

ALBERTA ELECTRIC SYSTEM OPERATOR

2003 TARIFF TERMS AND CONDITIONS OF SERVICE

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ARTICLE 1 DEFINITIONS AND INTERPRETATION

- 1.1 Unless otherwise expressly provided, any definition of a word or expression in the Act shall apply to the use of such word or expression in this Tariff. Notwithstanding the foregoing, the following terms shall have the following meanings in this Tariff:

“Act” means the *Electric Utilities Act*, S.A. 2003, c. E-5.1, as amended.

“AESO” means Alberta Electric System Operator, and is a trade name under which the ISO carries on business in fulfillment of its roles, responsibilities and duties pursuant to the Act.

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

“AEUB” means the Alberta Energy and Utilities Board.

“Affiliate” has the meaning ascribed to it in the *Business Corporations Act* (Alberta), S.A. 1981, c. B-15, as amended.

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

“Application Fee” means the non-refundable interconnection application fee a Customer pays to the AESO when the Customer submits a request for interconnection to the AIES. Application Fees are set out in Article 7.

“Area Control Error” means the instantaneous difference between actual and scheduled interchange, taking into account the effects of frequency bias (and time error or unilateral inadvertent energy, if automatic correction for either is part of the AGC);

“Automatic Generation Control” or **“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” or **“AVR”** means automatic control equipment that changes the Generating Unit excitation level to maintain voltage levels.

“Billing Capacity” shall have the meaning given to that term in Rate Schedule DTS.

“Billing Period” means a period of time starting on the first day of each calendar month at 00:00 hrs. and ending on the last day of the same calendar month at 24:00 hrs., during which a Customer is supplied with System Access Service by the AESO.

“Business Day” means a day other than a Saturday, a Sunday, a Statutory Holiday, or a Monday when a Statutory Holiday occurs on a Saturday or Sunday and the following Monday is a day during which financial banking privileges are suspended.

“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 AESO and which is expected to be normal for it to so operate, after energization and Commissioning.

“Commissioning” means those limited activities (as approved in advance by the AESO and subject to written agreement) conducted after interconnection which are required to ensure that a facility can satisfactorily enter Commercial Operation and that a facility meets the AESO’s requirements. Such written agreement will not extend beyond a three month period or a mutually agreed to commissioning period.

“Confidential Information” means information provided to the AESO which has been specifically identified as being confidential in nature by the provider of such information and information provided pursuant to Article 11 of these T&C’s.

“Confirmation Notice” is a notification from the AESO to a customer that the Customer’s system access service application is complete and will be processed.

“Constrained On” means, in respect of a Generating Unit, being dispatched on load while Out of Merit, as a result of a Dispatch Instruction by the System Controller.

“Construction Commitment Agreement” means an agreement to be entered into between the AESO and a Customer prior to the AESO arranging for new facilities required to accommodate System Access Service or an increase thereto, as referenced in Paragraph 8.1 hereof.

“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 the terms hereof.

“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, such as the AIES.

“COS” or “Customer-Owned Substation Credit” means the credit payable to certain Demand Customers as set forth in Rate Schedule Customer-Owned Substation Credit.

“Customer” is an Eligible Person who takes, or applies to take, System Access Service from the AESO and satisfies the pre-contract conditions provided in Paragraph 3.1 below.

“Customer’s Facilities” means all facilities interconnecting with the AIES on the Customer’s side of the POD or POS.

“Customer Contribution” means the amount required to be paid by Customers taking service under Rate Schedule DTS or Rate Schedule STS pursuant to Article 9 hereof.

“Deficiency Notice” is a notification from the AESO Customer that the Customer’s system access service application is deficient and the application will not be processed.

“Demand Customers” are load customers and generation customers, the latter for the purposes of obtaining their back up supply.

“Direct Loss or Damage” does not include loss of profit, loss of revenue, loss of production, loss of earnings, loss of contract or any other indirect, special or consequential loss or damage whatsoever arising out of or in any way connected with a AESO Person Act.

“Dispatch Instruction” means in respect of any Generating Unit, all dispatch instructions issued by the System Controller from time to time, designating such unit to provide System Support Services, by changing the output or manner of operation of a unit, or by another method or procedure, and giving any necessary details as to the service to be provided.

“Dispute” means any dispute, claim or difference which arises in respect of the Tariff between the AESO and the Customer.

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

“DOS” or “Demand Opportunity Service” means service under any one of Rate Schedules Demand Opportunity Service (DOS 7 Minutes), Demand Opportunity Service (DOS 1 Hour), Demand Opportunity Service (DOS Term).

“DTS” or **“Demand Transmission Service”** means service under Rate Schedule Demand Transmission Service.

“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.

“Eligible Person” means any of the following: the owner of a Generating Unit; the owner of an electric distribution system; an importer or exporter; the owner of an industrial system; a direct access customer or the purchaser of a PPA in accordance with Part 6 of the Act.

“Emergency” means, as declared by the System Controller, either: any abnormal system condition which requires immediate manual or automatic action to prevent abnormal system frequency deviation, abnormal voltage levels, equipment damage, or tripping of system elements which might result in cascading effects; or a state in which the AESO lacks sufficient System Support Services.

“Energy Transfer” shall mean the quantity of energy transfer attributable to a transaction for service under Rate Schedule Export Service or Rate Schedule Import Service, based on the capacity at a Point of Interconnection and allocated to a Customer.

“Export Service” means service under Rate Schedule Export Service.

“Force Majeure” means: acts of God; strikes; lockouts or other industrial disturbances; vandalism; wars; riots; epidemics; landslides; lightning; earthquakes; explosions; fires; storms; intervention of federal, provincial, or local government (or from any of their agencies or boards); the order or direction of any court; inability to obtain, interruption, suspension, curtailment or other diminution of, supply of materials, utilities, or services from any supplier (including, without limitation, TFOs, System Support Service Providers or the System Controller) and any other causes, whether of the kind herein enumerated or otherwise, not within the control of the AESO and which by the exercise of due diligence the AESO is unable to prevent or overcome.

“Generating Unit” shall have the meaning as ascribed to in the Act.

“Governor” or **“Governor System”** means automatic control equipment with speed droop characteristics to control Generating Unit speed and/or electric power output.

“Hourly Application Fee” means the actual AESO’s costs associated with processing a Customer’s request for interconnection to the AIES plus 30 per cent.

“Import Service” means service under Rate Schedule Import Service.

“Interconnection Requirements” means the requirements contained in the *Technical Requirements for Connecting to the Alberta Interconnected Transmission Grid* in either *Part 1: Technical Requirements for Connecting Loads* or *Part 2: Technical Requirements for Connecting Generators to the Alberta Interconnected Electric System*, published on the AESO’s website, as may be amended from time to time in accordance with the provisions of Article 5 below.

“ISO” means the Independent System Operator, a corporation established under the Act and whose role, responsibilities and duties are more particularly described therein.

“Looped” refers to transmission facilities that increase the number of electrical paths between any two POCs other than the POC that serves the Customer for whom the facilities are being or have been constructed.

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

“MCR” means Maximum Continuous Rating. MCR is the maximum net power output that can be sustained by a generator over a long period.

“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, 1-minute or other interval as deemed necessary by the AESO.

“Metered Energy” means the quantity of energy reflected by the relevant Metering Equipment as having been transferred in a particular period of time.

“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 these Terms and Conditions to measure Metered Demand.

“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-Recallable Customer” means a Customer taking System Access Service pursuant to Rate Schedule DTS or Rate Schedule STS.

“Off-Peak” means those periods of time which are not On-Peak.

“On-Peak” means the period of time from 8:00 hrs. to 21:00 hrs., inclusive, during any Business Day.

“Operating Reserves” means the capability above system demand available to the AIES within 10 minutes following a supply contingency, required to provide for system regulation and local area protection and to correct for or stabilize the system in the event of contingencies, load forecasting errors and forced outages to Generating Units. Operating Reserve includes any or all of the following in any combination at a given time:

- (a) **“Regulating Reserve”**, being an amount of Spinning Reserve responsive to AGC, which is sufficient to provide normal regulating margin;
- (b) **“Spinning Reserve”**, being the amount of reserve synchronized to the AIES, responding automatically through governor action to fluctuations in AIES frequency and capable of assuming load instantaneously;
- (c) **“Non-spinning Reserve”**, being the amount of generation capable of being connected to the AIES and loaded within 10 minutes, or demand that can be reduced within 10 minutes;
- (d) **“Contingency Reserve”**, being a combination of Spinning and Non-spinning Reserve and of sufficient quantity to reduce Area Control Error to zero within 10 minutes following the loss of supply capacity. At least 50% of the Contingency Reserve shall be Spinning Reserve, which will automatically respond to frequency deviation.

“Opportunity Capacity” means the incremental amount of transmission capacity which 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 Customer who can establish to the AESO’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 AESO can offset transmission costs.

“Opportunity Service Customers” means those Customers which meet the criteria for Opportunity Service, as defined.

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

“POC” or **“Point of Connection”** means a point at which electric energy is transferred between the Customer’s facility and the AIES. A Point of Connection may be a Point of Supply (POS), a Point of Delivery (POD), or both.

“POD” or **“Point of Delivery”** means the point at which electric energy is transferred from the AIES to a Customer’s facilities.

“Point of Interconnection” means the point at which electrical energy is transferred from the AIES to a neighboring jurisdiction and where the electric energy so transferred is measured;

“Pool Price” shall have the meaning ascribed to that term in the Act, and when used in the context of a particular hour, shall mean the pool price for that hour;

“POS” or **“Point of Supply”** means the point which electric energy is transferred from a Customer’s facilities to the AIES.

“Power Factor” means the ratio of Real Power to Apparent Power.

“PPA” or **“Power Purchase Arrangement”** means those instruments setting forth the rights and obligations of the parties in relation to operation of Regulated Generating Units and entitlements to electricity and System Support Services and approved by the AEUB under Part 6 of the Act.

“PPA Effective Date” means January 1, 2001 or such other date as the Power Purchase Arrangements become effective.

“PSS” means power system stabilizer.

“Radial” facilities are those transmission facilities that are not Looped.

“Ratchet Level” shall have the meaning ascribed thereto in Rate Schedule DTS.

“Rate Schedules” means the schedules attached to and forming part of the Tariff, which set out the respective rates to be charged, and credits to be attributed, for each type of System Access Service.

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

“Reactive Power” means the portion of electricity that establishes and sustains the electric and magnetic fields of alternating current equipment, usually expressed in kilovars (“kVAR”) or megavars (“MVAR”).

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

“Regulated Generating Unit” shall have the meaning ascribed thereto in the Act;

“Representatives” means the directors, officers, employees, consultants and agents of the AESO.

“RMS” means the Reliability Management System (and all mandatory operating criteria required thereby) adopted and enforced by the WSCC.

“Statutory Holiday” means New Years Day, Family Day, Good Friday, Victoria Day, Canada Day, Heritage Day, Labour Day, Thanksgiving Day, Remembrance Day, Christmas Day and Boxing Day.

“STS” or **“Supply Transmission Service”** means service under Rate Schedule Supply Transmission Service.

“STS Capacity” means the Contract Capacity as set out in the System Access Service Agreement for Supply Transmission Service.

“System Access Service” or **“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 carrying on business as the AESO and a Customer, in one of the forms attached hereto as Appendix “B”, which establishes the specific terms pursuant to which each individual Customer obtains System Access Service.

“System Controller” or **“SC”** shall have the meaning ascribed to that term in the Act.

“System Disturbance” means an unplanned event, which produces an abnormal AIES condition such as high or low frequency, abnormal voltage or oscillations in the AIES.

“System Security” means the ability of the AIES 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.

“System Support Services” shall have the meaning ascribed to that term in the Act.

“Tariff” means these Terms and Conditions and Appendices attached hereto and the Rate Schedules as approved by the AEUB.

“TFO” means Transmission Facilities Owner.

“Transmission Administrator Operating Policies” or **“TAOPs”** means the standards and practices established by the AESO to guide operation of the transmission system, as modified by the AESO from time to time.

“Transmission Must-Run” means Constrained On dispatch of a Generating Unit to a specific level in accordance with a Dispatch Instruction to maintain System Security.

“UFS” or **“Under-frequency Load Shedding Credit”** means the under-frequency load shedding provisions as set forth in Rate Schedule Demand Under-Frequency Load Shedding and the credits therefor.

“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 WSCC operate synchronously connected transmission systems.

“WSCC” means the Western Systems Coordinating Council and any successor organization.

ARTICLE 2
APPLICATION OF TARIFF

- 2.1 This Tariff sets forth the basic terms and conditions of service pursuant to which the AESO will provide System Access Service to its Customers. This Tariff has been approved by the AEUB, defines service to be delivered by the AESO and binds all of the AESO's Customers. This Tariff defines the basic rights of the AESO and all its Customers with respect to all services provided by the AESO. By accepting service from the AESO, a Customer is deemed to have accepted the terms and conditions and Rate Schedules contained in this Tariff. This Tariff becomes effective on the later of January 1, 2003 or the first day of the month after the AEUB approves it.

This Tariff shall continue in effect until replaced or amended pursuant to Section 124 of the Act.

ARTICLE 3 USE OF TRANSMISSION SYSTEM

- 3.1 The AESO agrees to provide and make available System Access Service to all Customers who:
- (a) satisfy the pre-contract conditions set out in Articles 5, 6 (and the definition of Opportunity Service Customers), 7, 10, 11, 12, and 21 and the applicable Rate Schedule(s);
 - (b) have executed a System Access Service Agreement; and
 - (c) continuously abide by these terms and conditions.
- 3.2 The AESO reserves the right to withhold, limit or discontinue System Access Service under the following provisions:
- (a) Article 4, System Support Services
 - (b) Article 5, Interconnection Requirements
 - (c) Article 10, Credit, Statement of Account and Payment Terms;
 - (d) Article 11, Provision of Information By Customers;
 - (e) Article 12, Metering;
 - (f) Article 13, Service Interruptions and Force Majeure;
 - (g) Article 15, Increases, Reductions or Termination of Contract Capacity; and
 - (h) the Rate Schedules, where appropriate.
- In the event of a written request from a Customer, the AESO shall provide a written explanation for its withholding System Access Service.
- 3.3 All Customers shall comply with the Interconnection Requirements. Failure to comply with Interconnection Requirements shall provide the AESO with the right, at its sole discretion, to withhold or discontinue System Access Service.
- 3.4 The AESO provides System Access Service to Customers up to and including the POD or POS. All facilities interconnecting with the AESO on the Customer's side of the POD or POS ("Customer Facilities") are the responsibility of the Customer. This Tariff applies only to System Access Service supplied through facilities up to or from, and including, the POD or POS. The Customer must supply all Customer Facilities and the AESO has no responsibility in respect of service provided over Customer Facilities.
- 3.5 No Customer or any other person may rearrange, disconnect, remove, interconnect with, or otherwise interfere with any transmission facility without the AESO's prior written consent.

**ARTICLE 4
UNDER-FREQUENCY LOAD SHEDDING**

- 4.1 From and after the effective date of the Tariff, certain Customers may be eligible and required to provide under-frequency load shedding. The provisions with respect to those requirements, and the credits therefore, are set out in Rate Schedule Under-Frequency Load Shedding (“UFS”).
- 4.2 Failure by any Customer to whom UFS applies to comply with the requirements thereof may cause the AESO to, at its sole discretion, withhold, limit or discontinue System Access Service to such Customer. Nothing in this paragraph shall, however, affect or derogate from the right of the WSCC to levy penalties or the obligation of the Customer, if any, to pay such penalties as a result of failure to provide Under-Frequency Load Shedding to the AESO as contemplated herein.

ARTICLE 5 INTERCONNECTION REQUIREMENTS

- 5.1 Any Customer proposing to take, or is taking, System Access Service through a POD or POS must comply with the Interconnection Requirements.
- 5.2 Any Customer whose facilities include a synchronous Generating Unit which is operated in parallel to the electric system, whether connected at a transmission voltage or a distribution voltage, must have a PSS in service when the Generating Unit is operating and an AVR that is operated in a voltage control mode for all hours in which the Generating Unit is operating. The Customer shall not operate the Generating Unit unless the PSS and AVR are operating as required. The Customer shall report to the AESO on a monthly basis, no later than the 5th Business Day of the month following the month to which the report relates, the PSS and AVR in-service periods for the preceding month. In the event that the AESO becomes aware of a failure to comply with this requirement, the AESO shall report the non-compliance to the WSCC and any penalties assessed by the WSCC as the result of the noncompliance shall be borne by the relevant Customer. Article 5.2 shall not apply to synchronous Generating Units 10 MVA and smaller that are connected at the distribution voltage until such time that the aggregate MVA output from such 10 MVA and smaller synchronous Generating Units connected at a distribution voltage in the Alberta Control Area exceeds 200 MVA.
- 5.3 Failure to comply with the Interconnection Requirements shall result in the AESO withholding, suspending or terminating System Access Service, however the AESO may, in its sole discretion, waive compliance with the Interconnection Requirements or the requirements of Paragraph 5.2 in respect of any existing Customer for whom, in the AESO's reasonable opinion, the imposition thereof would create severe hardship or unnecessary costs.
- 5.4 The AESO shall maintain the reliability of the AIES and the Western Interconnection in accordance with the RMS. The AESO may amend the Interconnection Requirements in order to reflect, and to adhere to, changes to the RMS from time to time, upon further approval by the AEUB.
- 5.5 Article 5.2 does not apply to generators in existence as of June 1, 2000 that do not have a suitable excitation system unless the AESO indicates otherwise. If the AESO requires PSS or AVR to be added to a currently regulated generator in the future, the AESO will pay any costs prudently incurred in the installation of the PSS or AVR and will recover prudently incurred costs from tariff(s) approved by the AEUB. Any costs incurred by the currently regulated generators in the installation of the PSS or AVR that are found by the AEUB to be imprudent in any AESO tariff proceeding will be reimbursed to the AESO by the party receiving the payment.

- 5.6 If the excitation system of an existing regulated or unregulated generator to which Article 5.2 does not apply is rebuilt or replaced, the new excitation system must be suitable for PSS, and a PSS/AVR must be installed.

ARTICLE 6 OPPORTUNITY SERVICE

- 6.1 To qualify for Opportunity Service the Customer shall submit a pre-qualification application to the AESO. The Customer must also meet the specified eligibility criteria and must demonstrate that the intended use of the service would not proceed any other applicable rate. The Customer will pay a non-refundable \$5,000 fee to the AESO to evaluate the commercial eligibility of the Customer's DOS pre-qualification application. See Appendix B for a copy of the appropriate DOS proformas.
- 6.2 An Opportunity Service Customer shall only consume Opportunity Service for Metered Energy above its Contract Capacity. Opportunity Service Customers shall take System Access Service for all Billing Capacity equal to or below the Contract Capacity pursuant to Rate Schedule DTS.
- 6.3 In the event that the Metered Energy in a Billing Period for an Opportunity Service Customer is taken at a rate above the aggregate of the Opportunity Capacities under all such Customer's Opportunity Service System Access Service Agreements:
- (a) The Metered Energy transfer at a rate above the said aggregate of Opportunity Capacities shall be added to the Metered Energy for the purpose of calculating the Customer's charges for that Billing Period under Rate Schedule DTS; and
 - (b) In the event that an Opportunity Service Customer has a Contract Capacity of zero and has not executed a System Access Agreement for DTS services, such Customer shall be deemed to have executed such an agreement, effective the beginning of the relevant Billing Period for which the aggregate of Opportunity Capacities was exceeded, for the purposes of determining a Billing Capacity, and for the purposes of applying the charges referred to in paragraph (a) above.
- 6.4 Opportunity Service is recallable:
- (a) in accordance with the Rate Schedules;
 - (b) in accordance with the provisions of Article 13 below;
 - (c) whenever sufficient transmission system capacity becomes temporarily or permanently unavailable; and
- 6.5 From time to time, the AESO may audit any Customer's eligibility for Opportunity Service. If, as a result of its audit, the AESO finds that the Customer is or has been serving loads which do not, or no longer, qualify for Opportunity Service, the AESO will change the Rate Schedule pursuant to which the Customer is billed. The AESO may, in its sole discretion, recover retroactive amounts equal

to the payments the Customer would have had to make if it had been taking System Access Service as a Non-Recallable Customer for the periods during which such Customer did not qualify for Opportunity Service. In the event the AESO determines that the Customer is no longer qualified for Opportunity Service and prior to executing an agreement for Non Recallable Service, the Customer will be deemed to have executed such agreement, with the effective date of such agreement to be the effective date of disqualification.

6.6 Opportunity Service contracts will be offered under the following conditions:

- (a) Commencement of the initial application for opportunity service must be requested at least 30 days prior to taking opportunity service;
- (b) The applicant must have been determined, in the sole opinion of the AESO to have met the commercial eligibility criteria for Opportunity Service and in particular the use of the Opportunity Service would not proceed on any other applicable rate;
- (c) subsequent applications for opportunity service with the same parameters as the initial qualification application must be requested at least one hour prior to taking opportunity service;
- (d) the minimum term of an opportunity service shall be a continuous eight hours from 00:00 hrs. midnight to 24:00 hrs., or such other minimum term as the AESO may, in its discretion, set; and
- (e) the maximum term of an opportunity service is one calendar month.

**ARTICLE 7
INTERCONNECTION APPLICATION FEES**

- 7.1 Effective January 1, 2002, the AESO shall charge and the Customer shall pay a non-refundable interconnection application fee (the “Application Fee”) to recover the AESO’s internal costs associated with a Customer’s request for interconnection to the AES. These costs may include, but are not limited to, the costs of estimating, engineering, customer service, project management, contracting and administration. The AESO will not process the Customer’s application, conduct the analysis or provide the detailed information to the Customer until the Customer has provided the AESO with:
- (a) a completed system access application form (copies of the Stage 1 and Stage 2 application forms can be obtained from the AESO’s website); and
 - (b) subject to Paragraph 7.4, the Application Fee paid in full.
- 7.2 Subject to Paragraph 7.4, the Application Fee charged is broken down into two stages and the stages are further broken down depending on the size of the Customer’s proposed project:
- (a) Stage 1 fees cover the AESO’s costs to provide the Customer:
 - (i) a draft functional specification;
 - (ii) in the case of a Customer which is a generator, a preliminary loss factor calculation; and
 - (iii) a cost estimate of the work specified in the draft functional specification;
 - (b) Stage 2 fees cover the AESO’s costs to provide the Customer:
 - i) an energization certificate.
 - ii) application by the TFO for transmission facilities;
 - iii) supporting letter from the AESO to the Board on the facility application by the TFO; and
 - iv) provision of a System Access Agreement.

7.3 The Stage 1 and Stage 2 Application Fees are as follows:

Project Size	Stage 1 Fee	Stage 2 Fee
< 10 MW	\$5,000	\$5,000
> 10MW ≤ 15 MW	\$8,000	\$8,000
> 15 MW ≤ 25 MW	\$15,000	\$15,000
> 25 MW	\$40,000	\$50,000

7.4 At the start of Stage 1 or Stage 2 the Customer, at its sole discretion, may elect to pay the actual AESO costs associated with interconnection plus thirty percent (the “Hourly Application Fee”) instead of the Stage 1 or Stage 2 Application Fees.

If the Customer elects to pay the Hourly Application Fee, the Customer will provide the AESO with a deposit equal to the applicable Stage 1 or Stage 2 Application Fee. At the completion of the stage of the project the AESO will provide the Customer with a detailed invoice of the work. If the deposit exceeds the amount of the invoice, the AESO will refund the excess funds to the Customer. If the amount of the invoice exceeds the deposit the Customer shall pay the AESO the amount owing.

7.5 Within five (5) business days of receiving a system access service application form and full payment of the Application Fee, the AESO will review the system access service application to determine if it is complete and contains all the necessary information.

7.6 If the system access service application is complete the AESO will notify the Customer, in writing, that the system access service application is complete (the “Confirmation Notice”).

7.7 If the system access service application is not complete or the Application Fee has not been paid in full, the AESO will notify the Customer, in writing, of the deficiencies (the “Deficiency Notice”) and the application will not be processed.

7.8 A Customer or potential Customer may request the AESO provide a preliminary loss factor calculation (only), in which case the Customer shall provide a completed loss factor calculation application form (copies of which can be obtained from the AESO’s web site) and pay a non-refundable fee of Twenty five hundred dollars (\$2,500) to the AESO.

7.9 For all other requests for service the Customer shall pay the AESO’s actual costs to prepare and provide the information, pursuant to the procedure set out in Paragraph 7.4.

7.10 Upon the AESO providing the Customer with the documents and information set out in paragraph 7.2(a) at the completion of Stage 1, the Customer has sixty (60) days to notify the AESO whether the Customer is proceeding to Stage 2, and , in

the event it is proceeding, provide the AESO with a completed Stage 2 application form. If the Customer elects not to proceed, does not notify or provide the AESO with the Stage 2 application (along with Stage 2 Application Fee) within the 60 day period, the Customer's system access service application will be deemed to have been cancelled and the project shall be removed from the AESOs' project list.

- 7.11 If a Customer's system access service application has been cancelled pursuant to paragraph 7.10, and the Customer subsequently wishes to reinstate its application the Customer must start the application process from the very beginning (i.e. submit a Stage 1 application and Application Fees pursuant to paragraph 7.1).
- 7.12 All detailed studies shall be conducted by the AESO in the order in which the AESO receives payment therefor. In the interest of maintaining confidentiality of each and every Customer and potential Customer, the AESO shall conduct all detailed studies only on the basis of available information about actual and planned AIES facilities. For planning purposes, only those facilities with respect to which a Construction Commitment Agreement has already been executed shall be deemed "planned facilities". The AESO shall not be liable to any Customer or potential Customer for any changes to the actual or planned facilities which occur between the date upon which the AESO issues the detailed study and the date upon which the Customer executes a Construction Commitment Agreement.
- 7.13 All applications made by customers under previous Tariffs will continue to be offered service in accordance with those Tariffs. Stage 1 and Stage 2 fees will not be assessed to applications made prior to January 1, 2002. Any application made prior to January 1, 2002, which does not reach the end of Stage 1 by December 1, 2002, will be terminated.

**ARTICLE 8
SECURITY FOR NEW TRANSMISSION FACILITIES**

- 8.1 The AESO is not obliged to arrange for commencement of the construction of new facilities required to initially facilitate System Access Service, or to accommodate increased Contract Capacity or Opportunity Capacity, for any Customer until that Customer has executed a Construction Commitment Agreement and, if required by the AESO, has provided to the AESO a performance bond, parental guarantee, irrevocable letter of credit or other security (“the security”) in an amount adequate to fund cancellation costs as referenced in Paragraph 8.2 or the AESO’s reasonable estimate thereof, (or any portion thereof deemed appropriate), up to, in the aggregate, a maximum of the estimated costs of construction. The security shall be satisfactory to the AESO in form and substance and the Construction Commitment Agreement shall be substantially in the form of the agreement attached hereto as Appendix “C”.
- 8.2 In the event that, after a Construction Commitment Agreement is executed, the System Access Service and new transmission facilities are no longer required for any reason, the Customer shall pay all costs incurred in the procurement and construction of facilities to the date at which construction is ceased, plus all cancellation costs, penalties or other claims accrued due to the cessation and costs required for material salvage and reclamation of the construction site.
- 8.3 The Customer for whom new transmission facilities were built must execute a System Access Service Agreement prior to Commissioning of the new facilities. System Access Service shall be provided on a temporary basis for Commissioning at the Rate Schedule named in the System Access Service Agreement, however, during Commissioning (only), the Metered Demand may, at the sole discretion of the AESO, be disregarded in calculating the Ratchet Level for service under Rate Schedule DTS.

ARTICLE 9 CUSTOMER CONTRIBUTION POLICY

- 9.1 In considering requests to provide service to a new POC, or to increase the capacity of, or improve the service to an existing POC, the AESO will determine the appropriate means of delivering the requested service.
- (a) If the AESO determines that the most economic option for providing service to a Customer is a facility other than a transmission facility (such as a distribution-level extension or isolated generation), or that the Customer's request primarily represents a shift of supply or demand from an existing POC, then the full cost of the transmission upgrade or extension ("the project") shall be borne by the Customer.
 - (b) Otherwise, the Customer's contribution to project costs shall be determined in accordance with Article 9.2 through 9.4.
- 9.2 Project costs will be classified as either system-related costs or Customer-related costs, as follows:
- (a) The costs of that part of the project associated with Looped transmission extensions shall be classified as system-related costs, and shall be paid by the AESO.
 - (b) The costs of that part of the project associated with Radial transmission extensions shall be classified as system-related if it is proposed in the transmission development plan (as that plan exists on the date the project is Commissioned) that the extension become Looped within five years. The Customer shall pay the cost of advancing that part of the project from the date established in the transmission development plan, which cost shall be calculated as the difference between the present values of the capital costs of the advanced and as-planned projects using the discount rate as determined under Article 9.12.
 - (c) Where economics or system planning dictate that a facility larger than that required to serve the Customer is to be installed initially, then the cost of that portion of the project deemed to be in excess of the Customer's needs shall be classified as system-related. As the need to serve additional POCs arises, these system-related costs may be reclassified as Customer-related costs and allocated to the new Customers. The capacity between the Customer's requirements and the minimum size of facilities required to serve the Customer is not considered to be in excess of the Customer's requirements.
 - (d) All costs not identified under (a), (b), or (c) shall be classified as Customer-related costs. If the project is to serve a Customer not taking

service under Rate DTS, then the Customer shall pay all Customer-related costs. Otherwise, the Customer's contribution to Customer-related costs shall be determined in accordance with Articles 9.3 and 9.4.

9.3 Customer-related costs will be classified as either supply-related costs or demand-related costs, as follows:

- (a) The fraction of Customer-related costs classified as supply-related shall be $STS/(STS+DTS)$, where STS and DTS are the STS and DTS Capacities, respectively, at the POC. All supply-related costs shall be paid by the Customer.
- (b) The Customer-related costs not classified as supply-related costs shall be classified as demand-related costs. The Customer's contribution to demand-related costs shall be in accordance with Article 9.4.

9.4 The Customer's contribution to the demand-related costs shall be calculated as follows:

- (a) *Customer contribution = demand-related costs – roll-in ceiling*, where:
 - (i) *roll-in ceiling = commitment term amount + revenue-related amount*;
 - (ii) *commitment term amount = \$400,000* for every one-year commitment term after the first five-year commitment term. A commitment term is a period within which the Customer commits to maintain its Contract Capacity at or above its initial Contract Capacity. The maximum commitment term amount is \$6 million.
 - (iii) *revenue-related amount = three times the levelized annual revenue* from the new or expanded service, where the levelized revenue is determined based on the projected Contract Capacities that are contracted at the time of the calculation of the Customer contribution. The discount rate to be used in the calculation of the levelized annual revenue shall be that established under Article 9.12.
- (b) If the calculation in (a) results in a negative Customer contribution, no Customer contribution is payable. The AESO will make no payment to the Customer with respect to any excess of the roll-in ceiling over the demand-related costs.

9.5 Any Customer contribution to be paid to the AESO must be paid prior to the AESO initiating procurement of the required facilities, unless other credit arrangements acceptable to the AESO are made. The discount rate to be used in any credit arrangement shall be that established under Article 9.12.

- 9.6 The cost estimate used in the calculation of project costs will be based on certain assumptions, including but not limited to assumptions about the method of construction, the routing of facilities, and the approvals and rights of way required to serve the Customer in accordance with the Customer's requests. In the sole opinion of the AESO, where a request for service is changed by a Customer or any assumptions are changed for reasons beyond the reasonable control of the AESO or the TFO, and a variance in the cost of the required facilities over the original estimate results, then:
- (a) Subject to (b), where there is an increase in the Customer contribution, this amount is immediately payable to the AESO, or
 - (b) If feasible, the Customer and the AESO may modify the terms of the contract to adjust the Contract Capacity or the number of commitment terms.
 - (c) The Customer shall have the right to cancel the request for service by paying to the AESO, and/or the TFO, all costs then incurred or required to be incurred to discharge the AESO, and/or the TFO, of all obligations and to satisfactorily cancel the request for System Access Service.
- 9.7 Certain material events may result in a recalculation of the Customer contribution in respect of a project. Any recalculation shall make use of revised commitment terms, revenue-related amounts, and other available information, and may result in payments by the AESO to the Customer or by the Customer to the AESO. The circumstances giving rise to contribution adjustments include, but are not limited to, those in which:
- (a) A Customer materially increases or decreases its Contract Capacity or number of commitment terms prior to the expiration of its original commitment terms;
 - (b) The actual Contract Capacities and/or incremental revenues turn out to be materially different, on a sustained basis, than originally projected;
 - (c) A facility that had been classified as system-related under Article 9.2(c) is reclassified as Customer-related due to load growth or the addition of a new POC.
 - (d) A material error is detected in the original calculation.
 - (e) A difference between the estimated costs of the project and the actual costs of the project.
- 9.8 If the AESO installs facilities to serve a Customer that is required to pay a contribution, and then uses those facilities to serve other Customers within 20

years of their Commissioning, the AESO will adjust the original Customer's contribution and assess each of the new Customers a contribution, as follows:

- (a) The contributions of the existing Customer and the new Customers will be determined on the basis of:
 - (i) the commitment terms of the original and new Customers;
 - (ii) the revenue-related amounts of the original and new Customers;
 - (iii) the Contract Capacities of the original and new Customers;
 - (iv) the extent of shared facilities; and
 - (v) the time interval between the Commissioning of the original and new Customers.
- (b) If the interval described in (a)(v) is not greater than five years, then the original Customer is eligible for the full amount of the adjustment. If the interval is greater than five years, then for the remaining 15 years the adjustment will be determined on a straight-line, declining-balance basis.
- (c) Commencing in year 11, any project whose remaining adjustment is less than \$50,000 shall be deemed to have an adjustment balance of zero, and no further refunds shall be due.
- (d) An adjustment as described above will also apply to situations in which the AESO subsequently deems that all or part of an original Customer's facilities have become system-related.

9.9 Where relocation of transmission facilities is required, the AESO will ensure that all reasonable costs in relocating any transmission facilities are paid for by the Customer.

9.10 Where new facilities between adjacent Control Areas are required, the cost of such facilities will be shared equally between the AESO and the party responsible for costs in the other Control Area.

9.11 The AESO reserves the right to exercise its discretion, acting reasonably, in the application of the contribution policy. Without limiting the generality of this discretion, the AESO may:

- (a) Limit the maximum number of commitment terms used to determine the roll-in ceiling.
- (b) Determine costs to be system-related in certain circumstances that might, under strict application of the foregoing, have been classified as customer-related.

- (c) Determine that a refund of a Customer contribution may not be given or that a refund may be deferred pending the attainment of certain specified conditions. Upon attainment of the specified conditions, the Customer may be eligible for a full or partial refund.
- (d) Determine that a refund of a Customer contribution must be returned to the AESO where it is demonstrated that an error was made or that an inappropriate refund was given.

9.12 The discount rate applicable to payments due under this Article shall be determined as follows:

- (a) For unassigned transmission facilities, for transmission facilities supplied to the AESO by an investor owned Transmission Facility Owner or for facilities supplied to the AESO by an income tax paying municipally owned Transmission facility Owner:

$$.65(\text{GCB} + 1\%) + .35(\text{GCB} + 3.5\%)/(1 - T)$$

where GCB is equal to the yield on 30-year Government of Canada bonds and T is equal to combined federal and provincial income tax rate for investor owned TFOs.

- (b) For transmission facilities supplied to the AESO by a non income tax paying municipally owned Transmission Facility Owners:

the yield on 30-year Government of Canada bonds plus 1.9 percent.

ARTICLE 10
CREDIT, STATEMENT OF ACCOUNT AND PAYMENT TERMS

- 10.1 After Commissioning, the AESO will issue a Statement of Account for System Access Service to each Customer no later than fifteen (15) Business Days after the end of each Billing Period. The AESO will determine the payment required and funds owed by each Customer for System Access Service at each POD and POS, as applicable, using available Metered Demand, Metered Energy or Energy Transfer data, as applicable, to calculate charges and any applicable credits. The AESO may deduct amounts owing by the AESO to the Customer or its Affiliates under other agreements between the AESO and the Customer or its Affiliates from the Statement of Accounts.
- 10.2 All Customers requiring access to the AIES must execute a System Access Service Agreement with the AESO for each POD and POS.
- 10.3 A Customer obtaining System Access Service may be afforded credit by the AESO. The Customer shall provide the AESO with any financial information that the AESO reasonably requests prior to the AESO granting service in order that the AESO may establish the Customer's ability to pay and/or creditworthiness.
- 10.4 The AESO may request, at any time a deposit of up to three months' payment in advance for System Access Service, based on the AESO's estimate of the appropriate sum based on the Customer's historic usage.
- 10.5 If the Customer fails to provide adequate security or advance payment to the AESO within ten (10) days of the AESO's request, the AESO may immediately withhold or suspend the Customer's System Access Service. However any such withholding or suspension shall not relieve the Customer from any obligation to pay any rate, charge or other amount payable which has accrued or is accruing to the AESO.
- 10.6 The AESO may use estimated values to produce a Statement of Account when Metered Demand data is not available or is incomplete, when Metering Equipment fails, or when the data is under Dispute. The AESO may also use estimated values to produce a Statement of Account if the AESO's billing and settlement system is unable to produce a Statement of Account. In the event that a Statement of Account is based on estimated values, an adjustment will be made on a subsequent Statement of Account to reflect the use of actual or more appropriate estimated values and the AESO may increase or reduce the amount billed in a subsequent Statement of Account in order to correct any underpayment or overpayment.
- 10.7 Effective January 1, 2002, where a Customer is an industrial site where multiple POCs are required, the AESO may totalize the POCs and produce one Statement of Account for the Customer. The AESO will base its decision to

totalize on a review of the economics of providing more than one POC, reclassification of the site as an AEUB designated industrial system, or the existence of a credible transmission bypass alternative.

- 10.8 The Customer shall pay the entire amount reflected as owing by it on the Statement of Account, notwithstanding any unresolved Dispute between the AESO and the Customer, no later than the twentieth Business Day after the end of the Billing Period. Payment shall be made by way of electronic funds transfer to the bank account specified by the AESO.
- 10.9 Late payments by the Customer shall be subject to a late payment charge of 1.5% per month for each month or part thereof for which such payment is late. The AESO will also assess the defaulting Customer for all administrative and collection costs relating to the recovery by the AESO of amounts owed. The AESO may suspend System Access Service and realize upon any security provided by the defaulting Customer if the Customer is in arrears by more than one month. System Access Service to the Customer shall not thereafter be reinstated until the Customer has paid all amounts owing to the AESO in full and has restored or secured its credit facility in a manner satisfactory to the AESO.

**ARTICLE 11
PROVISION OF INFORMATION BY CUSTOMERS**

- 11.1 Customers shall provide the following information necessary to enable the AESO to provide and maintain System Access Service that is safe, adequate and proper. When the required information has an impact on safety or system security, failure to provide the required information will result in suspension, termination or delay of System Access Service. System Access Service will not thereafter be reinstated, terminated or modified (as the case may be) until the necessary information is provided to the AESO. When the required information does not have an impact on safety or system security, failure to provide the required information will result in the AESO making application for approval of an information sharing arrangement pursuant to the Act and seeking to recover 100% of the actual costs of pursuit of its application from the Customer whose actions necessitated the application.
- 11.2 In addition to payment of the Application Fee (provided for in Article 7 above), information is required prior to providing a detailed cost quotation for new System Access Service. Detailed information is required to assess the impact of new demand or generation on the system, to determine whether new transmission facilities will be required in order to accommodate the new load or generation, and to produce functional specifications necessary to procure any new transmission facilities.
- 11.3 A Demand Customer shall provide a detailed request for System Access Service to accommodate a new or increased demand, which must include information regarding the retail customer's identity, the location, peak expected operating demand, desired in-service date and a forecast of future demand.
- 11.4 A Supply Customer who is requiring service for new generation or increase in capacity at an existing generation plant must submit a detailed request for System Access Service. The request must include information regarding the electrical characteristics of the generator so that the AESO can complete a detailed analysis of impact on the system and produce a detailed cost quotation.
- 11.5 The appropriate forms for making a detailed request for System Access Service are published on the AESO's website.
- 11.6 Additional technical information shall be required during construction and prior to energization of new interconnections or increases of capacity at existing PODs and/or Commissioning at POSs so that the AESO may ensure the ongoing security of the existing electrical system. Technical information is required prior to energization of load, as requested by the AESO, regarding the new transmission facilities including, but not limited to, transformer and line information. Technical information is required prior to Commissioning of new generation, as requested by the AESO, including, but not limited to, data

regarding the electrical characteristics of the generator and unit transformer. The appropriate forms for fulfilling pre-commissioning information requirements are published on the AESO's website.

- 11.7 Additional information may be required prior to Commissioning and Commercial Operation. Commissioning shall not occur until the Customer has received written approval thereof from the AESO.
- 11.8 The AESO requires forecast information and updated information from all Customers to plan, operate and optimize the AIES. On October 1st of each calendar year and whenever new information arises, all Customers shall provide the AESO with a copy of the Customer's operating procedures and a schedule of planned or maintenance outages for the two subsequent calendar years. On October 1st of each calendar year and whenever new information arises, all Customers shall provide the AESO with forecast information for the subsequent five (5) years, including:
- (a) Forecast Maximum Contract Capacity by POD or POS by month,
 - (b) Location and size of any new POD and POS required,
 - (c) Name and location of existing POD and POS which may no longer be required.

The appropriate forms for provision of forecast and update information are published on the AESO's website.

- 11.9 The AESO requires detailed information regarding Metering Equipment information. The Customer shall provide the AESO with the Metering Equipment information outlined in Appendix "D".
- 11.10 The Customer shall provide to the AESO, upon request, any information that the AESO requires in order to discharge its duties and functions under the Act and for compliance with any external agency's reporting requirements.
- 11.11 The AESO is not responsible for any delay, interruption, damage or other problems caused by a delay in the provision of information required from a Customer under the provisions of this Article 11.

ARTICLE 12 METERING

- 12.1 The selection, use and calibration of Metering Equipment shall be accomplished in accordance with the E&GI Act, except where the AESO requires revenue meters to be accurate to within 0.5% for loads up to 10 MVA and 0.2% for loads above 10 MVA (the "System Accuracy Standard").
- 12.2 The Customer may arrange to have any Non-dispensated Metering Equipment tested and/or calibrated to the System Accuracy Standard. If the Customer requests a test and the meter is subsequently found to be accurate within the System Accuracy Standard, then the Customer shall pay for the cost of the testing and shall be invoiced for this cost in its next Statement of Accounts.
- 12.3 The AESO may, at its discretion, require a Customer to install Metering Equipment on the Customer's premises, at the Customer's sole cost, and the Customer shall comply with such a request in a timely manner. If the Customer refuses or fails to comply with such a request, the AESO may request, and the Customer shall grant, access at any reasonable time to the Customer's premises so the AESO may enter the Customer's premises to install Metering Equipment, at the Customer's sole cost.
- 12.4 The AESO may request, and the Customer shall grant, access at any reasonable time to the Customer's premises so the AESO may, at the Customer's sole cost, enter the Customer's premises to read any Metering Equipment installed on the Customer's premises.
- 12.5 The Customer may request, at the Customer's sole cost, that the AESO arrange for testing of any Metering Equipment.
- 12.6 The AESO may require testing of Metering Equipment at any time. In the event that the Metering Equipment meets the System Accuracy Standard, the AESO shall bear the cost of such testing. In the event that the Metering Equipment does not meet the System Accuracy Standard, the Customer shall bear the costs of such testing and the required recalibration.
- 12.7 If a Dispute should arise with respect to the Metering Equipment or Metering Equipment data, the Dispute shall be resolved in accordance with the provisions of Article 16 below.
- 12.8 Metering signals in the form of energy pulses, reactive energy pulses, analog values of energy and reactive energy can be provided to the Customer, upon written request and at the Customer's cost. This cost shall be included in the Customer's Statement of Accounts.
- 12.9 All Customers shall provide Metering Equipment that measures Metered Demand in fifteen (15) minute intervals. The AESO may, at its discretion, require a

Customer to provide Metering Equipment that is capable of measuring Metered Demand at one (1) minute intervals or at such other intervals as may be determined by the AESO.

- 12.10 The Customer shall make reasonable efforts to provide the AESO, in accordance with the E&GI Act and the TAOPS, the following data:
- (a) fifteen (15) minute interval POC metering data; or
 - (b) if requested by the AESO, one (1) minute interval POC metering data.

The Customer shall provide the metering data set out above, for the previous day, by 12:00 p.m. of the next business day. Revenue class meters will be used for billing purposes, energy purchases and sales and system support service purchases.

- 12.11 Subject to Paragraph 12.12, failure to comply with the metering requirements set out in this Article 12 shall result in the AESO withholding, suspending or terminating System Access Service.
- 12.12 The AESO shall not withhold, suspend or terminate System Access Service under paragraph 12.11 unless and until the metering non-compliance has been resolved in accordance with the provisions of Article 16, the Customer has failed to adhere to the arbitrator's decision in a timely manner and the AESO has provided the Customer with five (5) days prior written notice of its intention to withhold, suspend or terminate System Access Service.

ARTICLE 13
SERVICE INTERRUPTIONS AND FORCE MAJEURE

- 13.1 Although precautions are taken to guard against System Access Service interruptions, the AESO does not guarantee uninterrupted System Access Service. The AESO is not responsible for interruptions which occur as a result of:
- (a) scheduled or planned facility maintenance activities;
 - (b) construction, commissioning and facility testing activities;
 - (c) unscheduled or unplanned events (such as, but not limited to, emergency equipment maintenance and Emergencies);
 - (d) Force Majeure;
 - (e) breaches of obligations owed to the AESO by its suppliers or Customers;
or
 - (f) as otherwise expressly allowed by a Rate Schedule.
- 13.2 Whenever System Access Service has been interrupted, diminished or reduced for reasons other than a breach of these Terms and Conditions by the Customer, the AESO shall make all reasonable efforts to ensure that service is restored as soon as practicable after the interruption, diminution or reduction.
- 13.3 The Customer's obligations to pay for System Access Service, to provide information and to maintain Interconnection Requirements shall not be affected during, or as the result of, any event of Force Majeure or other System Access Service interruption expressly contemplated under this Tariff.

ARTICLE 14
LIMITATION OF LIABILITY AND INDEMNIFICATION

(Expires December 31, 2004)

- 14.1 Notwithstanding anything to the contrary contained in these Terms and Conditions, no action lies against the AESO, nor its affiliates, directors, officers or employees (collectively referred to as the AESO) and the AESO is not liable for any act or omission carried out or purportedly carried out in accordance with this Tariff (“AESO Tariff Act”) unless AESO Tariff Act constitutes wilful misconduct, negligence, breach of contract or if the AESO Tariff Act is not carried out in good faith. If the AESO is liable to another person for an AESO Tariff Act, then the AESO is liable for only Direct Loss or Damage suffered or incurred by that other person.
- 14.2 The AESO is entitled to indemnify persons who provide the AESO with Ancillary Services from liabilities to other persons for loss of profits, loss of revenue, loss of production, loss of earnings, loss of contract or any other indirect, special or consequential loss or damage arising as a result any act or omission carried out or purportedly carried out by the Customer in providing Ancillary Services and to recover through rates charged to Customers any and all costs prudently incurred pursuant to such indemnification, including, without limitation, all indemnification amounts and legal expenses and legal fees on a solicitor and client basis to defend any claims which are the subject of such indemnification or are paid to or on behalf of such provider of Ancillary Services to defend a legal action against such provider.
- 14.3 In the event a Customer is directed to provide the AESO with Ancillary Services pursuant to Article 24 of this Tariff, the AESO will indemnify and save harmless such Customers, its directors, officers, employees and agents from and against any and all liabilities, damages, losses, costs and expenses (including all reasonable legal expenses and legal fees on a solicitor and client basis) whatsoever and howsoever arising from any legal action, other than for Direct Loss or Damage suffered by the Customer arising from the Customer’s negligence, willful misconduct or breach of contract, which may be brought against the Customer, its directors, officers, employees and agents as a result of any act or omission carried out or purportedly carried out by the Customer in providing Ancillary Services under Article 24 of this Tariff to or for the account of AESO.
- 14.4 Indemnification Procedure:
- a) For purposes of this Article, the term “Indemnifying Party” when used in connection with a claim shall mean the AESO, having an obligation to indemnify a Customer with respect to such claim, and the term “Indemnified Party” when used in connection with a particular claim shall mean a Customer

- who has been directed to provide the AESO with Ancillary Services pursuant to Article 24 this Tariff and having the right to be indemnified with respect to such claim by the AESO.
- b) To make claim for indemnification, an Indemnified Party shall notify the Indemnifying Party of its claim under this Article, including the specific details of and specific basis under this Tariff or contract for its claim (the “Claim Notice”). In the event that the claim for indemnification is based upon a claim by a third party against the Indemnified Party (a “Third Party Claim”), the Indemnified Party shall provide its Claim Notice promptly after the Indemnified Party has actual knowledge of the Third Party Claim and shall enclose a copy of all papers (if any) served with respect to the Third Party Claim; provided that the failure of any Indemnified Party to give notice of a Third Party Claim as provided in this Article shall not relieve the Indemnifying Party of its obligations under this Agreement except to the extent such failure results in insufficient time being available to permit the Indemnifying Party to effectively defend against the Third Party Claim or otherwise prejudices the Indemnifying Party’s ability to defend against the Third Party Claim.
- c) In the case of a claim for indemnification based upon a Third Party Claim, the Indemnifying Party shall have 30 days from its receipt of the Claim Notice to notify the Indemnified Party whether it admits or denies its liability to defend the Indemnified Party against such Third Party Claim at the sole cost and expense of the Indemnifying Party. The Indemnified Party is authorized, prior to and during such 30 day period, to file any motion, answer or other pleading that it shall deem necessary or appropriate to protect its interests or those of the Indemnifying Party and that is not prejudicial to the Indemnifying Party.
- d) If the Indemnifying Party admits its liability to defend against such Third Party Claim, it shall have the right and obligation to diligently defend, at its sole cost and expense, the Third Party Claim. The Indemnifying Party shall have full control of such defense and proceedings, including any compromise or settlement thereof. If requested by the Indemnifying Party, the Indemnified Party agrees to cooperate, at the cost and expense of the Indemnifying Party, in contesting any Third Party Claim, which the Indemnifying Party elects to contest. The Indemnified Party may participate in, but not control, any defense or settlement of any Third Party Claim controlled by the Indemnifying Party pursuant to this part of Article 14. An Indemnifying Party shall not, without the written consent of the Indemnified Party, (i) settle any Third Party Claim or consent to the entry of any judgment with respect thereto which does not include an unconditional written release of the Indemnified Party from all liability in respect of such Third Party Claim or (ii) settle any Third Party Claim or consent to the entry of any judgment with respect thereto in any manner that may materially and adversely affect the Indemnified Party (other than as a result of money damages covered by the indemnity).

- e) If the Indemnifying Party does not admit its liability or admits its liability to defend the Third Party Claim but fails to diligently defend or settle the Third Party Claim, then the Indemnified Party shall have the right to defend against the Third Party Claim at the sole cost and expense of the Indemnifying Party, with counsel of the Indemnified Party's choosing, subject to the right of the Indemnifying Party to admit its liability to defend and assume the defense of the Third Party Claim at any time prior to settlement or final determination thereof. If the Indemnifying Party has not yet assumed the defense of the Third Party Claim, the Indemnified Party shall nevertheless raise any defence to such claim that may be available to it pursuant to applicable law and shall not compromise or settle any such claim without the consent of AESO, such consent not to be unreasonably withheld. The Indemnified Party shall also send written notice to the Indemnifying Party of any proposed settlement and the Indemnifying Party shall have the option for 15 days following receipt of such notice to (i) admit in writing its liability to defend against the Third Party Claim and (ii) if such liability is so admitted, reject or accept, in its reasonable judgment, the proposed settlement.
- 14.5 For purposes of Article 14 and 24, the term "Ancillary Services" means those services required to ensure that the AIES is operated in a manner that provides a satisfactory level of service with acceptable levels of voltage and frequency.
- 14.6 This Article 14 expires on December 31, 2004.

ARTICLE 15
INCREASES, REDUCTIONS OR TERMINATION OF CONTRACT CAPACITY

- 15.1 In the event that a Customer desires to increase the Contract Capacity in its System Access Service Agreement at an existing POD or POS, the Customer must execute an amended System Access Service Agreement. If new facilities or upgrades are required to provide the new service or to provide the amended service level, the requirements for a Customer Contribution shall apply and the provisions of Article 8 shall be applicable.
- 15.2 The Contract Capacity for a new POS established by the AESO shall not exceed the sum of the MCR of all generators connected to the AIES by the new POS less the sum of all gross loads that offset the energy delivered to the AIES from that POS under normal operating conditions.
- 15.3 (a) Subject to paragraphs (b) and (c), the Metered Demand for a Customer taking service under Rate Schedule DTS or Rate Schedule STS shall not exceed the lesser of:
- (i) 110% of the Contract Capacity;
 - (ii) the Rated Capacity of any transmission facilities comprising its interconnection; or
 - (iii) the Physical Capacity of any transmission facilities comprising its interconnection.

In the event that the foregoing is not complied with, the AESO shall have the right to discontinue the applicable System Access Service until the Customer installs equipment to limit its Metered Demand.

- (b) A DTS Customer may temporarily exceed the level stipulated in subparagraph 15.3(a)(i) to the extent it has in place a System Access Service Agreement for an Opportunity Service at the applicable POD.
- (c) Subject to subparagraph 15.3(d) an STS customer may temporarily exceed the level stipulated in subparagraph 15.3(a)(i), with the AESO's consent obtained on a minimum twenty-four (24) hours' notice, provided that the AESO determines that the transmission system can safely accommodate the proposed energy without risk of disturbance to other AESO customers.
- (d) Under exceptional circumstances, the AESO may allow a reduction to the notice provisions for STS customers with frequently repeated transactions of similar size and duration, but under no circumstance will a notice period of less than one (1) hour be accepted.

- 15.4 At least once per year, the AESO will review the Contract Capacity of STS customers. The AESO may reduce a customer's STS Contract Capacity to:
- (a) The mean metered power delivered to the AIES in the preceding twelve (12) months; or
 - (b) For low capacity factor generators, the mean metered power delivered to the AIES over recurrent periods that are shorter than twelve (12) months, as determined by the AESO
- if such deliveries are more than 10% below the existing Contract Capacity or as mutually agreed to between the Customer and the AESO.
- 15.5 System Access Service Agreements between the AESO and Customers who operate Regulated Generating Units shall be terminated on the PPA Effective Date, with the exception of Regulated Generating Units that are not sold at the PPA auction and the Regulated Hydro Generating Units outlined in Appendix E.
- 15.6 System Access Service Agreements with an effective date after the PPA Effective Date between the AESO and Customers who operate Regulated Generating Units or who have entered into a Power Purchase Arrangement with the owner of a Regulated Generating Unit shall terminate at the end of the base life year of the Regulated Generating Unit as outlined in Appendix E with the exception of the following Regulated Generating Units listed below:
- (a) Rossdale Units 8, 9 and 10's deemed base life year shall be 2003; and
 - (b) Rainbow Units 1, 2 and 3's deemed base life year shall be 2005;
- 15.7 Reductions of Contract Capacity at a POD or a POS will be made five (5) years after receipt of written notice from the Customer. The Contract Capacity immediately following the five (5) year notice period shall be the maximum of:
- (a) the pre-notice Contract Capacity less the reduction of Contract Capacity requested by the Customer; or
 - (b) the highest Metered Demand during the notice period less the reduction of Contract Capacity requested by the Customer.
- 15.8 Separate written notice must be provided for increases or reductions of Contract Capacity at each respective POD and POS at a single transmission station; no net reductions will be accepted or effected.

**ARTICLE 16
DISPUTE RESOLUTION**

- 16.1 A Dispute shall be referred to a senior officer from each of the AESO and the relevant Customer for resolution.
- 16.2 If the Dispute has not been resolved within thirty (30) days after referral to the senior officers, either the AESO or the Customer may require, by written notice, that the Dispute be resolved through arbitration. The AESO shall advise the AEUB of any matter going to arbitration within thirty (30) days of the matter being referred to arbitration. The parties shall appoint a mutually satisfactory arbitrator within ten (10) days of the notice to resolve the Dispute through arbitration. In the event that the parties cannot agree on a single arbitrator within ten (10) days, each party shall appoint an arbitrator within ten (10) days thereafter by written notice, and the two arbitrators shall together appoint a third arbitrator. In the event that a tribunal is required, the third arbitrator shall be appointed within twenty (20) days of written notice for arbitration. The arbitrator or tribunal shall render a decision within thirty (30) days of the last appointment. The AESO shall advise the AEUB of the results of the arbitration within thirty (30) days of the Arbitrator's decision. The AESO shall also furnish the AEUB with a list of parties potentially affected by the results of the arbitration. The arbitration shall be conducted in accordance with the Arbitration Act (Alberta), as amended from time to time. In the event of a conflict between these Terms and Conditions and the Arbitration Act, these Terms and Conditions shall prevail.
- 16.3 Any interested party adversely and unduly affected by the decision of an arbitrator or a tribunal is entitled to make an application to the AEUB requesting a clarification or change to these Terms and Conditions.
- 16.4 Pending resolution of any Dispute, the AESO and the Customer shall continue to perform their respective obligations under this Tariff.

ARTICLE 17
MAINTENANCE OF RECORDS

- 17.1 The AESO shall maintain records for a period of ten (10) years relating to those matters associated with the Tariff, such as capital costs of facilities, which require such level of data retention to perform necessary calculations or otherwise provide necessary information, and for any other matter, the AESO shall maintain records for a period of six (6) years. Data required to verify any billing information provided by the AESO may be made available to Customers during regular business hours and the Customer will be responsible to pay for all of the costs of retrieval and provision of the data.

ARTICLE 18
COSTS ASSOCIATED WITH REBILLING

- 18.1 When invoices to Customers have to be recalculated and reissued forty-five (45) days or more after end of the applicable billing period as a result of:
- (i) unavailable or incomplete meter data, or
 - (ii) inaccurate estimates of meter data,
 - (iii) reconciliation with updated estimates of meter data,

the cost of recalculating and reissuing the affected Statement of Account shall be recovered from the Customer taking service from the relevant Metering Equipment. The AESO shall charge \$1,000 for each recalculated and reissued invoice.

**ARTICLE 19
NOTIFICATIONS**

- 19.1 All notices given or served upon the AESO in accordance with this Tariff shall be in writing and shall be marked "Important" and given by personal service, telefax or by registered letter addressed to:

AESO
Attention: Manager, Customer Service
900, 736 – 8 Ave SW
Calgary, Alberta, T2P 1H4

or by telefax addressed to:
AESO
Attention: Manager, Customer Service
Fax (403) 266-2959

- 19.2 All notices given or served upon the Customer in accordance with this Tariff shall be in writing served by personal service, registered letter or telefax and sent to the address or addresses shown for such Customer in the relevant System Access Service Agreement.

ARTICLE 20
SPRDA GENERATORS

20.1 Generating Units constructed under the *Small Power Research and Development Act* (Alberta) (“SPRDA”) are exempt from the provisions of Rate Schedule STS to the extent of the volume of energy sales which they conduct under contracts specifically executed pursuant to the provisions of the SPRDA.

**ARTICLE 21
PEAK METERED DEMAND WAIVER**

- 21.1 The AESO may, in its sole discretion, waive the Metered Demand set in a Billing Period or any prior Billing Periods for the purposes of calculating the Billing Capacity when such level of Metered Demand was caused by one of the following:
- (a) Commissioning as defined in the Article 1;
 - (b) activities required to repair and maintain transmission facilities;
 - (c) pre-scheduled activities required to repair and maintain distribution facilities;
 - (d) load restoration activities following an outage of transmission or distribution facilities or caused by an Emergency;
 - (e) an event of Force Majeure; or
 - (f) compliance with a dispatch instruction from the System Controller during an Emergency.

**ARTICLE 22
TRANSMISSION SYSTEM EXPANSION**

- 22.1 Except in exceptional circumstances, the following material new transmission facilities shall be competitively procured:
- (a) facilities with a capital construction cost of \$10 million dollars or more;
 - (b) facilities of a voltage of 240kV or higher; or
 - (c) interconnections with neighboring Control Areas.
- 22.2 The AESO reserves the right to directly assign the construction of a new transmission facility in the event that the AESO determines that the costs of administering a competitive procurement process would outweigh the benefits thereof.
- 22.3 Subject to Paragraphs 22.1 and 22.2, any Customer whose interconnection to the AIES requires the construction of material new transmission facilities, whose load or generation equals or exceeds 5 MW and who is transmission-interconnected, may elect to have the facilities competitively procured by the AESO. Any Customer electing to have the AESO competitively procure transmission facilities which do not meet one or more of the criteria listed in Paragraph 22.1 shall pay all reasonable out-of-pocket expenses (including, but not limited to, legal fees, technical consultants' fees and regulatory expenses) incurred by the AESO while conducting the competitive procurement process. The AESO shall be entitled to require the payment of deposits from time to time during the course of the competitive procurement process and the AESO shall be entitled to withhold continuation of the process until such time as deposits are made.
- 22.4 In the event that a Customer requires facilities to be built in addition to those which the AESO would otherwise provide ("Optional Facilities"), the Customer will be required to pay 100% of the cost of those additional facilities, however the Customer may choose to have those Optional Facilities competitively procured by the AESO, subject to Paragraph 22.1 and in accordance with Paragraph 22.3.
- 22.5 The AESO shall procure all transmission facilities. No Customer shall, without the prior written consent of the AESO, directly procure transmission facilities, whether competitively or otherwise, except for transmission facilities directly assigned by the AESO.

**ARTICLE 23
MISCELLANEOUS**

- 23.1 Each respective System Access Service Agreement executed by the AESO hereunder shall be binding on any subsequent ISO) for the length of its term.
- 23.2 A Customer can assign its System Access Service Agreement or any rights thereunder to another Customer who is qualified for the service available under such agreement, but only with the consent of the AESO, such consent not to be unreasonably withheld.
- 23.3 In the event of any conflicts between the provisions of these Terms and Conditions, and the provisions of the Rate Schedules, the provisions of these Terms and Conditions shall govern.
- 23.4 Customers shall comply with dispatches and directives of the System Controller which are required for performance of Customers' obligations hereunder in real-time, including, without limitation, those related to Interconnection Requirements and provision of System Support Services.
- 23.5 In the event an STS or DTS contract has been assigned, pursuant to Article 23.2, all rights and obligations associated with the service, including any and all retrospective adjustments due to deferral account reconciliation or any other adjustments will be applied to the account of the assignee.

ARTICLE 24 ANCILLARY SERVICES

- 24.1 During a state in which the AIES lacks sufficient Ancillary Services and for the purposes of maintaining system security, the System Controller may require a Customer to operate its generating unit to provide Ancillary Services. For the period during which the conscription persists, Customers required to provide Ancillary Services shall be compensated as provided in Article 24.2 or Article 24.3, whichever is applicable.
- 24.2 If at the time the Customer is required to provide Ancillary Services the Customer has an existing contract with the AESO, either directly or indirectly, to provide the Ancillary Services in question (the "Existing Contract"), then the amount to be paid to the Customer by the AESO for the Ancillary Services shall be determined according to the terms of the Existing Contract.
- 24.3 If at the time the Customer is required to provide an Ancillary Service and the Customer does not have an Existing Contract, then the amount to be paid to the Customer by the AESO in respect of each Ancillary Service provided shall be the greater of:
- (a) The sum, over all hours during which the Customer is required to provide the Ancillary Service pursuant to Article 24.1, of the product of the hourly MW dispatch and the highest price paid in the hour to Customers providing the Ancillary Service pursuant to Article 24.2; or
 - (b) The sum, over all hours during which the Customer is required to provide the Ancillary Service pursuant to Article 24.1, of the product of the hourly MW dispatch and 110% of the energy price in the hour as set by the Power Pool of Alberta, plus any additional charges from the Power Pool of Alberta (including but not limited to uplift charges) and charges from the AESO net of pool energy receipts; or

- (c) The direct costs incurred by the Customer to provide the required Ancillary Service, net of pool energy receipts, plus ten percent. Direct costs include, but are not limited to, generating unit start-up costs, costs to purchase replacement energy to fulfil Customers' contractual obligations, fuel costs and variable operation and maintenance costs; however, direct costs do not include indirect, incidental, consequential, or special damages arising out of or relating to the Customer providing Ancillary Services. Direct costs also include a prorate of fixed capacity costs and fixed maintenance costs applicable to the conscription period. The pro-rata share shall be calculated using the fraction of hours of providing ancillary services pursuant to Article 24.1 to the total operating hours of the service providing facility in the calendar month. For Customers with Power Purchase Arrangements that have annual start limitations and that are forced to make a start-up in response to a directive from the System Controller, the minimum pro-rata share of fixed costs shall be calculated as the total annual costs, times the number of starts consumed in providing ancillary services, divided by the annual start allowance. Revenues received by Customers, pursuant to the purchase of Power Purchase Arrangements, shall be treated as an offset to the prorate of fixed capacity costs; or
 - (d) The verifiable net opportunity cost incurred by the Customer to supply the required Ancillary Services taking into account all offsetting revenues from any source, such as pool energy receipts; or
- 24.4 For the purposes of this Article, MW dispatch means the amount of an Ancillary Service (expressed in MW) that is provided by the Customer in response to a dispatch by the System Controller.

ARTICLE 25 CONFIDENTIALITY

25.1 The AESO:

- (a) shall not disclose the Confidential Information to any person except as permitted under this Tariff;
- (b) shall only use or reproduce the Confidential Information for the purpose for which it was disclosed or another purpose contemplated in this Tariff;
- (c) shall not permit unauthorized persons to have access to the Confidential Information; and
- (d) shall only disclose the Confidential Information to those Representatives who need to know the information and have been informed of the confidential nature of the Confidential Information.

25.2 Exceptions to the confidentiality obligations stated in Paragraph 25.1 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 AESO;
- (b) the disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information;
- (c) the disclosure, use or reproduction of information to the extent the Confidential Information:
 - (i) must be disclosed by law to any agent, government or governmental body, authority or agency having jurisdiction over the Transmission Authority;
 - (ii) must be disclosed to the Power Pool of Alberta or System Controller for the purposes of the Transmission Administration fulfilling its duties under the *EUA* (Alberta); and
 - (iii) must be disclosed to a TFO for the purposes of the AESO fulfilling its duties under the *EUA* (Alberta). All information provided to a TFO shall be subject to the confidentiality provisions in the TFO's Terms and Conditions of service.

the disclosure, use or reproduction of information if required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism relating to this Tariff;

- (d) the disclosure of information if required to protect the safety of personnel or equipment, or to protect the reliability of the AIES; and
- (e) the disclosure, use or reproduction of information as an unidentifiable component of an aggregate of information.

25.3 In the case of a request or demand for disclosure under Paragraph 25.2(c)(i) or Paragraph 25.2(d), the AESO will provide notice to those affected by the request or demand as soon as reasonably practicable, so as to afford the opportunity to challenge such request or demand or seek injunctive relief or protection from the request or demand.

25.4 No provision of this Tariff obligates the Customer to treat its own information and agreements with the AESO as confidential.

Appendix “A”
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Appendix “B”

System Access Service Agreement Proformas

**SYSTEM ACCESS SERVICE AGREEMENT
DEMAND TRANSMISSION SERVICE**

The following constitute the terms pursuant to which the Independent System Operator, **a corporation carrying on business under the trade name** Alberta Electric System Operator (AESO), shall provide System Access Service to the Customer. (Defined terms used herein without definition shall have the meanings ascribed thereto in the Terms and Conditions of the AESO's Tariff).

1. TYPE OF SERVICE

Service under this Agreement shall be provided pursuant to Rate Schedule Demand Transmission Service (DTS).

2. POINT OF INTERCONNECTION WITH THE TRANSMISSION SYSTEM

(a) Point of Supply (POD): The POD shall be [description, e.g. relative to Substation]

(b) Location:
Township _____ Range _____ W _____ M

3. CONTRACT CAPACITY

"x" MW

4. COMMISSIONING PERIOD FOR NEW FACILITIES, IF ANY:

5. EFFECTIVE DATE

_____, 2001

6. CUSTOMER CONTRIBUTION

The Customer Contribution charge is \$ _____.

Number of Commitment terms _____ x 5 equals _____ years.

7. RATES AND TERMS OF SERVICE

The supply of System Access Service pursuant to this Agreement, and the Customer's obligations with respect to connection and supply of System Support Services, shall be subject to the AESO's Tariff, in particular to the Rate Schedule referenced under Paragraph 1.

8. NOTICES

Notices sent to the Customer pursuant to this Agreement shall be as follows:

Invoices:	Attention:	_____
	Address:	_____

	Fax:	_____
All other notices:	Attention:	_____
	Address:	_____

	Fax:	_____

9. [Optional Clause for Customer designated to provide under-frequency load shed]

____ MW of load is connected by an under-frequency load shed relay set to trip at ____ Hz.

By executing in the space below, the Customer and the AESO agree to the foregoing provisions.

Independent System Operator a corporation carrying on business under the trade name Alberta Electric System Operator

Per: _____ Date: _____
Tony Demassi
Director, Customer Relations

Per: _____ Date: _____
Name: _____
Title: _____

Per: _____ Date: _____
Name: _____
Title: _____

**DEMAND OPPORTUNITY SERVICE
STAGE 1 APPLICATION FOR OPPORTUNITY SERVICE**

**Stage 1 Application for Demand Opportunity Service (DOS)
Preliminary Assessment**

The "Applicant", noted below, requests a preliminary assessment of the availability of Opportunity Service for the use described herein. The Applicant should be familiar with the information on Opportunity Service that appears on the AESO's website, including the AESO's Business Practices for Demand Opportunity Service and the AESO's Term and Conditions of Service. This application does not bind the AESO or the Applicant to any contractual arrangement. There is no fee at Stage 1.

IDENTIFICATION OF END USER AND CUSTOMER

End User Name: _____

Customer Name: _____

(Must be an existing DTS Customer of the AESO)

Primary Contact: Name: _____ Company: _____

(May be the end user or the Customer at Stage 1; however, the Stage 2 application must be made by the AESO's Customer.)

Phone Number: _____ Fax number: _____ Email Address: _____

Facility Name: _____

Facility Location: LSD _____ SEC _____ TWP _____ RGE _____ MER _____

Connected AIES Substation (Name and Number): _____

Point of Delivery (POD): _____

(Description of the Point of Delivery)

TECHNICAL AND COMMERCIAL INFORMATION

The following preliminary information is required.

- Earliest date Opportunity Service is expected to be used: _____
- Requested Opportunity Capacity: _____ MW (Demand in excess of DTS Contract Capacity)
- Proposed use of the electricity to be obtained under DOS, and anticipated consumption profile:

Please provide this, labeled "Schedule A".

- **Eligibility:** *Please read the Commercial Eligibility Criteria of the AESO's Business Practices for Demand Opportunity Services (DOS) and provide a brief explanation, labeled "Schedule B", of how the proposed use of DOS meets the criteria.*
- Referring to the Commercial Eligibility Criteria, which of the following applies? (Check one):

1. Alternative Source of Energy 2. No Alternative Source of Energy 3. Generator Maintenance

- What will the applicant do if DOS is not available as requested? _____
- For what period of time does the applicant expect the qualifying criteria to persist? _____

**DEMAND OPPORTUNITY SERVICE
STAGE 1 APPLICATION FOR OPPORTUNITY SERVICE**

Stage 1 Application for Demand Opportunity Service (DOS) -- Preliminary Assessment

CONFIDENTIALITY

Prior to submitting this application, the applicant may request the AESO to sign a confidentiality agreement. May the AESO disclose information from this application to the interconnecting Transmission Facility Owner, on a need-to-know basis?

Yes _____ No _____

ATTACHMENTS TO BE PROVIDED BY THE APPLICANT

- Schedule A: Proposed use of the electricity to be obtained under DOS, and anticipated consumption profile
- Schedule B: Explanation of how the proposed use of DOS meets the Commercial Eligibility Criteria

The applicant acknowledges that this document is not a contract between itself and the Alberta Electric System Operator.

Applicant: _____ Date: _____

(The applicant may be the end user or the Customer at Stage 1; however, the Stage 2 applicant must be a DTS Customer of the AESO.)

Name: _____ Title: _____

Please complete and send to Alberta Electric System Operator .

Mail: 900, 736 – 8 Avenues S.W.

Calgary, Alberta T2P 1H4

Fax: (403) 266-2959

**DEMAND OPPORTUNITY SERVICE
STAGE 2 APPLICATION FOR OPPORTUNITY SERVICE**

Stage 2 Application for Demand Opportunity Service (DOS)
Pre-qualification

It is suggested that a Stage 1 Application (preliminary assessment) be made before making this Stage 2 Application. The applicant should be familiar with the information on Opportunity Service that appears on the AESO's website, including the AESO's Business Practices for Demand Opportunity Service, the AESO's Terms and Conditions of Service, and the Rate Schedules. This application does not bind the AESO or the applicant to any contractual terms or conditions. A non-refundable fee of \$5000.00 is payable with this application.

IDENTIFICATION OF APPLICANT AND THE END USER

Applicant: _____
(Must be an existing DTS Customer of the AESO)

End User Name: _____
(Need not be a direct Customer of the AESO)

Primary Contact: Name: _____ **Company:** _____
(May be the end user, at the discretion of the Applicant.)

Phone: _____ **Fax:** _____ **Email:** _____

Facility Name: _____

Facility Location: LSD _____ SEC _____ TWP _____ RGE _____ MER _____

Connected AIES Substation (Name and Number): _____

Point of Delivery (POD): _____
(Description of the Point of Delivery)

Has a Stage 1 Application been submitted for this proposed use of DOS? Yes ___ No ___

TECHNICAL AND COMMERCIAL INFORMATION

The following information is required in order for the AESO to assess whether the proposed use of DOS complies with the AESO's Terms and Conditions of Service and meets the technical and commercial eligibility criteria.

- **Earliest date Opportunity Service is expected to be used:** _____
- **Requested Opportunity Capacity:** _____ MW (Maximum demand in excess of DTS Contract Capacity)
- **Type of Opportunity Service expected to be used:** DOS 7 minute ___ DOS 1 Hour ___ DOS Standard ___
(This indication does not preclude the use of other types of Opportunity Service.)
- **Technical Information: Please provide the following, labeled "Schedule A".**
 1. Load Characteristic (static, synchronous machine, or induction machine).
 2. Approximate load factor.
 3. Expected power factor.
- **Commercial Information: Please read the Commercial Eligibility Criteria of the AESO's Business Practices for Demand Opportunity services (DOS) and provide a comprehensive Business Case, labeled "Schedule B", demonstrating that the proposed use of DOS complies with these criteria. The Business Case must provide enough information to satisfy the AESO that the proposed use of electricity under DOS would not occur at the standard rate schedule (DTS). The Business Case normally pertains to the end user's commercial circumstances, and the end user must be prepared to provide any additional information that the AESO reasonably requests.**
- **For what period of time does the applicant expect the qualifying criteria to persist?** _____
(This information does not limit the pre-qualification to this time period.)

**DEMAND OPPORTUNITY SERVICE
STAGE 2 APPLICATION FOR OPPORTUNITY SERVICE**

Stage 2 Application for Demand Opportunity Service (DOS) – Pre-qualification

CONFIDENTIALITY

Prior to submitting this application, the applicant may request the AESO to sign a confidentiality agreement. May the AESO disclose information from this application to the interconnecting Transmission Facility Owner, on a need-to-know basis? Yes _____ No _____

ATTACHMENTS TO BE PROVIDED BY THE APPLICANT

- Schedule A: Technical information describing the proposed use of DOS
- Schedule B: Business Case demonstrating that the proposed use of DOS meets the Commercial Eligibility Criteria

The Applicant confirms that the contents of this application are true.

Applicant: _____ Date: _____

(The applicant must be a DTS Customer of the AESO.)

Name: _____ Title: _____

Please complete and send to Alberta Electric System Operator

Mail: 900, 736 – 8 Avenues S.W.

Calgary, Alberta T2P 1H4

Fax: (403) 266-2959

The Alberta Electric System Operator acknowledges that this application was received on the indicated date, together with the prescribed fee.

_____ Fee paid: \$ _____
(Date)

Signature: _____

Name: _____ Title: _____

Alberta Electric System Operator Internal Use Only

Corporate Finance

Application approved or denied: _____

Signature: _____ Date: _____

Name: _____ Title: _____

Technical Services Operational Planning

Application approved or denied: _____

Approved application checklist: Loss Factor (Y/N): _____ Pre-qualify List addition (Y/N): _____

Signature: _____ Date: _____

Name: _____ Title: _____

**SYSTEM ACCESS SERVICE AGREEMENT
DEMAND OPPORTUNITY SERVICE**

<i>Alberta Electric System Operator</i> <i>Operating Policy OP-224</i> Opportunity Service	OP-224 Issue Date: 2002-05-01 Effective Date: 2002-05-01 Expiry Date: Annual Revision No.: 1
---	---

Appendix A: DOS Request

Pre-qualification Number _____ Request number provided by Customer _____ Check box if this Request overlaps with a previous
DOS Request or DOS Transaction

The Customer is to complete this document, and fax it to the System Controller to request a DOS Transaction. The Customer must follow up by phoning the SC. (Fax: 403-261-7864) (Ph: 403-233-6420)

Demand Opportunity Service (DOS), according to the terms herein, will be available only after the System Controller approves this DOS Request..

Identification

_____ requests Opportunity Service (subject to confirmation of available Customer or Customer's Agent capacity) in accordance with the Pre-qualification granted by the Alberta Electric System Operator, identified by Pre-qualification Number shown above, at _____
Description of the Point of Delivery

Terms of Transaction

The requested service is (indicate one): ___DOS Standard; ___DOS 7 minutes, ___DOS One hour

The transaction is to begin on: _____ at _____
Start Date Start time

The transaction will be completed on: _____ at _____
End Date End time

The requested Capacity is _____ MW (cannot exceed the Opportunity Capacity)

A DOS Transaction must start and end at the top of an hour, and cannot start within 60 minutes of the time the DOS Request is faxed. The minimum Term is 8 hours; End Date must occur in the same calendar month as the Start Date

Applicant's Endorsement

Submitted by: _____ on _____ at _____
Customer's Representative (please print) date time

Signature: _____ Phone: _____ Fax: _____
Customer's Representative

Approval/Denial by the System Controller..

Submitted by: _____ on _____ at _____
System Controller's Representative (please print) date time

Signature: _____
System Controller's Representative

Approved: Denied: If denied, please indicate the reason below:

The request does not comply with the SC's information on pre-qualified DOS customers:

The requested Opportunity Capacity is unavailable at the time requested:

System Controller's comments: _____

**SYSTEM ACCESS SERVICE AGREEMENT
EXPORT SERVICE**

The following constitute the terms pursuant to which the Independent System Operator, a corporation carrying on business under the trade name Alberta Electric System Operator (AESO) shall provide System Access to the Customer: (Defined terms used herein without definition shall have the meanings ascribed thereto in the Terms and Conditions of the AESO's Tariff).

1. TYPE OF SERVICE

Service under this contract shall be pursuant to Rate Schedule Export Service (ES).

2. POINT OF EXPORT

British Columbia Intertie Saskatchewan Intertie

3. EFFECTIVE DATE

_____, 2001

4. TERM

_____ Days [Months]

5. RATES AND TERMS OF SERVICE

The supply of System Access Service under this Agreement shall be pursuant to the AESO's Tariff.

6. NOTICES

Notices sent to the Customer pursuant to this Agreement shall be as follows:

Invoices: Attention: _____
 Address: _____

 Fax: _____

All other notices: Attention: _____
 Address: _____

 Fax: _____

By executing in the space below, the Customer and the AESO agree to the foregoing provisions.

Independent System Operator a corporation carrying on business under the trade name Alberta Electric System Operator

Per: _____ Date: _____
Tony Demassi
Director, Customer Relations

Per: _____ Date: _____
Name: _____
Title: _____

Per: _____ Date: _____
Name: _____
Title: _____

**SYSTEM ACCESS SERVICE AGREEMENT
SUPPLY TRANSMISSION SERVICE**

The following constitute the terms pursuant to which the Independent System Operator, **a corporation carrying on business under the trade name Alberta Electric System Operator (AESO)** shall provide System Access to the Customer. (Defined terms used herein without definition shall have the meanings ascribed thereto in the Terms and Conditions of the AESO's Tariff).

1. TYPE OF SERVICE

System Access Service shall be provided pursuant to Rate Schedule Supply Transmission Service (STS).

2. POINT OF INTERCONNECTION WITH THE TRANSMISSION SYSTEM

(a) Point of Supply (POS): The POS shall be [description, e.g. relative to Substation]

(b) Location:
Township_____ Range_____ W_____M

3. CONTRACT CAPACITY

"x" MW

4. COMMISSIONING PERIOD FOR NEW TRANSMISSION FACILITIES, IF ANY

5. EFFECTIVE DATE

_____, 2001

6. CUSTOMER CONTRIBUTION

The Customer Contribution charge is \$_____.

7. RATES AND TERMS OF SERVICE

The supply of System Access Service pursuant to this Agreement and the Customer's obligations with respect to connection and supply of System Support Services shall be subject to the AESO's Tariff, in particular to the Rate Schedule referenced under Paragraph 1.

8. NOTICES:

Notices sent to the Customer pursuant to this Agreement shall be as follows:

Invoices: Attention: _____
 Address: _____

 Fax: _____

All other notices: Attention: _____
 Address: _____

 Fax: _____

By executing in the space below, the Customer and the AESO agree to the foregoing provisions.

Independent System Operator a corporation carrying on business under the trade name Alberta Electric System Operator

Per: _____ Date: _____
Tony Demassi
Director, Customer Relations

Per: _____ Date: _____
Name: _____
Title _____

Per: _____ Date: _____
Name: _____
Title _____

**SYSTEM ACCESS SERVICE AGREEMENT
IMPORT SERVICE**

The following constitute the terms pursuant to which the Independent System Operator, **a corporation carrying on business under the trade name Alberta Electric System Operator (AESO)** shall provide System Access to the Customer. (Defined terms used herein without definition shall have the meanings ascribed thereto in the Terms and Conditions of the AESO's Tariff).

1. TYPE OF SERVICE

Service under this contract shall be pursuant to Rate Schedule Import Service (IS).

2. POINT OF INTERCONNECTION WITH THE TRANSMISSION SYSTEM

British Columbia Intertie Saskatchewan Intertie

3. EFFECTIVE DATE

_____, 2001

4. TERM

_____ Days

5. RATES AND TERMS OF SERVICE

The supply of System Access Service pursuant to this Agreement shall be subject to the AESO's Tariff, in particular to the Rate Schedule referenced under Paragraph 1.

6. NOTICES

Notices sent to the Customer pursuant to this Agreement shall be as follows:

Invoices: Attention: _____
 Address: _____

 Fax: _____

All other notices: Attention: _____
 Address: _____

 Fax: _____

By executing in the space below, the Customer and the AESO agree to the foregoing provisions.

Independent System Operator a corporation carrying on business under the trade name Alberta Electric System Operator

Per: _____ Date: _____
Tony Demassi
Director, Customer Relations

Per: _____ Date: _____
Name: _____
Title: _____

Per: _____ Date: _____
Name: _____
Title: _____

Appendix "C"

Construction Commitment Agreement Proforma

THIS AGREEMENT is effective on _____ (the "Effective Date")

BETWEEN:

Independent System Operator a corporation carrying on business under the trade name Alberta Electric System Operator
(hereinafter referred to as the "AESO")

-and-

(Insert name of party)

A corporation incorporated under the Business Corporations Act (Insert Jurisdiction)
(hereinafter referred to as the "Customer")

INTRODUCTION

1. The Customer has requested System Access Service from AESO and intends to enter into a System Access Service Agreement with the AESO. The granting of System Access Service to the Customer will necessitate the construction of new transmission facilities and a commitment by the Transmission Administrator in relation to the expenditure of capital for such construction (the "Proposed Project").
2. Upon execution of this Construction Commitment Agreement, the Transmission Administrator shall begin implementing plans to complete the Proposed Project. Both the Transmission Administrator and its contractors must be held harmless from any negative financial consequences emanating from a decision by the Customer to discontinue, postpone or cancel the Proposed Project.

AGREEMENT

1. The AESO and the Customer agree to the following:
 - (a) This Agreement shall take effect on the Effective Date and shall remain in effect until execution of the System Access Service Agreement by the AESO and the Customer;
 - (b) If the Customer terminates the Proposed Project or fails to execute the System Access Service Agreement within 30 days after the completion of

the Proposed Project, the Proposed Project shall be deemed to have been cancelled and the Customer shall immediately reimburse the AESO for the aggregate amount of costs and expenses, as well as any losses, damages, penalties or other claims it may incur or be subject to howsoever arising from the Proposed Project (“Cancellation Costs”), and which are incurred by the AESO or its contractors relating to facilities planning and design, the competitive procurement process (if any), material and right-of-way procurements and construction of the Proposed Project (including without limitation all cancellation penalties and salvage and reclamation costs);

- (c) In the event that the Customer terminates the Proposed Project prior to its completion, the AESO shall use, and shall cause its contractors to use, reasonable commercial efforts to minimize the amount of the Cancellation Costs to the extent such is within their control;
- (d) The Customer shall pay the Cancellation Costs immediately upon demand by the AESO. In the event that the Customer fails to pay the AESO upon demand, the AESO shall be entitled to charge the Customer 1.5% per month interest on late payment of all amounts due to the AESO; and
- (e) In the event that the Customer has not paid all of the Cancellation Costs to the AESO within seven (7) days of receipt by the Customer of the AESO’s demand therefor, the AESO shall be entitled to realize fully upon any and all security provided by the Customer as assurance of payment, which security is attached hereto as Schedule “A”.

2. The AESO's Tariff form part of this Agreement and in the event of any conflict between the provisions hereof and those of the AESO's Tariff, the AESO's Tariff shall prevail.

THE CUSTOMER AND THE AESO have executed this Agreement on the Effective Date:

Independent System Operator, a corporation carrying on business under the trade name as **Alberta Electric System Operator (AESO)**.

Per: _____

Per: _____

(INSERT CUSTOMER'S NAME)

Per: _____

Per: _____

Appendix "D"

Metering Equipment Information

1. For each POS Meter:
 - (a) Company identification
 - (b) Meter type identification
 - (c) Meter serial number
 - (d) Date meter installed
 - (e) Date meter removed
 - (f) Number of elements
 - (g) Manufacturer
 - (h) Model
 - (i) Measurement Canada approval
 - (j) Past test dates
 - (k) Past results (pass/fail information only)
 - (l) Planned test dates

2. For each POS meter recorder:
 - (a) Record identification
 - (b) Recorder type
 - (c) Serial number
 - (d) Date installed
 - (e) Date removed
 - (f) Manufacturer
 - (g) Model
 - (h) Measurement Canada approval
 - (i) Past test dates
 - (j) Past results (pass/fail information only)
 - (k) Planned test dates

3. For each Current Transformer associated with POS metering:
 - (a) Company identification
 - (b) Transformer type
 - (c) Serial number
 - (d) Date installed
 - (e) Date removed
 - (f) Phase location
 - (g) Ratio
 - (h) Accuracy
 - (i) Manufacturer
 - (j) Model
 - (k) Measurement Canada approval

4. For each Potential Transformer associated with POS metering:
- (a) Company identification
 - (b) Transfer type
 - (c) Serial number
 - (d) Date installed
 - (e) Date removed
 - (f) Phase location
 - (g) Ratio
 - (h) Accuracy
 - (i) Manufacturer
 - (j) Model
 - (k) Measurement Canada approval

Appendix E
Regulated Generating Units

Generating Unit	Owner	Type of Plant	Base Life
Barrier #1	TAU	Hydro	2013
Battle River #3	AE	Coal-fired thermal	2009
Battle River #4	AE	Coal-fired thermal	2009
Battle River #5	AE	Coal-fired thermal	2021
Bearspaw #1	TAU	Hydro	2013
Bighorn #1	TAU	Hydro	2032
Bighorn #2	TAU	Hydro	2032
Braseau #1	TAU	Hydro	2025
Braseau #2	TAU	Hydro	2025
Cascade #1	TAU	Hydro	2013
Cascade #2	TAU	Hydro	2013
Clover Bar #1	EPGI	Gas-fired thermal	2010
Clover Bar #2	EPGI	Gas-fired thermal	2010
Clover Bar #3	EPGI	Gas-fired thermal	2010
Clover Bar #4	EPGI	Gas-fired thermal	2010
Genesee #1	EPGI	Coal-fired thermal	2029
Genesee #2	EPGI	Coal-fired thermal	2029
Ghost #1	TAU	Hydro	2013
Ghost #2	TAU	Hydro	2013
Ghost #3	TAU	Hydro	2013
Ghost #4	TAU	Hydro	2013
Horseshoe #1	TAU	Hydro	2013
Horseshoe #2	TAU	Hydro	2013
Horseshoe #3	TAU	Hydro	2013
Horseshoe #4	TAU	Hydro	2013
H.R. Milner	AE	Coal-fired thermal	2012
Interlakes #1	TAU	Hydro	2013
Kananaskis #1	TAU	Hydro	2013
Kananaskis #2	TAU	Hydro	2013
Kananaskis #3	TAU	Hydro	2013
Keephills #1	TAU	Coal-fired thermal	2023
Keephills #2	TAU	Coal-fired thermal	2023
Pocaterra #1	TAU	Hydro	2013
Rainbow #1	AE	Gas turbine	2005
Rainbow #2	AE	Gas turbine	2005
Rainbow #3	AE	Gas turbine	2005
Rossdale #8	EPGI	Gas-fired thermal	2000
Rossdale #9	EPGI	Gas-fired thermal	2000
Rossdale #10	EPGI	Gas-fired thermal	2000
Rundle #1	TAU	Hydro	2013
Rundle #2	TAU	Hydro	2013

Generating Unit	Owner	Type of Plant	Base Life
Sheerness #1	AE/TAU	Coal-fired thermal	2026
Sheerness #2	AE/TAU	Coal-fired thermal	2026
Spray #1	TAU	Hydro	2013
Spray #2	TAU	Hydro	2013
Sturgeon #1	AE	Gas turbine	1998
Sturgeon #2	AE	Gas turbine	1998
Sundance #1	TAU	Coal-fired thermal	2010
Sundance #2	TAU	Coal-fired thermal	2010
Sundance #3	TAU	Coal-fired thermal	2020
Sundance #4	TAU	Coal-fired thermal	2020
Sundance #5	TAU	Coal-fired thermal	2020
Sundance #6	TAU	Coal-fired thermal	2020
Three Sisters #1	TAU	Hydro	2013
Wabamun #1	TAU	Coal-fired thermal	2003
Wabamun #2	TAU	Coal-fired thermal	2003
Wabamun #3	TAU	Coal-fired thermal	2003
Wabamun #4	TAU	Coal-fired thermal	2003