the **ISO**.

#### 9.1.5.9 Reasons for non-compliance

In addition to any other provisions in these rules, in the event the **ISO**, acting reasonably, determines that a **Designated TFO** has not complied with this **rule 9.1.5** regarding procurement, it shall advise the **Designated TFO** and give it the reasons for such non-compliance.

#### 9.1.5.10 Project Procurement Report

The **Designated TFO** shall include in the **Final Cost Report** details regarding the level of competitive procurement with respect to the acquisitions for a **Project** made pursuant to

---

**rule 9.1.5.2.**

9.1.6 Confidentiality

9.1.6.1 Data and Information Included

Subject to **rule 9.1.6.2**, all data and information either the **ISO** or **Designated TFO** provides to the other with respect to **rule 9.1** shall be treated by the party receiving such data and information in accordance with the confidentiality provisions in the **ISO rules** or the terms and conditions contained in the current version of the EUB approved tariff of the **TFO**.

9.1.6.2 Data and Information Excluded

All **NID Estimates** and all **Quarterly Projects Reports** shall not be confidential.

9.1.7 Interpretation

In the event of any conflict or inconsistency between this **rule 9.1** and any tariff approved by the **EUB**, or **EUB** order or directive, the latter shall prevail.

**9.2 Transmission Loss Factors**

9.2.1 Purpose of Rule

The purpose of this rule is to describe the means by which the ISO determines annual **loss factors** to provide for the reasonable cost recovery of transmission line **losses** in accordance with the requirements of the **TR**.

9.2.2 Establish and Maintain Loss Factors

- a. The ISO must establish and maintain for each calendar year **loss factors** in accordance with this **rule**.
- b. Despite **rule 9.2.2.a**, if the ISO determines that, in its opinion, an enhancement or upgrade to the transmission system materially affects **loss factors** it may adjust the **loss factors** in accordance with this **rule 9.2.2**. A material change for the purpose of this **rule** would be any change in **loss factor** to one or more **generating units** of 0.25%.
- c. The ISO must post on its web site and make publicly available the following:
  - i. A list of annual **loss factors** for:
    - all generators directly connected to the **interconnected electric system**, and
    - firm imports (service not currently available).

The loss factors will be posted by the first week in November prior to them becoming effective.

- ii. A list of **loss factors** for:

- 
- demand opportunity service, and
  - opportunity import and export transmission service.

The opportunity service **loss factors** will be posted by the first week in November prior to them becoming effective.

- iii. The effective date of establishment of the **loss factors** and the period of time they are in force pursuant to **rule 9.2.2.b**;
  - iv. A list of estimated **loss factors** (non-binding) for the fifth year subsequent to the year referenced in the foregoing 9.2.2.c.i. for all generators directly connected to the **interconnected electric system**.
  - v. The annual **generic stacking order**.
- d. The ISO must follow the **loss factor methodology** to determine **loss factors**. Without restricting the foregoing, the **loss factor methodology** must have regard for the following:
- i. **Loss factors** must be determined for each location on the transmission system as if no abnormal operating conditions exist;
  - ii. The **loss factor methodology** should be a long-term signal and relatively stable, to allow it to be factored into investment decisions.
  - iii. The **loss factor** in each location must be representative of the impact on average **transmission system losses** by each respective **generating unit** or group of **generating units** relative to load;
  - iv. **Loss factors** must be one number at each location that does not vary, except as a result of revisions referred to in **rule 9.2.2.b**;
  - v. After determining which **loss factors** result in a charge or credit, every **loss factor** must be compressed to limit the **loss factors** as follows:
    - ( i ) **loss factors** associated with a charge must not exceed 2 times the average **transmission system loss factor**, and
    - ( ii ) **loss factors** associated with a credit must not exceed one times the average **transmission system loss factor**.
- e. The ISO must make **rules** with respect to the designation of **loss factors** in any place in Alberta where a **generating unit** is not located, and on request, determine a **loss factor** with respect to a **generating unit** that a person proposes to construct.
- f. A request pursuant to **rule 9.2.2.e** by a **market participant** must be made by completing and submitting a “Preliminary Loss Factor Calculation Application” available on the ISO’s website as well as paying the fee specified on the foregoing application.
- g. The ISO may not amend the **loss factor methodology** unless it has posted on its website not less than 3 months prior to the proposed date of amendment, a notice of its intention to do so and has sent a copy of such notice to the address specified for notices in each System Access Agreement then in force for each generating unit. An amendment to this Rule will require the ISO to undertake a formal stakeholder consultation process.
- h. An amendment to Appendix 7, “Transmission Loss Factor Methodology and Assumptions”

---

will be treated as an amendment to this **rule 9.2**.

### 9.2.3 Recovery of Costs of Transmission Losses

- a. The ISO must establish each year with respect to each **loss factor**, charges or credits which if applied, would result in the recovery of the forecast costs of **transmission system losses** for such year.
- b. In accordance with the **rules**, the ISO will adjust the charges for **losses** with the application of a **calibration factor** to ensure that the actual cost of **losses** is reasonably recovered through charges and credits under the ISO tariff on an annual basis.
- c. If the actual cost of **losses** is over or under recovered in one year, the over or under recovery must be collected or refunded in the next year or subsequent years.
- d. The ISO must follow the methodology set forth in the ISO's Tariff, Rider E, to determine the **calibration factor**.
- e. Subject to **rule 9.2.3.h**, the owner of a **generating unit** must pay the charges, and is entitled to the credits, determined by the ISO in accordance with this **rule**.
- f. A **market participant** importing **electric energy** under a firm service arrangement, must pay the charges, and is entitled to the credits, as determined by the ISO.
- g. A **market participant** receiving **system access service** under an interruptible service arrangement for **load**, import or export must pay location-based loss charges that recover the full cost of **losses** required to provide this service.
- h. A market participant receiving **system access service** for merchant transmission lines connected to the **interconnected electric system**, internally or intra-control area will be treated the same as the existing inter-tie lines from Alberta to Saskatchewan and British Columbia. For merchant lines not connected to the **interconnected electric system** (isolated), no **loss factors** will be accrued.
- i. The payment of charges and entitlement to credits pursuant to **rules 9.2.3.g – 9.2.3.i** inclusive, will be administered in accordance with the **ISO rules**.

### 9.2.4 Loss Factor Modeling and Assumption Details

A description of the **loss factor methodology** and the assumptions used to calculate **loss factors** are described in Appendix 7 of the **ISO rules**.

**9.3 This Section is to be Developed**

**9.4 This Section is to be Developed**

**9.5 Annual Performance Criteria for Refund of System Contribution**

#### 9.5.1 Purpose of Rule

The purpose of this **rule** is to define the annual performance criteria which a **generating asset** must satisfy for the **generating facility owner** of such asset to receive the refund of a **System Contribution** in accordance with the terms and conditions of the **ISO tariff**.

---

### 9.5.2 Annual Performance Criteria

The **ISO tariff** provides for the refund of an annual amount of a **System Contribution** for a **generating year** by the **ISO** to the **generating facility owner** of a **generating asset** if such asset satisfies all three of the following annual performance criteria for such year.

- a) **Commercial Operation** — The **generating asset** has reached **commercial operation** during such year.
- b) **Capacity Use** — The **generating asset’s** average capacity factor has met or exceeded the following levels for such year:

<b>Generating Asset Type</b>	<b>Capacity Factor</b>
Coal	75%
Natural Gas — Base Load	50%
Natural Gas — Peaking	10%
Hydro	20%
Wind	20%
Biomass and Waste	75%

The **generating asset** type is as declared by the **generating facility owner** at the time of execution of the **system access service agreement** for the **generating asset**, and must be consistent with the **generating asset** type specified by the **generating facility owner** of such asset in any application made to the **EUB** for approvals required under the **Act** or the **HEEA**.

For the purpose of this **rule 9.5.2**, “**average capacity factor**” means the ratio of the sum of the **metered demand** of the **generating asset** during the **generating year** to the **STS Capacity** for such unit multiplied by the number of hours in such year. **Average capacity factor** is expressed and can be calculated according to the formula:

$$\text{Average Capacity Factor} = \frac{\text{Sum of metered energy in generating year}}{\text{STS Capacity} \times \text{hours in generating year}}$$

- c) **Operation within STS Capacity** — The **generating asset’s metered demand** has not exceeded 110% of the **STS Capacity** at any time during the **generating year**. If the **generating asset’s metered demand** exceeds 110% of the **STS Capacity** at any time during the **generating year**, the **System Contribution** refunded for the **generating year** will be reduced or forfeited as per 9.5.3.

### 9.5.3 Reduction or Forfeiture of Refunds

If a **generating asset** satisfies the criteria in **rules 9.5.2 a)** and **9.5.2 b)** during a **generating year** but does not satisfy the criteria in **rule 9.5.2 c)**, the annual amount of the **System Contribution** for such year will be reduced or forfeited in accordance with the following:

- a) **Reduction of Refund** — If the **generating asset’s metered demand** has exceeded 110% of the **STS Capacity** but has not exceeded 125% of the **STS Capacity** at any time during the **generating year**, the annual amount will be reduced on a straight-line basis from 100% when the maximum **metered demand** is 110% of **STS Capacity** to 0% when the maximum **metered demand** is 125% of **STS Capacity**.

- 
- b) Forfeiture of Refund — If the **generating asset's metered demand** has exceeded 125% of the **STS Capacity** at any time during the **generating year**, the annual amount will be forfeited.
  - c) Consent to Exceed **STS Capacity** — If the **generating asset's generating facility owner** received consent in accordance with the **ISO tariff** to temporarily exceed the **STS Capacity**, the annual amount will not be reduced or forfeited if the **generating asset's metered demand** exceeds 110% of **STS Capacity** during the period of such consent.

#### 9.5.4 Reporting Requirements

- a) Annual Performance Report — The **generating facility owner** of **generating asset** for which a refund of a **System Contribution** is requested must submit an annual performance report to the **ISO** by January 31 of the year following each **generating year**, including the following information:
  - i. The name and address of the **generating facility owner**.
  - ii. The name and location of the **generating asset**.
  - iii. The **commercial operation** date of the **generating asset**.
  - iv. The **generating asset** type.
  - v. The sum of **metered energy** for the **generating asset** by month for the **generating year**.
  - vi. The maximum **metered demand** for the **generating asset** by month for such year.
  - vii. The **STS Capacity** for the **generating asset** during such year including any consents to temporarily exceed such capacity.
- b) Report Deficiencies — If such **generating facility owner** does not provide all of the required information by January 31, the **ISO** will notify the **generating facility owner** of the deficiency and the **generating facility owner** will have 10 **business days** from the date of such notice to correct such deficiency.
- c) Late Fee — For each deficiency notice provided by the **ISO** to a **generating facility owner**, the owner will be obligated to pay to the **ISO** a fee of \$1000, which amount the **ISO** may obtain by reducing and retaining the annual amount of the **System Contribution** for the **generating asset** for such year.

#### 9.5.5 Payment of Annual Amounts

In accordance with the **ISO tariff**, annual amounts of the **System Contribution**, less any reductions, for a **generating year** payable to the **generating facility owner** will be paid by the **ISO** by February 28 of the year following such year, provided that the annual performance criteria have been satisfied and the **ISO** has received by January 31 the annual performance report required by **rule 9.5.4 a)**.

#### 9.5.6 Dispute Resolution

Where the **generating facility owner** disputes the **ISO's** determination with respect to whether a **generating asset** has satisfied the annual performance criteria or any resulting reduction or

---

forfeiture of refunds, the dispute shall be resolved in accordance with section 11 of the **ISO rules**.

## **9.6 Merchant Transmission Facility Open Access**

### **9.6.1 Purpose of Rule**

Pursuant to s. 15(5) of the **Transmission Regulation**, a **merchant facility proponent** proposing to construct a **merchant transmission facility** must, in accordance with this rule 9.6,

- (a) provide **open access** to **market participants** and file its **merchant transmission terms and conditions** with the **EUB** for information, and
- (b) make capacity available on the **merchant transmission facility** in an open and non-discriminatory manner, similar to the access available to other **transmission facilities**.

### **9.6.2 Open Access**

- (a) A **merchant facility proponent** must provide reasonable prior public notice of its intention to proceed by way of **open access** with respect to a **merchant transmission facility**. Public notice means a notice reasonably expected to be seen by **market participants** and other persons who may be interested in the **merchant transmission facility**. Such notice must, without limitation, be inserted in major newspapers in Alberta and in jurisdictions outside Alberta in which the **merchant transmission facility** is planned to be located, in the section of each such newspaper where such a notice would reasonably be expected to appear. As well, the **merchant facility proponent** must conduct public information sessions in Alberta and such jurisdictions.
- (b) The **merchant facility proponent** must make publicly available the names of persons who have acquired **merchant transmission facility** capacity through the **open access** process, as well as the amount of such capacity each has acquired, within one month of such capacity being acquired.
- (c) All **merchant transmission facility** capacity which has not been sold pursuant to an **open access** process may not be sold or otherwise made available except in accordance with a subsequent **open access** process.
- (d) In the event an **affiliate** of a **merchant facility proponent** or other corporation who is obligated by this rule 9.6 to comply with the **open access** process participates in the **open access** process, the **merchant facility proponent** or other person must make public that participation and confirm that the **affiliate** was not provided any advantages in such process over other interested parties.

### **9.6.3 Merchant Transmission Terms and Conditions**

- (a) A **merchant facility proponent** must include with respect to its **merchant transmission facility**, without limitation, appropriate provisions in its **merchant transmission terms and conditions** to prevent capacity withholding and other anti-competitive behavior.
- (b) The **merchant facility proponent** must make its **merchant transmission terms and conditions** publicly available to **market participants** at all times.

---

9.6.4 Compliance Review Right of ISO

In addition to the rights and obligations set forth in rule 12, the **merchant facility proponent** must maintain its books and records at least to the extent reasonably necessary to verify compliance by the **merchant facility proponent** with this rule 9.6 and must make such books and records available to the **ISO** upon reasonable prior notice.

---

## 10. INFORMATION EXCHANGE

### 10.1 Information Disclosure Principles

*The ISO will provide open and timely exchange of relevant and non-confidential information.*

Information that will be published and made available through the **ISO** is summarized in the accompanying Appendix 5. The following principles are to be used in determining the information and manner in which such information shall be made available by the **ISO**.

- a) All relevant, non-**confidential information** shall be accessible by all persons in open and non-discriminatory fashion.
- b) Each person will be responsible for its own costs of accessing and retrieving information made available by the **ISO**.
- c) The **ISO** shall publish or make available all relevant, non-**confidential information**, in a timely fashion.
- d) In the case of electronic data sharing, access to **ISO** information shall be provided on a read-only basis.
- e) The **ISO** will publish a minimum or critical set of data to be made available in order to allow **pool participants** to make rational, informed decisions regarding **offers** and **bids**. Such data will be made available as soon as is reasonably practical.
- f) The **pool participants** have equal access to all information available under these **rules**.
- g) Information exchange will recognize the needs of the **power pool** to function as a fair and efficient market for electric energy.

### 10.2 Forecast Scheduling Period Data, Six Day Forecast

*The ISO will provide forecasted information for the forecast scheduling period.*

The **ISO** will use reasonable best efforts to make available before 16:00 each **day**, for each of the remaining **6 days** within the **forecast scheduling period**, the following information:

- a) Peak forecast **AIES demand** in **MW** for each **day** of the **forecast scheduling period**;
- b) Aggregate **offer**/supply availability in **MW** for each **settlement interval**; and
- c) A forecast **adequacy** assessment for each **settlement interval**,

### 10.3 Day Ahead, Trading Day Forecast

*The ISO will provide forecast information for the next trading day.*

The **ISO** will use reasonable best efforts to make available before 16:00 each **day**, for the next **trading day** the following information:

- a) Peak forecast **AIES demand** in **MW** for the **trading day**,
- b) Aggregate **offer**/supply availability in **MW** for each **settlement interval**,

- 
- c) A forecast **adequacy** assessment for each **settlement interval**, and
  - d) Such other information as the **ISO** considers appropriate.

#### 10.4 Next Two Settlement Intervals Forecast

*The ISO will provide a forecast system marginal price for the next two settlement intervals.*

The **ISO** will use reasonable efforts to make available during the preceding two **settlement intervals** for each **settlement interval** of the **trading day's** operation the **forecast dispatch price** in \$/MWh.

#### 10.5 Settlement Interval Following

*The ISO will provide the pool price and demand as soon as practicable after each settlement interval.*

The **ISO** will make available during a **trading day**, as soon as practicable after each **settlement interval**, the following information for the applicable **settlement interval**:

- a) Pool price in \$/MWh,
- b) AIES demand in MW, and
- c) Such other information as the **ISO** considers appropriate.

#### 10.6 Trading Day History

*Without disclosing the source of offers or bids, the ISO will provide a summary of each trading day's activities.*

As soon as practicable following the end of each **settlement interval**, the **ISO** will update and make available histories showing:

- a) **Pool price** in \$/MWh for each **settlement interval**.
- b) **AIES demand** in MW for each **settlement interval**.
- c) **Forecast pool prices** in \$/MWh for the same **trading day**.
- d) Regarding **power pool** supply, without disclosing the source of such **offers**, the following as contained in the **offers**:
  - i) **Operating block(s)** in MW;
  - ii) **Price block(s)** in \$/MWh.
- e) Regarding **power pool** purchases and without disclosing the source of such **bids** the following as contained in the **bids**:
  - i) **Operating block(s)** in MW;

- 
- ii) **Price block(s)** in \$/MWh.
  - f) Summary of declared changes to **offer** and **bid** availability without disclosing the source of such declared changes.
  - g) Summary of aggregated TMR dispatch quantities (MWh), aggregated DDS dispatches (MWh) and reference price by settlement interval.

## 10.7 ISO Records and Reports

*The ISO will provide a weekly report on power pool transactions.*

The **ISO** will publish each week a report or synopsis on the **power pool** transactions for the previous week, including a report on **AIES** incidents and operating conditions relevant to the operation of the **power pool**.

The **ISO** will maintain sufficient records to support audit and verification requirements of the **ISO** and to support as required any surveillance activities undertaken by the **Market Surveillance Administrator**.

## 10.8 Ancillary Services Information Provision

*The ISO provides information on ancillary services.*

The **ISO** will provide to **market participants** in a timely fashion, **AIES** information indicating the amount of **ancillary services** being provided, the providers of **ancillary services** and those **assets** supplying specific **ancillary services**. The specific information to be provided is prescribed in **software and procedures**.

## 10.9 Confidentiality

### 10.9.1 Obligations

*The ISO and market participants will follow guidelines concerning confidential information.*

A market participant, the **ISO** and members of the **ISO** board who receive confidential information:

- a) shall not disclose the **confidential information** to any person except as permitted by these **rules**;
- b) shall only use or reproduce the confidential information for the purpose for which it was disclosed or another purpose contemplated by these **rules**; and
- c) shall not permit unauthorized persons to have access to the confidential information.

In accordance with the **Act** and related regulations, the **ISO** will make available to the **Market Surveillance Administrator** **confidential information** and other records relating to **market participants** that are held by or become available to the **ISO** pursuant to its mandate under the **Act**.

### 10.9.2 Exceptions

---

***Market participants and the ISO may disclose, use or reproduce confidential information in certain situations.***

Exceptions to the obligations stated in rule 10.9.1 will be made when:

- a) the disclosure, use or reproduction of information if the relevant information is at the time generally and publicly available other than as a result of breach of confidence by the **pool participant** wishing to disclose, use or reproduce the information (or one of its disclosures);
- b) the disclosure of information by a **market participant** for the purposes of these **rules** or for the purpose of advising the relevant **market participant** in relation thereto and the use or reproduction of information for those purposes by:
  - i) an employee, director or officer of that **market participant** or its **affiliate** or subsidiary corporation as defined in the Alberta Business Corporations Act; or
  - ii) a legal or other professional adviser, auditor or other consultant of that **market participant** disclosing the information;
- c) the disclosure, use or reproduction of information by the **ISO** with the consent of the person or persons who provided the relevant information;
- d) the disclosure, use or reproduction of information to the extent required by law or by a lawful requirement of:
  - i) any agent, government or governmental body, authority or agency having jurisdiction over a **market participant** or its related bodies corporate; or
  - ii) any stock exchange having jurisdiction over a **market participant** or its **affiliate** or subsidiary corporation as defined in the Alberta Business Corporations Act;
- e) the disclosure, use or reproduction of information if required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism relating to the **rules** and only in accordance with these **rules**;
- f) the disclosure of information if required to protect the safety of personnel or equipment;
- g) the disclosure, use or reproduction of information as an unidentifiable component of an aggregate sum.

### 10.9.3 Conditions

***Pool participants wishing to disclose confidential information must inform and consult with those affected by the information disclosure.***

In the case of a request or demand for disclosure under paragraph (d) or (e) of rule 10.9.2, the **market participant** shall advise those affected by the request or demand (including other **market participants**, the **ISO board**, and the **ISO**) as soon as reasonably practicable and shall take all reasonable steps to permit those persons affected to challenge such request or demand or seek terms and conditions in respect of any such disclosure.

---

## 11. MEDIATION AND DISPUTE RESOLUTION

### 11.1 **Mediation Committee**

*A mediation committee established by the ISO board will oversee the resolution of disputes related to the power pool.*

The **ISO board** will establish as required a non-standing **mediation committee** which will be comprised of **ISO board** representatives appointed in accordance with its bylaws.

The role of the **mediation committee** is to;

- a) monitor each dispute's progress, report to the **ISO board** and if necessary recommend any other measures that may be taken to expedite the resolution of a dispute;
- b) keep records relating to the resolution of disputes;
- c) recommend any changes towards improving the process;
- d) administer as necessary a mediation process relating to payments as per rule 8.5;
- e) maintain a list of mediators, which list shall contain the names of individuals who are independent and impartial and are qualified to act as a mediator by professional qualifications or experience.

### 11.2 **Mediation Process**

#### 11.2.1 Dispute Notification

*A notice of dispute must be sent to the mediation committee prior to commencing any type of proceedings. The mediation committee must take action on a notice of dispute.*

- a) Except with respect to the pursuit of remedies against defaulting **pool participants**, if any **pool participant**, the **ISO board**, or the **ISO** is unable to resolve a dispute with another **pool participant**, with the **ISO board** or a committee of the **ISO**, or with the **ISO** in relation to the **power pool** it shall, prior to commencing an action in court, making application to the **EUB** or commencing any other proceedings, send a notice of dispute to the **mediation committee**. The notice of dispute shall contain a summary of the background to the dispute and identify the issue or issues in dispute.
- b) Upon receipt of the notice of dispute, the **mediation committee** shall, within 15 **business days**:
  - i) attempt to contact the other **pool participants** and parties named in the notice of dispute to provide information concerning the dispute;
  - ii) examine the dispute
  - iii) direct the dispute to the mediation process or authorize the **pool participant** to proceed with court proceedings or to the **EUB** or otherwise as the **pool participant** determines is appropriate.

#### 11.2.2 EUB Related Disputes

---

Disputes relating to **EUB** orders or directions relating to regulations under the **Act** shall be referred directly to the **EUB** for resolution.

#### 11.2.3 Role of the ISO Board

*The ISO board may assist, but has no authority to impose a settlement upon disputing parties.*

The **ISO board** has no authority to impose a settlement upon parties. However the **ISO board** may, if all member representatives and the disputing parties consent, assist parties to reach a settlement of issues in dispute and in such circumstances may issue directions to override the provisions of rule 11.0 as necessary.

#### 11.2.4 Mediator

*The mediation committee will steer the appointment of an impartial mediator.*

- a) Where the **mediation committee** directs a dispute to the mediation process, the **mediation committee** shall at the same time provide the parties with a list of mediators maintained by the **mediation committee**, pursuant to rule 11.1, from which the parties shall select a mediator within 5 **business days**. In the event the parties cannot agree on an appointment of a mediator within 5 **business days** of receipt of the direction of the **mediation committee**, the **mediation committee** shall appoint a mediator from the list of mediators maintained by it.
- b) No person shall serve as a mediator in a dispute in which that person has a financial or personal interest. In the event that any one of the parties subsequently complains about the selection of a mediator because of such interest, which was not known at the time of selection, the **mediation committee** will endeavor to appoint another mediator acceptable to all parties.

#### 11.2.5 Mediation Sessions

*Certain information must be exchanged between parties and the mediator. The mediator may consult with the parties individually, report to the mediation committee, and obtain expert advice.*

- a) The mediator will in consultation with all parties fix the date(s) and time(s) of each mediation session.
- b) Unless dispensed with by the mediator, each party will at least 3 **business days** prior to the first scheduled mediation session provide the mediator and each other party with a brief setting out its views as to the issues that need to be resolved and its position with respect to each issue. Each party will also provide the mediator with all documents and information necessary to understand the issues.
- c) The mediator may meet with one or more of the parties separately from the other party or parties, as the mediator may see fit, and may make recommendations to the parties for settlement. The mediator has no authority to impose a settlement upon the parties but will assist the parties to reach a settlement of the issues in dispute.

- 
- d) The mediator will report to the **mediation committee** from time to time, as requested by the **mediation committee**, on the progress of the mediation. All communications between the mediator and the **mediation committee** will be subject to the same obligations as to confidentiality as imposed on the mediator and the parties.
  - e) The mediator may obtain expert advice concerning technical aspects of the dispute provided that the parties agree and assume any expenses of obtaining such advice.

#### 11.2.6 Authority to Terminate Mediation

*Mediation sessions may be ended if further efforts would not contribute to a resolution, or is not resolved within 45 days. The mediation committee may recommend what action the ISO board may take.*

The mediator may end the mediation whenever, in the judgment of the mediator, further efforts would not contribute to the resolution of any issue in dispute and shall so report to the **mediation committee**. If the issues in the dispute, or any of them are not resolved within 45 **days** from the receipt of the notice of dispute, the mediator shall forthwith report to the **mediation committee** as to the resolution or lack of resolution of the issues.

The **mediation committee**, upon receipt of the advice of the mediator that further mediation efforts would not be productive or that one or more of the issues in the dispute are not resolved after the 45 **days**, shall report to the **ISO board** within 10 **days** of having received the advice of the mediator and provide any recommendations as to the settlement of the dispute and further action which the **ISO board** might take.

The **ISO board** shall within 10 **days** of the report from the **mediation committee** advise the parties that the **ISO board** is directing that certain actions be taken in furtherance of the settlement of the dispute and, subject to such direction that the parties may proceed to take legal action or apply to the **EUB** or otherwise proceed with respect to the issue or issues which remain unresolved as they see fit.

#### 11.2.7 Privacy and Confidentiality

*Certain standards of privacy and confidentiality must be maintained.*

- a) Mediation sessions are private. Only the parties and their representatives may attend unless the parties and the mediator agree to the participation of others.
- b) All information disclosed to the mediator by the parties or others in the course of mediation and identified as confidential will not be divulged by the mediator. All documents received or exchanged shall be treated as confidential by the mediator and the mediator shall not be compelled by any party to divulge such records or to act as a witness in regard to the mediation in any subsequent proceedings of any nature.
- c) The parties shall maintain the confidentiality of the mediation and shall not rely upon or introduce as evidence in any proceeding of any nature:
  - i) views expressed or suggestions made by another party with respect to a possible settlement of the dispute;

- 
- ii) admissions made by another party in the course of the mediation;
  - iii) proposals made or views expressed by the mediator.

All communications relating to mediation are "without prejudice".

#### 11.2.8 Costs and Expenses

*Costs of the mediator, facilities and services will be shared among the parties.*

The parties will each bear their own costs of and in connection with the mediation and will share equally the costs and expenses of the mediator and any facilities or services utilized for the mediation. The costs of participation by the **ISO** shall be assumed by the **ISO board** and collected under **ISO fees**.

### 11.3 Access to Information

*Bid and offer information will not be disclosed, other than what is already prescribed in the rules.*

Other than to the extent prescribed in rules 10.2, 10.3, 10.4, 10.5 or 10.6. the ISO will not disclose information as to the bids and offers received and such additional information shall not be released to a **pool participant** in respect of a dispute as to the settlement of accounts or otherwise.

## **12.1 Introduction**

### 12.1.1 Purpose

The purpose of rule 12 is to prescribe the processes and guiding principles by which the **ISO** will monitor, investigate and enforce **ISO rules**.

The **ISO** will use these **rules** as a basis for determining whether and to what extent a **market participant** has contravened an **ISO rule** and the appropriate course of action to take in such circumstances.

### 12.1.2 Scope

Rule 12 applies to all **ISO rules** with the exception of rule 7 and rule 8. Any matter associated with rule 1.10 that is within the mandate of the **Market Surveillance Administrator** under the **Act** will be referred to the **Market Surveillance Administrator**.

To the extent that a matter associated with rule 1.10 is referred to the **Market Surveillance Administrator** and the **Market Surveillance Administrator** is satisfied that a **market participant** has contravened rule 1.10, the **ISO** will consider the **Market Surveillance Administrator's** recommendation as part of the **ISO** senior management adjudication process in rule 12.5.1.

To the extent that a matter associated with rule 1.10 is referred to the **Market Surveillance Administrator** and the **Market Surveillance Administrator** recommends that the **ISO** revise the **ISO rules**, the **ISO** will consider this recommendation in accordance with Part 1 General – G5 of the **ISO rules**.

### 12.1.3 Authority

**ISO** compliance monitoring and enforcement will be conducted within the authority set forth in the **ISO rules** and the **Act**.

### 12.1.4 Application of Other Remedies

The action and remedies authorized under rule 12 are in addition to any other action or remedies that may be available to the **ISO** elsewhere in **ISO rules** or under law, regulation or order. Nothing in rule 12 should be construed to limit the right of the **ISO** to take action or seek remedies otherwise available to it, and such action or remedies may be pursued in lieu of or in addition to the action or remedies specified in rule 12.

## **12.2 Compliance Monitoring**

### 12.2.1 Extent of Compliance Monitoring

The **ISO** will undertake such monitoring of **market participants** as it considers necessary to determine whether **market participants** are complying with **ISO rules**.

### 12.2.2 Primary Information Sources

In conducting compliance monitoring, the **ISO** will rely primarily upon data and information that is gathered in the normal course of the business of the **ISO**, along with

---

publicly available data and information.

#### 12.2.3 Data or Information Request

The **ISO** may determine that additional data or information is required from **market participants** in order to monitor, review or enforce compliance with **ISO rules**. To the extent that such a determination is made the **ISO** may request a **market participant** possessing such data or information to provide it to the **ISO** within a reasonable time, in response to a written request. Such written request will be accompanied by an explanation of the need for such data or information and whether the request is made in the context of a compliance review conducted in accordance with rule 12.4. The **ISO** will work with the **market participant** to set a reasonable time within which to provide such data or information and to address any concerns regarding the need for the data or information.

The **ISO** will limit the use of data or information obtained in accordance with rule 12.2.3 to purposes related to compliance with **ISO rules**.

#### 12.2.4 Return of Data or Information Request Material to a Market Participant

The **ISO** retains the right to maintain in its possession data or information obtained pursuant to rule 12.2.3 for as long as the **ISO**, in its sole discretion, deems necessary. Subject to this provision, the data or information obtained pursuant to rule 12.2.3 along with any copies made by the **ISO** will be returned to the **market participant** that submitted the data or information upon the written request of that **market participant**.

#### 12.2.5 Failure or Refusal to Comply with a Data or Information Request

A **market participant** that receives a request pursuant to rule 12.2.3 will provide the **ISO** with all data or information that is required in order for the **ISO** to carry out its duties under rule 12.

If a **market participant** does not provide such data or information within a reasonable time, the **market participant** will be deemed to have contravened rule 12.2.3.

#### 12.2.6 Confidentiality

The **ISO** will observe the confidentiality provisions of the **ISO rules** with respect to such data or information that a **market participant** has identified to the **ISO** as **confidential information**.

### 12.3 Issue Assessment

#### 12.3.1 Monitoring, Referrals and Complaints

The **ISO** may become aware of possible non-compliance with an **ISO rule** as a result of:

- a) its monitoring of **market participants** or through an **internal referral**;
- b) the submission of information to the **ISO** by the **Market Surveillance Administrator**, the **EUB**, or the **Crown**;
- c) an **external referral**; or
- d) a **complaint**.

---

### 12.3.2 Communications to the ISO and Confidentiality

The communication information for the **ISO** regarding a **complaint, internal referral, external referral**, referral made by the **Market Surveillance Administrator**, the **EUB** or the **Crown**, an appeal or any other matter related to rule 12 is detailed in Appendix 4.

Internal monitoring conducted by the **ISO** will be done on a confidential basis, and any **internal referral** will be made on a confidential basis. Any **complaint**, communication or referral to the **ISO** regarding compliance with an **ISO rule** will be treated by the **ISO** on a confidential basis if requested by the **complainant** or referrer.

### 12.3.3 Preliminary Assessment

In response to an issue relating to non-compliance with an **ISO rule** that the **ISO** becomes aware through rule 12.3.1 or any other means, the **ISO** will conduct a preliminary assessment in order to determine whether a compliance review should be conducted. This preliminary assessment may include, but not be limited to, consideration of the following:

- a) the nature of the issue regarding an **ISO rule**,
- b) the problem or concern regarding an **ISO rule**;
- c) the alleged failure of a market participant to comply with an **ISO rule**;
- d) the level of frequency, severity, duration and materiality associated with the issue;
- e) whether the **ISO** has jurisdiction regarding the issue;
- f) whether the issue is related to the *Power Purchase Arrangements Determinations Regulation* (AR 175/2000);
- g) whether a compliance review is warranted;
- h) whether the actions and activities are consistent with the **Act**;
- i) mitigating factors;
- j) the impact or potential to impact other **market participants**; and
- k) the appropriateness of communications to **market participants**.

Except as required by the **Act**, a regulatory authority with jurisdiction or **ISO rules**, the **ISO** may decline to act with respect to any specific **complaint, internal referral, external referral**, or any other referral or request if the **ISO** considers:

- a) the **complaint**, referral or request is frivolous, vexatious, trivial or otherwise does not warrant action on the part of the **ISO**; or,
- b) the subject - matter is under the jurisdiction of another authority.

The **ISO** will provide a written response regarding its preliminary assessment, as soon as reasonably practical, to the party making a referral pursuant to rule 12.3.1(b), or to the party making a **complaint**.

---

## 12.4 Compliance Review

### 12.4.1 Notification to Market Participant

Where the **ISO** determines, as a result of a preliminary assessment as outlined in rule 12.3.3, that a **market participant** may have failed to comply with an **ISO rule** and that a compliance review of the issue is warranted, the **ISO** will provide notice as soon as reasonably practical to the **market participant** that an **ISO rule** may have been contravened.

The **ISO** will follow the compliance review process as outlined in rule 12.4.3. However, the **ISO** may modify this process, as required, in order to accommodate any unique circumstances that may exist.

### 12.4.2 Compliance Review Guidelines

In conducting a compliance review, the **ISO** will take into consideration the following guidelines:

- a) Whether a **market participant** failed to comply with an **ISO rule**, and any information or evidence that would support such a finding.
- b) The frequency, duration, materiality and severity of any failure to comply with or alleged failure to comply with an **ISO rule** by a **market participant**.
- c) Whether a **market participant** disclosed the matter to the **ISO** on its own or whether it was prompted to do so, and any other actions that a **market participant** took upon becoming aware of non-compliance with an **ISO rule**.
- d) Whether the actions or activities of a **market participant** might have an impact, or the potential to impact, other **market participants**.
- e) Whether the actions or activities of a **market participant** are consistent with the **Act**.

### 12.4.3 Compliance Review Process

The compliance review process will be conducted on a confidential basis.

As part of the compliance review process, a time period will be established and communicated to a **market participant** that is the subject of a compliance review within which the **market participant** will be permitted to make written representations in response to the allegations.

In addition, a **market participant** that is the subject of a compliance review will be advised of the right to request a meeting with the **ISO** to discuss the matter.

The compliance review process may include, but not be limited to, the following:

- a) Define the issue or the alleged failure to comply with an **ISO rule**;
- b) Speak with or correspond with relevant **market participants** regarding the alleged failure to comply with an **ISO rule**;

- 
- c) Collect and analyze data considered relevant to the alleged failure to comply with an **ISO rule** (including but not limited to the frequency and duration of the issue under review, the physical constraints associated with an **asset**, and any past failures of a **market participant** to comply with an **ISO rule**);
  - d) Consider any representations that may be made by a **market participant** that is the subject of the alleged failure to comply with an **ISO rule**;
  - e) Evaluate and consider the details of the information and evidence regarding whether a **market participant** may have failed to comply with or continue to be failing to comply with an **ISO rule**;
  - f) Take into consideration the compliance review guidelines outlined in rule 12.4.2;
  - g) Consider the sanctions that may be imposed if the failure to comply with an **ISO rule** is established in accordance with rule 12.6;
  - h) Take into consideration any failure or refusal of a **market participant** to co-operate with the **ISO**;
  - i) Prepare a preliminary report; and,
  - j) Prepare preliminary recommendations as a result of the compliance review.

Following the completion of a preliminary report and any preliminary recommendations prepared as a result of the compliance review, the **market participant** that is the subject of the alleged failure to comply with an **ISO rule** will be afforded an opportunity to:

- a) Review the preliminary report and any preliminary recommendations prepared as a result of the compliance review;
- b) Submit written information requests to the **ISO** regarding the contents of the preliminary report and any preliminary recommendations prepared as a result of the compliance review; and,
- c) Furnish relevant evidence to contradict or explain the facts or allegations.

Following the steps outlined above in a) – c), the **ISO** will prepare a final report, final recommendations and a draft **ISO** order (if applicable) for consideration by **ISO** senior management. The **market participant** that is the subject of a compliance review will be provided with a copy of such final report, final recommendations and draft **ISO** order (if applicable).

#### 12.4.4 Recommendations Made as a Result of a Compliance Review

A recommendation to **ISO** senior management made as part of a compliance review by the **ISO** may include, but not be limited to, any one or more of the following recommendations as well as accompanying draft **ISO** order (if applicable):

- a) To dismiss the issue;
- b) To refer the issue to another agency;
- c) That there is insufficient evidence that a **market participant** has failed to comply

---

with an **ISO rule**;

- d) That there is sufficient evidence that a **market participant** has failed to comply with an **ISO rule** and a recommendation of the appropriate sanction;
- e) To extend the time frame of the compliance review and to further review the matter as the **ISO** determines appropriate;
- f) To implement additional monitoring of a **market participant**;
- g) To direct or request that a **market participant** undergo appropriate additional training;
- h) To initiate a proposed change in the **ISO rules**.

#### 12.4.5 Proposed ISO Rule Changes

Subject to Part 1 General – G5 of the **ISO rules**, to the extent that the **ISO** proposes to change **ISO rules** in response to rule 12.4.4 (h) or in response to a recommendation made by the **Market Surveillance Administrator** pursuant to rule 12.1.2, the **ISO** will advise **market participants** and interested parties of the reasons for the proposed **ISO rule** change and of any actions or behaviours of **market participants** that are of concern to the **ISO**.

## 12.5 **ISO Adjudication**

### 12.5.1 ISO Senior Management Adjudication Process

Following the completion of the compliance review process, the **ISO** will commence an **ISO** senior management adjudication process.

Prior to the commencement of the **ISO** senior management process, a time period will be established and communicated to a **market participant** that is the subject of such a process within which the **market participant** may make written representations to **ISO** senior management to show cause as to why the recommendation as a result of the compliance review or the recommendation as a result of the **Market Surveillance Administrator's** investigation in conjunction with rule 12.1.2 and draft **ISO** order (if applicable) should not be issued against it.

The **ISO** senior management review process may include, but not be limited to, one or more of the following:

- a) Consideration of the compliance review guidelines outlined in rule 12.4.2;
- b) Consideration of any representations that may be made by a **market participant** that is the subject of the alleged failure to comply with an **ISO rule**;
- c) Consideration of any representations that may be made regarding the *Power Purchase Arrangements Determinations Regulation* (AR 175/2000), if applicable;
- d) Consideration of any representations that may be made regarding the Terms and Conditions of a Transmission Tariff, if applicable;

- 
- e) Consideration of the final compliance review report, accompanying recommendations and accompanying draft **ISO** order (if applicable);
  - f) Consideration of any recommendation made by the **Market Surveillance Administrator**, if any, made in accordance with rule 12.1.2;
  - g) Consideration of the sanctions that may be imposed in accordance with rule 12.6;
  - h) Consideration of any failure or refusal of a **market participant** to co-operate with the **ISO**;
  - i) Consideration and a determination to accept, modify or reject the recommendations and draft **ISO** order made as a result of the compliance review; and,
  - j) Consideration and a determination regarding the extent and manner in which the **ISO** written decision with reasons will be communicated to the **complainant**, other **market participants** and the public.

#### 12.5.2 Written Decision with Reasons

The **ISO** will prepare and provide a written statement of its decision setting out the findings of fact on which it based its decision and the reasons for the decision regarding the **ISO** senior management adjudication and any **ISO** order issued. Such order and decision shall be provided as soon as reasonably practical to the **market participant** that is the subject of the senior management adjudication process as well as any other parties as determined as part of the **ISO** senior management adjudication process. Unless otherwise determined as part of the senior management adjudication process, the **ISO** order and decision will remain confidential, and will not be disclosed by any party to any third party beyond those determined as part of the **ISO** senior management adjudication process.

A written decision with reasons will include, but not be limited to:

- a) The **ISO rule** that has been contravened (if any);
- b) The **ISO**'s assessment of the level of non-compliance in accordance with rule 12.6.3 (if applicable); and,
- c) The specific enforcement actions that may apply to the non-compliant **market participant** (if applicable).

#### 12.5.3 ISO Orders

To the extent that **ISO** senior management, following its adjudication, is satisfied that a **market participant** has contravened an **ISO rule**, the **ISO** may, by order, do one or more of the following:

- a) Issue a warning letter or a non-compliance letter to a **market participant**;
- b) Direct a **market participant** to do, within a specified period of time, such things as may be necessary to comply with an **ISO rule**;
- c) Direct a **market participant** to cease, within a specified period of time, the act, activity or practice that constituted the contravention of an **ISO rule**;

- 
- d) Impose additional record-keeping or reporting requirements on a **market participant**;
  - e) Impose an administrative penalty on a **market participant** of not more than \$100,000 a **day** for each **day** on which a contravention occurs or continues;
  - f) Subject to rule 12.6.7, deny, suspend, restrict or terminate the right of a **market participant** to exchange electric energy through the power pool or to participate in any other market operated by the **ISO**;
  - g) Impose another sanction that the **ISO** considers appropriate.

When making an **ISO** order, the **ISO** may take into consideration any failure or refusal of a **market participant** to co-operate with the **ISO**.

## 12.6 Sanctions

### 12.6.1 Introduction

Where **ISO rules** provide for consequences in respect of a contravention by a **market participant** of a particular **ISO rule**, those consequences will apply in the circumstances and in the manner provided for in the relevant sections of **ISO rules**, in addition to such sanctions as may be imposed pursuant to rule 12, except as limited by the provisions of rule 12.1.2.

Unless otherwise specified in rule 12.6, any sanction issued by the **ISO** in the form of an **ISO** order will be dealt with by the **ISO** on a case-by-case basis.

### 12.6.2 Sanction Process

To the extent that the **ISO** determines that it would be appropriate to issue to a **market participant**, by **ISO** order, a warning letter, a non-compliance letter or to impose an administrative penalty, the **ISO** may:

- a) Determine the level of non-compliance by the **market participant** in accordance with rule 12.6.3;
- b) Determine the frequency of non-compliance by the **market participant** of the **ISO rule** in question;
- c) Consider any mitigating factor regarding the contravention of an **ISO rule**, as outlined in rule 12.6.5;
- d) Based on a) – c) above, and any other consideration relevant to the circumstances, determine whether to issue a warning letter, a non-compliance letter or to impose an administrative penalty in accordance with the rule 12.6.4.

### 12.6.3 Levels of Non-Compliance

The **ISO** will determine the level of non-compliance referred to in rule 12.6.2 as follows:

- Level 1: Instances where a **market participant** has failed to comply, in whole or in part, with all of the requirements of an **ISO rule**, and where such non-

---

compliance has *little or no impact* on other **market participants**, the operation of the market or the **system controller's** ability to direct the safe, reliable and economic operation of the **AIES**, as determined solely by the **ISO**;

Level 2: Instances where a **market participant** has failed to comply, in whole or in part, with all of the requirements of an **ISO rule**, and where such non-compliance has a *material impact* on other **market participants**, the operation of the market or the **system controller's** ability to direct the safe, reliable and economic operation of the **AIES**, as determined solely by the **ISO**;

Level 3: Instances where a **market participant** has failed to comply, in whole or in part, with all of the requirements of an **ISO rule**, and where such non-compliance has a *severe impact* on other **market participants**, the operation of the market or the **system controller's** ability to direct the safe, reliable and economic operation of the **AIES**, as determined solely by the **ISO**.

Where the level of non-compliance cannot be clearly assessed or determined to be in one of two consecutive levels, the **ISO** will assess the failure to comply at the lower of the two levels.

#### 12.6.4 Sanctions Matrix

To the extent that the **ISO** determines that it would be appropriate to issue a warning letter or a non-compliance letter to a **market participant** or to impose an administrative penalty on a **market participant**, the **ISO** will after considering rule 12.6.2 impose a sanction within the ranges outlined in the Sanctions Matrix associated with Rule 12 – **ISO Compliance Monitoring and Enforcement** found in the Schedule of Administrative Penalties.

Nothing in this rule shall prevent the **ISO** from imposing a sanction for failure by a **market participant** to remedy a contravention in respect of which a warning letter or a non-compliance letter has been issued by the **ISO**.

#### 12.6.5 Mitigating Factors

To the extent to which a **market participant's** failure to comply with an **ISO rule** is caused by any one or more of the following, the **market participant** will be determined to not be in contravention of an **ISO rule**:

- a) An event of **force majeure** affecting the **market participant**; provided however, that the **market participant** gives written notice to the **ISO** of the **force majeure** in reasonable detail as promptly as possible after it knows of the event or condition and makes all reasonable efforts to cure, mitigate, or remedy the effects of the event or condition;
- b) a circumstance related to the operation of the **asset** or **transmission facility** which if it operated could reasonably be expected to affect the immediate safety of the asset, the environment, staff or the public;
- c) Actions or omissions that are consistent with **good electric operating practice** in a **system emergency**;

- 
- d) Actions or omissions specifically required by a regulatory authority with jurisdiction;
  - e) Actions or omissions in compliance with an **ISO directive**; or,
  - f) Actions or inactions in response to a **directive** made by the **system controller**.

#### 12.6.6 Posting of an Administrative Penalty

Subject to the complaints process in rule 12.7.4 being exhausted, the **market participant** against whom an administrative penalty has been applied will be posted to the public website maintained by the AESO. The website posting will include the name of the **market participant**, the **ISO rule** that was contravened and the amount of the administrative penalty.

#### 12.6.7 Order to Deny, Suspend, Restrict or Terminate the Right to Exchange Energy

**ISO** senior management may during the adjudication outlined in rule 12.5.1 determine that it would be appropriate to issue an **ISO** order denying, suspending, restricting or terminating the right of a **market participant** to exchange energy through the power pool or to participate in any other market operated by the **ISO**. In such circumstances, the **ISO** will in addition to the process identified in rule 12.5.1 permit the market participant to make an oral representation to **ISO** senior management to show cause as to why the recommended **ISO** order should not be issued against it

#### 12.6.8 Posting an Order to Deny, Suspend, Restrict or Terminate the Right to Exchange Energy

Upon the issuance of an **ISO** order to a **market participant** denying, suspending, restricting or terminating the right of that **market participant** to exchange electric energy through the power pool or to participate in any other market operated by the **ISO**, a posting will be made to the public website maintained by the AESO and a notice of posting will be sent to all **market participants**. The website posting will include the name of the **market participant**, the **ISO** rule that was contravened and the nature of the **ISO** order.

### 12.7 **Appeal of Sanctions**

#### 12.7.1 Introduction

A **market participant** that is the subject of a warning letter or a non-compliance letter may file an appeal of that warning letter or non-compliance letter in accordance with rule 12.7.

#### 12.7.2 Appeal of a Warning Letter

A **market participant** that receives a warning letter from the **ISO** and does not agree with the assessment or other contents of the warning letter may appeal the contents of the warning letter.

An appeal of a warning letter must be in writing, and must be received by the **ISO** Senior Legal Counsel at the address identified in Appendix 4 within thirty (30) **days** of the date of the warning letter. A copy of the appeal must also be sent to [compliance@aeso.ca](mailto:compliance@aeso.ca).

The determination of the **ISO** Senior Legal Counsel will be final and not subject to further appeal within the **ISO**.

---

### 12.7.3 Appeal of a Non-Compliance Letter

A **market participant** that receives a non-compliance letter from the **ISO** and does not agree with the assessment or other contents of the non-compliance letter may appeal the contents of the non-compliance letter.

An appeal of a non-compliance letter must be in writing, and must be received by the **ISO** Chief Executive Officer at the address identified in Appendix 4 within thirty (30) **days** of the date of the non-compliance letter. A copy of the appeal must also be sent to [compliance@aeso.ca](mailto:compliance@aeso.ca).

The determination of the **ISO** Chief Executive Officer will be final and not subject to appeal within the **ISO**.

### 12.7.4 Complaints to the EUB

Any person may make a written complaint to the **EUB** about an **ISO** order pursuant to provisions of the **Act**.

## 12.8 Administration and Enforcement

### 12.8.1 Administration and Payment of Administrative Penalties

The **ISO** will provide the Balancing Pool with **ISO** orders that impose an administrative penalty by the **ISO** along with the name of the **market participant**, relevant contact information and the due date of the administrative penalty. Payment of an administrative penalty imposed by the **ISO** must be paid to the Balancing Pool, in full, by the due date specified in the request for payment issued by the Balancing Pool.

### 12.8.2 Enforcement of ISO Orders

Enforcement of **ISO** orders will be conducted within the authority set forth in the **Act**.

### 12.8.3 Time Guidelines

The **ISO** will take all reasonable steps to commence a preliminary assessment of an issue within thirty (30) **days** of the discovery of the issue or the circumstances being first reported to the **ISO**, and will take all reasonable steps to complete a preliminary assessment of an issue within thirty (30) **days** of the commencement of a preliminary assessment.

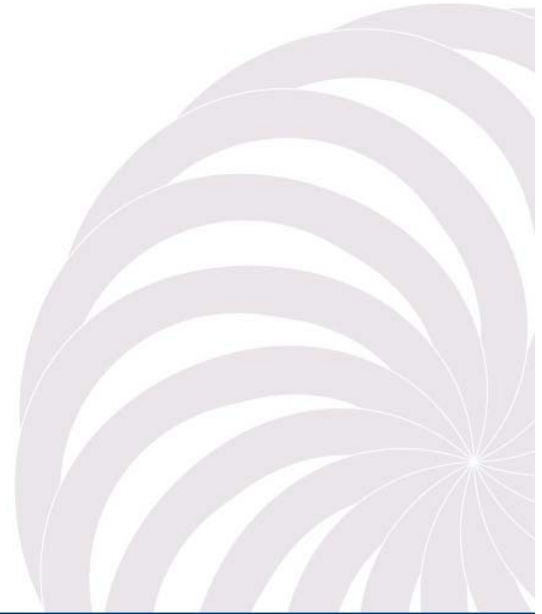
The **ISO** will take all reasonable steps to complete a compliance review within a period of ninety (90) **days** from the completion of the preliminary assessment.

The **ISO** may modify the above time schedules in order to accommodate any unique circumstances that may exist.

Sanctions may be assessed under rule 12 up to two (2) years after the date of the **ISO** being aware or being deemed to be aware of the non-compliance.



# Part Three Policies & Procedures



---

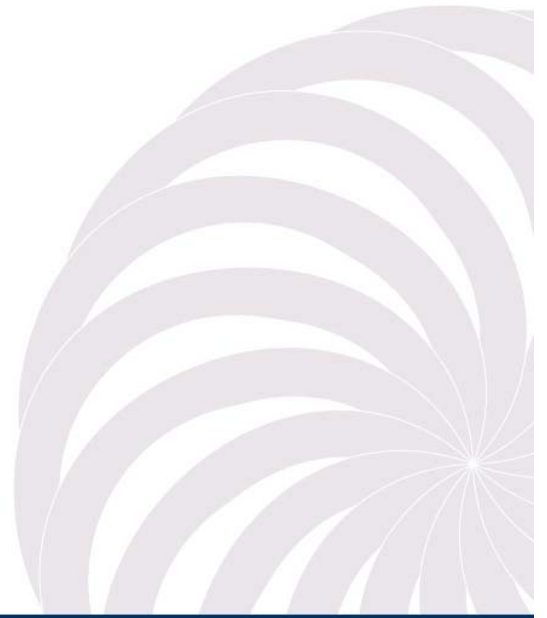
P1 ISO OPERATING POLICIES AND PROCEDURES

Please [click here](#) to see ISO Operating Policies and Procedures.



# Part Four Appendices

---



APPENDIX 1 - APPLICATION FORM

**Alberta Electric System Operator**  
**Pool Participant Application Registration Forms**

Terms bolded in this pool participant application registration form have the meaning given to them in the **ISO rules**.

1. **Application**

\_\_\_\_\_ (insert full legal name) (the "Applicant") hereby applies to the **ISO** to be registered as a **pool participant**.

2. **Eligibility of Applicant**

The Applicant represents and warrants that it will exchange electric energy through the **power pool** as a **market participant**, or provide **ancillary services** by virtue of its status as (check one or more as applicable):

- \_\_\_\_\_ the owner of a **generating unit**
- \_\_\_\_\_ the owner of an industrial system pursuant to the **Act**
- \_\_\_\_\_ an **ancillary service provider**
- \_\_\_\_\_ a **PPA buyer**
- \_\_\_\_\_ a **retailer**
- \_\_\_\_\_ a **regulated rate provider**
- \_\_\_\_\_ a **self retailer**
- \_\_\_\_\_ a **marketer**
- \_\_\_\_\_ other (subject to specific **ISO** approval)

3. The following is a brief description of the eligibility criteria indicated in Section 2 of this application and the Applicant has also enclosed a completed **asset addition form**.

\_\_\_\_\_  
\_\_\_\_\_

4. **Prudential Requirements**

The Applicant has reviewed the **prudential requirements** of the **rules** and as of the date of this pool participant application registration form, the **pool participant** proposes to satisfy such requirements in the following manner (give details confirming how the Applicant is in compliance with **prudential requirements**, including copies of necessary documents to demonstrate satisfaction of the same, together with details as to financial strength and position of Applicant; additional pages may be attached):

5. **Further Information**

The Applicant acknowledges and agrees that in addition to the information provided in connection with this pool participant application registration form it will be required to provide such further and other information to the **ISO** as may be required at any time and from time to time by the **rules**.

6. **Metering and System Access Service Requirements**

The Applicant, if intending to act as an **importer** and/or **exporter**, represents and warrants that:

\_\_\_\_\_ it has entered into either a valid system access service agreement with the **ISO**, dated \_\_\_\_\_, \_\_\_\_\_ and such agreement is in full force and effect; or \_\_\_\_\_ it is otherwise eligible to receive system access service in accordance with the current tariff schedule of the **ISO**.  
(check applicable part)

The Applicant, if it intends to financially settle on **metered** volumes, represents and warrants that the **metered** volumes will be arranged to be provided to the **ISO** by a **meter data manager, load settlement agent** and/or a source otherwise approved by the **ISO**.

7. **Agent Appointment Request Form**

If appointing an **agent**, the Applicant has executed and delivered an **agent** appointment request in the form provided by the **ISO**.

8. **Pool Participant Agreement**

The Applicant has executed and delivered a Pool Participant Agreement in the form provided by the **rules**.

9. **Acknowledgment**

The Applicant acknowledges that the **ISO**:

- a. has the authority to review this application and determine in its reasonable opinion whether the Applicant may be registered as a **pool participant**;
- b. may require additional information or authorizations in respect of creditworthiness, facility connection requirements, agency relationships or otherwise to be submitted by the Applicant before making such determination; and
- c. may approve of such registrations of the Applicant on such terms and conditions as it considers reasonable, including the satisfaction of prudential requirements, facility connection requirements, agency relationships or any other requirements of the **rules**.

10. **GST Number**

The Applicant acknowledges that exchanges in the **ISO** are transactions for which Goods and Services Tax (GST) are taxable, and that a GST registration number is required for the Applicant unless the Applicant is GST exempt. If not exempt, the Applicant acknowledges that its GST registration number is \_\_\_\_\_

11. **Annual Participation Fee**

The Applicant encloses herewith the sum of \$ \_\_\_\_\_ including Goods and Services Tax in payment of its first annual **pool participation fee** of \$ \_\_\_\_\_ and its registration fee of \$ \_\_\_\_\_ as required by the **rules**.

12. **Applicant Contact Information**

- a) Please provide for the Applicant identified in 1 above:  
Mailing Address:  
Main Telephone Number:  
Main Fax Number:
- b) Corporate Contact (for purposes of regular correspondence and bid/offer information)  
Contact Name:  
Telephone Number:  
Fax Number:  
Email Address:
- c) Financial Settlement Contact:  
Contact Name:  
Telephone Number:  
Fax Number:  
Email Address:
- d) Applicant Internal Treasury/Banking Contact - if different from (c)  
Contact Name:  
Telephone Number:  
Fax Number:  
Email Address:
- e) Load Settlement Contact (for purposes of providing load settlement information, and gathering input regarding changes to Load Settlement Rules)  
Contact Name:  
Telephone Number:  
Fax Number:  
Email Address:

13. **Banking Information**

The Applicant encloses the banking information required by the **ISO** for purposes of **power pool** settlements.

14. **Energy Bulletin Board**

Indicate below if you wish to have your corporate contact information included on the Alberta Electric System Operator's "Energy Bulletin Board". (Please attach information if the contact for this purpose is different than the corporate contact above.) The Energy Bulletin Board is an Internet meeting place for electricity buyers and sellers to try to arrange sales directly with one another.    Yes    No

---

15. **Information Changes**

The Applicant acknowledges that it is its responsibility to advise the **ISO** of any changes to any of the information provided by it in this **pool participant** application registration form.

DATED the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

(Name of Applicant)

Per: \_\_\_\_\_

APPENDIX 2 – POOL PARTICIPANT AGREEMENT

**Alberta Electric System Operator  
Pool Participant Agreement**

This Agreement is made as of the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between:

\_\_\_\_\_, having an office at  
(full legal name of pool participant)

\_\_\_\_\_  
(address)

(the "participant")

- and -

The Independent System Operator, operating under the registered trade name Alberta Electric System Operator.

(the "ISO")

**Whereas:**

The participant wishes to participate in the power pool or provide ancillary services on terms which conform to the ISO rules which may be modified from time to time and are otherwise in conformity with the Act.

**Article 1  
Interpretation**

**1.1 Definitions**

- a. Terms and expressions defined in the Act or in the rules shall have those meanings when used herein.
- b. "rules" shall mean the ISO rules established pursuant to the Act, as the same may be amended from time to time as contemplated by rule G5 of the ISO rules, together with such schedules thereto and any other ancillary operating codes or specifications which may be adopted by the **ISO** from time to time as part of the ISO rules.

---

**Article 2**  
**Agreement to be Bound by ISO rules**

**2.1 Covenants of the Participant**

The participant agrees that:

- a. the ISO rules constitute the authorized code of rules governing the operation of the power pool and system control, including rules in respect of membership criteria, bidding, settlement, prudential requirements for participants, information reporting requirements, confidentiality restrictions and ancillary services;
- b. it will abide by, and will perform all of its obligations under the ISO rules in respect of all matters set forth therein including, without limitation, all matters relating to exchanges of electric energy by it through the power pool, ongoing obligations in respect of bidding and financial settlement of any adjustments in respect thereof and all ongoing obligations including those relating to prudential requirements, confidentiality and dispute resolution; and
- c. its status as participant is at all times subject to the ISO rules, and, in particular, that its participation in the power pool or other ISO market may be terminated in accordance with the ISO rules.

**2.2 Acknowledgment re Limitation of Liability**

The participant acknowledges and accepts the limitation of liability of the ISO board, the ISO, pool participants in the power pool and other persons as set forth in the ISO rules.

**2.3 No Waiver or Abrogation of Remedies**

Nothing in Section 2.1 or Section 2.2 shall constitute a waiver by the participant of or an abrogation of any right or remedy available to the participant at law or in equity to see such changes to the ISO rules or any other determination in respect of the just and reasonable operation of the ISO.

**Article 3**  
**Term**

**3.1 Term**

This Agreement shall commence on the date the participant is registered as a participant in the ISO and shall terminate on December 31 of the same year in which the participant was so registered. Thereafter, unless terminated in accordance with the ISO rules, this Agreement is renewable for succeeding terms of one calendar year each in accordance with the renewal provisions of the ISO rules and upon payment of such annual or other fees as may be required there in.

**Article 4**  
**General**

**4.1 No Assignment; Successors**

This Agreement shall not be assignable by the participant. This Agreement may enure to the benefit of and be binding on the successors at law of the participant through amalgamation or reorganization (if the participant is a corporation), provided that the ISO reserves the right to approve or reject any successor as a participant for purposes of this Agreement in accordance with the eligibility requirements for participants set forth in the ISO rules.

**4.2 Partial Invalidity**

If any provision of this Agreement, or the application of such provision to any persons, circumstance or transaction, shall be held invalid, the remainder of this Agreement, or the application of such provision to other persons or circumstances or transactions, shall not be affected thereby.

**4.3 Further Assurances**

The parties shall execute and deliver all documents, provide all information and take or refrain from taking all actions necessary or appropriate to achieve the purposes hereof, and shall do all such things as may be required from time to time by the ISO or the ISO rules.

**4.4 Representations and Warranties**

The participant represents and warrants as follows:

- a. the statements made by the participant in the participant application registration form submitted by it to the ISO are true and correct; and
- b. the participant has all requisite power, authority and capacity and has received all necessary authorizations enabling it to execute and deliver this Agreement and the pool participant application registration form to perform all obligations required of it by the ISO rules.

4.3 All notices, communications, requests or other statements (collectively "Notices") given hereunder shall be in writing and shall be deemed to have been properly given if delivered by hand or sent by facsimile to the number shown opposite its signature below. Any such Notice shall be effective on the date delivered or sent, as the case may be, unless delivered or sent other than on a business day or after 5:00 p.m. at the place of delivery or receipt in which case it shall be effective on the next business day.

Notice Address:

•

Attn.: •

Fax: •

---

IN WITNESS WHEREOF this Agreement has been executed as of the date first above written.

• (Pool Participant)

Per: \_\_\_\_\_  
Name and Office Held (Print)

Per: \_\_\_\_\_  
Name and Office Held (Print)

The Independent System Operator, operating under the registered trade name Alberta Electric System Operator.

Per: \_\_\_\_\_

Attn.: • Account Manager  
Fax: • (403) 543-0388

## APPENDIX 3 - POOL PARTICIPANT PRUDENTIAL REQUIREMENTS

### 1. General

Subject to the review and reassessment of the **prudential requirements** of a **pool participant** by the **ISO** from time to time and as otherwise provided in these **rules**, and subject to any further direction of the **ISO** on the application of a **pool participant** or applicant to be accepted as a **pool participant**, a **pool participant** will be deemed to have met the **ISO's** prudential requirements if the **pool participant** has met all its financial obligations and the financial security requirements of the **ISO** in accordance with this appendix.

### 2. Pool participant Financial Security Requirements

A **pool participant** shall provide the **ISO** financial security as determined in accordance with this appendix. The amount of financial security required to be provided by a **pool participant** is the amount by which a **pool participant's** financial obligations owing to the **ISO** for two settlement periods exceeds the amount of any **unsecured credit limit** granted to the **pool participant** as determined in accordance with Sections 3 or 4 of this appendix.

The **ISO** will determine a **pool participant's** financial obligations owing to the **ISO** by taking the actual **net energy consumed** for the two most recent **settlement periods**, adjusted for any anomalies, by the **pool participant** and multiplying it by an estimated **pool price**. The **net energy consumed** is defined as the energy consumed by a **pool participant** less energy purchased from a third party by the **pool participant** using **net settlement instructions** less energy produced by the **pool participant** plus energy sold to a third party by the **pool participant** using **net settlement instructions**. For new **pool participants**, the **pool participant** shall provide to the **ISO**, as part of its application, its estimated net energy to be consumed for two settlement periods.

The form of the financial security to be provided by the **pool participant** shall be in the form as prescribed in Section 6 of this appendix.

### 3. Unsecured Credit Limit – Rated Companies

**Pool participants** (or a guarantor of a **pool participant**) who have a long-term unsecured debt rating (“credit rating”) from an acceptable bond rating agency may obtain an **unsecured credit limit** from the **ISO**. Acceptable rating agencies include the Dominion Bond Rating Service, Standard & Poor’s and Moody’s Investor Service. Other rating agencies may be accepted at the sole discretion of the **ISO**. If the **pool participant** or guarantor is rated by more than one rating agency, then the **ISO** will rely on the lowest credit rating when establishing the **unsecured credit limit**.

The **ISO** will grant up to the following **unsecured credit limit** for each **pool participant** or guarantor in relation to the relevant, established, credit rating of the **pool participant** or guarantor (or equivalent credit rating):

<b>Rating</b>	<b>Unsecured Credit Limit</b>
AAA	\$25,000,000
AA	\$20,000,000
A	\$15,000,000
BBB	\$10,000,000
<BBB	\$0

A credit rating with a plus or minus sign indicates the relative standing within the major rating categories. The base rating shall be considered when determining creditworthiness; for example, an “AA minus” would be considered an “AA” for purposes of the applicable unsecured **credit limit** in the above table. An exception to this is a rating of BBB minus which falls in the <BBB category and therefore no **unsecured credit limit** is granted.

#### 4. Unsecured Credit Limit – Non Rated Companies

For a **pool participant** (or guarantor of a **pool participant**) that does not have a credit rating from a ratings agency or has a credit rating from a ratings agency not recognized by the **ISO**, the **pool participant** or guarantor may apply to the **ISO** for an **unsecured credit limit** based on a proxy credit rating to be determined by the **ISO**. The **ISO** may prepare the proxy credit rating for the **pool participant** or guarantor at its sole discretion. In order for a proxy credit rating to be determined by the **ISO**, the **pool participant** or guarantor must provide to the **ISO** its latest audited annual financial statements and other financial and non financial information required by the **ISO** to determine a proxy credit rating. The **ISO** will grant up to the following **unsecured credit limits** to a non-rated **pool participant** or guarantor based on the credit ratings scale as follows:

Proxy Credit Rating	Unsecured Credit Limit
AAA	\$10,000,000
AA	\$5,000,000
A	\$2,500,000
BBB	\$1,250,000
<BBB	\$0

**Pool participants** who are formed or operate under Acts of the Province of Alberta (other than the Business Corporations Act) may be granted an **unsecured credit limit** at the sole discretion of the **ISO**.

The amount of the **unsecured credit limit** provided to a non-rated **pool participant** or guarantor can not exceed .5% of the **pool participant's** Tangible Net Worth. Tangible Net Worth is defined as the total assets less total liabilities less intangible assets (i.e. goodwill, trademarks, etc.) of the **pool participant** or guarantor as the case may be.

General information requirements for non-rated **pool participants** who qualify for an **unsecured credit limit** are as follows:

- The **pool participant** or guarantor must have audited annual financial statements and those audited annual financial statements must be submitted to the **ISO** within 120 days after the **pool participant's** or guarantor's year-end;
- The **pool participant** or guarantor must provide unaudited quarterly financial statement to the **ISO** within 60 days after the **pool participant's** or guarantor's quarter end;
- In addition to annual audited financial statements, the **pool participant** on an annual basis must provide the **ISO** a general description of its business, its business risks and how the **pool participant** manages its business risks;
- The **pool participant** must provide to the **ISO** notice of any **material adverse change** within two **business days** after a **material adverse change** event occurs;
- The **pool participant** or guarantor must provide the **ISO** any other financial information or non financial information, as requested by the **ISO** at the **ISO's** sole discretion;

A **pool participant** or guarantor, who fails to meet any of the general information requirements, may have its **unsecured credit limit** reduced by the **ISO** and in which case the **pool participant** may be required to provide the **ISO** additional security in accordance with Section 8 of this appendix.

The **ISO** will review the **pool participant's** or guarantor's proxy credit rating and financial and non financial information on at least annual basis. The **ISO** will notify the **pool participant** in writing of any changes in the assigned proxy credit rating, **unsecured credit limit** and financial security requirements of the **pool participant**.

#### 5. Parent, Subsidiary and Affiliated Company Unsecured Credit Limits

A **pool participant**, who is a subsidiary company, may request for an **unsecured credit limit** under Section 4 of this appendix even though its parent company has a credit rating from a ratings agency that is acceptable to the **ISO**. The **unsecured credit limit** granted to the **pool participant** will be based on the lower of the parent company's credit rating and the **pool participant**'s proxy credit rating as determined in accordance with Section 4 of this appendix.

Only one **unsecured credit limit** will be granted to a related group of companies including parent, subsidiary and affiliated company relationships.

## 6. Forms of Financial Security

Generally, the security must be in the form of one of the following:

Letter of Credit – an unconditional and irrevocable standby letter of credit, payable on demand. The letter of credit must be issued from a Canadian chartered bank or other comparable financial institution, with at least an A minus rating from Standard & Poor's or similar rating from a recognized rating agency executed in favor of the **ISO**, and be in form and substance acceptable to the **ISO**, acting reasonably. If the letter of credit proposed to be provided to the **ISO** is from a financial institution that is based outside of Canada, the **ISO**, at its sole discretion, may determine whether to accept the letter of credit or not.

Cash Deposit – cash is an acceptable form of security. A Cash Collateral Agreement must be provided to the **ISO** by the **pool participant** and such agreement must be in form and substance satisfactory to the **ISO**. Cash received as a security will be registered by the **ISO** under the Personal Property Act and the **pool participant** will be required to obtain any required bank waivers as required by the **ISO**.

Guarantee - The guarantee must be a written, irrevocable, continuous and unconditional guarantee that is payable on demand and be in form and substance acceptable to the **ISO**, acting reasonably. The **ISO** will attribute as financial security up to the unsecured credit limits prescribed in Section 3 of this appendix for guarantors who have a long term unsecured debt rating from an **ISO** recognized ratings agency or prescribed in Section 4 of this appendix for non-rated guarantors. At any time after the attributing an amount of financial security for a guarantor and regardless of the credit rating of the guarantor, the **ISO** at its sole discretion may reduce the amount of financial security attributed to a guarantor. The **ISO** will notify the **pool participant** in writing of such reduction and the new amount of financial security attributed to the guarantor. The **pool participant** must provide the **ISO** any additional financial security required by the **ISO** within two **business days** of receiving such written notice.

## 7. Material Adverse Change

If a **pool participant** (or guarantor) suffers a **material adverse change**, or is aware of a likely **material adverse change** occurring, they must inform the **ISO** no later than 2 **business days** after the occurrence of **the material adverse change**.

The **ISO** will determine the impact of the **material adverse change** on the **pool participant**'s (or guarantor's) **unsecured credit limit** and on the financial security required to be provided to **ISO** by the **pool participant**. **ISO** will notify the **pool participant** of the amount of additional financial security required to be provided by the **pool participant**. The additional financial security must be provided by the **pool participant** to the **ISO** within two **business days** from the date the **ISO** notified the **pool participant**.

## 8. Additional Financial Security

At any time after the granting of an unsecured credit limit to a **pool participant** and regardless of the **pool participant**'s credit rating or proxy credit rating, the **ISO** at its sole discretion may reduce the unsecured credit limit granted to a **pool participant**. The **ISO** will immediately notify the **pool participant** in writing of any decrease in unsecured credit limit attributed to the **pool participant** and the amount of additional security that must be provided to the **ISO** by the **pool participant**.

If a **pool participant's** estimated financial obligations owing to the **ISO** for two **settlement periods** exceeds the unsecured credit limit granted to the **pool participant**, plus the amount of any financial security provided by the **pool participant**, the **ISO** may request in writing additional financial security from the **pool participant**.

Any additional financial security requested by the **ISO** must be provided by the **pool participant** within two **business days** of the **pool participant** receiving written notice to do so. If the **pool participant** fails to provide the additional financial security within two **business days** of receiving written notice to do so, the **ISO** may suspend the **pool participant's** trading privileges in accordance with **rule** 1.4 until such time as the additional financial security is provided to the **ISO**.

## **9. Reductions in Financial Security**

At the written request of a **pool participant**, the **ISO** will consider, at its sole discretion, a reduction in the **pool participant's** financial security requirements when it is determined that a **pool participant's** unsecured credit limit plus financial security provided exceeds the **pool participant's** estimated **financial obligations** for two **settlement periods** for an extended period of time or if a **pool participants** credit rating has been upgraded.

## **10. Financial Security Costs**

All costs associated with the obtaining financial security and meeting **prudential requirements** are the responsibility of the **pool participant**.

APPENDIX 4 - COMMUNICATIONS WITH ISO

**Offers, bids, operating constraints and ancillary service declarations** in accordance with rule 3 and **net settlement instruction** data in accordance with rule 4 is to be submitted to the following:

Electronic Address: [office@aeso.ca](mailto:office@aeso.ca)

Website [www.aeso.ca](http://www.aeso.ca)

Phone Number: (403) 539-2450

Facsimile Number: (403) 539-2949

Courier Address: 2500, 330 - 5th Ave SW  
Calgary, Alberta  
T2P 0L4

**System Controller:**

Facsimile Number: (403) 261-7864

A **complaint, internal referral, external referral**, referral made by the **Market Surveillance Administrator**, the **EUB** or the **Crown**, an appeal and any other matter related to rule 12 is to be submitted to the following:

Electronic Address: [compliance@aeso.ca](mailto:compliance@aeso.ca)

Phone Number: (403) 539-2779

Facsimile Number:

(403) 539-2762

Courier Address:

Alberta Electric System Operator  
Calgary Place  
Attention: Compliance Monitoring  
2500, 330 - 5th Ave SW  
Calgary, AB T2P 0L4

APPENDIX 5 - INFORMATION TO BE PROVIDED THROUGH THE ISO

<b>Information Type / Availability</b>	6 days Ahead, Over Forecast Scheduling Period	Day Ahead - Trading Day Forecast	Settlement Interval Ahead	Real Time	Following Settlement Interval	Following End of Settlement Period	Historical
Forecast Dispatch Price in \$/MWh			√				√
Forecast Pool Price/Settlement interval in \$/MWh			√	√			√
Forecast Peak Hour AIES demand, MW	√	√					√
Aggregate Offer/Supply Availability, MW/h	√	√					√
Adequacy Assessment	√	√	√				√
Price Block setting System Marginal Price (Source Kept Confidential)				√	√		
)							
Actual Pool Price in \$/MWh/Settlement Interval					√	√	√
Actual AIES demand in MW/hour					√	√	√
Detail Associated With Offers + Bids (Source Kept Confidential)					√	√	√
Current Supply & Demand				√			
Actual Energy Production MW/Asset/hour						√	√
Actual Energy Consumption MW/hour demand						√	√

Legend: (Shading Indicates Not Applicable)



APPENDIX 6 - TRANSMISSION LOSS FACTOR METHODOLOGY & ASSUMPTIONS

[Appendix 6](#), the Transmission Loss Factor Methodology and Assumptions document.

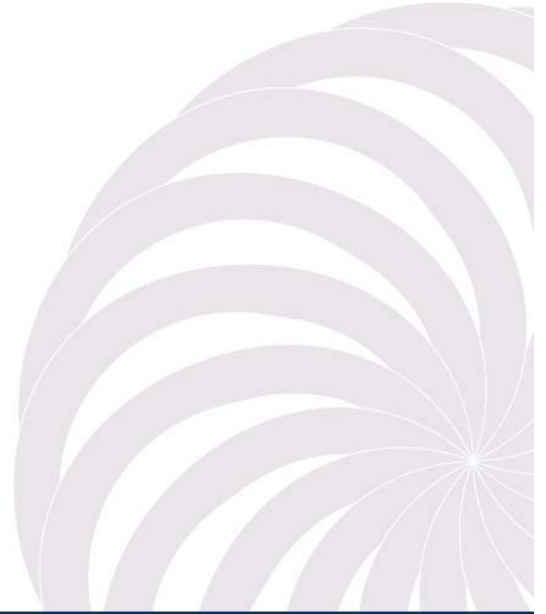
## APPENDIX 7 - SUMMARY OF RULE CHANGES

Appendix 7 is for reference purposes only and does not affect the interpretation of the **rules**. Please [click here](#) to view the Summary Table of Rule Changes.



# Schedules

---



---

## SCHEDULE OF ISO FEES

In accordance with the provisions of the Electric Utilities Act, and also in accordance with **rule 2.2**, the following **ISO fees** are set:

Rule 2.2.2.	Annual pool participation fee	\$150/pool participant plus Goods and Services Tax
Rule 8.4.2	Trading Charge/MWh	\$0.1360/MWh (effective January 1, 2007)
Rule 2.2.3	Registration Fee	no charge
Rule 8.4.2	Software Security Charge	\$100 plus Goods and Services Tax per digital certificate per 12 month period
Rule 8.4.2	Late Payment Charges	Charges incurred as a result of late payment
Rule 2.2.4	IT Service Charge	\$100/hour for special queries
Rule 2.2.5	Other Services	Cost recovery
Rule 2.2.6	Load Settlement Costs	Cost recovery
Rule 8.4.2	Supply Shortfall Costs	Cost Recovery

SCHEDULE OF ADMINISTRATIVE PENALTIES

In accordance with the provisions of the Electric Utilities Act, the following administrative penalties are set:

- Rule 8.4.3                      Late Payment Penalty                      2 days Interest Penalty on outstanding amount owing
- Rule 8.4.3                      Interest Penalty                      Toronto Dominion prime rate plus 6% on outstanding amount owing minus Bank Charges; or Toronto Dominion prime rate plus 12% on outstanding amount owing minus Bank Charges.
- Rule 7                              Appendix C 4.3.4.b)                      Financial penalties of up to \$100,000 per day.
- Rule 12                              **ISO Compliance**                      See matrix below:  
Monitoring and Enforcement

<b>Sanctions Matrix:</b>				
<b>Level of Non-Compliance</b>	<b>First Failure to Comply in a Rolling 12 month period</b>	<b>Second Failure to Comply in a Rolling 12 month period</b>	<b>Third Failure to Comply in a Rolling 12 month period</b>	<b>Fourth and Subsequent Failure to Comply in a Rolling 12 month period</b>
<b>Level 1</b> (see Note below)	Warning letter	Warning letter or Non-compliance letter	Warning letter, non-compliance letter or an administrative penalty of up to \$2,000.00 per <b>day</b>	Warning letter, non-compliance letter or an administrative penalty of up to \$10,000.00 per <b>day</b>
<b>Level 2</b> (see Note below)	Warning letter or Non-compliance letter	Non-compliance letter or an administrative penalty of up to \$5,000.00 per <b>day</b>	Non-compliance letter or an administrative penalty of up to \$25,000.00 per <b>day</b>	Non-compliance letter or an administrative penalty of up to \$100,000.00 per <b>day</b>
<b>Level 3</b> (see Note below)	Warning letter, non-compliance letter or an administrative penalty of up to \$5,000.00 per <b>day</b>	Non-compliance letter or an administrative penalty of up to \$25,000.00 per <b>day</b>	Non-compliance letter or an administrative penalty of up to \$50,000.00 per <b>day</b>	Non-compliance letter or an administrative penalty of up to \$100,000.00 per <b>day</b>

**Note:** In addition to the above, the **ISO** reserves the right to impose additional sanctions as outlined in rule 12.5.3.