

## Rates

Rate DTS	Demand Transmission Service
Rate FTS	Fort Nelson Demand Transmission Service
Rate DOS	Demand Opportunity Service
Rate XOS	Export Opportunity Service
Rate XOM	Export Opportunity Merchant Service
Rate UFLS	Demand Underfrequency Load Shedding Credits
Rate PSC	Primary Service Credit
Rate STS	Supply Transmission Service
Rate IOS	Import Opportunity Service

## Riders

Riders A1-A4	Transmission Duplication Avoidance Adjustments A1: Dow Chemical Canada Inc. / Dow Hydrocarbons / ASU2 A2: NOVA Chemicals Corporation – Joffre Industrial System A3: Shell Canada Corporation – Scotford Industrial System A4: Imperial Oil Resources Limited – Cold Lake Industrial System
Rider C	Deferral Account Adjustment Rider
Rider E	Losses Calibration Factor Rider
Rider F	Balancing Pool Consumer Allocation Rider
Rider J	Wind Forecasting Service Cost Recovery Rider

## Terms and Conditions

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## Applicability

**1** Rate DTS of the **ISO tariff**, *Demand Transmission Service*, applies to **system access service** provided at a **point of delivery** to:

- (a) the **legal owner** of an **electric distribution system**;
- (b) a **person** who has entered into an arrangement directly with the **ISO** for the provision of **system access service** under subsection 101(2) of the **Act**;
- (c) the **legal owner** of an industrial system that has been designated as such by the **Commission**; or
- (d) the City of Medicine Hat.

## Rate

**2** The **ISO** must determine the charge under Rate DTS in a **settlement period** in accordance with subsections 3 through 7 below as the sum of the connection charge, the **operating reserve** charge, the **transmission constraint rebalancing** charge, the voltage control charge and the other system support services charge.

## Connection Charge

**3(1)** The **ISO** must determine the connection charge as the sum, over all rows, of the products calculated by multiplying the volume and charge in each row (a) through (i) of the following table.

Volume in <b>Settlement Period</b>	Charge
<b>Bulk System Charge</b>	
(a) Coincident <b>metered demand</b>	\$10,814.00/MW/month
(b) <b>Metered energy</b>	\$1.13/MWh
<b>Regional System Charge</b>	
(c) <b>Billing capacity</b>	\$2,799.00/MW/month
(d) <b>Metered energy</b>	\$0.86/MWh
<b>Point of Delivery Charge</b>	
(e) <b>Substation fraction</b>	\$14,291.00/month
(f) First ( $7.5 \times$ <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$4,703.00/MW/month
(g) Next ( $9.5 \times$ <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$2,789.00/MW/month
(h) Next ( $23 \times$ <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$1,867.00/MW/month
(i) All remaining MW of <b>billing capacity</b>	\$1,150.00/MW/month

**3(2)** The ISO must determine the coincident **metered demand** as the **metered demand** at the **point of delivery** averaged over the 15-minute interval in which the sum of the **metered demands** for all Rate DTS and Rate FTS of the **ISO tariff, Fort Nelson Demand Transmission Service, market participants** is greatest in the **settlement period**.

### Operating Reserve Charge

**4(1)** The ISO must determine the **operating reserve** charge as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate DTS **market participant** in the hour; and
- (b) the total cost of **operating reserves** in the hour divided by the total **metered energy** for all Rate DTS and Rate FTS **market participants** in the hour.

**4(2)** The ISO must estimate the **operating reserve** charge, if unable to determine it for a **settlement period** in accordance with subsection 4(1) above, as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate DTS **market participant** in the hour; and
- (b) **pool price** in the hour multiplied by 7.13%.

### Transmission Constraint Rebalancing Charge

**5** The ISO must determine the **transmission constraint rebalancing** charge as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate DTS **market participant** in the hour; and
- (b) the total cost of **transmission constraint rebalancing** payments in the hour divided by the total **metered energy** for all Rate DTS and Rate FTS **market participants** in the hour.

### Voltage Control Charge

**6** The ISO must determine the voltage control charge as the product of **metered energy** in the **settlement period** multiplied by \$0.05/MWh.

### Other System Support Services Charge

**7** The ISO must determine the other system support services charge as the sum of:

- (a) the highest **metered demand** in the **settlement period** multiplied by \$24.00/MW/month; and
- (b) when **power factor** is less than 90% during the interval of highest **metered demand** in the **settlement period**, \$400.00/MVA multiplied by the **apparent power** difference calculated during the interval of highest **metered demand** in the **settlement period** as the difference between the metered **apparent power** and 111% of **metered demand**, unless the ISO waived the application of such a charge prior to December 31, 2016.

### Terms

**8(1)** The ISO must apply Rate DTS separately at each **point of delivery**, except where Rate DTS applies to totalized **points of delivery** under subsection 10.3 of the **ISO tariff, Settlement and Payment Terms**.

**8(2)** The **ISO** must determine **metered energy** under Rate DTS, in an hour for which a Rate DOS of the **ISO tariff**, *Demand Opportunity Service*, transaction has been approved by the **ISO** at a **point of delivery** where Rate DOS applies, as the sum of:

- (a) **metered energy** up to the Rate DTS **contract capacity**; plus
- (b) any additional **metered energy** determined under subsection 2(2) of Rate DOS.

**8(3)** The **ISO** must apply Rider C of the **ISO tariff**, *Deferral Account Adjustment Rider*, to **system access service** provided under this rate.

**8(4)** The **ISO** must apply Rider F of the **ISO tariff**, *Balancing Pool Consumer Allocation Rider*, to **system access service** provided under this rate.

**8(5)** The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017..
2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-11-26	Updated subsections and charges, as approved in <b>Commission</b> Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2013 and on a final basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** Rate FTS of the **ISO tariff**, *Fort Nelson Demand Transmission Service*, applies to **system access service** provided at the **point of delivery** to BC Hydro at Fort Nelson, British Columbia:

## Rate

**2** The **ISO** must determine the charge under Rate FTS in a **settlement period** in accordance with subsections 3 through 7 below as the sum of the connection charge, the **operating reserve** charge, the **transmission constraint rebalancing** charge, the voltage control charge and the other system support services charge.

## Connection Charge

**3(1)** The **ISO** must determine the connection charge as the sum, over all rows, of the products calculated by multiplying the volume and charge in each row (a) through (d) of the following table.

Volume in <b>Settlement Period</b>	Charge
Bulk System Charge	
(a) Coincident <b>metered demand</b>	\$10,814.00/MW/month
(b) <b>Metered energy</b>	\$1.13/MWh
Regional System Charge	
(c) <b>Billing capacity</b>	\$2,799.00/MW/month
(d) <b>Metered energy</b>	\$0.86/MWh

**3(2)** The **ISO** must determine the coincident **metered demand** as the **metered demand** at the **point of delivery** averaged over the 15-minute interval in which the sum of the **metered demands** for all Rate DTS of the **ISO tariff**, *Demand Transmission Service*, and Rate FTS **market participants** is greatest in the **settlement period**.

**3(3)** The **ISO** must determine the rate for the regional system charge in subsections 3(1)(c) and (d) above as the greater of:

- (a) the rate for the regional system charge in subsections 3(1)(c) and (d) of Rate DTS; or
- (b) a specific Fort Nelson rate based on the levelized cost of the original ATCO Electric line providing service to Fort Nelson.

## Operating Reserve Charge

**4(1)** The **ISO** must determine the **operating reserve** charge as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate FTS **market participant** in the hour; and

- (b) the total cost of **operating reserves** in the hour divided by the total **metered energy** for all Rate DTS and Rate FTS **market participants** in the hour.

**4(2)** The **ISO** must estimate the **operating reserve** charge, if unable to determine it for a **settlement period** in accordance with subsection 4(1) above, as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate FTS **market participant** in the hour; and
- (b) **pool price** in the hour multiplied by 7.13%.

### Transmission Constraint Rebalancing Charge

**5** The **ISO** must determine the **transmission constraint rebalancing** charge as the sum, over all hours in the **settlement period**, of the amount calculated in each hour as the product of:

- (a) **metered energy** for the Rate FTS **market participant** in the hour; and
- (b) the total cost of **transmission constraint rebalancing** payments in the hour divided by the total **metered energy** for all Rate DTS and Rate FTS **market participants** in the hour.

### Voltage Control Charge

**6** The **ISO** must determine the voltage control charge as the sum of:

- (a) the product of **metered energy** in the **settlement period** multiplied by \$0.05/MWh; and
- (b) the sum, over all hours in the **settlement period** in which Rainbow area load exceeds 145 MW and transmission must-run generation is required in the Rainbow area, of the cost associated with transmission must-run generation in the Rainbow area in an hour multiplied by the ratio in the hour of:
  - (i) Fort Nelson load in excess of 38.5 MW; to
  - (ii) the sum of Fort Nelson load in excess of 38.5 MW and Alberta Rainbow area load (excluding Fort Nelson load) in excess of 106.5 MW.

### Other System Support Services Charge

**7** The **ISO** must determine the other system support services charge as the sum of:

- (a) the highest **metered demand** in the **settlement period** multiplied by \$24.00/MW/month; and
- (b) when **power factor** is less than 90% during the interval of highest **metered demand** in the **settlement period**, \$400.00/MVA multiplied by the **apparent power** difference calculated during the interval of highest **metered demand** in the **settlement period** as the difference between the metered **apparent power** and 111% of **metered demand**, unless the **ISO** waived the application of such a charge prior to December 31, 2016.

### Terms

**8(1)** BC Hydro must, if it terminates the **system access service** provided under this rate prior to the full payment of the levelized cost of the original ATCO Electric line providing service to Fort Nelson under subsection 3(3)(b) above, pay the amount the **ISO** determines as the remaining unpaid balance of those costs net of any residual value, in addition to any **financial obligations** under section 5 of the **ISO tariff**, *Changes to System Access Service*.

**8(2)** The **ISO** must apply Rider C if the **ISO tariff**, *Deferral Account Adjustment Rider*, to **system access service** provided under this rate.

**8(3)** The terms and conditions of the **ISO tariff** form part of this rate.

### Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-11-26	Updated subsections and charges, as approved in <b>Commission</b> Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2013 and on a final basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** Rate DOS of the **ISO tariff, Demand Opportunity Service**, applies to **system access service** provided at a **point of delivery** to a **market participant** who:

- (a) receives **system access service** under Rate DTS of the **ISO tariff, Demand Transmission Service**;
- (b) is eligible for **demand** opportunity service under section 9 of the **ISO tariff, Demand Opportunity Service**; and
- (c) is recallable in accordance with the provisions of this rate.

## Metered Energy

**2(1)** The **ISO** must apply a Rate DOS charge to **metered energy** received at a **point of delivery** in every hour:

- (a) for which a Rate DOS transaction has been approved by the **ISO**;
- (b) above the Rate DTS **contract capacity** for the **system access service**; and
- (c) up to the sum of the Rate DTS **contract capacity** and the approved Rate DOS transaction capacity for the **system access service**.

**2(2)** The **ISO** must add to the **market participant's metered energy** received at a **point of delivery** under Rate DTS any **metered energy** received at the **point of delivery** in an hour that exceeds the sum of the Rate DTS **contract capacity** and the approved Rate DOS transaction capacity for the **system access service**, in the same **settlement period**.

## Rate

**3(1)** The **ISO** must provide the three types of **demand** opportunity service in accordance with the charges, recall **directive** response times and recall priorities in the following table.

Rate DOS Type	Rate DOS Charge	Recall <b>Directive</b> Response Time	Recall Priority
(a) DOS 7 Minutes	\$6.11/MWh	7 minutes	Before Rates DTS, FTS, DOS Term and DOS 1 Hour
(b) DOS 1 Hour	\$17.85/MWh	1 hour	Before Rates DTS, FTS and DOS Term
(c) DOS Term	\$110.44/MWh	7 minutes	Before Rates DTS and FTS

**3(2)** The **ISO** must determine the amount billed for **demand** opportunity service in a **settlement period** as the greater of:

- (a) (i) the Rate DOS charge from subsection 3(1)(a), (b), or (c) above, as applicable, multiplied by the **metered energy** during the **settlement period**; plus
- (ii) an incremental losses charge calculated as the sum, over all transaction hours in the **settlement period**, of **metered energy** in the hour multiplied by **pool price** in the hour multiplied by a **loss factor** for the facility, where the **loss factor** is determined in accordance with section 501.10 of the **ISO rules**, *Transmission Loss Factors*, which is available to **market participants** on the AESO website;

or

- (b) a minimum amount equal to the Rate DOS charge from subsection 3(1)(a), (b), or (c) above, as applicable, multiplied by the approved Rate DOS transaction capacity multiplied by the number of hours in total transactions in the **settlement period** multiplied by 75%.

**3(3)** The **ISO** must add a transaction fee of \$500.00 to the amount billed for **demand** opportunity service in a **settlement period** in which the **ISO** approved at least one Rate DOS transaction at the **point of delivery**.

## Terms

**4(1)** The **ISO** must apply Rate DOS separately at each **point of delivery**.

**4(2)** The **market participant** must, if the **ISO** recalls a **market participant's demand** opportunity service, curtail load by the amount directed by the **ISO** which:

- (a) may be an amount up to the approved Rate DOS transaction capacity; and
- (b) must not require curtailment below the **market participant's Rate DTS contract capacity** for the **system access service**.

**4(3)** The **market participant** must, in response to a **directive** from the **ISO**, achieve curtailment of its **demand** opportunity service load within the response time specified in subsection 3(1)(a), 3(1)(b), or 3(1)(c) above, as applicable.

**4(4)** The **ISO** must apply Rider E of the **ISO tariff**, *Losses Calibration Factor Rider*, to **system access service** provided under this rate.

**4(5)** The **ISO** must apply Rider F of the **ISO tariff**, *Balancing Pool Consumer Allocation Rider*, to **system access service** provided under this rate, with the exception of the City of Medicine Hat.

**4(6)** The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015 except for the losses charge component in subsection 3(2) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2014 and on a final basis, in <b>Commission</b> Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 3(2) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 Rate XOS of the **ISO tariff**, *Export Opportunity Service*, applies to **system access service** provided to **market participants** who export electric energy from the **interconnected electric system** utilizing an **intertie** that existed on August 12, 2004, as referred to in section 16 of the *Transmission Regulation*.

## Availability

- 2 The **ISO** must make export opportunity service available:
- (a) only when sufficient capacity exists on the **transmission system** to accommodate the capacity scheduled for export; and
  - (b) a minimum of 24 hours following execution of an agreement for **system access service** for export opportunity service.

## Rate

3(1) The **ISO** must provide export opportunity service in accordance with the charge, recall **directive** response time and recall priority in the following table.

Rate	Charge	Recall <b>Directive</b> Response Time	Recall Priority
XOS	\$8.00/MWh	1 hour	Before Rates DTS, FTS and DOS (any type)

3(2) The **ISO** must determine the amount billed for export opportunity service in a **settlement period** as the greater of:

- (a)
  - (i) the Rate XOS charge from subsection 3(1) above multiplied by the **market participant's** export **interchange transaction** during the **settlement period**; plus
  - (ii) an incremental losses charge calculated as the sum, over all transaction hours in the **settlement period**, of the **market participant's** export **interchange transaction** in the hour multiplied by **pool price** for the hour multiplied by a **loss factor** for the **intertie**, where the **loss factor** is determined in accordance with section 501.10 of the **ISO rules**, *Transmission Loss Factors*, which is available to **market participants** on the AESO website;
- or
- (b) a minimum amount calculated as the sum, over all transaction hours in the **settlement period**, of:
  - (i) the Rate XOS charge from subsection 3(1)(a) or (b) above, as applicable, multiplied by the **market participant's** hour-ahead scheduled capacity multiplied by 75%; plus
  - (ii) an incremental losses charge calculated as the **market participant's** hour-ahead scheduled capacity multiplied by 75% multiplied by **pool price** for the hour multiplied by a **loss factor** for the **intertie**, where the **loss factor** is determined in accordance with

section 501.10 of the **ISO rules**, *Transmission Loss Factors*, which is available to **market participants** on AESO website.

**3(3)** The **ISO** must add an **operating reserve** charge, an other system support services charge or both to the amount billed for export opportunity service in a **settlement period** when the transaction requires the **ISO** to procure incremental **operating reserves**, incremental system support services or both.

**3(4)** The **ISO** must add a transaction fee of \$500.00 to the amount billed for export opportunity service in a **settlement period** in which at least one Rate XOS transaction was approved for the **market participant**.

## Terms

**4(1)** The **ISO** must apply Rate XOS separately at each **point of interconnection**.

**4(2)** A **market participant** must achieve curtailment of its export opportunity service within the response time specified in subsection 3(1) above in response to a **directive** from the **ISO**.

**4(3)** The **market participant** may contract for export opportunity service for a term within the minimum and maximum terms in the following table.

Rate	Minimum Term	Maximum Term
XOS	1 hour	1 month

**4(4)** The **ISO** must apply Rider E of the **ISO tariff**, *Losses Calibration Factor Rider*, to **system access service** provided under this rate.

**4(5)** The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015 except for the losses charge component in subsection 3(2) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2014 and on a final basis, in <b>Commission</b> Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 3(2) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** Rate XOM of the **ISO tariff**, *Export Opportunity Merchant Service*, applies to **system access service** provided to **market participants** who export electric energy from the **interconnected electric system** utilizing a merchant **intertie**, defined in accordance with subsection 27(4) of the *Transmission Regulation* as an **intertie** for which the cost of planning, designing, constructing, operating and interconnecting is paid by the person who proposed the **intertie** and other persons that directly benefit from the **intertie**.

### Availability

- 2** The **ISO** must make export opportunity merchant service available:
- (a) only when sufficient capacity exists on the **transmission system** to accommodate the capacity scheduled for export; and
  - (b) a minimum of 24 hours following execution of an agreement for **system access service** for export opportunity merchant service.

### Rate

**3(1)** The **ISO** must provide export opportunity merchant service in accordance with the charge, recall **directive** response time and recall priority in the following table.

Rate	Charge	Recall <b>Directive</b> Response Time	Recall Priority
XOM	\$8.00/MWh	1 hour	Before Rates DTS, FTS and DOS (any type)

**3(2)** The **ISO** must determine the amount billed for export opportunity merchant service in a **settlement period** as the greater of:

- (a) the Rate XOM charge from subsection 3(1) above multiplied by the **market participant's** export **interchange transaction** during the **settlement period**; or
- (b) a minimum amount calculated as the sum, over all transaction hours in the **settlement period**, of the Rate XOM charge from subsection 3(1) above multiplied by the **market participant's** hour-ahead scheduled capacity multiplied by 75%.

**3(3)** The **ISO** must add an **operating reserve** charge, an other system support services charge or both to the amount billed for export opportunity merchant service in a **settlement period** when the transaction requires the **ISO** to procure incremental **operating reserves**, incremental system support services or both.

**3(4)** The **ISO** must add a transaction fee of \$500.00 to the amount billed for export opportunity merchant service in a **settlement period** in which at least one Rate XOM transaction was approved for the **market participant**.

## Terms

**4(1)** The **ISO** must apply Rate XOM separately at each **point of interconnection**.

**4(2)** A **market participant** must achieve curtailment of its export opportunity merchant service within the response time specified in subsection 3(1) above in response to a **directive** from the **ISO**.

**4(3)** The **market participant** may contract for export opportunity merchant service for a term within the minimum and maximum terms in the following table.

Rate	Minimum Term	Maximum Term
XOM	1 hour	1 month

**4(4)** The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
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2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Introduced for export service over Alberta-Montana <b>intertie</b> , as approved on interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2013.

# ISO Tariff – Rate UFLS

## Demand Under-Frequency Load Shedding Credit



### Applicability

**1** Rate UFLS applies to **system access service** provided at a **point of delivery** to a **market participant** who:

- (a) receives **system access service** under Rate DTS, *Demand Transmission Service*; and
- (b) is directed by the **ISO** to install and activate an **underfrequency load shedding** relay satisfactory to the **ISO**.

### Underfrequency Load Shedding Capacity Requirements

**2(1)** The **ISO** may require that a **market participant** maintain a minimum of 50% of its aggregate load, across all **points of delivery** through which the **market participant** receives **system access service** under Rate DTS, connected to an **underfrequency load shedding** device in order to maintain the integrity of the **interconnected electric system**.

**(2)** The **ISO** must determine the Rate UFLS capacity requirement as the share of the Rate DTS **contract capacity**, in MW, for each relay trip setting specified in subsection 3(2) below for which the **market participant** has agreed to be shed.

**(3)** The **ISO** may from time to time revise a **market participant's** Rate UFLS capacity requirement to maintain the minimum of 50% of the **market participant's** aggregate load.

**(4)** The **market participant** must ensure the aggregate Rate UFLS capacity, across all **points of delivery** through which the **market participant** receives **system access service** under Rate DTS, continues to meet a revised Rate UFLS capacity requirement.

### Rate

**3(1)** The **ISO** must determine the **underfrequency load shedding** credit to compensate a **market participant** who has load connected to **underfrequency load shedding** devices and therefore faces a higher risk of **forced outage**.

**(2)** The **ISO** must calculate the **underfrequency load shedding** credit by multiplying the connected Rate UFLS capacity times the credit level for each relay trip setting in the following table.

Relay Trip Setting	Credit Level (\$/MW of Rate UFLS Capacity/month)
59.1 Hz	\$65.00
58.9 Hz	\$60.00
58.7 Hz	\$55.00
58.5 Hz	\$50.00
58.3 Hz	\$45.00
58.1 Hz	\$40.00

Relay Trip Setting	Credit Level (\$/MW of Rate UFLS Capacity/month)
58.0 Hz	\$35.00

### Effect of Non-Compliance

**4** The **ISO** may limit, reduce, withhold or terminate **system access service** to a **market participant** to whom Rate UFLS applies if the **market participant** fails to comply with the requirements of Rate UFLS.

### Terms

**5(1)** The **ISO** provides no assurance as to the number or duration of any future **forced outages** due to **underfrequency load shedding**.

**(2)** The terms and conditions of the **ISO tariff** form part of this rate.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1(1)** Rate PSC of the **ISO tariff**, *Primary Service Credit*, applies to **system access service** provided at a **point of delivery** to a **market participant** who receives **system access service** under Rate DTS of the **ISO tariff**, *Demand Transmission Service*, and:

- (a) does not utilize transformation facilities owned by a **legal owner** of **transmission facilities** to step transmission voltage down to 25 kV or less; or
- (b) is served through an unconventional connection such as one using metering transformers.

**1(2)** Rate PSC does not apply to **system access service** to an isolated community as defined under the *Isolated Generating Units and Customer Choice Regulation*.

## Rate

**2(1)** The **ISO** must determine the primary service credit to compensate a **market participant** whose connection does not include conventional transformation facilities owned by a **legal owner** of **transmission facilities**, including a connection for a **market participant** who has purchased, owns and operates its transformer.

**2(2)** The **ISO** must determine the primary service credit as the sum of the products calculated by multiplying the volume and credit in each row (a) through (e) of the following table.

Volume in <b>Settlement Period</b>	Credit
(a) <b>Substation fraction</b>	\$11,290.00/month
(b) First (7.5 × <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$3,715.00/MW/month
(c) Next (9.5 × <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$2,203.00/MW/month
(d) Next (23 × <b>substation fraction</b> ) MW of <b>billing capacity</b>	\$1,475.00/MW/month
(e) All remaining MW of <b>billing capacity</b>	\$1,150.00/MW/month

## Terms

**3(1)** The **ISO** must apply Rate PSC separately at each **point of delivery**, except where Rate PSC applies to totalized **points of delivery** in accordance with subsection 10.3 of the **ISO tariff**, *Settlement and Payment Terms*.

**3(2)** The **ISO** must provide the primary service credit in conjunction with a reduced maximum local investment in accordance with subsection 4.7 of the **ISO tariff**, *Classification and Allocation of Connection Projects Costs*.

**3(3)** The **ISO** must apply Rider C of the **ISO tariff**, *Deferral Account Adjustment Rider*, to **system access service** provided under this rate.

**3(4)** The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated credit levels, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on November 28, 2017.
2018-01-01	Updated credit levels, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017 and revised terms as approved on an interim basis in <b>Commission</b> Decision 22942-D01-2017.
2017-01-01	Updated credit levels, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated credit levels, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated credit levels, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and credit levels, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

- 1(1) Rate STS applies to **system access service** provided at a **point of supply** to:
- (a) a **legal owner** of a **generating unit** or an **aggregated generating facility** that is not subject to a **power purchase arrangement**;
  - (b) a holder of the **power purchase arrangement** for a **generating unit** that is subject to a **power purchase arrangement**;
  - (c) a **legal owner** of an industrial system that has been designated as such by the **Commission**;
  - (d) a **legal owner** of an **electric distribution system** where a **generating unit** or an **aggregated generating facility** is connected to the **electric distribution system**; or
  - (e) the City of Medicine Hat.
- 1(2) Rate STS does not apply to a **generating unit** constructed under the *Small Power Research and Development Act*, to the extent the volume of energy sales from such a **generating unit** is conducted under a contract specifically executed pursuant to the provisions of the *Small Power Research and Development Act*.

## Rate

- 2(1) The **ISO** must determine the charge under Rate STS in a **settlement period** as the losses charge calculated as the sum, over all hours in the **settlement period**, of **metered energy** in the hour multiplied by **pool price** multiplied by a **loss factor** for the facility, where the **loss factor** is determined in accordance with section 501.10 of the **ISO rules**, *Transmission Loss Factors*, which is available to **market participants** on the AESO website.
- 2(2) The **ISO** must measure **metered energy** on a 15-minute interval for the purpose of calculating the losses charge under subsection 2(1) above.

## Regulated Generating Unit Connection Cost

- 3 The **ISO** must apply an additional charge of \$15.00/MW per **month** for each regulated **generating unit** MW only to the regulated **generating units** identified in Appendix A of the **ISO tariff** and only to the end of the base life year of the regulated **generating units** as provided in Appendix A.

## Terms

- 4(1) The **ISO** must apply Rate STS separately at each **point of supply**, except where Rate STS applies to totalized **points of supply** under subsection 10.3 of the **ISO tariff**, *Settlement and Payment Terms*.
- 4(2) The **ISO** must apply Rider E, *Losses Calibration Factor Rider*, to **system access service** provided under this rate.
- 4(3) The **ISO** must apply Rider J, *Wind Forecasting Service Cost Recovery Rider*, to **system access service** provided under this rate for a wind-powered **generating unit** or **aggregated generating facility**.
- 4(4) The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 on February 28, 2020.
2019-01-01	Updated charges, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015 except for the losses charge component in subsection 2(1) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2014 and on a final basis, in <b>Commission</b> Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 2(1) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 Rate IOS of the **ISO tariff**, *Import Opportunity Service*, applies to **system access service** provided to **market participants** who import electric energy to the **interconnected electric system**.

## Availability

2 The **ISO** must make import opportunity service available:

- (a) only when sufficient capacity exists on the **transmission system** to accommodate the capacity scheduled for import; and
- (b) a minimum of 24 hours following execution of an agreement for **system access service** for import opportunity service.

## Rate

2(1) The **ISO** must determine the charge under Rate IOS in a **settlement period** as the losses charge calculated as the sum, over all hours in the **settlement period**, of the **market participant's** import **interchange transaction** in the hour multiplied by **pool price** multiplied by a **loss factor** for the **intertie**, where the **loss factor** is determined in accordance with section 501.10 of the **ISO rules**, *Transmission Loss Factors*, which is available to **market participants** on AESO website.

2(2) The **ISO** must add a transaction fee of \$500.00 to the amount billed for import opportunity service in a **settlement period** in which at least one Rate IOS transaction was approved for the **market participant**.

## Terms

4(1) The **ISO** must apply Rate IOS separately at each **point of interconnection**.

4(2) A **market participant** must achieve curtailment of its import opportunity service within one (1) hour in response to a **directive** from the **ISO**.

4(3) The **ISO** must apply Rider E of the **ISO tariff**, *Losses Calibration Factor Rider*, to **system access service** provided under this rate.

4(4) The terms and conditions of the **ISO tariff** form part of this rate.

## Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 on February 28, 2020.
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015 except for the losses charge component in subsection 2(1) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2013-10-01	The losses charge component in subsection 2(1) approved on an interim basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

# ISO Tariff – Rider A1

## Transmission Duplication Avoidance Adjustment

### Dow Chemical Canada Inc. / Dow Hydrocarbons / ASU2



#### Applicability

**1** Rider A1 applies to **system access service** provided to TransAlta Utilities Corporation / FortisAlberta at certain **points of delivery** associated with Dow's facility, as more particularly described in Alberta Energy and Utilities Board Decision U98125 (Grid Company of Alberta Inc. – Transmission Avoidance Rate – Dow Transmission Bypass).

#### Rate

**2(1)** The charge under Rider A1 is an adjustment to otherwise applicable rates to be made in each **settlement period** pursuant to the Decision.

**(2)** The forecast of the benefit to the **ISO** arising from the **construction contributions** made by Dow Chemicals Canada Inc. to TransAlta Utilities Corporation are provided in the following table.

Year	Forecast Benefit to ISO (Annual)	Forecast Benefit to ISO (Monthly)
1998	\$544,093	\$45,341
1999	\$865,378	\$72,115
2000	\$836,603	\$69,717
2001	\$807,828	\$67,319
2002	\$779,053	\$64,921
2003	\$750,278	\$62,523
2004	\$721,503	\$60,125
2005	\$692,728	\$57,727
2006	\$663,953	\$55,329
2007	\$635,178	\$52,932
2008	\$606,403	\$50,534
2009	\$577,628	\$48,136
2010	\$548,853	\$45,738
2011	\$520,078	\$43,340
2012	\$491,303	\$40,942
2013	\$462,528	\$38,544
2014	\$433,754	\$36,146
2015	\$404,979	\$33,748

Year	Forecast Benefit to <b>ISO</b> (Annual)	Forecast Benefit to <b>ISO</b> (Monthly)
2016	\$376,204	\$31,350
2017	\$347,429	\$28,952
2018	\$318,654	\$26,554
2019	\$289,879	\$24,157
2020	\$261,104	\$21,759
2021	\$232,329	\$19,361

## Terms

**3** The terms and conditions of the **ISO tariff** form part of this rider.

## Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** Rider A2 applies to **system access service** provided to NOVA Chemicals Corporation (NOVA Chemicals) at the 535S transmission station **point of delivery** and **point of supply** at NOVA Chemicals' Joffre industrial system, as designated by Alberta Energy and Utilities Board Order No. HE 9826.

## Rate

**2(1)** For each metering time interval, the **metered demand** and **metered energy** for the **point of delivery** and **point of supply** at the 535S transmission station will be totalized for the purpose of settlement under Rate DTS and Rate STS, as described in subsections 4 and 5 below. Charges under Rate DTS and Rate STS will be calculated using the totalized **metered demand** and the totalized **metered energy**. The meters to be totalized are on 330 Line-1, 330 Line-2, 298L, 297L, 535ST1 and 535ST2.

**(2)** NOVA Chemicals will make the following payments to the **ISO**:

- (a) Capital Charge: A lump-sum payment of \$2 375 000 to be made immediately upon implementation of this rider;
- (b) Incremental Losses Charge:
  - (i) Commencing on January 1, 2001, **metered demand** and **metered energy** will be adjusted through the metering balance calculation for the 535S transmission station, using the **loss factors** in subsection 6 below. If the **metered demand** in a metering interval is between two levels in subsection 6 below, the applicable **loss factor** will be calculated by interpolating between the **loss factors** for the two levels of **metered demand**. If the **metered demand** in a metering interval is less than 10 MW, including 0 MW, the incremental loss will be deemed to be 0.14 MW. The meters to be compensated in the metering balancing calculation are on 298L, 297L, 535ST1 and 535ST2.
  - (ii) For each **settlement period**, commencing on the effective date of this rider, a payment equal to the totalized **metered energy** multiplied by the applicable **loss factor** and multiplied by the **pool price**, calculated on an hourly basis. The applicable **loss factor** for each hour will be the **loss factor** in subsection 6 below that corresponds with the totalized **metered energy** for the hour; and
- (c) Other Expenses Charge: For each **settlement period** commencing on January 1, 2001, an amount equal to the "Monthly Payment" in subsection 7 below for the applicable year.

## Terms

**3** All terms in the **ISO's** 23 June Application for a Duplication Avoidance Tariff for NOVA Chemicals Corporation Joffre Industrial System will be applicable.

## Metering and Totalizing

**4(1)** See Application, Section 2.5: Terms for the Duplication Avoidance Tariff; Section 2.5.1: Metering and Totalizing.

(2) If NOVA Chemicals were to build the duplicate facilities, the 535S transmission station would be a **point of supply** for metering when the Joffre Site power generation exceeds the load requirements. Likewise, it would be a **point of delivery** when the Joffre site generation does not meet the load requirements. The duplication avoidance tariff will simulate this result by deeming the separate **point of delivery** and **point of supply** at the 535S transmission station to be a single point of exchange for the purpose of totalizing **metered demand** and **metered energy** in applying the ISO's Rate DTS and Rate STS.

(3) During the term of the duplication avoidance tariff, the ISO would totalize the metered data at the 535S transmission station for the load of NOVA Chemicals' existing facilities and the generation from its cogeneration facility. The totalized metered data would also include a debit to NOVA Chemicals to account for the deemed duplicate transformer losses. This would ensure that payments by NOVA Chemicals to the ISO under Rate DTS and Rate STS are equivalent to the costs NOVA Chemicals would have incurred had they built the duplicate facilities.

(4) The amount of load of the existing facilities included in the totalizing calculation would be limited to the deemed capacity of the duplicate transformer in NOVA Chemicals' duplicate facilities design, which is 80 MVA. If the **metered demand** at the 535S transmission station for the existing facilities exceed this deemed capacity of 80 MVA, additional costs of upgrading the deemed duplicate transformer would be estimated and invoiced to NOVA Chemicals.

### Example of Totalizing

5(1) See Application, Appendix C: Example of Totalizing. The following is an example of the totalizing calculation for **metered demand** and **metered energy** for two different metering time intervals:

	Time Interval 1	Time Interval 2
535S <b>point of delivery</b> (A)	+65 MW	+130 MW
535S <b>point of supply</b> (B) (cogeneration facility)	–365 MW	0 MW
Totalized <b>metered demand</b> and <b>metered energy</b> (C)	–300 MW	+130 MW

(2) In time interval 1, under the duplication avoidance tariff, NOVA Chemicals' **demand** requirement is 65 MW at the 535S transmission station. At the same time, NOVA Chemicals' cogeneration facility is delivering 365 MW of power to the **interconnected electric system** at the 535S transmission station. If NOVA Chemicals built the duplicate facilities, the **metered energy** delivered from the **interconnected electric system** for NOVA Chemicals' load requirement at point A would be 0 MW, and the **metered energy** received by the **interconnected electric system** from the generator output at point B would be 300 MW. This energy balance is simulated by the proposed totalizing procedure. Combining the **point of delivery** (A) and **point of supply** (B) produces a totalized **metered demand** of –300 MW, where the negative sign signifies a net energy receipt by the **interconnected electric system**.

(3) In time interval 2, the cogeneration facility is not operating, supplying 0 MW of power, and NOVA Chemicals' load remains at 65 MW for the existing facilities and 65 MW for the new facilities. The result is a net load of +130 MW for that time interval, where the positive sign signifies a net energy delivery from the **interconnected electric system**.

## Schedule 1 — Incremental Loss Factors

6	Metered Demand of Existing Facilities (MW)	Loss Factor (% of metered demand of existing facilities)
	> 0 ≤ 10	1.41 %
	> 10 ≤ 20	0.76 %
	> 20 ≤ 30	0.57 %
	> 30 ≤ 40	0.49 %
	> 40 ≤ 50	0.46 %
	> 50 ≤ 60	0.45 %
	> 60 ≤ 70	0.45 %
	> 70 ≤ 80	0.47 %

## Schedule 2 — Other Expenses Charge

7	12-Month Period	Monthly Payment
	Jan. 1, 2001 – Dec. 31, 2001	\$ 2,142
	Jan. 1, 2002 – Dec. 31, 2002	\$ 2,107
	Jan. 1, 2003 – Dec. 31, 2003	\$ 2,179
	Jan. 1, 2004 – Dec. 31, 2004	\$ 2,152
	Jan. 1, 2005 – Dec. 31, 2005	\$ 2,234
	Jan. 1, 2006 – Dec. 31, 2006	\$ 4,013
	Jan. 1, 2007 – Dec. 31, 2007	\$ 2,162
	Jan. 1, 2008 – Dec. 31, 2008	\$ 3,283
	Jan. 1, 2009 – Dec. 31, 2009	\$ 2,204
	Jan. 1, 2010 – Dec. 31, 2010	\$ 3,219
	Jan. 1, 2011 – Dec. 31, 2011	\$ 2,131
	Jan. 1, 2012 – Dec. 31, 2012	\$ 5,305
	Jan. 1, 2013 – Dec. 31, 2013	\$ 2,185
	Jan. 1, 2014 – Dec. 31, 2014	\$ 2,141
	Jan. 1, 2015 – Dec. 31, 2015	\$ 11,723
	Jan. 1, 2016 – Dec. 31, 2016	\$ 4,343
	Jan. 1, 2017 – Dec. 31, 2017	\$ 2,151

12-Month Period	Monthly Payment
Jan. 1, 2018 – Dec. 31, 2018	\$ 4,745
Jan. 1, 2019 – Dec. 31, 2019	\$ 2,211
Jan. 1, 2020 – Dec. 31, 2020	\$ 6,835
Jan. 1, 2021 – Dec. 31, 2021	\$ 2,264
Jan. 1, 2022 – Dec. 31, 2022	\$ 2,225
Jan. 1, 2023 – Dec. 31, 2023	\$ 2,172
Jan. 1, 2024 – Dec. 31, 2024	\$ 7,790
Jan. 1, 2025 – Dec. 31, 2025	\$ 2,417
Jan. 1, 2026 – Dec. 31, 2026	\$ 2,184
Jan. 1, 2027 – Dec. 31, 2027	\$ 2,300
Jan. 1, 2028 – Dec. 31, 2028	\$ 2,256
Jan. 1, 2029 – Dec. 31, 2029	\$ 2,197
Jan. 1, 2030 – Dec. 31, 2030	\$ 36,105
Jan. 1, 2031 – Dec. 31, 2031	\$ 2,273
Jan. 1, 2032 – Dec. 31, 2032	\$ 5,154
Jan. 1, 2033 – Dec. 31, 2033	\$ 2,340
Jan. 1, 2034 – Dec. 31, 2034	\$ 2,291
Jan. 1, 2035 – Dec. 31, 2035	\$ 2,440
Jan. 1, 2036 – Dec. 31, 2036	\$ 7,595
Jan. 1, 2037 – Dec. 31, 2037	\$ 2,310
Jan. 1, 2038 – Dec. 31, 2038	\$ 2,239
Jan. 1, 2039 – Dec. 31, 2039	\$ 2,386
Jan. 1, 2040 – Dec. 31, 2040	\$ 4,518

## Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 Rider A3 applies to **system access service** provided to Shell Canada Corporation (Shell Canada) at the 409S transmission station **point of delivery** and **point of supply** at Shell Canada's Scotford industrial system, as designated by Alberta Energy and Utilities Board Order No. HE U2000-109.

## Rate

2(1) For each metering time interval, the **metered demand** and **metered energy** for each **point of delivery** and **point of supply** (409ST1, 409ST2, 337S and 746L feeders) around the 409S transmission station will be synchronized, totalized and adjusted to measure electricity at the 138 kV bus for the purpose of settlement under the **ISO tariff**. Charges under the **ISO tariff** will be calculated using the totalized **metered demand** and **metered energy**.

(2) Shell Canada will make the following payments to the **ISO**:

- (a) Capital Charge: A payment of \$2,907,800 is due immediately upon implementation of this rider.
- (b) Incremental Losses Charge:
  - (i) Commencing on the effective date of this rate rider, **metered demand** and **metered energy** will be adjusted through the metering balancing calculation for the 409S transmission station, using the **loss factors** in subsection 6 below. If the **metered demand** in a metering interval is between two levels in subsection 6 below, the applicable **loss factor** will be calculated by interpolating between the **loss factors** for the two levels of **metered demand**. If the **metered demand** in a metering interval is less than 10 MW, including 0 MW, the incremental loss will be deemed to be 0.083 MW. The meters to be compensated in the metering balancing calculation are on 409ST1, 409ST2, 337S and 746L.
  - (ii) For each **settlement period**, commencing on the effective date of this rate rider, a payment equal to the totalized **metered energy** multiplied by the applicable **loss factor** and multiplied by the **pool price**, calculated on an hourly basis. The applicable **loss factor** for each hour will be the **loss factor** in subsection 6 below that corresponds with the totalized **metered energy** for the hour; and
- (c) Other Expenses Charge: The other expenses charge is shown in subsection 7 below.

(3) Shell Canada will receive a primary service credit in respect of the duplicate facilities as is provided to other Rate DTS customers of the **ISO** who provide their own transmission station, pending the decision of the Alberta Energy and Utilities Board on the **ISO's** 2002 tariff application.

## Terms

3 All terms and conditions in the **ISO tariff** apply in addition to the terms in this Application for a Duplication Avoidance Tariff for Shell Canada's Scotford Industrial System. If either the **ISO** or Shell Canada were to terminate the Duplication Avoidance Tariff at a future date, Shell Canada would receive a partial refund of the lump sum capital charge payment. The amount of the partial refund would be the deemed remaining undepreciated dollar amount of the avoided duplicate facilities, in the year that the **ISO** or Shell Canada gives notice to terminate the Duplication Avoidance Tariff. The undepreciated dollar

value would be calculated based on the lump sum capital charge payment using a straight-line depreciation over the first twenty-four (24) years of the term of the Duplication Avoidance Tariff. At the end of twenty-four (24) years, the undepreciated value would be zero. The termination notice period, for both the **ISO** and Shell Canada, will be twenty-four (24) **months**.

## Metering and Totalizing

**4(1)** Totalization should proceed on the basis of economic indifference to Shell Canada between the Duplication Avoidance Tariff and the construction of duplicate facilities and a net positive benefit to other transmission customers. These principles are met by the terms proposed for the Duplication Avoidance Tariff.

**(2)** There is no direct relationship between the size of 409S (sized for a prior, smaller load-only Scotford site) and the larger scale operations now reflected in the industrial system. The Duplication Avoidance Tariff for 409S is the most advantageous arrangement for the **ISO** compared to construction of duplicate facilities.

**(3)** If Shell Canada were to build the duplicate facilities, the 409S transmission station would be a **point of supply** when the Scotford site power generation exceeds the load requirements. Likewise, it would be a **point of delivery** when the Scotford site generation does not meet the load requirements. The Duplication Avoidance Tariff will simulate this result by deeming the separate **point of delivery** and **point of supply** at the 409S transmission station to be a single **point of delivery** and **point of supply** for the purpose of totalizing **metered demand** and **metered energy**.

**(4)** During the term of the Duplication Avoidance Tariff, the **ISO** would totalize the metered data at the 409S transmission station for the load of Shell Canada's load facilities and the generation from its cogeneration facility. This would ensure that payments by Shell Canada to the **ISO** under the **ISO tariff** are equivalent to the costs that Shell Canada would have incurred had they built the duplicate facilities.

**(5)** The level of load of the load facilities included in the totalization calculation would be limited to the deemed capacity of the duplicate facilities in Shell Canada's duplicate facilities design. Given that the capacity of the duplicate facilities would be identical to that of the 409S transmission station, if the transformer requires upgrading in order to serve additional load from the load facilities, Shell Canada will be responsible for the cost of the upgrade.

## Example of Totalizing

**5(1)** The following is an example of the totalizing calculation for **metered demand** and **metered energy** for two different metering time intervals:

	Time Interval 1	Time Interval 2
409S <b>point of delivery</b> (A)	+60 MW	+60 MW
409S <b>point of supply</b> and <b>point of delivery</b> (B)	-70 MW	+20 MW
Totalized <b>metered demand</b> and <b>metered energy</b> (C)	-10 MW	+80 MW

**(2)** In time interval 1, under the Duplication Avoidance Tariff, Shell Canada's load requirement is 60 MW from the 409S transmission station. At the same time, Shell Canada's cogeneration facility is delivering a net supply of 70 MW to the **interconnected electric system** at the 409S transmission

station. This is net of load directly served from the cogeneration facility downstream of the 409S. If Shell Canada built the duplicate facilities, the level of energy delivered from Shell Canada to the **interconnected electric system** would be 10 MW. This energy balance is simulated through the proposed totalizing procedure. Combining the **point of delivery** (A) and **point of supply** (B) produces a totalized **metered demand** of –10 MW, where the negative sign signifies a net energy receipt by the **interconnected electric system**.

(3) In time interval 2, the load served from **point of delivery** (A) remains at 60 MW but there is a reduced supply of energy from the cogeneration facility. Due to load requirements directly served from the cogeneration facility (net of partial load shedding), energy flows at (B) are reversed, resulting in 20 MW of energy delivered from the **interconnected electric system** to Shell Canada. Thus (B) is also a **point of delivery**. If Shell Canada built the duplicate facilities, the level of energy delivered from the **interconnected electric system** to Shell Canada at (A) and (B) would be 80 MW. Through the proposed totalizing procedure the totalized **metered demand** would be +80 MW, where the positive sign signifies a net energy delivery from the **interconnected electric system** to Shell Canada.

### Schedule 1 — Incremental Loss Factors

6	Metered Demand of Load Facilities (MW)	Loss Factor (% of metered demand of load facilities)
	> 0 ≤ 10	0.84%
	> 10 ≤ 20	0.46%
	> 20 ≤ 30	0.35%
	> 30 ≤ 40	0.31%
	> 40 ≤ 50	0.30%
	> 50 ≤ 60	0.30%
	> 60 ≤ 70	0.30%
	> 70 ≤ 80	0.32%
	> 80 ≤ 90	0.33%
	> 90 ≤ 100	0.35%

### Schedule 2 — Other Expenses Charge

7	12-Month Period	Monthly Payment
	Jan. 1, 2002 – Dec. 31, 2002	\$ 1,779
	Jan. 1, 2003 – Dec. 31, 2003	\$ 1,673
	Jan. 1, 2004 – Dec. 31, 2004	\$ 1,723
	Jan. 1, 2005 – Dec. 31, 2005	\$ 1,669
	Jan. 1, 2006 – Dec. 31, 2006	\$ 1,820

12-Month Period	Monthly Payment
Jan. 1, 2007 – Dec. 31, 2007	\$ 3,405
Jan. 1, 2008 – Dec. 31, 2008	\$ 1,655
Jan. 1, 2009 – Dec. 31, 2009	\$ 4,055
Jan. 1, 2010 – Dec. 31, 2010	\$ 1,701
Jan. 1, 2011 – Dec. 31, 2011	\$ 4,264
Jan. 1, 2012 – Dec. 31, 2012	\$ 1,626
Jan. 1, 2013 – Dec. 31, 2013	\$ 4,954
Jan. 1, 2014 – Dec. 31, 2014	\$ 1,605
Jan. 1, 2015 – Dec. 31, 2015	\$ 1,637
Jan. 1, 2016 – Dec. 31, 2016	\$ 16,504
Jan. 1, 2017 – Dec. 31, 2017	\$ 5,665
Jan. 1, 2018 – Dec. 31, 2018	\$ 1,737
Jan. 1, 2019 – Dec. 31, 2019	\$ 4,222
Jan. 1, 2020 – Dec. 31, 2020	\$ 1,807
Jan. 1, 2021 – Dec. 31, 2021	\$ 15,946
Jan. 1, 2022 – Dec. 31, 2022	\$ 1,954
Jan. 1, 2023 – Dec. 31, 2023	\$ 1,918
Jan. 1, 2024 – Dec. 31, 2024	\$ 1,956
Jan. 1, 2025 – Dec. 31, 2025	\$ 9,933
Jan. 1, 2026 – Dec. 31, 2026	\$ 2,265
Jan. 1, 2027 – Dec. 31, 2027	\$ 2,076
Jan. 1, 2028 – Dec. 31, 2028	\$ 2,201
Jan. 1, 2029 – Dec. 31, 2029	\$ 2,160
Jan. 1, 2030 – Dec. 31, 2030	\$ 2,203
Jan. 1, 2031 – Dec. 31, 2031	\$ 59,074
Jan. 1, 2032 – Dec. 31, 2032	\$ 2,292
Jan. 1, 2033 – Dec. 31, 2033	\$ 7,777
Jan. 1, 2034 – Dec. 31, 2034	\$ 2,479

12-Month Period	Monthly Payment
Jan. 1, 2035 – Dec. 31, 2035	\$ 2,432
Jan. 1, 2036 – Dec. 31, 2036	\$ 2,761

## Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** Rider A4 applies to **system access service** provided to Imperial Oil Resources Limited (Imperial Oil) at the Leming Lake-715S transmission station **point of delivery** and **point of supply** and the Mahihkan-837S transmission station **point of delivery** at Imperial Oil's Cold Lake industrial system, as designated by Alberta Energy and Utilities Board Order No. HE 9901 and expanded by Order No. U2006-207, plus any expansions to this industrial system as may be approved by the **Commission**.

## Rate

**2(1)** For each metering time interval, the **metered demand** and **metered energy** for the **points of delivery** and **point of supply**, at the 715S and 837S transmission stations, will be totaled for the purpose of settlement under Rate DTS and Rate STS, as described in subsections 4 and 5 below.

**(2)** Imperial Oil shall make the following payments to the **ISO**:

- (a) Capital Charge: A lump-sum payment of \$5 968 800 collected upon implementation of this rider;
- (b) Incremental Losses Charge: For each **settlement period**, commencing on the effective date of this rider, a payment equal to the totaled **metered energy** multiplied by the applicable **loss factor** and multiplied by the **pool price**, calculated on an hourly basis. The applicable **loss factor** for each hour will be the **loss factor** in subsection 6 below that corresponds with the totaled **metered energy** for the hour; and
- (c) Other Expenses Charge: For each **settlement period**, commencing on the effective date of this rider, an amount equal to the "Monthly Payment" in subsection 7 below for the applicable year.

## Terms

**3** All terms in the **ISO's** June 22, 2001 Application for a Duplication Avoidance Tariff for Imperial Oil Resources Limited Cold Lake Site and in the **ISO's** 2008 Application for Amendment will be applicable.

## Metering and Totalizing

**4(1)** If Imperial Oil were to build the duplicate facilities, the Leming Lake transmission station would be a **point of supply** when the Cold Lake site power generation exceeds the load requirements, and a **point of delivery** when the generation does not meet the load requirements. The duplication avoidance tariff will simulate these conditions by deeming the **points of delivery** at the Mahihkan and Leming Lake transmission stations, and the **point of supply** at the Leming Lake transmission station, to be a single **point of delivery** and **point of supply** for the purpose of totalizing **metered demand** and **metered energy** in applying Rate DTS and Rate STS.

**(2)** During operation of the duplication avoidance tariff, the **ISO** will totalize the metered data for Imperial Oil's load and generation served from the Mahihkan and Leming Lake transmission stations. This will ensure that payments by Imperial Oil to the **ISO** under Rate DTS and Rate STS are equivalent to the costs Imperial Oil would have incurred for the duplicate facilities.

**(3)** Charges under Rate DTS and Rate STS will be calculated using the totaled **metered demand** and the totaled **metered energy** for Imperial Oil at the Mahihkan-837S transmission station and the

Leming Lake-715S transmission station. The meters to be totalized at Mahihkan-837S are 5L408, 5L409, 5L410 and 7L105. The meters to be totalized at Leming Lake-715S are 5L335, 5L408, 5L575, 5L395, 5L242 and 7L95. These meter points may change from time to time.

(4) The amount of load included in the totalizing calculation will be limited to 157 MVA from November through April and 130 MVA from May through October, which is the maximum amount of load that the duplicate facilities would be able to serve, based on the deemed winter and summer capacities, respectively, of the duplicate transmission line in Imperial Oil's design. If the combined **metered demand** at the Mahihkan and Leming Lake transmission stations for the load facilities exceeds the 157 MVA winter or 130 MVA summer limit, the costs that would have been required to service the additional load under the duplicate facilities alternative will be estimated and invoiced to Imperial Oil.

### Example of Totalizing

5(1) The following is an example of the totalizing calculation for **metered demand** and **metered energy** for two different metering time intervals.

	Time Interval 1	Time Interval 2
<b>Point of delivery (A) (Mahikan)</b>	+45 MW	+45 MW
<b>Point of supply and point of delivery (B) (Leming Lake)</b>	–100 MW	+60 MW
<b>Totalized <b>metered demand</b> and <b>metered energy</b> (C)</b>	–55 MW	+105 MW

(2) In time interval 1, under the duplication avoidance tariff, Imperial Oil's **demand** requirement is 45 MW at each of the Mahihkan and Leming Lake transmission stations. At the same time, Imperial Oil's cogeneration facility is producing 160 MW of power, of which 15 MW is used to directly serve other load requirements. The net delivery to the **interconnected electric system** is 145 MW at the Leming Lake transmission station. If Imperial Oil built the duplicate facilities, the **metered energy** delivered by the **interconnected electric system** to Imperial Oil's load requirement at the Mahihkan transmission station would be zero, and the **metered energy** received by the **interconnected electric system** from the generator output at the Leming Lake transmission station would be 55 MW (160 MW of generation minus 105 MW of load). This energy balance is simulated by the proposed totalizing procedure. Combining the **point of delivery (A)** and **point of supply (B)** produces an adjusted **metered demand** of –55 MW, where the negative sign signifies a net energy receipt by the **interconnected electric system**.

(3) In time interval 2, the cogeneration facility is not operating and Imperial Oil's load remains at 105 MW (45 MW at the Mahihkan station, and 45 MW plus 15 MW at Leming Lake station). The result is a net load of +105 MW for that time interval, where the positive sign signifies a net energy delivery from the **interconnected electric system**.

### Schedule 1 — Incremental Loss Factors

6	<b>Metered Demand</b> of Load Facilities (MW)	<b>Loss Factor</b> (% of <b>metered demand</b> of load facilities)
	> 0 ≤ 10	1.88%
	> 10 ≤ 20	1.31%

<b>Metered Demand of Load Facilities (MW)</b>	<b>Loss Factor (% of metered demand of load facilities)</b>
> 20 ≤ 30	0.64%
> 30 ≤ 40	0.54%
> 40 ≤ 50	0.60%
> 50 ≤ 60	0.73%
> 60 ≤ 70	0.90%
> 70 ≤ 80	1.09%
> 80 ≤ 90	1.29%
> 90 ≤ 100	1.51%
> 100 ≤ 110	1.72%
> 110 ≤ 115	1.91%
> 115 ≤ 120	1.99%
> 120 ≤ 125	2.08%
> 125 ≤ 130	2.16%
> 130 ≤ 135	2.25%
> 135 ≤ 140	2.33%
> 140 ≤ 145	2.48%
> 145	2.66%

## Schedule 2 — Other Expenses Charge

<b>7</b>	<b>12-Month Period</b>	<b>Monthly Payment</b>
	Jan. 1, 2003 – Dec. 31, 2003	\$ 4,223
	Jan. 1, 2004 – Dec. 31, 2004	\$ 6,323
	Jan. 1, 2005 – Dec. 31, 2005	\$ 4,286
	Jan. 1, 2006 – Dec. 31, 2006	\$ 4,225
	Jan. 1, 2007 – Dec. 31, 2007	\$ 5,791
	Jan. 1, 2008 – Dec. 31, 2008	\$ 7,651
	Jan. 1, 2009 – Dec. 31, 2009	\$ 5,189
	Jan. 1, 2010 – Dec. 31, 2010	\$ 6,835
	Jan. 1, 2011 – Dec. 31, 2011	\$ 4,500

12-Month Period	Monthly Payment
Jan. 1, 2012 – Dec. 31, 2012	\$ 8,367
Jan. 1, 2013 – Dec. 31, 2013	\$ 4,457
Jan. 1, 2014 – Dec. 31, 2014	\$ 10,648
Jan. 1, 2015 – Dec. 31, 2015	\$ 5,059
Jan. 1, 2016 – Dec. 31, 2016	\$ 5,430
Jan. 1, 2017 – Dec. 31, 2017	\$ 19,466
Jan. 1, 2018 – Dec. 31, 2018	\$ 10,660
Jan. 1, 2019 – Dec. 31, 2019	\$ 4,765
Jan. 1, 2020 – Dec. 31, 2020	\$ 10,594
Jan. 1, 2021 – Dec. 31, 2021	\$ 5,565
Jan. 1, 2022 – Dec. 31, 2022	\$ 29,055
Jan. 1, 2023 – Dec. 31, 2023	\$ 5,799
Jan. 1, 2024 – Dec. 31, 2024	\$ 5,905
Jan. 1, 2025 – Dec. 31, 2025	\$ 5,366
Jan. 1, 2026 – Dec. 31, 2026	\$ 19,095
Jan. 1, 2027 – Dec. 31, 2027	\$ 6,492
Jan. 1, 2028 – Dec. 31, 2028	\$ 5,695
Jan. 1, 2029 – Dec. 31, 2029	\$ 5,962
Jan. 1, 2030 – Dec. 31, 2030	\$ 7,811
Jan. 1, 2031 – Dec. 31, 2031	\$ 6,043

## Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** Rider C of the **ISO tariff**, *Deferral Account Adjustment Rider*, applies to **system access service** provided under:

- (a) Rate DTS of the **ISO tariff**, *Demand Transmission Service*;
- (b) Rate FTS of the **ISO tariff**, *Fort Nelson Demand Transmission Service*; and
- (c) Rate PSC of the **ISO tariff**, *Primary Service Credit*.

### Rider

**2(1)** The **ISO** must recover or refund through Rider C accumulated deferral account balances which are comprised of differences between revenues and costs incurred in providing **system access service** to **market participants**.

**(2)** The **ISO** must determine Rider C for each calendar quarter as an additional percentage charge or credit that applies to each rate listed in subsection 1 above.

**(3)** The **ISO** must publish the Rider C charge or credit, including its calculation, on the **ISO** website at least thirty (30) **days** prior to the beginning of the calendar quarter in which it will apply.

**(4)** The **ISO** must calculate the Rider C charge or credit as the sum of amounts, based on available recorded and forecast values, required to restore the deferral account balance to zero (0) at the end of the calendar year in which the Rider C charge or credit will apply, or such period as determined by the **ISO** to minimize the rate effect, in each of the following rate components:

- (a) connection charge and primary service credit;
- (b) **operating reserve** charge;
- (c) **transmission constraint rebalancing** charge;
- (d) voltage control charge; and
- (e) other system support services charge

where the **ISO** assigns revenues and costs to each rate component in accordance with the **ISO tariff** in effect during the period in which the revenue was collected or the cost was incurred.

**(5)** The **ISO** must calculate Rider C to include only transactions settled with the **ISO** that have occurred after January 1 of the calendar year in which the Rider C charge or credit will apply, although such transactions may involve amounts that relate to prior years.

### Terms

**3(1)** The **ISO** may adjust Rider C amounts collected or refunded, through a deferral account reconciliation application filed with the **Commission** by the **ISO**.

(2) The **ISO** must not add or deduct interest to or from amounts recovered or refunded through Rider C or through a deferral account reconciliation application, unless the **Commission** orders otherwise in specific circumstances.

(3) The terms and conditions of the **ISO tariff** form part of this rider.

### Revision History

Effective	Description
2018-01-01	Updated subsections, as approved on an interim basis in <b>Commission</b> Decision 22942-D01-2017 issued on November 28, 2017.
2015-11-26	Updated subsections, as approved in <b>Commission</b> Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

- 1(1)** Rider E applies to **system access service** provided under:
- (a) Rate DOS, *Demand Opportunity Service*;
  - (b) Rate XOS, *Export Opportunity Service*;
  - (c) Rate STS, *Supply Transmission Service*; and
  - (d) Rate IOS, *Import Opportunity Service*.
- (2)** Rider E applies in all **settlement periods** effective January 1, 2006.

### Rider

- 2(1)** The **ISO** must determine Rider E to adjust **loss factors** to ensure that the actual cost of losses is reasonably recovered through charges and credits on an annual basis.
- (2)** The **ISO** must add or subtract an additional **calibration factor** percentage (%) to or from all **loss factors** for facilities and **interties** on each applicable rate.
- (3)** The **ISO** must determine a **calibration factor** every quarter to recover or refund all accumulated and forecast differences between the anticipated costs of **transmission system** losses and the actual costs of **transmission system** losses, on a calendar year basis.
- (4)** The **ISO** must carry forward any balance between **transmission system** losses costs and revenues remaining at the end of a year to be recovered or refunded in the following calendar year.

### Terms

- 3** The terms and conditions of the **ISO tariff** form part of this rider.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

# ISO Tariff – Rider F

## Balancing Pool Consumer Allocation Rider



### Applicability

- 1(1)** Rider F applies to **system access service** provided under:
- (a) Rate DTS, *Demand Transmission Service*; and
  - (b) Rate DOS, *Demand Opportunity Service*.
- (2)** Notwithstanding subsection 1(1) above, Rider F does not apply to **system access service** provided to:
- (a) the City of Medicine Hat; or
  - (b) BC Hydro at Fort Nelson, British Columbia.
- (3)** Rider F applies in all **settlement periods** from January 1, 2020 to December 31, 2020.

### Rider

- 2(1)** The **ISO** must determine Rider F as a charge of \$2.50/MWh of **metered energy** during the **settlement period**.
- (2)** The **ISO** must determine Rider F to refund or collect an annualized amount estimated by the Balancing Pool and transferred to the **ISO** under section 82 of the **Act**, for the **market participants** receiving **system access service** from the **ISO** under subsection 1 above.

### Terms

- 3** The terms and conditions of the **ISO tariff** form part of this rider.

### Revision History

Effective	Description
2020-01-01	Updated to reflect \$2.50/MWh charge for 2020 consumption, as approved in <b>Commission</b> Decision 24892-D01-2019 issued on November 25, 2019.
2019-01-01	Updated to reflect \$2.90/MWh charge for 2019 consumption, as approved in <b>Commission</b> Decision 24037-D01-2018 issued on November 26, 2018.
2018-01-01	Updated to reflect \$3.10/MWh charge for 2018 consumption, as approved in <b>Commission</b> Decision 23163-D01-2017 issued on December 15, 2017.
2017-01-01	Updated to reflect \$1.10/MWh charge for 2017 consumption, as approved in <b>Commission</b> Decision 22248-D01-2016 issued on December 16, 2016.
2016-01-01	Updated to reflect \$3.25/MWh credit for 2016 consumption, as approved in <b>Commission</b> Decision 21031-D01-2015 issued on December 3, 2015.
2015-01-01	Updated to reflect \$5.50/MWh credit for 2015 consumption, as approved in <b>Commission</b> Decision 2014-317 issued on November 13, 2014.

2014-01-01	Updated to reflect \$5.50/MWh credit for 2014 consumption, as approved in <b>Commission</b> Decision 2013-425 issued on November 28, 2013.
2013-01-01	Updated to reflect \$5.50/MWh credit for 2013 consumption, as approved in <b>Commission</b> Decision 2012-306 issued on November 14, 2012.
2012-01-01	Updated to reflect \$5.50/MWh credit for 2012 consumption, as approved in <b>Commission</b> Decision 2011-476 issued on December 14, 2011.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

# ISO Tariff – Rider J

## Wind Forecasting Service Cost Recovery Rider



### Applicability

**1** Rider J of the **ISO tariff**, *Wind Forecasting Service Cost Recovery Rider*, applies to **system access service** provided under Rate STS of the **ISO tariff**, *Supply Transmission Service*, for a wind-powered **generating unit** or **aggregated generating facility**.

### Rider

**2(1)** The **ISO** must determine the Rider J amount to recover the costs paid by the **ISO** for provision of a wind forecasting service for wind-powered **generating units** and **aggregated generating facilities** in Alberta.

**2(2)** The **ISO** must calculate the Rider J charge as the product of **metered energy** in the **settlement period** multiplied by \$0.00/MWh.

**2(3)** The **ISO** must:

- (a) review Rider J costs and revenues at the end of each calendar year; and
- (b) adjust the Rider J amount in future years to address variances from forecasts of costs and revenues.

### Terms

**3(1)** The **ISO** must apply Rider J separately at each **point of supply**.

**3(2)** The terms and conditions of the **ISO tariff** form part of this rider.

### Revision History

Effective	Description
2020-04-01	As approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated to \$0.08/MWh charge, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated to \$0.09/MWh charge, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated to \$0.05/MWh charge, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in <b>Commission</b> Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated to \$0.05/MWh charge, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated to \$0.06/MWh charge, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated to \$0.12/MWh charge, as approved on an interim refundable basis in <b>Commission</b> Decision 2014-330 issued on December 3, 2014 and on a final basis in

	<b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

- 1(1)** A **market participant** who applies for or accepts **system access service** from the **ISO** agrees to be bound by the **ISO tariff**.
- (2)** Both the **ISO** and **market participants** are bound by and have the rights and obligations defined in the **ISO tariff** with respect to **system access service** the **ISO** provides, including rates, riders, terms and conditions and appendices.
- (3)** The **ISO tariff** becomes effective as of the date provided in the revision history of each rate, rider, section, or appendix and only when approved by the **Commission** and each rate, rider, section, or appendix of the **ISO tariff** remains in effect until the **Commission** approves its replacement or amendment.

### Conflict

- 2(1)** The **ISO** has certain powers, duties and responsibilities as described in the **Act** and nothing in the **ISO tariff** in any way restricts or limits those powers, duties and responsibilities.
- (2)** In the event of any conflict between the terms and conditions of the **ISO tariff** and the rates, riders or appendices of the **ISO tariff**, the terms and conditions govern.
- (3)** In the event of any conflict between the **ISO tariff** and a section of an agreement for **system access service**, the **ISO tariff** governs the specific section in conflict without affecting or impairing the remaining sections of the agreement for **system access service**.

### Interpretation

- 3** In the **ISO tariff**:
- (a) tables of contents, section headers and the use of underlining and italicizing are not a part of the **ISO tariff** but are inserted for convenience of reference only;
  - (b) words in the singular include the plural and words in the plural include the singular;
  - (c) words importing male **persons** include female **persons**, words importing female **persons** include male **persons** and words importing either sex include corporations;
  - (d) the provisions of the **ISO tariff** will be construed as always speaking and will be applied to circumstances as they arise;
  - (e) the use of the word “including” is not to be construed as being restrictive;
  - (f) “may” is to be construed as permissive and empowering and “must”, “shall” and “will” are to be construed as imperative;
  - (g) all references to a time of **day** in the **ISO tariff** mean mountain standard or mountain daylight time in the Province of Alberta, whichever is in effect on the **day** in question;
  - (h) words and phrases in bold type have the meanings given to them in the definitions found in the *Consolidated Authoritative Documents Glossary*; and

- (i) titles of documents are in italics.

## Jurisdiction

**4(1)** The **ISO** and **market participants** must address any dispute concerning the application, interpretation or enforceability of the **ISO tariff** in accordance with section 103.2 of the **ISO rules**, *Dispute Resolution*.

**(2)** Any such dispute is within the exclusive jurisdiction of the **Commission** or Courts of the Province of Alberta, as applicable, and any related legal proceedings must be commenced, heard and adjudicated within the applicable Alberta forum.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under any rate in the **ISO tariff**.

### Provision of Service

**2(1)** The **ISO** must provide **system access service**, up to and including the applicable **point of delivery** or **point of supply**, to a **market participant** who has a current agreement for **system access service** and complies with the **ISO tariff**, subject to subsections 3, 4, 5 and 6 below.

**(2)** The **ISO** must provide such **system access service** up to the **contract capacity** of the **market participant**.

**(3)** The **ISO** may limit, reduce or interrupt **system access service** under any applicable **ISO rule** or due to abnormal operating conditions which include, as defined in the *Transmission Regulation*, conditions where **transmission facilities** are out of service, **emergency** conditions exist, construction or **commissioning** of **transmission facilities** occurs or **transmission facility** maintenance cannot be coordinated with **planned outages** of a **generating unit** or an **aggregated generating facility**.

### Metered Demand Limitations

**3(1)** A **market participant** receiving **system access service** under Rate DTS, *Demand Transmission Service*, or Rate STS, *Supply Transmission Service*, must ensure **metered demand** does not exceed the lesser of the **rated capacity** or the **physical capacity** of any **transmission facilities** comprising the **market participant's** connection, subject to subsections 3(3) and 3(4) below.

**(2)** The **ISO** has the right to discontinue **system access service** if the **metered demand** exceeds either the **rated capacity** or the **physical capacity** of any **transmission facilities** comprising a **market participant's** connection, until the **market participant** installs equipment to limit the **metered demand** to the **rated capacity** or **physical capacity**, as applicable.

**(3)** A **market participant** receiving **system access service** under Rate DTS may temporarily exceed the **rated capacity** of **transmission facilities** comprising its connection, but only where the **ISO** has approved a transaction under Rate DOS for the **market participant** at the applicable **point of delivery**.

**(4)** A **market participant** receiving **system access service** under Rate STS may temporarily exceed the **rated capacity** of **transmission facilities** comprising its connection, but only with the **ISO's** consent, obtained on a minimum twenty-four (24) hours' notice, which the **ISO** withhold if the **ISO** determines that the **transmission system** cannot safely accommodate the proposed energy without risk of disturbance to other **market participants**.

### Withholding Service

**4(1)** The **ISO** may limit, reduce, withhold or terminate **system access service** if a **market participant** fails to comply with any provision of the **ISO tariff**.

**(2)** The **ISO** must provide a written explanation for limiting, reducing, withholding or terminating **system access service** to an affected **market participant** who submits a written request for those details.

## Service Not Guaranteed

**5(1)** The **ISO** must take reasonable precautions to guard against **system access service** limitations, reductions and interruptions, but can not and does not guarantee uninterrupted **system access service**.

**(2)** Interruptions may be caused by events including:

- (a) scheduled or planned facility maintenance activities;
- (b) construction, **commissioning** and facility testing activities;
- (c) unscheduled or unplanned **emergency** equipment maintenance or other **emergencies**;
- (d) events of **force majeure**;
- (e) breaches of obligations owed to the **ISO** by its suppliers or **market participants**; or
- (f) as otherwise expressly allowed by a rate or rider in the **ISO tariff**.

**(3)** The **ISO** must make reasonable efforts to restore **system access service** as soon as practicable after a limitation, reduction or interruption, except where the limitation, reduction or interruption is due to the **market participant** failing to comply with the **ISO tariff**.

## Interruptions for Construction, Commissioning and Facility Testing

**6** The **ISO** must make reasonable efforts to schedule construction, **commissioning** and facility testing activities in conjunction with planned downtime of an affected **market participant's** but, subject to such efforts, may interrupt **system access service** to perform such activities.

## Market Participant's Continuing Financial Obligations

**7** A **market participant's financial obligation** to pay any rate, charge or other amount that has accrued or is accruing to the **ISO** and to fully comply with the **ISO tariff** are not affected during or as the result of any limitation, reduction, interruption, withholding or termination of **system access service**.

## Reasonable Exercise of Discretion

**8** The **ISO**, the **legal owner** of the **transmission facility** and the **market participant**, individually and collectively, must exercise discretion acting reasonably in every instance, where discretion is permitted by the **ISO tariff** either explicitly or implicitly through the use of "may", and whether with respect to granting consent or withholding consent to a particular matter or otherwise.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under any rate in the **ISO tariff**.

### Technical Requirements

**2(1)** A **market participant** receiving **system access service** must comply with the technical requirements set out in the **ISO rules**.

**(2)** A **market participant** receiving **system access service** must also comply with the requirements, obligations and guidelines that apply to the connection of the **market participant's** facilities to the **interconnected electric system**.

**(3)** The **ISO** must identify such requirements, obligations and guidelines in documents it prepares, publishes and may amend or supplement from time to time, with respect to matters including transmission lines, **generating units** and **aggregated generating facilities**, loads, communications, phasor measurement units, protection, revenue metering, supervisory control and data acquisition and transmission data.

**(4)** The **ISO** must make such documents available to **market participants** on the AESO website and on request.

### Facilities Owned by a Market Participant

**3(1)** A **market participant** is responsible for all the facilities it owns and which are connected to the **interconnected electric system**, and the **ISO** has no responsibility in respect of service provided over **market participant** facilities.

**(2)** A **market participant** is responsible for any costs arising from changes to its facilities required as a result of:

- (a) changes to the **interconnected electric system** that affect the connection;
- (b) changes to requirements, obligations and guidelines that apply to the connection, subject to subsection 3(3) below, or
- (c) additional studies needed to ensure compliance with such requirements, obligations and guidelines.

**(3)** The **ISO** must pay to the **legal owner** of a **generating unit** all costs prudently incurred in the installation of an **automatic voltage regulator** or power system stabilizer when the **ISO** requires the installation of such equipment on a regulated **generating unit** listed in Appendix A of the **ISO tariff**, subject to the approval of the **Commission** for the recovery of such costs through the **ISO tariff**.

### Use of Transmission Facilities

**4** Neither a **market participant** nor any other **person** may rearrange, disconnect, remove, connect with or otherwise interfere with any **transmission facility** without the **ISO's** prior written consent.

## Compliance

**5(1)** The **ISO** may withhold, suspend or terminate the **system access service** of a **market participant** for failure to comply with the provisions of the **ISO** rules, technical requirements, obligations or guidelines described in subsection 2 above.

**(2)** The **ISO** may waive compliance with subsection 2 above if the **ISO** determines that non-compliance would not have a detrimental effect on system **reliability** and where the imposition of the technical requirements, obligations or guidelines would create severe hardship or unnecessary costs to an existing **market participant**.

## Revision History

Effective	Description
2015-07-01	Updated subsections and charges, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** This section applies to a **market participant** who has requested a new **system access service** or changes to an existing **system access service** under:

- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate FTS, *Fort Nelson Demand Transmission Service*;
- (c) Rate PSC, *Primary Service Credit*; or
- (d) Rate STS, *Supply Transmission Service*.

### Request for System Access Service

**2(1)** A **market participant** must apply in writing to the **ISO** to request a new **system access service** or to change an existing **system access service**.

**(2)** A **market participant** must make separate requests for changes to existing **system access services** at each **point of delivery** and **point of supply** at a single transmission substation.

**(3)** The **ISO** must not accept requests for a net change to an existing **system access services** agreement.

### Review of System Access Service Request

**3(1)** The **ISO** must review the requirements to provide **system access service** in response to the request of a **market participant** and determine the appropriate process for providing the **system access service**.

**(2)** The **ISO** must determine whether providing the requested **system access service** requires the construction of **transmission facilities**.

**(3)** If the **ISO** determines that providing **system access service** requires the construction of **transmission facilities**:

- (a) the **ISO** must determine the connection project scope, assign the project to a **legal owner** of a **transmission facility** and confirm the process for completing the connection project for the project; and
- (b) the **market participant** must at all times, throughout the **system access service** request process, satisfy the **financial obligations** required by section 5 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

**(4)** If the **ISO** determines that providing **system access service** does not require the construction of **transmission facilities**:

- (a) the **ISO** must assess whether the request can be accommodated on the existing **transmission system** and, if so, must proceed to prepare an amendment to the **market participant's** agreement for **system access service**; and

- (b) the **ISO** may require payment of an amount determined in accordance with section 9 of the **ISO tariff**, *Changes to System Access Service After Energization*.

## Preparation of Connection Proposal

**4(1)** The **market participant** is responsible for, and may work with the **legal owner** of the **transmission facility** or other parties in the preparation of the connection proposal which must include:

- (a) the facility design document, including an estimate of project costs and a single-line diagram of the proposed **transmission facilities**;
- (b) technical studies for the connection project; and
- (c) any required land and environmental impact assessments.

**(2)** The **ISO** may, notwithstanding subsection 5(1) above, complete the technical studies for a connection project when the **ISO**:

- (a) anticipates the impact on the **transmission system** may be significant; or
- (b) is planning **transmission system** development in the area and must include the connection project in the integrated development plan.

**(3)** The **ISO** must, if it considers it necessary, complete one (1) **loss factor** study for a connection project, at no cost to the **market participant**, but must charge the **market participant** \$2 500 for each additional **loss factor** study the market participant requests, if any.

**(4)** The **market participant** is responsible for any other studies required to support the connection proposal and the **ISO** must provide the **market participant** with **ISO** information required for the studies.

**(5)** The **ISO** must, upon receipt of a complete connection proposal, including all required studies:

- (a) review the proposal;
- (b) identify and communicate to the **market participant** any deficiencies to be addressed by the **market participant**; and
- (c) accept the connection proposal after deficiencies, if any, have been addressed.

**(6)** The **ISO** must include the connection project in the **ISO**'s connection queue upon:

- (a) accepting the connection proposal;
- (b) receiving the technical data required for the preparation of the **needs identification document** for the connection project; and
- (c) receiving confirmation from the **legal owner** of the **transmission facility** that the **market participant** has met the **financial obligations** of section 5 of the **ISO tariff**, *Financial Obligations for Connection Projects*..

## Preparation of Needs Identification Documents and Facility Applications

**5(1)** The **ISO** is responsible for, and may work with the **legal owner** of the **transmission facility** or other parties in, the preparation of a **needs identification document** as required for the connection project.

(2) The **ISO** may direct the **legal owner** of the **transmission facility** to assist in preparing the **needs identification document** by:

- (a) completing a participant involvement program;
- (b) providing an estimate of project costs; and
- (c) completing other studies for the connection project.

(3) The **ISO** may direct the **legal owner** of the **transmission facility** or request a **market participant** to prepare a facility application for the connection project, when the **ISO** includes the connection project in the **ISO's** connection queue.

### Submissions to the Commission

6(1) The **ISO** must submit to the **Commission** the **needs identification document** for the connection project.

(2) The **legal owner** of the **transmission facility** or the **market participant** must submit to the **Commission** the facility application for the connection project.

(3) The **ISO** must work cooperatively with the **legal owner** of the **transmission facility** or the **market participant**, as applicable, to facilitate all submissions to the **Commission**.

(4) The **ISO** must:

- (a) review a potential requirement for any new or revised section of the **ISO rules** identified during the preparation of a **needs identification document** or facility application for the connection project; and
- (b) draft a new or revised section of the **ISO rules** and submit it to the **Commission** if applicable.

### Requirement of Market Participant to Act

7(1) The **ISO** must establish critical requirements for a connection project, including payment of:

- (a) any **construction contribution** determined under section 8 of the **ISO tariff**; and
- (b) any **legal owner's** contribution for a **generating unit** or an **aggregated generating facility** determined under section 10 of the **ISO tariff**.

(2) A **market participant** must meet the critical requirements the **ISO** establishes.

(3) The **ISO** may, if a **market participant** fails to meet the critical requirements:

- (a) cancel the **system access service** request;
- (b) reassess the inclusion of the project in the **ISO's** connection queue; or
- (c) amend the critical requirements.

(4) A **market participant** may reapply for the **system access service** under subsection 2 above, if the **ISO** cancels a **system access service** request.

## Alternative Processes

**8** The **ISO** may, with the agreement of the **market participant**, satisfy the provisions of this section 4 through processes other than those described above and, in particular, alternative processes may be utilized when the **ISO** anticipates the impact on the **transmission system** may be significant.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

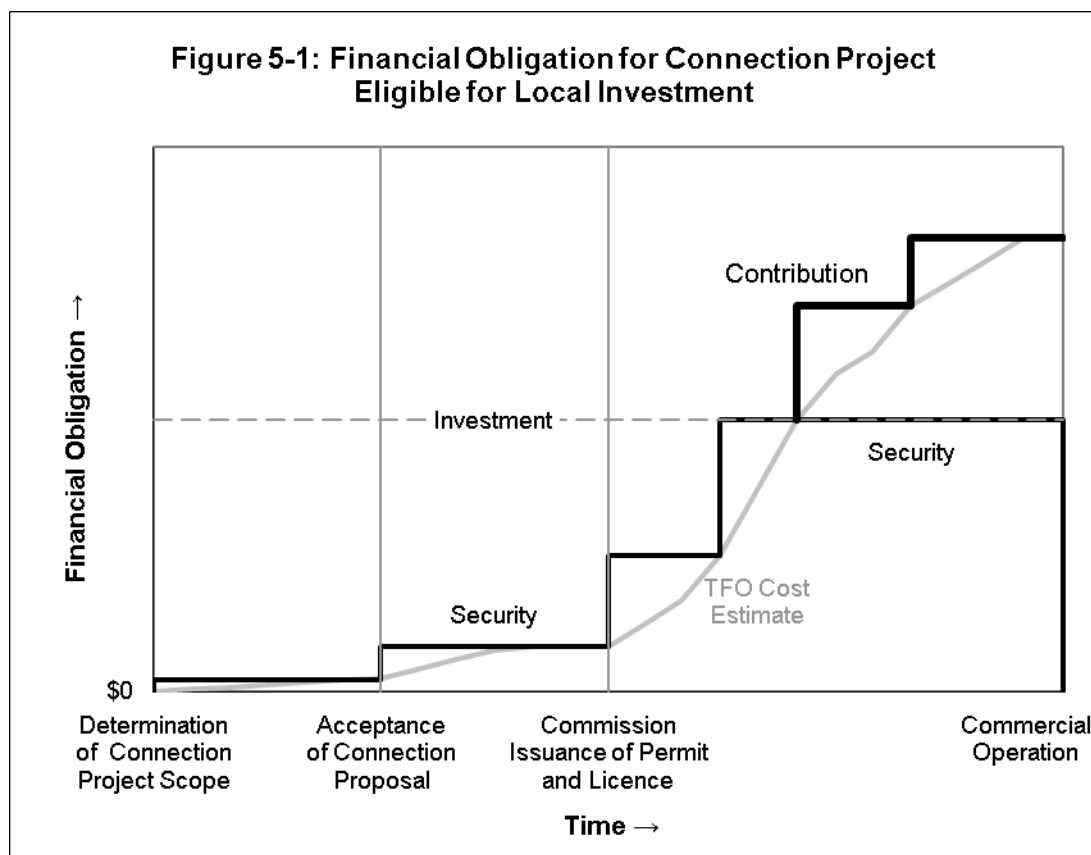
**1** This section applies to a **market participant** who has requested a new **system access service** or changes to an existing **system access service** under:

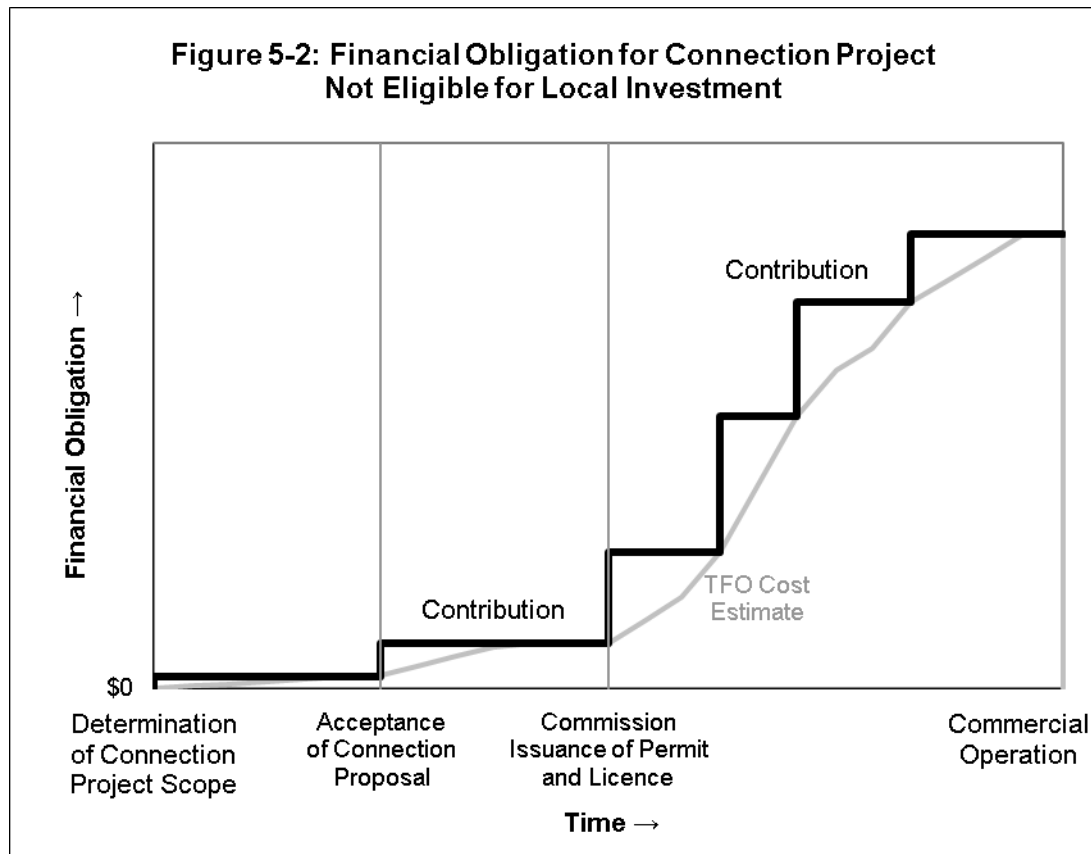
- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate FTS, *Fort Nelson Demand Transmission Service*;
- (c) Rate PSC, *Primary Service Credit*; or
- (d) Rate STS, *Supply Transmission Service*.

### Amount of Financial Obligation

**2(1)** A **market participant** must provide **financial security** and **construction contribution** as described in the following subsections, which **financial obligations** are illustrated:

- (a) in Figure 5-1 below, for a connection project eligible for local investment; and
- (b) in Figure 5-2 below, for a connection project not eligible for local investment.





(2) The **market participant** must satisfy the **financial obligation** for a connection project at all times after the **ISO** determines the connection project scope in accordance with subsection 3(3) of section 4 of the **ISO tariff**, *System Access Service Requests*.

(3) The **ISO** must determine the total amount of the **financial obligation** for a connection project which must include but not exceed:

- (a) participant-related costs of the connection project estimated or incurred in accordance with section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*, including:
  - (i) costs estimated in advance or incurred by the **legal owner** of the **transmission facility** for preparing the connection proposal and the facility application and for constructing the connection project; and
  - (ii) costs estimated in advance by the **ISO** for facilities which are in excess of those required by **good electric industry practice**;
- and
- (b) any operations and maintenance charge estimated in advance by the **market participant** for the connection project, in accordance with subsection 9 of section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*.

(4) The **legal owner** of the **transmission facility** must determine the amounts and timing of the **financial obligation** for the connection project as the project progresses through the stages illustrated in Figure 5-1 or 5-2 above, as applicable, where:

- (a) from the determination of the connection project scope to the **ISO's** acceptance of the connection proposal, the **financial obligation** amount is equal to the total estimated or actual cost that the **legal owner** of the **transmission facility** incurs during preparation of the connection proposal;
- (b) from the **ISO's** acceptance of the connection proposal to the **Commission's** issuance of permit and licence for the connection project, the **financial obligation** amount is the sum of:
  - (i) the amount from subsection 2(4)(a); and
  - (ii) the estimated or actual cost that the **legal owner** of the **transmission facility** incurs during preparation and submission of the facility application to the **Commission**;and
- (c) after the **Commission's** issuance of permit and licence for the connection project, the **financial obligation** amount is the sum, up to the total amount established in subsection 2(3) above, of:
  - (i) the amount from subsection 2(4)(b); and
  - (ii) the estimated or actual cost that the **legal owner** of the **transmission facility** incurs during the stages of construction and completion of the connection project, as illustrated in Figures 5-1 or 5 2 above, as applicable.

(5) The **legal owner** of the **transmission facility** must include all costs associated with procurement of long lead time equipment in the **financial obligation** amounts established under subsection 2(4) above, where the procurement occurs prior to the **Commission's** issuance of permit and licence for the connection project.

(6) The **legal owner** of the **transmission facility** may base the **financial obligation** amounts on certain assumptions regarding the **market participant's** request for **system access service** and may revise those assumptions from time to time to reflect changes to:

- (a) the request for **system access service**;
- (b) factors affecting the connection project, such as the method of construction, the routing of facilities and the approvals and rights of way;
- (c) variances in the estimated or actual cost of the connection project compared to the original estimate; and
- (d) other relevant considerations.

(7) The **legal owner** of the **transmission facility** must document the **financial obligation** amounts established in subsections 2(4) and 2(5) above in schedule "A" of a construction commitment agreement substantially in the form included in Appendix B of the **ISO tariff**, *System Access Service Agreement Proformas*.

(8) The **market participant** and the **legal owner** of the **transmission facility** must enter into the construction commitment agreement for the connection project except where the **ISO** waives the requirement for construction commitment agreements between a **legal owner** of an **electric distribution system** and a **legal owner** of **transmission facilities** who are **affiliates**.

(9) The **legal owner** of the **transmission facility** must maintain records of the construction commitment agreement, **financial security** and **construction contribution** related to the connection project and provide a copy of those records to the **ISO** upon request.

### Form and Provision of Financial Security for Projects Eligible for Local Investment

3(1) A **market participant**, other than a **legal owner** of an **electric distribution system** that is regulated by the **Commission**, must provide **financial security** for a connection project in accordance with this subsection 3.

(2) A **legal owner** of an **electric distribution system** that is regulated by the **Commission** is not required to provide **financial security** for a connection project.

(3) A **market participant**, other than a **legal owner** of an **electric distribution system** that is regulated by the **Commission**, must provide **financial security** to the **legal owner** of the **transmission facility** as illustrated in Figure 5-1 above:

- (a) in the amount of and at the time defined for the **financial obligation** described in subsection 2 above; and
- (b) up to the maximum local investment determined for the connection project under section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*.

(4) A **market participant**, other than a **legal owner** of an **electric distribution system** that is regulated by the **Commission**, must provide **financial security** satisfactory to the **legal owner** of the **transmission facility** in the form of:

- (a) an unconditional and irrevocable standby letter of credit payable on demand to the **legal owner** of the **transmission facility** and issued from a Canadian chartered bank or other comparable financial institution acceptable to the **legal owner** of the **transmission facility**;
- (b) a cash collateral deposit able to be registered as a first security interest held by the **legal owner** of the **transmission facility**; or
- (c) alternative financial security in a form, substance and amount determined at the sole discretion of the **legal owner** of the **transmission facility**.

(5) The **legal owner** of the **transmission facility** may at its sole discretion and based on practices it reasonably establishes and applies:

- (a) accept a request made by a **market participant** for unsecured credit, up to an unsecured credit limit determined by the **legal owner** of the **transmission facility**, or
- (b) reject that request.

(6) The **market participant** may provide **financial security** in amounts greater than those the **legal owner** of the **transmission facility** establishes in subsection 2(4) above but this does not reduce the amount of **construction contribution** required by subsection 4 below.

## Form and Provision of Construction Contribution

**4(1)** The **market participant** must pay as a **construction contribution**:

- (a) any **financial obligation** amount in excess of the maximum local investment for a connection project that is eligible for local investment determined under section 8 of the **ISO tariff Construction Contributions for Connection Projects**; or
- (b) the total amount of the **financial obligation** for a connection project that is not eligible for local investment, such as for **system access service** provided under Rate STS.

**(2)** The **market participant** must pay the **construction contribution**:

- (a) as documented in schedule “A” of the construction commitment agreement required by subsections 2(7) above; and
- (b) by way of electronic funds transfer or wire transfer to the bank account the **legal owner** of the **transmission facility** specifies.

**(3)** The **market participant** may pay the **construction contribution** in amounts greater than those documented in schedule “A” of the construction commitment agreement required by subsections 2(7) above.

## Cancellation

**5(1)** The **market participant** must, upon cancellation of a connection project at any time prior to **commercial operation**, pay:

- (a) all costs the **legal owner** of the **transmission facility** incurs or is required to incur in the preparation of the connection proposal, preparation of the facility application and construction of the project, as documented in the construction commitment agreement required by subsection 2(7) above; and
- (b) any other costs the **legal owner** of the **transmission facility** incurs or is required to incur with respect to the project, including all cancellation costs, penalties and costs for material salvage and reclamation of the construction site.

**(2)** The **legal owner** of the **transmission facility** must, upon failure by a **market participant** to pay the costs described in subsection 5(1) above before or on the payment due date as specified by the **legal owner** of the **transmission facility**:

- (a) make reasonable efforts to enforce and realize on any **financial security** provided by the **market participant** without further notice;
- (b) retain any realized **financial security**, **construction contribution** or other amounts paid by the **market participant** to offset costs the **legal owner** of the **transmission facility** incurs or is required to incur due to the cancellation of the connection project; and
- (c) take any other reasonable actions determined by the **legal owner** of the **transmission facility** or prescribed by the **ISO** with respect to the recovery of costs arising from the cancellation of the connection project.

**(3)** The **ISO** must support recovery, through the tariff of the **legal owner** of the **transmission facility**, of any costs that are unrecoverable under subsection 5(2) above by:

- (a) confirming, in writing, to the **Commission** that such costs were incurred as a consequence of the **legal owner's** compliance with the **ISO tariff**, to the best knowledge of the **ISO**; or
- (b) identifying, in writing, to the **Commission** any concern the **ISO** has that such costs were not incurred as a consequence of the **legal owner's** compliance with the **ISO tariff**,

but in so doing, the **ISO** must not make any statement with respect to the prudence of the **legal owner** of the **transmission facility** in incurring those costs.

(4) The **legal owner** of the **transmission facility** must return to the **market participant** any **financial security**, **construction contribution** or other amounts paid by the **market participant** in excess of the costs described in subsection 5(1) above.

(5) The **legal owner** of the **transmission facility** may deem a connection project to be cancelled pursuant to subsection 5(1) above if a **market participant** takes action that, in the opinion of the **legal owner** of the **transmission facility**, indicates the **market participant** has terminated or abandoned its intention to proceed to **commercial operation** of the connection project.

(6) The **legal owner** of the **transmission facility** may deduct, set off and net out any debts, liquidated demands, unliquidated demands, damages or other amounts the **legal owner** of the **transmission facility** owes to the **market participant**, under any construction commitment agreement between the **legal owner** of the **transmission facility** and the **market participant**, in partial or full satisfaction of any costs owing by the **market participant** under subsection 5(1) above.

(7) The **ISO** may deduct, set off and net out any debts, liquidated demands, unliquidated demands, damages or other amounts the **ISO** owes to the **market participant**, under any **system access service** agreement between the **ISO** and the **market participant**, in partial or full satisfaction of any costs owing by the **market participant** under subsection 5(1) above.

## Release of Financial Security

6(1) The **legal owner** of the **transmission facility** must return any **financial security** held for the connection project to the **market participant**, within ninety (90) **days** after **commercial operation** of the connection project.

(2) The **legal owner** of the **transmission facility** must return to the **market participant** any **construction contribution** paid by the **market participant** in excess of the actual cost of the connection project, within ninety (90) **days** after the **legal owner** of the **transmission facility** provides the final cost report for the connection project to the **ISO**.

## Compliance

7(1) A **market participant** must satisfy a request for **financial security** or **construction contribution** or for additional or replacement **financial security** or **construction contribution**, within thirty (30) **days** of such request.

(2) A **market participant** must report any event of default by it to a lender for borrowed funds or any **material adverse changes** in its financial position within two (2) **business days** of such event.

(3) The **legal owner** of the **transmission facilities** must suspend all work related to the connection project if:

- (a) a **market participant** fails to provide **financial security** or **construction contribution**; or

(b) the **ISO** or the **legal owner** of the **transmission facility** becomes aware of an unreported event or change under subsection 7(2) above.

(4) The **legal owner** of the **transmission facilities** must continue the suspension of work on the connection project until the **market participant** provides the required **financial security** or **construction contribution** or the **market participant's** financial position is reassessed, as appropriate.

(5) The **ISO** may cancel the **system access service** request or reassess the inclusion of the project in the **ISO's** connection queue if the **market participant** fails to meet any critical requirements under subsection 7 of section 4 of the **ISO tariff**, *System Access Service Requests*.

(6) The **market participant** must continue to meet all **financial obligations** for amounts that have accrued or are accruing, to the **ISO** or to the **legal owner** of the **transmission facility** with respect to the connection project, notwithstanding any suspension of work on the connection project under subsection 7(3) above.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under any rate in the **ISO tariff**.

## AESO Measurement System Standard

**2(1)** A **market participant** must comply with applicable provisions of the *AESO Measurement System Standard*, including ensuring that all **metering equipment** the **market participant** provides also complies at all times.

**(2)** The **ISO** must prepare, amend and supplement from time to time, the *AESO Measurement System Standard* and must make it available to a **market participant** on the AESO website and on request.

## Requirement to Install Metering Equipment

**3(1)** The **ISO** may require a **market participant** to install **metering equipment** on the **market participant's** premises, at the **market participant's** sole cost.

**(2)** The **ISO** may direct the **legal owner** of the **transmission facility** to enter and install **metering equipment** on the **market participant's** premises at the **market participant's** sole cost, if the **market participant** fails to comply in a timely manner with a requirement under subsection 3(1) above.

**(3)** The **market participant** must reasonably allow the **legal owner** of the **transmission facility** access to carry out any work required under subsection 3(2) above.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 This section applies to a **market participant** who has requested or is receiving **system access service** under any rate in the **ISO tariff**.

## System Access Information

2(1) A **market participant** must provide, upon the **ISO's** request, information that the **ISO** requires in order to discharge its duties and functions under the **Act** or in compliance with any external agency's reporting requirements, which includes:

- (a) information the **ISO** requires in respect of new or expanding **system access service**; and
- (b) technical information during construction and prior to the issuance of energization authorization, including pre-**commissioning** information.

(2) The **ISO** must specify the information the **market participant** must provide.

## Operating and Forecast Information

3(1) A **market participant** must provide any of the following information which the **ISO** may request from time to time but generally not more than once during a 12-month period:

- (a) a copy of the **market participant's** operating procedures;
- (b) a schedule of **planned outages** for the following two (2) calendar years; or
- (c) forecast information for the following five (5) calendar years, including:
  - (i) forecast maximum **contract capacity** by **point of delivery** or **point of supply**, by **month**;
  - (ii) the location and size of any required new **point of delivery** and **point of supply**, by year; and
  - (iii) the name and location of any existing **point of delivery** or **point of supply** which may no longer be required, by year.

(2) The **ISO** may provide forms for provision of the required update and forecast information.

## Effect of Non-Compliance

4(1) The **ISO** may, if a **market participant** fails to provide information that may have an impact on safety or system **reliability**:

- (a) delay or withhold the **system access service** of the **market participant's** until the **market participant** provides the information to the **ISO**; or
- (b) terminate the **market participant's** agreement for **system access service**.

(2) The **ISO** is not responsible for any delay, interruption, damage or other problems affecting the **system access service** of a **market participant** caused by a delay in the provision of information required from a **market participant**.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

### Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under:

- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate PSC, *Primary Service Credit*; or
- (c) Rate STS, *Supply Transmission Service*.

### Connection Costs

**2** The **ISO** must determine the costs of a connection project for a **market participant** to be those costs reasonably associated with facilities that:

- (a) a **legal owner** of a **transmission facility** owns and operates;
- (b) are required in order to:
  - (i) provide **system access service** to a new **point of delivery** or **point of supply**; or
  - (ii) increase the capacity of or improve **system access service** to an existing **point of delivery** or **point of supply**; and
- (c) are reasonably required to meet the **market participant's**:
  - (i) **demand** and supply forecast; and
  - (ii) **reliability** and operating requirements.

### Classification of Participant-Related and System-Related Costs

**3(1)** All costs of a connection project will be classified as either participant-related or system-related.

**(2)** Participant-related costs will be those costs related to a contiguous connection project including costs associated with:

- (a) the connection substation for the **point of delivery** or **point of supply**, including in out line configurations, where required;
- (b) new radial transmission lines, including double-radial configurations, with only one (1) transmission source from the **transmission system** to the connection substation;
- (c) a share of existing **transmission facilities** that were constructed to connect another **market participant**, where the existing facilities originally began **commercial operation** within the past twenty (20) years and where the share is determined in accordance with subsection 3 of section 9 of the **ISO tariff**;
- (d) line moves or burials of existing transmission line;
- (e) communication at the **point of delivery** or **point of supply**;

- (f) communication enhancements required at the nearest substation with communications equipment to allow direct communication between it and the connection substation;
  - (g) breakers and associated equipment required for the connection of the new radial transmission line to an existing substation;
  - (h) salvage labour required to remove existing **transmission facilities** to allow the installation of new or replacement facilities for a connection project, except where the cost of the removed facilities is treated as a capital maintenance cost by the **owner** of the **transmission facility**;
  - (i) changes to protection systems, equipment or settings related to the addition of a **generating unit** on an **electric distribution system** served through the connection substation;
  - (j) a **remedial action scheme**, if required;
  - (k) a phasor measurement unit, if required;
  - (l) the advancement of **transmission facilities** included as part of a critical transmission development or regional **transmission system** project under subsection 3(3)(b) below, calculated as the difference between the present values of the capital costs of the advanced and the as-planned facilities using the discount rate provided in subsection 11 below;
  - (m) facilities previously classified as system-related under subsection 3(3)(c) below and now reclassified as participant-related to meet the requirements of the connection project; and
  - (n) other facilities required to complete the **market participant's** connection, including **transmission facilities** required to enable the **market participant** to meet all relevant technical requirements for the connection project.
- (3) System-related costs will be those costs related to a connection project including non contiguous components of the project and any costs associated with:
- (a) looped **transmission facilities**, which are facilities that increase the number of electrical paths between any two (2) substations, excluding the substation serving the **market participant** and which exclude any new radial transmission line;
  - (b) radial **transmission facilities** which, within five (5) years of **commercial operation**, are planned to become looped as part of a critical transmission development or regional **transmission system** project:
    - (i) in the **ISO's** most recent long-term **transmission system** plan;
    - (ii) in a **needs identification document** filed with the **Commission**; or
    - (iii) as the **ISO** reasonably expects will be required in the future;and
  - (c) **transmission facilities** in excess of the minimum size required to serve the **market participant** where, in the opinion of the **ISO**, economics or system planning support the development of such facilities.

## Facilities in Excess of Good Electric Industry Practice

**4** A **market participant** must pay, as part of the **construction contribution**, any participant-related costs of facilities which the **ISO** deems, in its opinion, to be in excess of those required by **good electric industry practice**.

## Valuation of Facilities for Contribution Determination

**5(1)** The **ISO** must generally determine connection project costs based on the replacement costs new value of equipment, which is the current cost of similar new equipment having the nearest equivalent capability to the equipment being valued.

**(2)** The **ISO** must, when a connection project involves the installation of a transformer that replaces a smaller transformer which was removed from service at a substation, determine connection project costs by:

- (a) reducing the participant-related costs for the connection project by the replacement cost new of the removed transformer when the **legal owner** of the **transmission facility** either:
  - (i) deems the transformer which is removed to be re-deployable for use at another substation or suitable for use as an operating spare; or
  - (ii) treats the cost of the transformer which is removed as a capital maintenance cost; or
- (b) not reducing the participant-related costs in any other circumstances including when the **legal owner** of the **transmission facility** scraps the transformer which is removed without treating its cost as a capital maintenance cost.

## Allocation of Costs to Market Participants

**6(1)** The **ISO** must allocate to the **market participant** at the substation at which **system access service** is provided the balance of participant-related costs remaining after:

- (a) the exclusion of costs, if any, under subsection 4 above reflecting facilities in excess of those required by **good electric industry practice**; and
- (b) the reduction of costs, if any, under subsection 5 above reflecting replacement of a transformer removed from service.

**(2)** The **ISO** must allocate the participant-related costs determined in subsection 6(1) above among **market participants** receiving **system access service** at a single substation, which services may be solely under Rate DTS, solely under Rate STS or under a combination of both.

**(3)** The **ISO** must allocate the participant-related costs referred to in subsections 6(1) and 6(2) above to each **market participant** by multiplying those costs by the average **substation fraction** for the **market participant** determined in accordance with subsection 3(3) of section 9 of the **ISO tariff, Changes to System Access Service After Energization**.

**(4)** The **ISO** must deem costs allocated to a **market participant** taking service under Rate DTS to be **demand-related costs**.

**(5)** The **ISO** must deem costs allocated to a **market participant** taking service under Rate STS to be **supply-related costs**.

## Determination of Construction Contribution

**7(1)** The **ISO** must calculate the **construction contribution** in accordance with the **construction contribution** provisions of the **ISO tariff** in effect on the date on which the **Commission** issues permit and licence for the connection project.

(2) A **market participant** must pay **construction contribution** amounts to the **legal owner** of the **transmission facility** in accordance with the **financial obligation** provisions of section 5 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

(3) The **ISO** must calculate the **construction contribution**:

- (a) for a **market participant** receiving service under Rate DTS, as the **demand**-related costs less the local investment determined under subsection 8 below.
- (b) for a **market participant** receiving service under Rate STS, as the supply-related costs.

(4) A **market participant** receiving service under Rate STS must also pay the **ISO** any **legal owner's** contribution for a **generating unit** or an **aggregated generating facility** required under section 10 of the **ISO tariff**, *Generating Unit Owner's Contribution*.

### Determination of Local Investment

8(1) The **ISO** must calculate the maximal local investment:

- (a) based on the **contract capacity** and investment term set out in the **system access service** agreement for a connection project for a **market participant** taking service under Rate DTS or under Rate DTS with Rate PSC;
- (b) excluding any **contract capacity** transferred from another **point of delivery**; and
- (c) using an investment term from five (5) to twenty (20) years inclusive, commencing on the date of **commercial operation**.

(2) The **ISO** must calculate the maximum local investment for a connection project for a new **point of delivery** as the sum of annual amounts for each year in the investment term by adding the products of the values from each of rows (c) through (g) of the table below, where the product for a row is calculated by multiplying:

- (a) the **substation fraction** or **contract capacity**, as applicable, from column A; and
- (b) the investment amounts from column B or column C, as applicable.

Column A	Column B	Column C
Tier	Investment for Service Under Rate DTS	Investment for Service Under Rate DTS with Rate PSC
(c) <b>Substation fraction</b> (for new <b>points of delivery</b> only)	\$105,150/year	\$22,080/year
(d) First ( $7.5 \times$ <b>substation fraction</b> ) MW of <b>contract capacity</b>	\$34,600/MW/year	\$7,270/MW/year
(e) Next ( $9.5 \times$ <b>substation fraction</b> ) MW of <b>contract capacity</b>	\$20,550/MW/year	\$2,890/MW/year
(f) Next ( $23 \times$ <b>substation fraction</b> ) MW of <b>contract capacity</b>	\$13,750/MW/year	\$2,890/MW/year

Column A	Column B	Column C
(g) All remaining MW of <b>contract capacity</b>	\$8,450/MW/year	\$0/MW/year

(3) The **ISO** must calculate the maximum local investment for a connection project that accommodates a **contract capacity** increase at an existing **point of delivery** using:

- (a) the **contract capacity** representing the incremental **contract capacity** since the most recent change in **construction contribution** at the **point of delivery**;
- (b) the **substation fraction** based on **contract capacities** after the increase;
- (c) the existing **contract capacity** to establish the initial tier in which investment becomes available for the incremental **contract capacity**; and
- (d) investment available from subsequent tiers, as appropriate, where the sum of existing and incremental **contract capacities** exceeds the remaining MW in the initial tier.

(4) The **ISO** must calculate the maximum local investment for a connection project that includes increases or decreases to **contract capacity** over the investment term as the sum of the investment for each incremental amount of **contract capacity**, to be:

- (a) calculated in accordance with subsections 8(2) and 8(3) above, based on each increment of **contract capacity** and the years for which each increment is contracted, and
- (b) discounted from the beginning of the first **month** in which the increment of **contract capacity** exists back to the date of **commercial operation** of the connection project, using the discount rate provided in subsection 11 below.

(5) The **ISO** must determine the maximum local investment as the lesser of:

- (a) the amount calculated in subsection 8(2), 8(3) or 8(4) above; or
- (b) the **demand**-related costs.

## Operations and Maintenance

9(1) A **market participant** taking service under Rate DTS must pay, as part of the **construction contribution**, an operations and maintenance charge to be added to any participant-related costs of facilities which are deemed to be in excess of those required by **good electric industry practice** in subsection 4 above.

(2) The **market participant** must estimate and the **ISO** must agree to the operations and maintenance charge calculated:

- (a) as the present value of the full incremental maintenance cost, incremental operations cost, and overheads associated with the operations and maintenance of the facilities which are deemed to be in excess of those required by **good electric industry practice**,
- (b) over the useful life of those facilities or twenty (20) years, whichever is less.

(3) The **market participant** must use the discount rate provided in subsection 11 below in the present value calculation.

## Limitations

**10** The **ISO** may exercise discretion in the application of the **construction contribution** provisions in the **ISO tariff**, including the determination of costs to be system-related in certain circumstances that might, under strict application of the **construction contribution** provisions, have been classified as participant-related.

## Discount Rate

**11(1)** The **ISO** must determine the discount rate applicable to the calculation of **construction contributions** under this section 8 of the **ISO tariff** and payments in lieu of notice under section 9 of the **ISO tariff** as:

$$\text{discount rate} = [(1 - E) \times (\text{YLD} + 1\%)] + \left( \frac{E \times \text{ROE}}{1 - T} \right)$$

where:

- (a) E is equal to the **Commission**-approved equity ratio applicable to the **legal owner of transmission facilities**, as amended from time to time;
- (b) YLD is equal to the yield on 30-year Government of Canada bonds;
- (c) ROE is equal to the **Commission**-approved rate of return on equity applicable to the **legal owner of the transmission facilities**, as amended from time to time; and
- (d) T is equal to the combined federal and provincial income tax rate applicable to the **legal owner of the transmission facilities**.

**(2)** The **ISO** must use zero (0) as the tax rate T in subsection 11(1) above for a **legal owner of transmission facilities** that does not pay income tax, including a non-income tax paying municipal **legal owner of transmission facilities**.

## Miscellaneous

**12(1)** The **ISO** must make reasonable efforts to ensure that, where **transmission facilities** must be relocated, the party causing the relocation pays all reasonable costs associated with the relocation.

**(2)** The **ISO** must, where new facilities between adjacent **balancing authority areas** are required, allocate the costs of such facilities to the **ISO** and to the party responsible for costs in the other **balancing authority area** based on the extent to which each benefits directly from the facilities.

## Revision History

Effective	Description
2020-04-01	Updated investment levels, as approved on an interim refundable basis in <b>Commission</b> Decision 25175-D01-2020 issued on February 28, 2020.
2019-01-01	Updated investment levels, as approved in <b>Commission</b> Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated investment levels, as approved in <b>Commission</b> Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated investment levels, as approved on an interim refundable basis in <b>Commission</b> Decision 22093-D01-2016 issued on December 2, 2016.
2016-04-01	Updated investment levels, as approved in <b>Commission</b> Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated investment levels, as approved in <b>Commission</b> Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated investment levels, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015 except for subsection 3 which remains as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011
2013-10-01	Updated investment levels, as approved on an interim refundable basis in <b>Commission</b> Decision 2013-325 issued on August 28, 2013 and on a final basis in <b>Commission</b> Decision 2014-242 issued on August 21, 2014 except for subsection 3 which remains as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 This section applies to a **market participant** who is receiving **system access service** under:

- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate PSC, *Primary Service Credit*; or
- (c) Rate STS, *Supply Transmission Service*.

## Events Resulting in Adjustments to Construction Contributions

2(1) A **market participant**, the **ISO** or the **legal owner** of the **transmission facilities** may initiate a review of the **construction contribution** that the **ISO** had previously determined for a connection project when warranted by certain events.

(2) The **ISO** must review the **construction contribution** determination and may determine a **construction contribution** adjustment is required when:

- (a) a **market participant** materially increases or decreases **contract capacity** or investment term or terminates **system access service**, prior to the expiry of the investment term for a connection project;
- (b) one or more additional **market participants** use facilities originally installed for any existing **market participant**, resulting in sharing of facilities as provided for in subsection 3 below;
- (c) facilities previously classified as system-related are reclassified as participant-related to meet changes in **market participant** requirements;
- (d) facilities previously classified as participant-related are reclassified as system-related;
- (e) a material error in the original **construction contribution** is identified; or
- (f) the estimated or actual cost of the connection project materially varies from the original estimate.

(3) The **ISO** must determine the **construction contribution** under the provisions of section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*, rather than this section 9, when an increase in **contract capacity** requires the addition of new equipment at an existing **point of delivery** or **point of supply**.

(4) The **ISO** must not make any adjustment to a **construction contribution** more than twenty (20) years after **commercial operation** of a connection project.

## Reductions or Terminations of Contract Capacity

3(1) The **ISO** must make a reduction or termination of **contract capacity** effective five (5) years after the date of the request for reduction or termination, subject to subsection 3(2) below.

(2) A **market participant** reducing or terminating **contract capacity** may choose to make a lump sum payment determined by the **ISO** in lieu of all or a portion of the 5-year notice period in subsection 3(1) above.

(3) The **ISO** must determine the payment in lieu of notice to represent a share of system costs potentially incurred to reasonably accommodate the **contract capacity** of a **market participant** over the 5-year planning horizon of the **transmission system** and must calculate the payment:

- (a) for any **market participant** reducing or terminating **contract capacity** under Rate DTS, as the present value of the difference in bulk system and regional system charges which would be attributed to the service with and without the reduction or termination of **contract capacity** during the notice period; or
- (b) for any **market participant** terminating **contract capacity** under Rate STS for a regulated **generating unit** listed in Appendix A of the **ISO tariff**, *Regulated Generating Units*, as the difference in regulated **generating unit** connection cost charges which would be attributable to the service with and without the termination of the service during the notice period.

(4) The **ISO** must use the discount rate provided in subsection 11 of section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*, in the present value calculation in subsection 3(3)(a) above.

(5) A **market participant** may make a payment in lieu of notice at any time prior to or during the 5-year notice period, for the remainder of the notice period and the **ISO** must receive such payment at least thirty (30) **days** before the reduction or termination of **contract capacity** is effective.

(6) The **ISO** may waive or reduce the requirement for payment in lieu of notice if the **ISO** considers that circumstances warrant where:

- (a) **contract capacity** is transferred to a **system access service** of the same **market participant** at a nearby transmission substation;
- (b) **transmission system** benefits arise from the reduction or termination of **contract capacity**, which benefits may include relief of regional transmission constraints, removal of capacity limitations which would restrict **system access service** to other **market participants** or avoidance of future upgrades to the **transmission system**; or
- (c) the reduction of **contract capacity** results from an energy or **demand** reduction initiative of the **market participant** who has taken service for at least twenty (20) years who:
  - (i) provides to the **ISO** a clear, thorough and convincing case, with supporting facts, that demonstrates the energy or **demand** reduction resulting from the initiative and
  - (ii) during the ten (10) years prior to the reduction in **contract capacity** becoming effective, has not increased **contract capacity** at the **point of delivery** at which the reduction in **contract capacity** occurs.

(7) The **ISO** may, at any time during the remainder of a notice period for which a payment in lieu of notice was made:

- (a) re-assess the payment in lieu of notice if material differences arise between the requested and actual **contract capacities** or between expected and actual load; and
- (b) require additional payment from the **market participant** if appropriate.

### Metered Demand Above Pre-Notice Contract Capacity

**4(1)** The ISO must determine the **contract capacity** immediately following the 5-year notice period required by subsection 3(1) above to be the maximum of:

- (a) the pre-notice **contract capacity** less the reduction of **contract capacity** the **market participant** requested; or
- (b) the highest **metered demand** during the 5-year notice period less the reduction of **contract capacity** the **market participant** requested.

**(2)** A **market participant** may provide an additional notice of reduction to request a subsequent reduction of **contract capacity** to the original notice level, when the highest **metered demand** affects the maximum determined under subsection 4(1) above.

### Shared Facilities

**5(1)** The ISO must allocate the participant-related costs of shared **transmission facilities** to **market participants** when **transmission facilities** are constructed to serve a **market participant** and then used to serve other **market participants** within twenty (20) years after **commercial operation** of the original connection project.

**(2)** The ISO must allocate the participant-related costs of shared **transmission facilities** by:

- (a) first, where transmission line is shared by two or more substations, allocating the costs of the shared line to those substations in accordance with subsection 5(3) below; and
- (b) second, where a single substation is shared by two or more **market participants**, allocating the shared costs associated with the substation to those **market participants** in accordance with subsection 5(4) below.

**(3)** The ISO must allocate the participant-related costs of transmission line shared by two or more substations to the substations by:

- (a) determining the higher of the sum of all Rate DTS **contract capacities** or the sum of all Rate STS **contract capacities** for each substation in each of the twenty (20) years following **commercial operation** of the original transmission line, assigning a **contract capacity** of zero (0) in any year in which a substation did not exist;
- (b) calculating the percentage share of the transmission line attributable to each substation by dividing the **contract capacity** determined in subsection 3(2)(a) above for the substation in a year by the sum of **contract capacities** determined for all sharing substations in that year;
- (c) calculating the average percentage share over the full twenty (20) year period for each substation; and
- (d) multiplying the cost of the shared transmission line by the average percentage share determined for each substation.

**(4)** The ISO must allocate the participant-related costs of **transmission facilities** used to provide **system access services** to more than one **market participant** at a single substation to the **market participants** at the substation by:

- (a) determining the **substation fraction** for each **market participant** in each of the twenty (20) years following **commercial operation** of the original connection project, assigning a

**contract capacity** of zero (0) in any year in which a **market participant** did not receive **system access service**;

- (b) calculating the average **substation fraction** over the full twenty (20) year period for each **market participant**; and
- (c) multiplying the cost of the shared **transmission facilities** by the average **substation fraction** determined for each **market participant**.

(5) The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections 5(2), 5(3) and 5(4) above:

- (a) must reduce the participant-related costs allocated to the original **market participant**; and
- (b) may refund under subsection 6 below, where applicable, in part or in full, a **construction contribution** previously paid by that **market participant**.

(6) The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections 5(2), 5(3), and 5(4) above:

- (a) must include the allocated share of existing **transmission facilities** in the determination of participant-related costs for the additional **market participants** under subsection 3(2)(d) of section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*; and
- (b) may assess **construction contributions** to the additional **market participants** under section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*.

## Determination of Construction Contribution

6 The **ISO** must determine the amount of an adjustment to a **construction contribution** paid for a connection project in accordance with the **construction contribution** provisions described in the **ISO tariff** as applied to the **transmission facilities** when constructed.

## Payments and Refunds

7(1) The **market participant** must pay a **construction contribution** adjustment or a payment in lieu of notice:

- (a) at least thirty (30) **days** prior to the effective date of a change to a **system access service** agreement, when the payment arises from changes to **contract capacity** or investment term that do not require construction of **transmission facilities**; and
- (b) within thirty (30) **days** of a request for payment, in all other circumstances.

(2) The **legal owner** of the **transmission facilities** must refund a **construction contribution** adjustment:

- (a) within thirty (30) **days** after the effective date of a change to a **system access service** agreement, when the refund arises from changes to **contract capacity** or investment term that do not require construction of **transmission facilities**;
- (b) within ninety (90) **days** after the **Commission** issues permit and licence for **transmission facilities**, where the refund results from the construction of the **transmission facilities**; and
- (c) within ninety (90) **days** of the **ISO** determining the amount of the adjustment, in all other circumstances.

- (3) The **market participant** must pay:
- (a) any increase in **construction contribution** by way of electronic funds transfer or wire transfer to the bank account the **legal owner** of the **transmission facilities** specifies; and
  - (b) a payment in lieu of notice by way of electronic funds transfer or wire transfer to the bank account the **ISO** specifies.
- (4) The **market participant** must pay and the **legal owner** of the **transmission facilities** must refund all adjustments without interest.
- (5) The **market participant** is not required to pay and the **legal owner** of the **transmission facilities** is not required to refund any adjustment amount less than \$10 000.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011, and in <b>Commission</b> Decision 2011-333 issued on August 4, 2011 for subsection 5(6).

## Applicability

1 Section 10 of the **ISO tariff** applies to:

(a) a **market participant**:

- (i) who has requested or is receiving **system access service** under Rate STS, *Supply Transmission Service*;
- (ii) whose agreement for **system access service** will be or was signed on or after January 1, 2006; and
- (iii) whose Rate STS contract capacity will be or is greater than one (1) MW;

and

(b) the **ISO**.

## Allocation of Rate STS Contract Capacity

2 The **ISO** must allocate Rate STS **contract capacity** to each generation facility, being a **generating unit** or an **aggregated generating facility**, connected under a Rate STS **system access service** agreement to which this section of the **ISO tariff** is applicable, as follows:

- (a) for a new **system access service** agreement for a single new generation facility, the Rate STS **contract capacity** specified in the agreement must be allocated in its entirety to the new generation facility;
- (b) for an existing **system access service** agreement which is amended to add incremental Rate STS **contract capacity** for a single new generation facility, the incremental Rate STS **contract capacity** added to the agreement must be allocated in its entirety to the new generation facility;
- (c) for a new **system access service** agreement for two (2) or more new generation facilities, the Rate STS **contract capacity** specified in the agreement must be allocated among each new generation facility in proportion to its **maximum capability**; and
- (d) for an existing **system access service** agreement which is amended to add incremental Rate STS **contract capacity** for two (2) or more new generation facilities, the incremental Rate STS **contract capacity** added to the agreement must be allocated among each new generation facility in proportion to its **maximum capability**.

## Determination of Legal Owner's Contribution for a Generation Facility

3(1) A **market participant** must pay a **legal owner's** contribution for a generation facility for:

- (a) new Rate STS **contract capacity** requirements at a new **point of supply** for **system access service** under Rate STS; and
- (b) incremental Rate STS **contract capacity** requirements at an existing **point of supply** for **system access service** under Rate STS, where such additional requirements are the result of the addition of a new generation facility.

(2) The **ISO** must average the twelve (12) **months** of highest new or incremental Rate STS **contract capacity**, during the ten (10) years following the date a connection project enters **commercial operation**, for the determination of a **legal owner's** contribution for a generation facility when new or incremental Rate STS **contract capacity** is staged to include increases or decreases to **contract capacity**.

(3) The **ISO** must calculate the **legal owner's** contribution for a generation facility as:

- (a) the amount of new or incremental Rate STS **contract capacity** calculated in subsection 3(2) above;  
  
multiplied by
- (b) the contribution rate the **ISO** determines for the area of the **transmission system** where the generation facility will be located.

(4) The **ISO** must:

- (a) determine the **legal owner's** contribution rate in accordance with section 29 of the *Transmission Regulation*, which rate will vary between \$10 000/MW and \$50 000/MW based on the area of the **transmission system** where the generation facility will be located; and
- (b) make the contribution rates publicly available on the AESO website in advance of their effective dates.

(5) The **ISO** must calculate an additional **legal owner's** contribution for a generating facility when a **market participant** materially increases Rate STS **contract capacity** during the ten (10) years following the date a connection project enters **commercial operation**, where the additional contribution:

- (a) reflects the resulting increase, if any, to the average Rate STS **contract capacity** determined in subsection 3(2) above; and
- (b) is prorated based on any annual amounts previously determined in subsection 5(3) below for years prior to the increase.

### Payment of Legal Owner's Contribution for a Generation Facility

4(1) The **market participant** must pay the **legal owner's** contribution for a generation facility in full to the **ISO** by the later of:

- (a) ninety (90) **days** after the **Commission** issues permit and licence for the connection project;
- (b) thirty (30) **days** before the start of brushing or other vegetation management activities required for the connection project; or
- (c) where brushing and other vegetation management activities are not required, thirty (30) **days** before the installation of any conductors, transformers, switches or other equipment required for the connection project.

(2) The **market participant** must pay the additional **legal owner's** contribution for a generating facility calculated under subsection 3(5) above at least thirty (30) **days** before the effective date of the increase in Rate STS **contract capacity**.

(3) The **market participant** must pay the **legal owner's** contribution for a generation facility in full to the **ISO** by way of electronic funds transfer or wire transfer to the bank account the **ISO** specifies:

(4) The **market participant** must pay the **legal owner's** contribution for a generation facility in addition to the **construction contribution** determined in section 8 of the **ISO tariff**, *Construction Contributions for Connection Projects*.

### Refund of Legal Owner's Contribution for a Generation Facility

5(1) The **ISO** must refund to the **market participant** the **legal owner's** contribution for a generation facility where the generation facility meets the **ISO rules** regarding satisfactory annual performance, in accordance with the provisions of this subsection 5.

(2) The **ISO** must refund the **legal owner's** contribution for a generation facility in annual amounts during the refund period, which begins on January 1 following the date the generation facility enters **commercial operation** and ends nine (9) calendar years later on December 31.

(3) The **ISO** must calculate the annual amounts during the refund period as:

- (a) 5.6% of the **legal owner's** contribution for the generation facility, in each of the first through fourth calendar years in the refund period;
- (b) 11.2% of the **legal owner's** contribution for the generation facility, in the fifth calendar year in the refund period; and
- (c) 16.6% of the **legal owner's** contribution for the generation facility, in each of the sixth through ninth calendar years in the refund period.

(4) The **ISO** must refund to the **market participant**, for each calendar year during the refund period, the annual amount determined under subsection 5(3) above:

- (a) in full when the generation facility fully satisfies the performance criteria established in section 505.2 of the **ISO rules**, *Performance Criteria for Refund of Generating Unit Owner's Contribution*, during that calendar year; or
- (b) reduced in proportion to the performance assessment calculated in accordance with section 505.2 of the **ISO rules**, *Performance Criteria for Refund of Generating Unit Owner's Contribution*, when the generation facility does not fully satisfy the performance criteria during that calendar year.

(5) The **ISO** must determine annual amounts and provide refunds in accordance with subsections 5(2), 5(3) and 5(4) above even if the Rate STS **contract capacity** is zero (0) in one or more calendar years during the refund period.

(6) The **ISO** may reduce a refund if:

- (a) the refund would have otherwise been reduced in proportion to the performance assessment described in subsection 5(4) above except for a material decrease to Rate STS **contract capacity** during the ten (10) years following the date a connection project enters **commercial operation**;
- (b) the **ISO** could have potentially avoided an upgrade to or expansion of the **transmission system** if the lower Rate STS **contract capacity** had been originally requested; and
- (c) no **transmission system** benefits arise from the decrease to Rate STS **contract capacity**.

(7) The **ISO** must refund to the **market participant** the amount determined in accordance with subsections 5(4), 5(5), and 5(6) above by February 28 of the year following the calendar year to which the refund relates.

(8) The **ISO** must refund the annual amounts without interest.

### Return of Refunds

6 The **market participant** must return a refund of an annual amount, in whole or in part, if the **ISO** determines that an error was made or that an inappropriate amount was refunded.

### Revision History

Effective	Description
2013-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## General

**1** **Ancillary services** are provided by **market participants** when the **ISO** determines there is a need for such services to maintain system **reliability** and ensure the reliable operation of the **interconnected electric system**. **Market participants** required by the **ISO** to provide **ancillary services** shall be directed to do so in accordance with **ISO rules** and will be compensated as provided in subsections 2 through 7 below, as applicable.

## Contracted Ancillary Services

**2** If at the time the **market participant** is directed to provide **ancillary services** the **market participant** has an existing contract with the **ISO** to provide the **ancillary services** in question from the directed facility (the “existing contract”), then the amount to be paid to the **market participant** by the **ISO** for the **ancillary services** shall be determined according to the terms of the existing contract.

## Directed Ancillary Services Other Than Transmission Must-Run Services

**3** If at the time the **market participant** is directed to provide an **ancillary service** other than transmission must-run service, the **market participant** does not have an existing contract, then the amount to be paid to the **market participant** by the **ISO** in respect of each **ancillary service** provided shall be the greater of the following monthly amounts. Each amount is the sum for the **month** of hourly compensation amounts:

- (a) The product of the MW hour directed and the highest price paid in the hour to **market participants** providing the same **ancillary service** pursuant to subsection 2 above and that the existing contract was the result of a competitive process conducted in the prior twelve (12) **months**; or
- (b) The verifiable net opportunity cost related to foregone electricity sales incurred by the **market participant** to supply the directed **ancillary service**, taking into account offsetting **power pool** energy receipts.

## Transmission Must-Run Services

**4(1)** Transmission must-run services are **ancillary services** provided by **market participants** with **generating units** in response to a **directive** provided by the **ISO** to ensure safe and reliable electrical service for a region of the **interconnected electric system**.

**(2)** Transmission must-run services are foreseeable if the **ISO**, taking into account reasonable procurement timing requirements, determines transmission must-run services are required to meet **ISO** transmission **reliability** criteria which includes consideration of expected operating conditions and transmission **planned outages**. Transmission must-run services are unforeseeable transmission must-run services if they do not constitute foreseeable transmission must-run services.

## Arrangements and Compensation for Foreseeable Transmission Must-Run Services

**5** Arrangements and compensation for foreseeable transmission must-run services will be made in accordance with the *Foreseeable TMR Service Procurement Procedure* (Appendix C of the **ISO tariff**).

## Compensation for Unforeseeable Transmission Must-Run Services

**6(1)** If at the time the **market participant** is directed to provide unforeseeable transmission must-run service the **market participant** does not have an existing contract, then the amount to be paid to the **market participant** in the applicable **settlement period** for unforeseeable transmission must-run service is equal to variable costs plus fixed costs, where:

- (a) variable costs means the hourly difference of the **pool price** subtracted from the energy price, which shall not be less than zero (0), multiplied by the corresponding hourly energy generated (MWh) by the specific directed **generating unit** in compliance with the **directive** to provide unforeseeable transmission must-run service, where:
  - (i) Energy price (\$/MWh) is the product of the heat rate multiplied by the fuel cost, added to the sum of the variable Rate STS charges and variable O&M charge.
  - (ii) Heat rate (GJ/MWh) is the actual heat rate of the **market participant's generating unit** during the period when the unit was complying with the **directive**.
  - (iii) Fuel cost for a gas **generating unit** is the natural gas market price (\$/GJ), being the "Daily Spot Price at AECO-C and NIT", excluding weekends, as published in the *Canadian Gas Price Reporter*, for natural gas on the applicable **day**. The fuel cost for a coal **generating unit** shall be provided by the **market participant**.
  - (iv) Variable Rate STS charge (\$/MWh) is the actual cost of all variable charges from Rate STS of the **ISO tariff**, including the applicable **loss factor** charge or credit.
  - (v) Variable O&M charge (\$/MWh) is the all-in cost (including major/minor overhauls), fixed at \$4.00/MWh, of providing incremental output from the unit, excluding fuel costs and variable Rate STS charges.
- (b) Fixed costs are equal to the average monthly fixed cost multiplied by the greater of the must-run ratio or the minimum must-run ratio, where:
  - (i) Average monthly fixed cost is equal to one-twelfth of the sum of the annual costs in items (A) through (H) as follows:
    - (A) annual amortization and depreciation amounts for the **market participant's** investment or for the **power purchase arrangement** acquisition cost related to the specific directed **generating unit**, consistent with amounts reported in the **market participant's** audited financial statements and adjusted for cogeneration infrastructure not utilized for generation purposes;
    - (B) the product of the unamortized or undepreciated capital investment multiplied by a deemed debt percentage of 70% and multiplied by a debt interest rate that is equal to the current 10-year Government of Canada bond interest rate plus 0.5% and where the unamortized or undepreciated capital investment is the greater of
      - (1) the **market participant's** initial cost of property, plant and equipment for the specific directed **generating unit** or the **market participant's** initial **power purchase arrangement** acquisition cost related to the specific directed **generating unit**, less accumulated depreciation or amortization, as the case may be, related to the specific directed **generating unit**; or
      - (2) 25% of the **market participant's** initial cost of property, plant and equipment for the specific directed **generating unit** or the **market participant's** initial **power purchase arrangement** acquisition cost related to the specific directed **power purchase arrangement**.
    - (C) the product of unamortized or undepreciated capital investment, as described in (B) above, multiplied by a deemed 30% common equity percentage of capital structure multiplied by a deemed 12% rate of return on equity;

- (D) if the **market participant** provides verifiable actual values for the items in both (B) and (C) then those will be used instead of the deemed values;
  - (E) the product of the tax rates multiplied by the rate of return on equity amount determined in (C), where income tax costs reflect the marginal income tax rates for both federal and provincial portions of income tax;
  - (F) total annual direct fixed operation and maintenance costs associated with the specific directed **generating unit**;
  - (G) total annual direct fixed fuel costs associated with the specific directed **generating unit**; and
  - (H) fixed charges from applicable **power purchase arrangements** associated with the specific directed **generating unit**.
- (ii) Must-run ratio is the ratio of the number of hours in the **month** when unforeseeable transmission must-run services were provided to the total number of hours in the **month**;
- (iii) Minimum must-run ratio is:
- (A) 12% for the first or second unforeseeable transmission must-run service event within a rolling 12-**month** period in which transmission must-run service is directed by the **ISO**;
  - (B) 20% for the third unforeseeable transmission must-run service event within a rolling 12-**month** period in which transmission must-run service is directed by the **ISO**;
  - (C) 30% for the fourth unforeseeable transmission must-run service event within a rolling 12-**month** period in which transmission must-run service is directed by the **ISO**;
  - (D) 40% for the fifth unforeseeable transmission must-run service event within a rolling 12-**month** period in which transmission must-run service is directed by the **ISO**; or
  - (E) 50% for the sixth or any additional unforeseeable transmission must-run service event within a rolling 12-**month** period in which transmission must-run service is directed by the **ISO**.

If there is more than one unforeseeable transmission must-run service event in a **settlement period**, the minimum must-run ratio shall be the highest applicable percentage described in (A) through (E) above.

(2) In lieu of the variable and fixed costs in subsections 6(1)(a) and 6(1)(b) above, if a **market participant** can demonstrate foregone future energy sales due to a transmission must-run **directive**, then the verifiable net opportunity cost related to foregone electricity sales incurred by the **market participant** to supply the directed transmission must-run service, taking into account offsetting **power pool** energy receipts. This applies only to **market participants** that have responded to a transmission must-run **directive** using hydroelectric generating units.

## Maximum Transmission Must-Run Services Compensation

7 The maximum monthly amount to be paid by the **ISO** for transmission must-run service results in the recovery of fixed, operating and maintenance costs, including a reasonable rate of return for the service provider and is equal to the average monthly fixed cost plus variable costs as provided for in subsection 6 above.

## Invoicing

8 A **market participant** that provide unforeseeable transmission must-run service in response to a **directive** from the **ISO** will submit an invoice to the **ISO** within fifteen (15) **business days** after the end of the **month** in which the service was provided. The amount of the invoice shall be determined in accordance with the method in subsection 6 above and will separately itemize the values used for each component specified (fixed and variable costs).

## Audit Rights

**9** The **ISO** has the right to audit a **market participant's** invoices and source information related thereto for transmission must-run services, provided that any such audit is:

- (a) conducted only on reasonable prior notice to the **market participant**;
- (b) conducted on the **market participant's** premises during normal business hours;
- (c) not conducted by or the information gathered made available to, those individuals at the **ISO** that determine contestability for purposes of the **ISO** procuring transmission must-run competitively;
- (d) conducted subject to section 103.1 of the **ISO rules** regarding confidential information; and that
- (e) no copies of records reviewed during the audit shall be made without the **market participant's** prior written consent.

## Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under Rate DOS, *Demand Opportunity Service*.

## Eligibility and Pre-Qualification

**2(1)** A **market participant** must pre-qualify on an annual basis for **demand** opportunity service to receive **system access service** under Rate DOS.

**(2)** A **market participant** who applies to pre-qualify for **demand** opportunity service must:

- (a) submit to the **ISO** a completed pre-qualification application, available in the **demand** opportunity service section of the AESO website or from the **ISO**;
- (b) submit the pre-qualification application at least forty-five (45) **days** prior to submitting a transaction request for **demand** opportunity service; and
- (c) pay a non-refundable fee of \$5 000 to the **ISO** for evaluation of the **market participant's** eligibility for **demand** opportunity service when the pre-qualification application is submitted.

**(3)** The **ISO** must approve the **market participant's** pre-qualification for **demand** opportunity service only when:

- (a) the **market participant** meets the commercial eligibility criteria for **demand** opportunity service provided in subsection 3 below;
- (b) the **market participant's** use of **demand** opportunity service would not proceed on any other applicable rate; and
- (c) there are sufficient transmission capacity and suitable system operation conditions capable of accommodating the request.

**(4)** A **market participant** who pre-qualifies for **demand** opportunity service must limit use of the service to:

- (a) no more than the **demand** opportunity service **contract capacity** which the **market participant** requested or such lower **demand** opportunity service **contract capacity** as the **ISO** determines is available;
- (b) the specific type or types of **demand** opportunity service, as listed in Rate DOS, which the **market participant** requested and is eligible for; and
- (c) a maximum of one (1) year from the date the **ISO** approves the **market participant's** pre-qualification.

**(5)** The **ISO** must notify a **market participant** in writing of approval or denial of approval of pre-qualification for **demand** opportunity service, within forty-five (45) **days** of receiving a pre-qualification application.

## Commercial Eligibility Criteria

**3(1)** A **market participant** must provide to the **ISO** a clear, thorough and convincing case, with supporting facts, that demonstrates that the **market participant** would not increase **metered demand** under Rate DTS, *Demand Transmission Service*, if Rate DOS was not available.

**(2)** The **market participant** must satisfy the **ISO** that a commercial business opportunity exists for the use of additional electric energy on either a temporary or repeated short-term basis.

**(3)** The **market participant** must utilize additional electric energy under the DOS 7 Minutes and DOS 1 Hour types of Rate DOS either:

- (a) to replace an alternative source of energy where the **market participant**:
  - (i) has an available alternative source of energy, including means to employ it, that could rationally be used instead of electric energy from the **interconnected electric system**; and
  - (ii) the cost of utilizing the alternative source of energy is less than the cost of receiving additional electric energy under Rate DTS;
- or
- (b) to take advantage of a market opportunity where the **market participant**:
  - (i) has a market or business opportunity that requires additional electric energy;
  - (ii) the cost of receiving additional electric energy under Rate DTS renders the opportunity uneconomic; and
  - (iii) the **market participant's** alternative is to forego the opportunity.

**(4)** The **market participant** must utilize additional electric energy under the DOS Term type of Rate DOS either:

- (a) for the purposes listed in subsection 3(3)(a) or 3(3)(b) above; or
- (b) for scheduled maintenance of a **generating unit** or an **aggregated generating facility** where the **market participant**:
  - (i) has planned maintenance of an on-site **generating unit** or **aggregated generating facility** that normally supplies electric energy to an industrial process on the same premises; and
  - (ii) would reduce the load of its industrial process in these circumstances rather than pay the cost of receiving additional electric energy under Rate DTS.

**(5)** The **market participant** must not utilize additional electric energy under any type of Rate DOS when:

- (a) the **market participant** has the opportunity to install facilities that will reduce the consumption of electric energy from the **interconnected electric system**; or
- (b) the requirement for additional electric energy is the result of a **forced outage, unplanned outage** or derate of an on-site **generating unit** or **aggregated generating facility** that normally supplies electric energy to an industrial process on the same premises or otherwise displaces consumption of electric energy from the **interconnected electric system**.

## Transaction Requests

**4(1)** The **market participant** may submit a transaction request for **demand** opportunity service after the **ISO** approves a **market participant's** pre-qualification for **demand** opportunity service under subsection 2 above.

**(2)** A **market participant** may submit a transaction request for **demand** opportunity service for a **point of delivery**:

- (a) only in accordance with its confirmed pre-qualification under subsection 2(4) above, specifically:
  - (i) up to its pre-qualified capacity; and
  - (ii) for the pre-qualified type or types of **demand** opportunity service;
- (b) for only one Rate DOS type in any single hour, even if the **market participant** is eligible for multiple Rate DOS types;
- (c) with a minimum continuous duration of eight (8) hours and a maximum continuous duration of one (1) **month**; and
- (d) with a start date and end date in the same **month**.

**(3)** A **market participant** must submit a completed transaction request form, available in the **demand** opportunity service section of the AESO website or from the **ISO**, at least one (1) hour and no more than ten (10) **days** before the requested start time of the **demand** opportunity service transaction.

**(4)** The **ISO** must approve a transaction request for **demand** opportunity service if it determines that:

- (a) the request meets the requirements of subsection 4(2) and 4(3) above;
- (b) the request form has been fully and correctly completed and submitted; and
- (c) sufficient surplus capacity exists on the **transmission system** to accommodate the requested capacity for the duration of the Rate DOS transaction.

**(5)** The **ISO** must notify a **market participant** when a transaction request has been approved or has been denied approval.

**(6)** A **market participant** may not cancel or revise a Rate DOS transaction request after it is approved by the **ISO**.

## Recallable Service

**5(1)** The **ISO** must recall **demand** opportunity service in advance of **system access service** provided to **market participants** under Rate DTS and Rate FTS, *Fort Nelson Demand Transmission Service*, to the extent practicable in an **emergency**.

**(2)** The **ISO** must recall **demand** opportunity service:

- (a) in accordance with the provisions of Rate DOS;
- (b) whenever **transmission system** capacity becomes insufficient to sustain **demand** opportunity service, either temporarily or permanently;
- (c) when the Alberta **balancing authority area** lacks sufficient **ancillary services**; and

- (d) in accordance with the provisions of section 2 of the **ISO tariff**, *Provision of and Limitations to System Access Service*.

(3) A **market participant** must curtail capacity provided under Rate DOS when the **ISO** issues a **directive** to do so, in accordance with the response time and recall priority set out in Rate DOS for the Rate DOS type approved for the transaction.

### Effect of Disqualification

6(1) The **ISO** may audit a **market participant's** eligibility for and use of **demand** opportunity service from time to time to verify compliance with the eligibility requirements in subsection 2 above and in particular with the commercial eligibility criteria in subsection 3 above.

(2) The **ISO** may charge the **market participant** the cost of an audit conducted in accordance with subsection 7(1) above.

(3) The **ISO** must terminate billing under Rate DOS and bill all **metered energy** delivered to the **market participant** under Rate DTS starting on the date of termination of billing under Rate DOS, if the **ISO** determines that the **market participant** is no longer eligible for **demand** opportunity service.

(4) The **ISO** may, in its sole discretion, recover retroactive amounts for the period during which such **market participant** did not qualify for, but was billed under, Rate DOS.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

- 1(1)** This section applies to a **market participant** who has requested or is receiving **system access service** under any rate of the **ISO tariff**.
- (2)** A **legal owner** of an **electric distribution system** that is regulated by the **Commission** is not required to comply with the **ISO's financial security** requirements applicable to **system access service** charges in subsection 2 below.
- (3)** All other **market participants** must comply with the **ISO's financial security** requirements.

## Financial Security Requirements

- 2** A **market participant** must provide **financial security** for **system access service** in accordance with section 103.3 of the **ISO** rules, *Financial Security Requirements*.

## Billing Procedures

- 3(1)** The **ISO** must issue a statement of account for **system access service** no later than fifteen (15) **business days** after the end of each **settlement period**, which statement may include:
- (a) amounts determined on an initial basis for that **settlement period**;
  - (b) amounts determined on an interim basis for the period two (2) **months** prior to that **settlement period**; and
  - (c) amounts determined on a final basis for the period four (4) **months** prior to that **settlement period**.
- (2)** The **ISO** may review any statement of account and may issue a new statement of account based on that review.
- (3)** The **ISO** may choose not to issue a statement of account on an interim or final basis if it would result in a charge or refund of less than \$1 000.
- (4)** The **ISO** may use estimated values to produce a statement of account when **metered demand** or **metered energy** data is not available or is incomplete, **metering equipment** fails or the data is under dispute.
- (5)** The **ISO** may also use estimated values to produce a statement of account if the **ISO's** billing and settlement system is unable to produce a statement of account.
- (6)** The **ISO** must, when a statement of account is based on estimated values, make an adjustment on a subsequent statement of account issued in accordance with subsection 3(1)(b) or 3(1)(c) above to reflect the use of actual or more appropriate estimated values.
- (7)** The **ISO** may deduct from a statement of account any amounts it owes to the **market participant** or its **affiliates**.

## Totalized Billing

**4(1)** The **ISO** may totalize **points of delivery** and **points of supply** and produce one statement of account for a **market participant** that is an industrial facility with multiple **points of delivery**, **points of supply** or both.

**(2)** The **ISO** must base its decision to totalize on a review of:

- (a) the economics of providing more than a single **point of delivery** or **point of supply**;
- (b) reclassification of the site as a **Commission**-designated industrial system; or
- (c) the existence of a credible transmission bypass alternative.

## Adjustments

**5(1)** A **market participant** may request that a statement of account be recalculated and reissued forty-five (45) or more **days** after an amount has been determined on a final basis for a **settlement period**, as a result of:

- (a) unavailable or incomplete meter data;
- (b) inaccurate estimates of meter data; or
- (c) reconciliation with updated estimates of meter data;

**(2)** The **ISO** may recover the cost of recalculating and reissuing a statement of account from the **market participant** that is receiving service through the relevant **metering equipment**.

**(3)** The **market participant** must pay the **ISO** \$1 000 for each recalculated and reissued statement of account.

## Request for Settlement Data

**6(1)** The **ISO** must make available to a **market participant** during regular business hours any data required to verify a statement of account for **system access service**.

**(2)** The **market participant** must pay all of the costs of retrieval and provision of the data.

## Payment Terms

**7(1)** A **market participant** must pay the amounts shown on the statement of account no later than the twentieth **business day** after the end of the **settlement period**.

**(2)** The **market participant** must make payment by way of electronic funds transfer or wire transfer to the bank account the **ISO** specifies.

## Effect of Non-Compliance

**8(1)** The **ISO** may charge interest and other amounts, suspend or terminate **system access service** and take other action in accordance with section 103.7 of the **ISO rules**, *Financial Default and Remedies*, if a **market participant**:

- (a) fails to comply with a requirement to provide **financial security** to the **ISO** for **system access service**; or
- (b) fails to pay in full any **financial obligation** to the **ISO** for **system access service**, on or before a specified due date for that **financial obligation**.

(2) The **ISO** must not reinstate **system access service** to a **market participant** until the **market participant** has paid all **financial obligations** owing to the **ISO** in full and has restored or secured its credit facility in a manner satisfactory to the **ISO**.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

1 This section applies to a **market participant** who is receiving **system access service** under:

- (a) Rate DTS, *Demand Transmission Service*; or
- (b) Rate FTS, *Fort Nelson Demand Transmission Service*.

## Causes Eligible for Peak Metered Demand Waivers

2(1) The **ISO** may waive peak **metered demand** for a **market participant** for the purpose of calculating **billing capacity** when the peak **metered demand** was caused by one of the following:

- (a) **commissioning**;
- (b) activities required to repair and maintain **transmission facilities**;
- (c) load restoration activities that:
  - (i) follow a **forced outage**, **planned outage** or **unplanned outage** of **transmission facilities** or facilities that are part of an **electric distribution system**; or
  - (ii) are caused by an **emergency** on the **transmission system**;
- (d) compliance with a **directive** the **ISO** issues during an **emergency**; or
- (e) an event of **force majeure** that impacts the **ISO**.

(2) The **ISO** may also waive peak **metered demand** for a **legal owner** of an **electric distribution system** for pre-scheduled activities required to maintain facilities that are part of its **electric distribution system**.

## Requests for Peak Metered Demand Waivers

3(1) A **market participant** may request a peak **metered demand** waiver by submitting a completed *Peak Metered Demand Waiver Request* form, available on the AESO website or from the **ISO**.

(2) The **market participant** must submit the *Peak Metered Demand Waiver Request* form to the **ISO** no later than seven (7) **business days** after the end of the **settlement period** for which the waiver is being requested.

(3) The **ISO** must, upon receipt of a peak **metered demand** waiver request, confirm whether:

- (a) the peak **metered demand** was caused by an event set out in subsection 1(1) above; and
- (b) the **ISO** has sufficient information to make a determination on the request.

(4) The **ISO** must, if it does not have sufficient information to make a determination on a peak **metered demand** waiver request:

- (a) request additional information from the **market participant**; or
- (b) request permission to audit the **market participant's** relevant records associated with the event.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1** This section applies to a **market participant** who has requested or is receiving **system access service** under any rate in the **ISO tariff**.

## Assignment

**2(1)** A **market participant** may assign its agreement for **system access service** or any rights under it to another **market participant** who is eligible for the **system access service** available under such agreement and the **ISO tariff**, but only with the consent of the **ISO**, such consent not to be unreasonably withheld.

**(2)** The **ISO** must apply to the account of the assignee all rights and obligations associated with the **system access service** when a **system access service** agreement for Rate DTS, *Demand Transmission Service*, Rate FTS, *Fort Nelson Demand Transmission Service*, or Rate STS, *Supply Transmission Service*, has been assigned in accordance with subsection 2(1) above, including any and all retrospective adjustments due to deferral account reconciliation or any other adjustments.

## Termination by Mutual Agreement

**3** The **ISO** and a **market participant** may, by mutual written agreement, terminate any agreement entered into with respect to **system access service** under the **ISO tariff**, provided such termination does not relieve either the **ISO** or the **market participant** of any obligations accrued or accruing under the agreement prior to its termination.

## Compliance With ISO Directives

**4** A **market participant** must comply with all **directives** of the **ISO** in real-time, including those related to technical requirements and provision of **ancillary services**.

## Notifications

**5(1)** The **market participant** must give or serve all notices upon the **ISO** in accordance with the **ISO tariff**, in writing, marked “Important” and by personal service, registered letter or fax, addressed to:

AESO  
2500, 330 – 5th Avenue SW  
Calgary, Alberta T2P 0L4  
  
Attention: Commercial Services  
Fax (403) 539-2509

with a copy to:

AESO  
2500, 330 – 5th Avenue SW  
Calgary, Alberta T2P 0L4  
  
Attention: General Counsel  
Fax (403) 539-2949

(2) The **ISO** must give or serve all notices upon the **market participant** in writing and by personal service, registered letter or fax and sent to the address or addresses shown for such **market participant** in the relevant agreement for **system access service**.

(3) The **market participant** and the **ISO** must deem all notices to be duly given:

- (a) upon delivery if personally delivered;
- (b) five (5) **business days** after posting if sent by registered mail during normal postal service conditions; or
- (c) on the same **day**, if emailed or faxed.

(4) The **market participant** and the **ISO** must send all notices by personal delivery in the event of disruption of normal postal services.

### Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

# ISO Tariff – Appendix A

## Regulated Generating Units



### Applicability

**1** Under Rate STS, *Supply Transmission Service*, a regulated **generating unit** connection cost charge applies to the regulated **generating unit** (“RGU”) MW listed in the table below.

Regulated <b>Generating Unit</b>	<b>Legal Owner</b>	Type of Plant	RGU MW	Base Life
Barrier	TransAlta	Hydro	11.2	2020
Battle River 5	ATCO Power	Coal-fired thermal	368.2	2020
Bearspaw	TransAlta	Hydro	16.0	2020
Bighorn 1	TransAlta	Hydro	60.0	2020
Bighorn 2	TransAlta	Hydro	60.0	2020
Bighorn Total			120.0	
Brazeau 1	TransAlta	Hydro	160.0	2020
Brazeau 2	TransAlta	Hydro	190.0	2020
Brazeau Total			350.0	
Cascade 1	TransAlta	Hydro	17.0	2020
Cascade 2	TransAlta	Hydro	17.0	2020
Cascade Total			34.0	
Genesee 1	Capital Power	Coal-fired thermal	381.0	2020
Genesee 2	Capital Power	Coal-fired thermal	381.0	2020
Genesee Total			762.0	
Ghost 2	TransAlta	Hydro	14.0	2020
Ghost 3	TransAlta	Hydro	14.0	2020
Ghost 4	TransAlta	Hydro	25.0	2020
Ghost Total			54.0	
Horseshoe 1	TransAlta	Hydro	5.0	2020
Horseshoe 2	TransAlta	Hydro	3.0	2020
Horseshoe 3	TransAlta	Hydro	3.0	2020
Horseshoe 4	TransAlta	Hydro	5.0	2020
Horseshoe Total			16.0	
Interlakes	TransAlta	Hydro	5.0	2020
Kananaskis 1	TransAlta	Hydro	5.0	2020
Kananaskis 2	TransAlta	Hydro	5.0	2020
Kananaskis 3	TransAlta	Hydro	9.0	2020
Kananaskis Total			19.0	
Keephills 1	TransAlta	Coal-fired thermal	383.0	2020
Keephills 2	TransAlta	Coal-fired thermal	383.0	2020
Keephills Total			766.0	
Rundle 1	TransAlta	Hydro	17.0	2020
Rundle 2	TransAlta	Hydro	33.0	2020
Rundle Total			50.0	

Regulated <b>Generating Unit</b>	<b>Legal Owner</b>	Type of Plant	RGU MW	Base Life
Sheerness 1	ATCO Power	Coal-fired thermal	378.1	2020
Sheerness 2	ATCO Power	Coal-fired thermal	378.1	2020
Sheerness Total			756.2	
Spray 1	TransAlta	Hydro	47.5	2020
Spray 2	TransAlta	Hydro	52.0	2020
Spray Total			99.5	
Sundance 1	TransAlta	Coal-fired thermal	280.0	2017
Sundance 2	TransAlta	Coal-fired thermal	280.0	2017
Sundance 3	TransAlta	Coal-fired thermal	353.0	2020
Sundance 4	TransAlta	Coal-fired thermal	353.0	2020
Sundance 5	TransAlta	Coal-fired thermal	353.0	2020
Sundance 6	TransAlta	Coal-fired thermal	357.0	2020
Sundance Total			1,976.0	
Three Sisters	TransAlta	Hydro	2.7	2020

## Revision History

Effective	Description
2015-07-01	Updated to remove units with base lives ending before 2014 as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

## Applicability

**1(1)** The attached **system access service** agreement proformas are used for **system access services** provided under:

- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate STS, *Supply Transmission Service*;
- (c) Rate DOS, *Demand Opportunity Service*;
- (d) Rate XOS and Rate XOM, *Export Service*; and
- (a) Rate IOS, *Import Opportunity Service*.

**(2)** The attached construction commitment agreement proforma is used for requests for **system access service** under section 5 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

## Revision History

Effective	Description
2015-07-01	Updated subsections, as approved in <b>Commission</b> Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.

# ISO Tariff – Appendix B

## System Access Service Agreement Proforma for Rate DTS, Demand Transmission Service



This **DTS Agreement** effective the 1st day of \_\_\_\_\_, 201\_\_ (the “effective date”).

Between:

**Independent System Operator**, operating as AESO  
a body corporate with offices in the City of Calgary,  
in the Province of Alberta  
(the “ISO”)

and

**[insert legal name of corporation or partnership]**,  
[a body corporate or a partnership] with office[s] in the City of **[insert city]**,  
in the Province of **[insert province]**  
(the “market participant”)

### RECITALS:

- A. This **DTS Agreement** sets out the particular details of the **system access service** that the **ISO** will provide to the **market participant** under Rate DTS of the **ISO tariff**.
- B. The **ISO tariff** contains additional terms and conditions of **system access service**. This **DTS Agreement** is comprised of both this document and the **ISO tariff**, and accordingly, both this document and the **ISO tariff** must be referred to and administered by the parties, even though the **ISO tariff** is not attached but incorporated into this **DTS Agreement** by reference.

In consideration of the premises to this **DTS Agreement**, the mutual covenants and agreements set forth in this **DTS Agreement** and other good and valuable consideration (the receipt and sufficiency of which is acknowledged by each of the parties), the parties agree as follows:

### 1. DEFINITIONS AND INTERPRETATION

- (a) Unless otherwise defined in this **DTS Agreement**, bolded terms, not including headings, used in this document have the meanings given to them in the *Consolidated Authoritative Documents Glossary*. In the event of any conflict or inconsistency between this document and the *Consolidated Authoritative Documents Glossary*, the latter shall prevail.
- (b) The **ISO tariff** shall be the **ISO tariff** in effect from time to time.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

### 2. POINT OF DELIVERY, CONTRACT CAPACITY AND OTHER DETAILS

- (a) **Point of delivery** is located and described as follows:

Substation name and #:	<b>[Name of Substation (123S)]</b> ;
Legal Subdivisions (LSD):	<b>[insert WxM]</b> ;
Measurement Point Identification (MPID):	<b>[insert assigned number]</b>

- (b) **Contract capacity** is the following amounts for and during the following periods:

MW from [insert date] up to and including [insert date];  
MW [insert date] up to and including [insert date]; and  
MW [insert date] for the balance of the term of this **DTS Agreement**.

- (c) Other details related to the connection project include:

**ISO tariff** in effect on date of permit and licence:

Total Project Costs:	\$ _____
Participant-Related Costs:	\$ _____
System-Related Costs:	\$ _____
Investment:	\$ _____

- (d) Key dates:

- (i) Date **Commission** issued permit and licence: [insert date] or n/a
- (ii) Energization authorization date: \_\_\_\_\_
- (iii) **Commissioning** period will commence on: \_\_\_\_\_
- (iv) **Commercial operation** date: \_\_\_\_\_
- (v) Investment term: [insert number of years] years  
commencing on [insert date] and  
terminating on [insert date].

### 3. SETTLEMENT

The **ISO** shall charge, and the **market participant** shall pay, amounts in accordance with Rate DTS commencing in the **settlement period** in which the energization authorization date occurs.

### 4. CONTRIBUTIONS

As of the **effective date** of this **DTS Agreement**, the **market participant's construction contribution** is estimated to be \$[insert amount] and may be adjusted in accordance with the **ISO tariff**.

### 5. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 7, the **ISO** shall provide **system access service** under Rate DTS to the **market participant** at the **point of delivery** at the **contract capacity** pursuant to Section 2 of this **DTS Agreement**.

### 6. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE

If the **market participant** takes **system access service** under Rate DTS, the **market participant** shall take such **system access service** at the **point of delivery** at the **contract capacity** pursuant to Section 2 of this **DTS Agreement**.

### 7. MARKET PARTICIPANT'S PAYMENT OBLIGATION

The **market participant** shall pay to the **ISO** for **system access service** under Rate DTS during the term of this **DTS Agreement** the amount required pursuant to Rate DTS.

8. **OTHER RATES AND CONDITIONS**

- (a) The primary service credit is applicable under this **DTS Agreement**.  
Yes ☐ No ☐
- (b) This **point of delivery** is designated to provide **underfrequency load shedding**.  
Yes ☐ No ☐
- (c) The **market participant** is required to comply with a connection **remedial action scheme** for this **point of delivery**.  
Yes ☐ No ☐

9. **TERM**

This **DTS Agreement** will commence on the **effective date** and will continue unless it is terminated in accordance with the **ISO tariff**.

10. **PRIOR AGREEMENTS**

This **DTS Agreement** supersedes and replaces, as of the **effective date**, any other agreement for **system access service** under Rate DTS between the parties at the **point of delivery**.

11. **COMMISSIONING**

- (a) The **market participant** must undertake and complete **commissioning** in accordance with the requirements set out in the **ISO rules**.
- (b) **Commissioning** must be completed within ninety (90) **days** from the date that it commences.
- (c) The **market participant** may request changes to the **commissioning** period, energization **authorization** date and **commercial operation** date but such changes will only be effective if the **ISO** approves them in writing.

12. **COMMERCIAL OPERATION**

Upon completion of **commissioning**, provided the **market participant** has met its obligations and the **ISO** is satisfied that the **market participant's** facility will be safely and reliably integrated into the **interconnected electric system**, the **ISO** must issue a **commissioning** certificate certifying the date the facility may begin **commercial operation**.

13. **MARKET PARTICIPANT'S REPRESENTATIONS AND WARRANTIES**

The **market participant** represents and warrants to the **ISO** as follows:

- (a) the **market participant** is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization, and duly registered and authorized to carry on business in the Province of Alberta;
- (b) this **DTS Agreement** has been duly authorized, executed and delivered by the **market participant** and constitutes a legal, valid and binding obligation of the **market participant**, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization,

and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and

- (c) the authorization, execution and performance by the **market participant** of this **DTS Agreement**:
  - (i) does not and will not violate any laws applicable to the **market participant**; and
  - (ii) is not in contravention of its constituting documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

#### 14. NOTICES

- (a) Notices will be provided as per Section 15(4) of the **ISO tariff**. The **market participant's** address for notices is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (b) The **market participant's** address for invoices, if different from the address for notices, is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (c) The **market participant** must provide any changes to its addresses to the **ISO** using the method posted on the **ISO** website as updated from time to time.

#### 15. AMENDMENTS

- (a) The parties acknowledge that either may request an amendment to this **DTS Agreement**, including without limitation an amendment to the **contract capacity**. A party may request such an amendment by complying with the procedure for amending **DTS Agreements** posted by the **ISO** on its website. If such procedure is not posted, the party requesting an amendment may provide a notice to the other requesting such amendment.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff** and the **ISO rules** may be amended from time to time during the term of this **DTS Agreement** by approval of the **Commission** and that this **DTS Agreement** shall be deemed amended upon each such approval.

- (c) Subject to Section 15(b), this **DTS Agreement** may only be amended by written instrument executed by the **ISO** and the **market participant**.

16. **MISCELLANEOUS**

- (a) The following matters shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**:
  - (i) Assignment – Section 15 of the **ISO tariff**.
  - (ii) Confidentiality – **ISO rule** 103.1.
  - (iii) Dispute Resolution – **ISO rule** 103.2.
- (b) **Force majeure** shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**.
- (c) Section 7 shall survive the termination of this **DTS Agreement** for either the time provided for in such section or the longest period provided by law.
- (d) This **DTS Agreement** will enure to the benefit and be binding upon the parties to this **DTS Agreement** and their respective successors and permitted assigns.
- (e) No waiver by any party of any breach (whether actual or anticipated) of any of the terms, conditions, representations or warranties contained in this **DTS Agreement** shall take effect or be binding upon that party unless the waiver is expressed in writing under the authority of that party. Any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other or future breach.
- (f) Time is of the essence.
- (g) If at any time any one or more of the provisions of this **DTS Agreement** is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this **DTS Agreement** will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h) This **DTS Agreement** shall be governed by and interpreted in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein, excluding any conflict of laws principles that may apply therein.
- (i) Whenever possible, each provision of this **DTS Agreement** shall be interpreted in such a manner as to be effective and valid under applicable law, however, each provision of this **DTS Agreement** is intended to be severable and if any provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shall be severed from this **DTS Agreement** and will not affect the legality, validity or enforceability of the remainder of this **DTS Agreement** or any other provision of this **DTS Agreement**.
- (j) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as shall be reasonably required in order to fully perform and carry out the terms of this **DTS Agreement**.
- (k) The parties may execute this **DTS Agreement** by fax or other electronic means and in separate counterparts, each of which when so executed and delivered shall be an original, and all such counterparts taken together shall constitute one instrument.

By signing this **DTS Agreement**, the **market participant** acknowledges that it has reviewed the **ISO tariff** and fully understands all rights and obligations contained in it.

IN WITNESS WHEREOF the **ISO** and the **market participant** have executed this **DTS Agreement** as of the **effective date**.

**Independent System Operator**, operating as AESO

Per: \_\_\_\_\_ Date:

Name:

Title:

**[insert legal name of corporation or partnership]**

Per: \_\_\_\_\_ Date:

Name:

Title:

# ISO Tariff – Appendix B

## System Access Service Agreement Proforma for Rate STS, Supply Transmission Service



This **STS Agreement** effective the 1st day of \_\_\_\_\_, 201\_\_ (the “**effective date**”).

Between:

**Independent System Operator**, operating as AESO  
a body corporate with offices in the City of Calgary,  
in the Province of Alberta  
(the “**ISO**”)

and

**[insert legal name of corporation or partnership]**,  
[a body corporate or a partnership] with office[s] in the City of **[insert city]**,  
in the Province of **[insert province]**  
(the “**market participant**”)

### RECITALS:

- A. This **STS Agreement** sets out the particular details of the **system access service** that the **ISO** will provide to the **market participant** under Rate STS of the **ISO tariff**.
- B. The **ISO tariff** contains additional terms and conditions of **system access service**. This **STS Agreement** is comprised of both this document and the **ISO tariff**, and accordingly, both this document and the **ISO tariff** must be referred to and administered by the parties, even though the **ISO tariff** is not attached but incorporated into this **STS Agreement** by reference.

In consideration of the premises to this **STS Agreement**, the mutual covenants and agreements set forth in this **STS Agreement** and other good and valuable consideration (the receipt and sufficiency of which is acknowledged by each of the parties), the parties agree as follows:

### 1. DEFINITIONS AND INTERPRETATION

- (a) Unless otherwise defined in this **STS Agreement**, bolded terms, not including headings, used in this document have the meanings given to them in the *Consolidated Authoritative Documents Glossary*. In the event of any conflict or inconsistency between this document and the *Consolidated Authoritative Documents Glossary*, the latter shall prevail.
- (b) The **ISO tariff** shall be the **ISO tariff** in effect from time to time.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

### 2. POINT OF SUPPLY, CONTRACT CAPACITY AND OTHER DETAILS

- (a) **Point of supply** is located and described as follows:

Substation name and #:	<b>[Name of Substation (123S)]</b> ;
Legal Subdivisions (LSD):	<b>[insert WxM]</b> ;
Measurement Point Identification (MPID):	<b>[insert assigned number]</b>

- (b) **Contract capacity** is the following amounts for and during the following periods:

MW from [insert date] up to and including [insert date];  
MW [insert date] up to and including [insert date]; and  
MW [insert date] for the balance of the term of this **STS Agreement**.

- (c) Other details related to the connection project include:

**ISO tariff** in effect on date of permit and licence:

Total Project Costs: \$ \_\_\_\_\_

Participant-Related Costs: \$ \_\_\_\_\_

System-Related Costs: \$ \_\_\_\_\_

**Generating Unit Type:** \_\_\_\_\_

- (d) Key dates:

(i) Date **Commission** issued permit and licence: [insert date] or n/a

(ii) Energization authorization date: \_\_\_\_\_

(iii) **Commissioning** period will commence on: \_\_\_\_\_

(iv) **Commercial operation** date: \_\_\_\_\_

### 3. SETTLEMENT

The **ISO** shall charge, and the **market participant** shall pay, amounts in accordance with Rate STS commencing in the **settlement period** in which the energization authorization date occurs.

### 4. CONTRIBUTIONS

As of the effective date of this **STS Agreement**, the **market participant's**:

- (a) **construction contribution** is estimated to be \$ [insert amount] and may be adjusted in accordance with the **ISO tariff**; and

- (b) **legal owner's** contribution for a **generating unit** or an **aggregated generating facility** is \$ [insert amount] and may be adjusted in accordance with the **ISO tariff**.

### 5. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 7, the **ISO** shall provide **system access service** under Rate STS to the **market participant** at the **point of supply** at the **contract capacity** pursuant to Section 2 of this **STS Agreement**.

### 6. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE

If the **market participant** takes **system access service** under Rate STS, the **market participant** shall take such service at the **point of supply** at the **contract capacity** pursuant to Section 2 of this **STS Agreement**.

### 7. MARKET PARTICIPANT'S PAYMENT OBLIGATION

The **market participant** shall pay to the **ISO** for **system access service** under Rate STS during the term of this **STS Agreement** the amount required pursuant to such rate.

8. **OTHER CONDITIONS**

The **market participant** is required to comply with a connection **remedial action scheme** for this **point of supply**.

Yes ☐

No ☐

9. **TERM**

This **STS Agreement** will commence on the **effective date** and will continue unless it is terminated in accordance with the **ISO tariff**.

10. **PRIOR AGREEMENTS**

This **STS Agreement** supersedes and replaces, as of the **effective date**, any other agreement for **system access service** under Rate STS between the parties at the **point of supply**.

11. **COMMISSIONING AND COMMERCIAL OPERATION**

- (a) The **market participant** must undertake and complete **commissioning** in accordance with the requirements set out in the **ISO rules**.
- (b) **Commissioning** must be completed within ninety (90) **days** from the date that it commences.
- (c) The **market participant** may request changes to the **commissioning** period, energization authorization date and **commercial operation** date but such changes will only be effective if the **ISO** approves them in writing.

12. **COMMERCIAL OPERATION**

Upon completion of **commissioning**, provided the **market participant** has met its obligations and the **ISO** is satisfied that the **market participant's generating unit** or **aggregated generating facility** will be safely and reliably integrated into the **interconnected electric system**, the **ISO** must issue a **commissioning** certificate certifying the date the **generating unit** or **aggregated generating facility** may begin **commercial operation**.

13. **MARKET PARTICIPANT'S REPRESENTATIONS AND WARRANTIES**

The **market participant** represents and warrants to the **ISO** as follows:

- (a) the **market participant** is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization, and duly registered and authorized to carry on business in the Province of Alberta;
- (b) this **STS Agreement** has been duly authorized, executed and delivered by the **market participant** and constitutes a legal, valid and binding obligation of the **market participant**, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and

- (c) the authorization, execution and performance by the **market participant** of this **STS Agreement**:
  - (i) does not and will not violate any laws applicable to the **market participant**; and
  - (ii) is not in contravention of its constituting documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

#### 14. NOTICES

- (a) Notices will be provided as per Section 15(4) of the **ISO tariff**. The **market participant's** address for notices is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

- (b) The **market participant's** address for invoices, if different from the address for notices, is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

- (c) The **market participant** must provide any changes to its addresses to the **ISO** using the method posted on the **ISO** website as updated from time to time.

#### 15. AMENDMENTS

- (a) The parties acknowledge that either may request an amendment to this **STS Agreement**, including without limitation an amendment to the **contract capacity**. A party may request such an amendment by complying with the procedure for amending **STS Agreements** posted by the **ISO** on its website. If such procedure is not posted, the party requesting an amendment may provide a notice to the other requesting such amendment.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff** and the **ISO rules** may be amended from time to time during the term of this **STS Agreement** by approval of the **Commission** and that this **STS Agreement** shall be deemed amended upon each such approval.
- (c) Subject to Section 14(b), this **STS Agreement** may only be amended by written instrument executed by the **ISO** and the **market participant**.

16. **MISCELLANEOUS**

- (a) The following matters shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**:
  - (i) Assignment – Section 15 of the **ISO tariff**.
  - (ii) Confidentiality – **ISO rule** 103.1.
  - (iii) Dispute Resolution – **ISO rule** 103.2.
- (b) **Force majeure** shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**.
- (c) Section 7 shall survive the termination of this **STS Agreement** for either the time provided for in such section or the longest period provided by law.
- (d) This **STS Agreement** will enure to the benefit and be binding upon the parties to this **STS Agreement** and their respective successors and permitted assigns.
- (e) No waiver by any party of any breach (whether actual or anticipated) of any of the terms, conditions, representations or warranties contained in this **STS Agreement** shall take effect or be binding upon that party unless the waiver is expressed in writing under the authority of that party. Any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other or future breach.
- (f) Time is of the essence.
- (g) If at any time any one or more of the provisions of this **STS Agreement** is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this **STS Agreement** will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h) This **STS Agreement** shall be governed by and interpreted in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein, excluding any conflict of laws principles that may apply therein.
- (i) Whenever possible, each provision of this **STS Agreement** shall be interpreted in such a manner as to be effective and valid under applicable law, however, each provision of this **STS Agreement** is intended to be severable and if any provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shall be severed from this **STS Agreement** and will not affect the legality, validity or enforceability of the remainder of this **STS Agreement** or any other provision of this **STS Agreement**.
- (j) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as shall be reasonably required in order to fully perform and carry out the terms of this **STS Agreement**.
- (k) The parties may execute this **STS Agreement** by fax or other electronic means and in separate counterparts, each of which when so executed and delivered shall be an original, and all such counterparts taken together shall constitute one instrument.

By signing this **STS Agreement**, the **market participant** acknowledges that it has reviewed the **ISO tariff** and fully understands all rights and obligations contained in it.

IN WITNESS WHEREOF the **ISO** and the **market participant** have executed this **STS Agreement** as of the effective date.

**Independent System Operator**, operating as AESO

Per: \_\_\_\_\_ Date:

Name:

Title:

**[insert legal name of corporation or partnership]**

Per: \_\_\_\_\_ Date:

Name:

Title:

# ISO Tariff – Appendix B

## System Access Service Agreement Proforma for Rate DOS, Demand Opportunity Service



A **market participant** applying for pre-qualification for demand opportunity service should review the terms and conditions of such service contained in the **ISO tariff** and any other related information documents that appear on the **ISO's** website from time to time.

If approved, this application sets the parameters for a **market participant's** demand opportunity service transaction requests throughout the 12 **months** following such approval. Pre-qualification does not obligate the **ISO** to approve, or the **market participant** to request, any demand opportunity service. A non-refundable fee of \$5000.00 is payable with this application.

---

### Application Details

**Market participant:** \_\_\_\_\_

Party administering demand opportunity service on behalf of the **market participant**:

**market participant** ☐ or ☐ company name:

Name of primary contact of administrator: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Facility name: \_\_\_\_\_

Facility location: LSD \_\_\_\_\_ SEC \_\_\_\_\_ TWP \_\_\_\_\_ RGE \_\_\_\_\_ MER \_\_\_\_\_

Connected substation (name and number): \_\_\_\_\_

**Point of delivery:** \_\_\_\_\_

Current demand transmission service **contract capacity** at the **point of delivery**: \_\_\_\_\_

Is this an application to renew a current pre-qualification? Yes ☐ No ☐

---

### Technical and Commercial Information

The following information is required in order for the **ISO** to determine whether the proposed use of demand opportunity service complies with the criteria set out in the **ISO tariff**.

- Requested start date: \_\_\_\_\_
- End date: 12 **months** from requested start date
- Requested demand opportunity service capacity: \_\_\_\_\_ MW
- Anticipated frequency of use: \_\_\_\_\_
- Total MWhs per **month**: \_\_\_\_\_

- Type of demand opportunity service expected to be used:

DOS 7 minute ☐

DOS 1 hour ☐

DOS Term ☐

**Technical Information:** Please provide the following on an attachment labeled “Schedule A”.

- Load characteristic (static, synchronous machine or induction machine)
- Approximate load factor (demand opportunity service specific load only)
- Expected **power factor**

Schedule A: ☐ Attached

**Commercial Information:** Please read the eligibility criteria in the **ISO tariff** and provide a comprehensive business case, labeled “Schedule B”, demonstrating that the proposed use of demand opportunity service complies with those criteria. The business case must provide enough information to satisfy the **ISO** that the proposed use of electricity under demand opportunity service would not occur at the standard Rate 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 **ISO** reasonably requests.

Schedule B: ☐ Attached

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### Undertaking

The **market participant** undertakes to provide prompt notification to the **ISO** upon the occurrence of any financial, operational, and/or technical changes, where such changes materially impact the assumptions contained within the attached business case (“Schedule B”). Failure to provide such information to the **ISO** in a timely and comprehensive manner may result in the **ISO** auditing and/or reassessing the eligibility of the **market participant** to be pre-qualified for the use of demand opportunity service. Further, the **market participant** undertakes that the use of demand opportunity service contemplated in the business case will not be modified.

---

The **market participant** confirms that the contents of this application are true.

### Market participant:

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
(Print name) (Print title)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please complete and send to the Alberta Electric System Operator.

Mail: 2500, 330 – 5th Avenue SW  
Calgary, Alberta T2P 0L4

Attention: Commercial Services

# ISO Tariff – Appendix B

## System Access Service Agreement Proforma for Rate XOS and Rate XOM, Export Service



This **Export Agreement** effective the 1st day of \_\_\_\_\_, 201\_\_ (the “**effective date**”).

Between:

**Independent System Operator**, operating as AESO  
a body corporate with offices in the City of Calgary,  
in the Province of Alberta  
(the “**ISO**”)

and

**[insert legal name of corporation or partnership]**,  
[a body corporate or a partnership] with office[s] in the City of **[insert city]**  
in the Province of **[insert province]**  
(the “**market participant**”)

### RECITALS:

- A. This **Export Agreement** sets out the particular details of the **system access service** that the **ISO** will provide to the **market participant** under:
- Rate XOS of the **ISO tariff**, *Export Opportunity Service*;
  - Rate XOM of the **ISO tariff**, *Export Opportunity Merchant Service*; or
  - both.
- B. The **ISO tariff** contains additional terms and conditions of **system access service**. This **Export Agreement** is comprised of both this document and the **ISO tariff**, and accordingly, both this document and the **ISO tariff** must be referred to and administered by the parties, even though the **ISO tariff** is not attached but incorporated into this **Export Agreement** by reference.

In consideration of the premises to this **Export Agreement**, the mutual covenants and agreements set forth in this **Export Agreement** and other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the parties), the parties agree as follows:

### 1. DEFINITIONS AND INTERPRETATION

- (a) Unless otherwise defined in this **Export Agreement**, bolded terms, not including headings, used in this document have the meanings given to them in the *Consolidated Authoritative Documents Glossary*. In the event of any conflict or inconsistency between this document and the *Consolidated Authoritative Documents Glossary*, the latter shall prevail.
- (b) The **ISO tariff** shall be the **ISO tariff** in effect from time to time.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

### 2. POINT OF INTERCONNECTION

☐ British Columbia **Intertie**    ☐ Saskatchewan **Intertie**    ☐ Montana **Intertie**

3. **SETTLEMENT**

The **ISO** shall charge, and the **market participant** shall pay, amounts in accordance with Rate XOS or Rate XOM, as applicable, commencing on [insert date].

4. **ISO OBLIGATION TO PROVIDE SERVICE**

Subject to Section 7, the **ISO** shall provide **system access service** under Rate XOS or Rate XOM, as applicable, to the **market participant** at the **point of interconnection** pursuant to Section 2 of this **Export Agreement**.

5. **MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE**

If the **market participant** takes **system access service** under Rate XOS or Rate XOM, as applicable, the **market participant** shall take such **system access service** at the **point of interconnection** pursuant to Section 2 of this **Export Agreement**.

6. **MARKET PARTICIPANT'S PAYMENT OBLIGATION**

The **market participant** shall pay to the **ISO** for **system access service** during the term of this **Export Agreement** the amount required pursuant to Rate XOS or Rate XOM, as applicable.

7. **TERM**

This **Export Agreement** will commence on the **effective date** and will continue for a term of one (1) year, expiring on \_\_\_\_\_, 201\_\_\_\_.

8. **PRIOR AGREEMENTS**

This **Export Agreement** supersedes and replaces, as of the **Effective Date**, any other agreement for **system access service** under Rate XOS or Rate XOM, as applicable, between the parties at the **point of interconnection**.

9. **MARKET PARTICIPANT'S REPRESENTATIONS AND WARRANTIES**

The **market participant** represents and warrants to the **ISO** as follows:

- (a) the **market participant** is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization, and duly registered and authorized to carry on business in the Province of Alberta;
- (b) this **Export Agreement** has been duly authorized, executed and delivered by the **market participant** and constitutes a legal, valid and binding obligation of the **market participant**, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and
- (c) the authorization, execution and performance by the **market participant** of this **Export Agreement**:
  - (i) does not and will not violate any laws applicable to the **market participant**; and
  - (ii) is not in contravention of its constituting documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

10. **NOTICES**

- (a) Notices will be provided as per Section 15(4) of the **ISO tariff**. The **market participant's** address for notices is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (b) The **market participant's** address for invoices, if different from the address for notices, is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (c) The **market participant** must provide any changes to its addresses to the **ISO** using the method posted on the **ISO** website as updated from time to time.

11. **AMENDMENTS**

- (a) The parties acknowledge that either may request an amendment to this **Export Agreement**. A party may request such an amendment by complying with the procedure for amending **Export Agreements** posted by the **ISO** on its website. If such procedure is not posted, the party requesting an amendment may provide a notice to the other requesting such amendment.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff** and the **ISO rules** may be amended from time to time during the term of this **Export Agreement** by approval of the **Commission** and that this **Export Agreement** shall be deemed amended upon each such approval.
- (c) Subject to Section 11(b), this **Export Agreement** may only be amended by written instrument executed by the **ISO** and the **market participant**.

12. **MISCELLANEOUS**

- (a) The following matters shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**:
- (i) Assignment – Section 15 of the **ISO tariff**.
  - (ii) Confidentiality – **ISO rule** 103.1.
  - (iii) Dispute Resolution – **ISO rule** 103.2.

- (b) **Force majeure** shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**.
- (c) Section 6 shall survive the termination of this **Export Agreement** for either the time provided for in such section or the longest period provided by law.
- (d) This **Export Agreement** will enure to the benefit and be binding upon the parties to this **Export Agreement** and their respective successors and permitted assigns.
- (e) No waiver by any party of any breach (whether actual or anticipated) of any of the terms, conditions, representations or warranties contained in this **Export Agreement** shall take effect or be binding upon that party unless the waiver is expressed in writing under the authority of that party. Any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other or future breach.
- (f) Time is of the essence.
- (g) If at any time any one or more of the provisions of this **Export Agreement** is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this **Export Agreement** will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h) This **Export Agreement** shall be governed by and interpreted in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein, excluding any conflict of laws principles that may apply therein.
- (i) Whenever possible, each provision of this **Export Agreement** shall be interpreted in such a manner as to be effective and valid under applicable law, however, each provision of this **Export Agreement** is intended to be severable and if any provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shall be severed from this **Export Agreement** and will not affect the legality, validity or enforceability of the remainder of this **Export Agreement** or any other provision of this **Export Agreement**.
- (j) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as shall be reasonably required in order to fully perform and carry out the terms of this **Export Agreement**.
- (k) The parties may execute this **Export Agreement** by fax or other electronic means and in separate counterparts, each of which when so executed and delivered shall be an original, and all such counterparts taken together shall constitute one instrument.

By signing this **Export Agreement**, the **market participant** acknowledges that it has reviewed the **ISO tariff** and fully understands all rights and obligations contained in it.

IN WITNESS WHEREOF the **ISO** and the **market participant** have executed this **Export Agreement** as of the **effective date**.

**Independent System Operator**, operating as AESO

Per: \_\_\_\_\_ Date:

Name:

Title:

**[insert legal name of corporation or partnership]**

Per: \_\_\_\_\_ Date:

Name:

Title:

# ISO Tariff – Appendix B

## System Access Service Agreement Proforma for Rate IOS, Import Opportunity Service



This **Import Agreement** effective the 1st day of \_\_\_\_\_, 201\_\_ (the “**effective date**”).

Between:

**Independent System Operator**, operating as AESO  
a body corporate with offices in the City of Calgary,  
in the Province of Alberta  
(the “**ISO**”)

and

**[insert legal name of corporation or partnership]**,  
[a body corporate or a partnership] with office[s] in the City of **[insert city]**,  
in the Province of **[insert province]**  
(the “**market participant**”)

### RECITALS:

- A. This **Import Agreement** sets out the particular details of the **system access service** that the **ISO** will provide to the **market participant** under Rate IOS of the **ISO tariff, Import Opportunity Service**.
- B. The **ISO tariff** contains additional terms and conditions of **system access service**. This **Import Agreement** is comprised of both this document and the **ISO tariff**, and accordingly, both this document and the **ISO tariff** must be referred to and administered by the parties, even though the **ISO tariff** is not attached but incorporated into this **Import Agreement** by reference.

In consideration of the premises to this **Import Agreement**, the mutual covenants and agreements set forth in this **Import Agreement** and other good and valuable consideration (the receipt and sufficiency of which is acknowledged by each of the parties), the parties agree as follows:

### 1. DEFINITIONS AND INTERPRETATION

- (a) Unless otherwise defined in this **Import Agreement**, bolded terms, not including headings, used in this document have the meanings given to them in the *Consolidated Authoritative Documents Glossary*. In the event of any conflict or inconsistency between this document and the *Consolidated Authoritative Documents Glossary*, the latter shall prevail.
- (b) The **ISO tariff** shall be the **ISO tariff** in effect from time to time.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

### 2. POINT OF INTERCONNECTION

☐ British Columbia **Intertie**      ☐ Saskatchewan **Intertie**      ☐ Montana **Intertie**

3. **SETTLEMENT**

The **ISO** shall charge, and the **market participant** shall pay, amounts in accordance with Rate IOS commencing on [insert date].

4. **ISO OBLIGATION TO PROVIDE SERVICE**

Subject to Section 7, the **ISO** shall provide **system access service** under Rate IOS to the **market participant** at the **point of interconnection** pursuant to Section 2 of this **Import Agreement**.

5. **MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE**

If the **market participant** takes **system access service** under Rate IOS, the **market participant** shall take such **system access service** at the **point of interconnection** pursuant to Section 2 of this **Import Agreement**.

6. **MARKET PARTICIPANT'S PAYMENT OBLIGATION**

The **market participant** shall pay to the **ISO** for **system access service** under Rate IOS during the term of this **Import Agreement** the amount required pursuant to Rate IOS.

7. **TERM**

This **Import Agreement** will commence on the **effective date** and will continue for a term of one (1) year, expiring on \_\_\_\_\_, 201\_\_.

8. **PRIOR AGREEMENTS**

This **Import Agreement** supersedes and replaces, as of the **effective date**, any other agreement for **system access service** under Rate IOS between the parties at the **point of interconnection**.

9. **MARKET PARTICIPANT'S REPRESENTATIONS AND WARRANTIES**

The **market participant** represents and warrants to the **ISO** as follows:

- (a) the **market participant** is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization, and duly registered and authorized to carry on business in the Province of Alberta;
- (b) this **Import Agreement** has been duly authorized, executed and delivered by the **market participant** and constitutes a legal, valid and binding obligation of the **market participant**, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and
- (c) the authorization, execution and performance by the **market participant** of this **Import Agreement**:
  - (i) does not and will not violate any laws applicable to the **market participant**; and
  - (ii) is not in contravention of its constituting documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

10. **NOTICES**

- (a) Notices will be provided as per Section 15(4) of the **ISO tariff**. The **market participant's** address for notices is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (b) The **market participant's** address for invoices, if different from the address for notices, is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

- (c) The **market participant** must provide any changes to its addresses to the **ISO** using the method posted on the **ISO** website as updated from time to time.

11. **AMENDMENTS**

- (a) The parties acknowledge that either may request an amendment to this **Import Agreement**. A party may request such an amendment by complying with the procedure for amending **Import Agreements** posted by the **ISO** on its website. If such procedure is not posted, the party requesting an amendment may provide a notice to the other requesting such amendment.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff** and the **ISO rules** may be amended from time to time during the term of this **Import Agreement** by approval of the **Commission** and that this **Import Agreement** shall be deemed amended upon each such approval.
- (c) Subject to Section 11(b), this **Import Agreement** may only be amended by written instrument executed by the **ISO** and the **market participant**.

12. **MISCELLANEOUS**

- (a) The following matters shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**:
- (i) Assignment – Section 15 of the **ISO tariff**.
  - (ii) Confidentiality – **ISO rule** 103.1.
  - (iii) Dispute Resolution – **ISO rule** 103.2.

- (b) **Force majeure** shall be dealt with in accordance with the **ISO tariff** and the **ISO rules**.
- (c) Section 6 shall survive the termination of this **Import Agreement** for either the time provided for in such section or the longest period provided by law.
- (d) This **Import Agreement** will enure to the benefit and be binding upon the parties to this **Import Agreement** and their respective successors and permitted assigns.
- (e) No waiver by any party of any breach (whether actual or anticipated) of any of the terms, conditions, representations or warranties contained in this **Import Agreement** shall take effect or be binding upon that party unless the waiver is expressed in writing under the authority of that party. Any waiver so given shall extend only to the particular breach so waived and shall not limit or affect any rights with respect to any other or future breach.
- (f) Time is of the essence.
- (g) If at any time any one or more of the provisions of this **Import Agreement** is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this **Import Agreement** will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h) This **Import Agreement** shall be governed by and interpreted in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein, excluding any conflict of laws principles that may apply therein.
- (i) Whenever possible, each provision of this **Import Agreement** shall be interpreted in such a manner as to be effective and valid under applicable law, however, each provision of this **Import Agreement** is intended to be severable and if any provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shall be severed from this **Import Agreement** and will not affect the legality, validity or enforceability of the remainder of this **Import Agreement** or any other provision of this **Import Agreement**.
- (j) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as shall be reasonably required in order to fully perform and carry out the terms of this **Import Agreement**.
- (k) The parties may execute this **Import Agreement** by fax or other electronic means and in separate counterparts, each of which when so executed and delivered shall be an original, and all such counterparts taken together shall constitute one instrument.

By signing this **Import Agreement**, the **market participant** acknowledges that it has reviewed the **ISO tariff** and fully understands all rights and obligations contained in it.

IN WITNESS WHEREOF the **ISO** and the **market participant** have executed this **Import Agreement** as of the effective date.

**Independent System Operator**, operating as AESO

Per: \_\_\_\_\_ Date:

Name:

Title:

**[insert legal name of corporation or partnership]**

Per: \_\_\_\_\_ Date:

Name:

Title:

# ISO Tariff – Appendix B

## Construction Commitment Agreement Proforma



**THIS CONSTRUCTION COMMITMENT AGREEMENT** made as of the \_\_\_\_ day of \_\_\_\_\_, 201\_\_ (the “Effective Date”)

BETWEEN:

**[Insert Name of Legal Owner of the Transmission Facility],**  
a corporation incorporated under the  
laws of the Province of Alberta (hereinafter referred to as the “TFO”)

– and –

**[Insert Name of Market Participant],**  
a corporation incorporated under the  
laws of the Province of • (hereinafter referred to as the “Market Participant”)

### RECITALS

- A. **WHEREAS** the Market Participant has requested system access service from the Independent System Operator, operating as the Alberta Electric System Operator, (the “ISO”) and intends to enter into, or amend, a system access service agreement with the ISO in relation to **[Insert Connection Project Name and Number as provided by the ISO]**;
- B. **AND WHEREAS** the provision or amendment of system access service will require the construction of new transmission facilities and a commitment by the Market Participant in relation to the expenditure of capital for such construction;
- C. **AND WHEREAS** the ISO Tariff requires the Market Participant to provide Financial Security to the TFO, to pay a Construction Contribution to the TFO, or both, with respect to the Market Participant’s Financial Obligation for the Connection Project in amounts determined pursuant to the ISO Tariff;
- D. **AND WHEREAS** prior to commencing the Project Work set out in Schedule “A” hereto, the ISO Tariff requires the Market Participant to enter into an agreement substantially in the form of this Construction Commitment Agreement with the TFO to hold the TFO harmless from any negative financial consequences related to the cancellation of the Connection Project.

**NOW THEREFORE** in consideration of the mutual covenants and agreements set forth herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties, the parties hereby agree as follows:

### Interpretation and Definitions

- 1. In this Agreement:
  - (a) unless the context requires otherwise, words in the singular include the plural and words in the plural include the singular;
  - (b) “may” is to be construed as permissive and empowering and “must”, “shall” and “will” are to be construed as imperative;
  - (c) the use of the word “including” is not to be construed as being restrictive; and

- (d) capitalized words and phrases have the meanings given to them in the preamble or body of this Agreement, and in addition the following terms shall have the meanings provided below:
- (i) **“Act”** means the *Electric Utilities Act* and any regulations made under it.
  - (ii) **“Agreement”** means this Construction Commitment Agreement and all amendments hereto, including all Schedules attached herewith and amendments thereto.
  - (iii) **“Cancellation Costs”** means all Connection Project costs actually incurred by the TFO prior to cancellation of the Connection Project, or reasonably required to be incurred by the TFO after cancellation of the Connection Project, including costs arising from preparation of the connection proposal, preparation of the facility application and construction of the Connection Project, as documented in the construction commitment agreement required by subsection 2 of section 5 of the ISO Tariff; third-party cancellation costs and penalties; costs for material salvage; and reclamation of the construction site.
  - (iv) **“Cancellation Event”** means an event described in paragraph 10 or 11 of this Agreement which leads to or may lead to the cancellation of the Connection Project.
  - (v) **“Commercial Operation”** means the date upon which a load, generating unit or aggregated generating facility begins to operate on the transmission system in a manner which is acceptable to the ISO and which is expected to be normal for it to so operate, after energization and commissioning.
  - (vi) **“Commission”** as defined in the Act means the Alberta Utilities Commission established by the *Alberta Utilities Commission Act*.
  - (vii) **“Connection Project”** means new transmission facilities constructed by the TFO at the request of the Market Participant for system access service.
  - (viii) **“Construction Contribution”** means the financial contribution in aid of construction, in excess of any available maximum local investment, that a Market Participant must pay for the construction and associated costs of transmission facilities required to provide system access service.
  - (ix) **“Financial Obligation”** for the purpose of this Agreement means any debt, payment or similar obligation of the Market Participant actually incurred or likely to be incurred in accordance with section 5 of the ISO Tariff or under any terms of an agreement or other document between the Market Participant and the TFO.
  - (x) **“Financial Security”** for the purpose of this Agreement means sufficient enforceable credit support to secure the Financial Obligations of the Market Participant to the ISO or the TFO.
  - (xi) **“Guarantor”** means an entity that provides a guarantee on behalf of the Market Participant.
  - (xii) **“ISO Tariff”** as defined in the Act means the tariff prepared by the ISO under section 30 of the Act that has been approved by the Commission, as amended from time to time.
  - (xiii) **“Material Adverse Change”** for the purpose of this Agreement means a downgrade in the credit rating of the Market Participant or its Guarantor by any credit rating agency, or an event that may result in the materially weaker

creditworthiness of the Market Participant or its Guarantor as would be reasonably determined by the TFO.

- (xiv) **“Project Work”** means the work for the Connection Project as set out in Schedule “A” to this Agreement.
- (xv) **“Schedules”** means the following Schedules attached to this Agreement, and all amendments to such Schedules:

Schedule “A” – Project Work and Financial Obligation

Schedule “B” – Construction Contribution and Financial Security

### Term of Agreement

- 2. This Agreement shall take effect on the Effective Date and shall remain in full force and effect until:
  - (a) the Connection Project begins Commercial Operation; or
  - (b) if upon the occurrence of a Cancellation Event the Connection Project is cancelled and all amounts owing to the TFO hereunder have been paid in full.

### ISO Tariff

- 3. In addition to the obligations of the parties pursuant to this Agreement:
  - (a) the Market Participant shall remain fully subject to the ISO Tariff in respect of the Connection Project; and
  - (b) with the exception of terms stated to be defined for the purpose of this Agreement, in the event of any conflict or inconsistency between the provisions of this Agreement and the ISO Tariff, the provisions of the ISO Tariff shall prevail.

### Construction Contribution and Financial Security

- 4. The Market Participant will pay to the TFO a Construction Contribution required in respect of its Financial Obligation for the Connection Project in accordance with section 5 of the ISO Tariff. The Market Participant will pay the Construction Contribution in the amounts and at the times set out and described in the Schedules (as amended from time to time), each such payment being an absolute transfer of ownership in the funds to the TFO as a payment for the Project Work.
- 5. For a Connection Project that is eligible for local investment, the Market Participant will also provide or cause to be provided to the TFO the Financial Security required in accordance with section 5 of the ISO Tariff as security for the payment and performance of all present and future debts, costs and Financial Obligations of the Market Participant to the TFO arising pursuant to this Agreement other than those for which the Construction Contribution is paid. The Market Participant will provide or cause to be provided the Financial Security in the amounts and at the times set out and described in the Schedules, as amended from time to time.
- 6. The Construction Contribution and Financial Security shall in aggregate be in an amount adequate to fund the Financial Obligation arising from the Project Work, as determined pursuant to section 5 of the ISO Tariff.
- 7. All changes to the Construction Contribution and Financial Security shall be documented in duly executed amended Schedules by the parties reflecting the change.
- 8. If all or part of the Financial Obligation of the Market Participant pursuant hereto are unsecured, or its Guarantor has provided a guarantee as Financial Security, and the Market Participant

becomes aware of any Material Adverse Change in respect of the Market Participant or Guarantor, the Market Participant shall provide written notice thereof to the TFO and to the ISO within two (2) business days of becoming aware of the occurrence of such Material Adverse Change. Upon the occurrence of a Material Adverse Change, the TFO may require the Market Participant to provide additional or replacement Financial Security.

9. In determining whether an event of Material Adverse Change has occurred, consideration must be given to any event, circumstance or change which affects or would reasonably be expected to affect:
- (a) the financial condition of the Market Participant or any Guarantor;
  - (b) the ability of the Market Participant or any Guarantor to perform its obligations under any Financial Security; or
  - (c) the assets or business of the Market Participant or any Guarantor.

#### **Cancellation of Connection Project**

10. The Connection Project will be cancelled if:
- (a) the Market Participant informs the ISO or the TFO of the cancellation of the Connection Project;
  - (b) the ISO cancels the Connection Project due to the Market Participant's failure to meet any critical requirements under subsection 7 of section 4 of the ISO Tariff; or
  - (c) the ISO cancels the Connection Project after reasonably concluding, based on the action or inaction of the Market Participant, that the Market Participant is not proceeding with the Connection Project.
11. The Connection Project may be cancelled by the TFO in accordance with the ISO Tariff upon the occurrence of any of the following events:
- (a) the Market Participant fails to provide or cause to be provided the Financial Security in the form and amount set out in Schedule "B" concurrently with the execution and delivery of this Agreement, or thereafter in forms and amounts set out in any amended Schedule "B", or fails to provide or cause to be provided such additional guarantee(s), security or other documents as it may be required to deliver to the TFO pursuant to the terms and conditions hereof;
  - (b) the Commission rejects or fails to approve the relevant application for the Connection Project;
  - (c) the Market Participant fails to:
    - (i) execute a system access service agreement (in the ISO's standard form); or
    - (ii) enter into an amendment of its existing system access service agreement with respect to the Connection Project (in the ISO's standard form),at least three (3) business days prior to the start of the month of planned energization;
  - (d) the Market Participant or any Guarantor breaches any term, condition, agreement or covenant under this Agreement or the Financial Security and fails to remedy such breach within five (5) business days of receipt of written notice of such breach by the TFO to the Market Participant;

- (e) any representation or warranty made or given by the Market Participant in connection with this Agreement is shown to be untrue or incorrect as at the date given or ceases to be true and correct during the term of this Agreement;
- (f) the Market Participant or any Guarantor is found to be insolvent or bankrupt by a court of competent jurisdiction or makes an authorized assignment of its assets or a compromise or arrangement for the benefit of its creditors, makes a proposal to its creditors under the *Bankruptcy and Insolvency Act* (Canada), seeks relief under the *Companies' Creditors Arrangement Act* (Canada), the *Winding Up Act* (Canada) or any other bankruptcy, insolvency or analogous law in Canada or the United States, files a petition or proposal to take advantage of any act of insolvency, consents to or acquiesces in the appointment of a trustee, receiver, receiver and manager, interim receiver, custodian or other person with similar powers over all or any substantial portion of its assets, files a petition or otherwise commences any proceeding seeking any reorganization, arrangement, composition or readjustment under any applicable bankruptcy, insolvency, moratorium, reorganization or other similar law affecting creditor's rights or consents to, or acquiesces in, the filing of such a petition; or if a petition in bankruptcy is filed or presented against the Market Participant or any Guarantor;
- (g) there is instituted by or against the Market Participant or any Guarantor any formal or informal proceeding for the dissolution or liquidation of, settlement of claims against, or winding up of the affairs of, the Market Participant or any Guarantor, or a resolution is passed for dissolution, liquidation or winding up the Market Participant or any Guarantor;
- (h) the Market Participant or any Guarantor ceases or threatens to cease to carry on business or makes or agrees to make a bulk sale of assets or commits or threatens to commit an act of bankruptcy;
- (i) a receiver, receiver and manager or interim receiver is appointed for all or any part of the property, assets or undertaking of the Market Participant or any Guarantor;
- (j) the Market Participant creates or permits to exist any charge, security interest, lien, encumbrance or claim against any of the collateral charged under the Financial Security which ranks or could in any event rank in priority to or pari passu with the Financial Security;
- (k) the holder of any charge, security interest, lien, encumbrance or claim against any of the collateral charged under the Financial Security does anything to enforce or realize on such charge, security interest, lien, encumbrance or claim; or
- (l) with respect to any letter of credit provided to the TFO, if replacement Financial Security is requested and not provided by the Market Participant within two (2) business days due to any of the following events:
  - (i) the issuer of the letter of credit is no longer acceptable to the TFO, at its sole discretion;
  - (ii) the issuer of the letter of credit fails to comply with or perform its obligations under such letter of credit if such failure continues after the lapse of any applicable grace period;
  - (iii) the issuer of such letter of credit disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such letter of credit;
  - (iv) such letter of credit expires or terminates, or ceases to be in full force and effect for the purposes of this Agreement (in either case other than in accordance with its terms) prior to the satisfaction of all obligations of the Market Participant under this Agreement without the written consent of the TFO;

- (v) there are less than twenty (20) business days remaining until expiry of such letter of credit; or
  - (vi) any event analogous to a Material Adverse Change occurs with respect to the issuer of such letter of credit.
- 12. If upon the occurrence of a Cancellation Event the Connection Project is cancelled, the TFO, without limiting or restricting other rights or remedies under contract, at law or in equity:
  - (a) shall:
    - (i) cease to perform any Project Work;
    - (ii) demand immediate payment of all Cancellation Costs; and
    - (iii) if applicable, demand immediate payment under any guarantee granted to the TFO;and
  - (b) may do one or both of the following:
    - (iv) exercise its rights under all or any part of the Financial Security, and any other security in respect of the Connection Project provided by the Market Participant to the TFO under separate construction commitment agreements; and
    - (v) commence such legal actions or proceedings against the Market Participant or its Guarantor as it determines.
- 13. Upon the occurrence of a Cancellation Event the TFO shall use, and shall cause its contractors to use, reasonable commercial efforts to minimize the amount of the Cancellation Costs to the extent within their control.
- 14. The TFO shall at all times maintain accurate accounts, records, invoices and third-party invoices for all Connection Project costs, including all Cancellation Costs, which will be prima facie evidence of the amounts owing to the TFO by the Market Participant.
- 15. The Market Participant shall forthwith, upon demand having been made therefore by the TFO following the occurrence of a Cancellation Event, pay the Cancellation Costs to the TFO. If the Market Participant fails to pay to the TFO the Cancellation Costs upon demand, the TFO shall have all remedies available pursuant to the ISO Tariff and may charge the Market Participant interest calculated at the TFO's bank prime rate plus 6% on all amounts outstanding from the date of demand to the date of payment to the TFO.

### **Representations and Warranties**

- 15. The Market Participant represents and warrants to the TFO as follows:
  - (a) the Market Participant is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization;
  - (b) the Construction Contribution and Financial Security are provided to the TFO free and clear of any and all security interests, mortgages, liens, charges, and encumbrance of any nature;
  - (c) this Agreement has been duly authorized, executed and delivered by the Market Participant and constitutes a legal, valid and binding obligation of the Market Participant, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and

similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and

- (d) the authorization, execution and performance by the Market Participant of this Agreement:
  - (i) does not and will not violate any laws applicable to the Market Participant; and
  - (ii) is not in contravention of its constating documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

16. The TFO represents and warrants to the Market Participant as follows:

- (a) the TFO is duly incorporated or organized, validly existing and in good standing under the laws of its jurisdiction of incorporation or organization;
- (b) this Agreement has been duly authorized, executed and delivered by the TFO and constitutes a legal, valid and binding obligation of the TFO, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and
- (c) the authorization, execution and performance by the TFO of this Agreement:
  - (i) does not and will not violate any laws applicable to the TFO; and
  - (ii) is not in contravention of its constating documents or its by-laws or the provisions of any loan agreement or other agreement to which it is a party or by which it is bound.

### General

17. The Market Participant will pay for the TFO's legal fees (on a solicitor and client basis) and other costs, charges and expenses in respect of the enforcement of this Agreement and the Financial Security by the TFO.

18. In this Agreement:

- (a) any notice or communication required or permitted to be given under this Agreement will be in writing and will be considered to have been duly given if delivered by hand or courier, transmitted by facsimile transmission address or facsimile transmission number, or delivered by e-mail, of each party set out below:
  - (i) if to the Market Participant:
    - 
    - Attention: •
    - Fax No: •
    - E-mail: •
  - (ii) if to the TFO:
    - 
    - Attention: •
    - Fax No: •
    - E-mail: •

- (iii) if to the ISO:

Alberta Electric System Operator  
2500, 330 – 5th Ave SW  
Calgary, Alberta T2P 0L4  
Attention: •  
Fax No: •  
E-mail: •
  - (iv) to such other address or facsimile transmission number as any party may designate by providing notice of the same to all parties.
  - (b) notice or communication will be considered to have been received if delivered by hand or courier during business hours on a business day, upon receipt by a responsible representative of the receiver, and if not delivered during business hours, upon the commencement of business on the next business day, and if sent by facsimile transmission or e-mail during business hours on a business day, upon the sender receiving confirmation of the transmission or e-mail delivery, and if not transmitted during business hours, upon the commencement of business on the next business day.
- 19. This Agreement may not be assigned by the Market Participant without the prior written consent of the TFO.
  - 20. This Agreement may not be assigned by the TFO without the prior written consent of the Market Participant, except that the TFO may assign its interest in this Agreement to the ISO without the consent of the Market Participant.
  - 21. Without prejudice to the Market Participant's obligation to pay Cancellation Costs, nothing in this Agreement is to be construed as an obligation on the part of the Market Participant to proceed with the Connection Project.
  - 22. This Agreement will enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.
  - 23. No failure or delay on the TFO's part in exercising any power or right hereunder will operate as a waiver thereof.
  - 24. The TFO's rights and remedies hereunder are cumulative and not exclusive of any rights or remedies at law or in equity.
  - 25. Time is of the essence of this Agreement and all documents or instruments delivered hereunder.
  - 26. If at any time any one or more of the provisions hereof is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions hereof will not in any way be affected or impaired thereby to the fullest extent possible by law.
  - 27. This Agreement will be governed by and interpreted in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein. The Market Participant and the TFO submit to the nonexclusive jurisdiction of the Courts of the Province of Alberta and agree to be bound by any suit, action or proceeding commenced in such Courts and by any order or judgment resulting from such suit, action or proceeding, but the foregoing will in no way limit the right of the TFO to commence suits, actions or proceedings based on this Agreement in any jurisdiction it may deem appropriate.
  - 28. This Agreement may be varied or amended only by or pursuant to an agreement in writing signed by the parties hereto.

29. All Schedules attached hereto will be deemed fully a part of this Agreement. The Schedules may be varied or amended provided such amendments are signed by the parties hereto, as provided in the Schedules.
30. This Agreement may be signed in one or more counterparts, originally or by facsimile, each such counterpart taken together will form one and the same agreement.

**THE TFO AND THE MARKET PARTICIPANT** have executed this Agreement as of the Effective Date:

**INSERT FULL NAME OF TFO**

**INSERT FULL NAME OF MARKET  
PARTICIPANT**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name (print): \_\_\_\_\_

Name (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

## SCHEDULE “A”

To the Construction Commitment Agreement

Between

**[Insert Name of Legal Owner of the Transmission Facility],**  
a corporation incorporated under the  
laws of the Province of Alberta (hereinafter referred to as the “TFO”)

– and –

**[Insert name of Market Participant],**  
a corporation incorporated under the  
laws of the Province of • (hereinafter referred to as the “Market Participant”)

## PROJECT WORK AND FINANCIAL OBLIGATION

For Connection Project **[insert project name]**

**[Author: If this is a replacement Schedule “A” keep the following language:**

The TFO and Market Participant have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained herein.

In consideration of the premises hereto, the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto), the parties hereby agree to amend this Schedule “A” as provided below.

Effective as of the latest date of signature stated below, and upon execution of this amended Schedule “A”, the Schedule “A” effective on **[insert date]** is deleted in its entirety and replaced with this Schedule “A”.]

This Schedule “A” describes the Project Work to be performed by the TFO for the Connection Project. The Project Work as referenced in the Construction Commitment Agreement includes the following:

**[Insert amounts next to applicable selections]**

Project Work	Estimated Costs	Date of Issue
Stages 1 and 2 Activities: preparation and support for connection proposal, including connection study scope, technical studies, order-of-magnitude cost estimates, and project management <b>[add description of any additional work]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 3 and 4 Activities: preparation and support for submission and approval of a proposal to provide service (PPS), participant involvement program (PIP) and facilities application (FA) <b>[add description of any additional work]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	

Project Work	Estimated Costs	Date of Issue
Stages 5 and 6 Costs: Construction Costs – Step 1 <b>[add description of any additional work]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 5 and 6 Costs: Construction Costs – Step 2 <b>[add description of any additional work]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 5 and 6 Costs: Construction Costs – Step 3 <b>[add description of any additional work]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
<b>[Additional construction steps as required]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
<b>[Additional detail for any stages as required]</b>	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Total Costs as of <b>[Insert Date]</b>		

Provided the TFO has confirmed to the ISO that the Market Participant has delivered the Financial Obligation for the Project Work to the TFO, and provided that the Cancellation Costs for the Project Work not exceed **Insert Connection Project total in words** Canadian dollars plus GST (CDN \$ **Connection Project total in numbers** + GST), the ISO will direct the TFO to proceed with Project Work issued prior to permit and licence being granted by the Commission.

The required Construction Contribution, if any, is set out on Schedule “B”.

**IN WITNESS WHEREOF**, the parties acknowledge that they have read this amended Schedule “A”, understand it, and agree to be bound by it and have caused it to be executed by their duly authorized representatives effective as of the latest date of signature stated below.

**[INSERT FULL NAME OF TFO]**

**[INSERT FULL NAME OF MARKET PARTICIPANT]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name (print): \_\_\_\_\_

Name (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## SCHEDULE “B”

To the Construction Commitment Agreement

Between

**[Insert Name of Legal Owner of the Transmission Facility],**  
a corporation incorporated under the  
laws of the Province of Alberta (hereinafter referred to as the “TFO”)

– and –

**[Insert name of Market Participant],**  
a corporation incorporated under the  
laws of the Province of • (hereinafter referred to as the “Market Participant”)

### CONSTRUCTION CONTRIBUTION AND FINANCIAL SECURITY

For Connection Project **[insert project name]**

**[Author: If this is a replacement Schedule “B” keep the following language:**

The TFO and Market Participant have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained herein.

In consideration of the premises hereto, the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto), the parties hereby agree to amend this Schedule “B” as provided below.

Effective as of the latest date of signature stated below, and upon execution of this amended Schedule “B”, the Schedule “B” effective on **[insert date]** is deleted in its entirety and replaced with this Schedule “B”.]

This Schedule “B” describes the Construction Contribution and Financial Security to be provided to the TFO as of **[Insert Current Date]**. The Construction Contribution and Financial Security as referenced in the Construction Commitment Agreement includes the following:

1. Pursuant to subsection 3 of section 5 of the ISO Tariff, a legal owner of an electric distribution system that is regulated by the Commission is not required to provide Financial Security up to the maximum local investment.
2. Upon execution of the Construction Commitment Agreement, the Market Participant shall provide to the TFO one or more of the following as determined in accordance with section 5 of the ISO Tariff:
  - (a) Construction Contribution (cash payment) in the amount of **Amount in words** Canadian dollars plus GST (CDN \$ **Amount in numbers** + GST); and
  - (b) Financial Security in one or more of the following forms:
    - (i) an unconditional and irrevocable standby letter of credit payable on demand to the TFO and issued from a Canadian chartered bank or other comparable financial institution acceptable to the TFO in the amount of **Amount in words** Canadian dollars plus GST (CDN \$ **Amount in numbers** + GST);

- (ii) a cash collateral deposit able to be registered as a first security interest held by the TFO in the amount of Amount in words Canadian dollars plus GST (CDN \$ Amount in numbers + GST); or
- (iii) alternative financial security in a form, substance and amount determined at the sole discretion of the TFO.

3. The Market Participant shall execute and if applicable, cause to have executed all security agreements and documentation in form and substance required from time to time by the TFO in its sole absolute discretion.

**IN WITNESS WHEREOF**, the parties acknowledge that they have read this amended Schedule “B”, understand it, and agree to be bound by it and have caused it to be executed by their duly authorized representatives effective as of the latest date of signature stated below.

**[INSERT FULL NAME OF TFO]**

**[INSERT FULL NAME OF MARKET PARTICIPANT]**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name (print): \_\_\_\_\_

Name (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

Title (print): \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**PROCEDURE FOR FORESEEABLE TRANSMISSION MUST-RUN SERVICE**

**1** This appendix shall come into force upon the approval of the *Settlement Agreement* by the Alberta Energy and Utilities Board and remain in force until replaced or revised through the creation of an **ISO rule** following reasonable efforts by all parties hereto to develop same.

**2** The **ISO** shall issue an expression of interest inviting eligible **market participants** to express interest in contracting with the **ISO** for the supply of transmission must-run service, where an existing contract is not in effect. (Reference #1 in below diagram)

**3** Based on **market participant** response to the expression of interest, the **ISO** shall fairly and reasonably determine if the expression of interest is contestable (Reference #2 in below diagram). The advice and direction of the **Market Surveillance Administrator** will be sought in all such matters and, should the subsequent determination be disputed the issue of whether the expression of interest is contestable may be determined by the **Commission**. (Reference #4 in below diagram)

**4** Upon determination by the **ISO** that the expression of interest is contestable a request for proposal shall be issued by the **ISO** (Reference #3 in below diagram). The **ISO** shall fairly and reasonably determine if the request for proposal is contestable, again after seeking the advice and direction of the **Market Surveillance Administrator**. (Reference #5 in below diagram)

**5** If either of the expression of interest or request for proposal is deemed by the **ISO** not to be contestable the **ISO** shall issue written reasons in that regard and a bilateral negotiation process shall commence. The bilateral negotiation process:

- (a) shall be subject to the maximum transmission must-run price specified by subsection 7 of section 11 of the **ISO tariff**,
- (b) may include all **market participants** who are effective providers of the required transmission must-run service, although preference will be given to those who responded to the expression of interest or request for proposal, and
- (c) shall not be limited by the pricing provisions of subsection 6 of section 11 of the **ISO tariff** in respect of unforeseeable transmission must-run service.

(Reference #6 in below diagram)

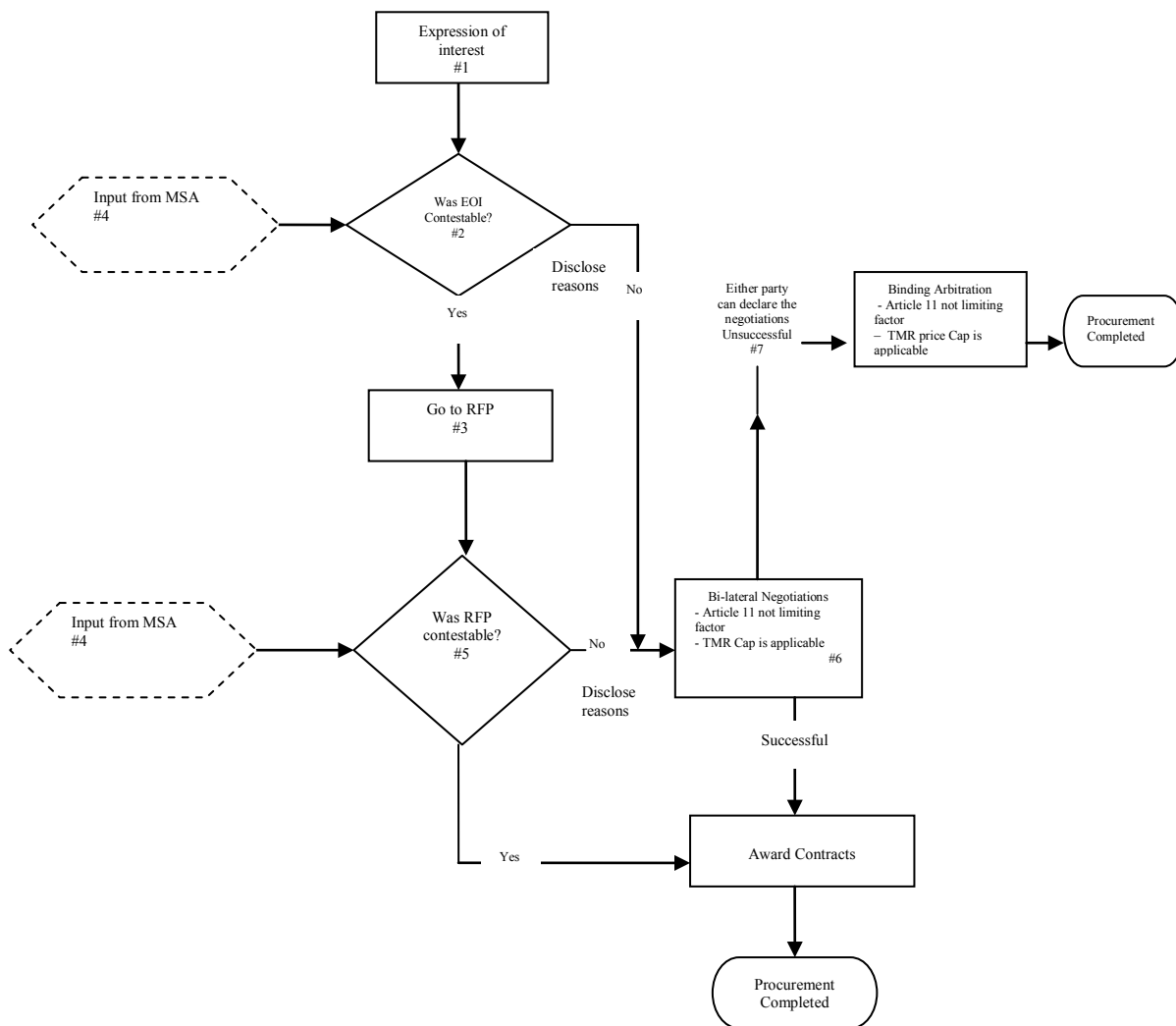
**6** Any party to the bilateral negotiation process may declare it unsuccessful after thirty (30) **days**, at which time a binding arbitration process shall commence between the **ISO** and the **market participant** (Reference #7 in below diagram). In circumstances where multiple **market participants** may provide transmission must-run services to the **ISO**, the **ISO** shall act fairly and reasonably in its selection as to the party that is subject to binding arbitration. The binding arbitration process shall:

- (a) be subject to the maximum transmission must-run price specified by subsection 7 of section 11 of the **ISO tariff**, and
- (b) not be limited by the pricing provisions of subsection 6 of section 11 of the **ISO tariff** in respect of unforeseeable transmission must-run service.

(Reference #8 in below diagram)

**7** The binding arbitration process shall employ the dispute resolution process established under section 103.2 of the **ISO rules** and proceed directly to arbitration as per section 103.2 of the **ISO rules**. Any arbitrator appointed pursuant to that dispute resolution process shall have an expert understanding and knowledge of the Alberta electricity marketplace. (Reference #8 in below diagram)

### PROCEDURE FOR FORESEEABLE TRANSMISSION MUST-RUN SERVICE DIAGRAM



### Revision History

Effective	Description
2011-07-01	Revised and reformatted all subsections, as approved in <b>Commission</b> Decision 2011-275 issued on June 24, 2011.