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ISO Tariff – Rate DTS Demand Transmission Service



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 Settlement Period	Charge
Bulk System Charge	
(a) Coincident metered demand	\$9,038.00/MW/month
(b) Metered energy	\$1.01/MWh
Regional System Charge	
(c) Billing capacity	\$2,701.00/MW/month
(d) Metered energy	\$0.81/MWh
Point of Delivery Charge	
(e) Substation fraction	\$10,120.00/month
(f) First ($7.5 \times$ substation fraction) MW of billing capacity	\$4,108.00/MW/month
(g) Next ($9.5 \times$ substation fraction) MW of billing capacity	\$2,572.00/MW/month
(h) Next ($23 \times$ substation fraction) MW of billing capacity	\$1,799.00/MW/month
(i) All remaining MW of billing capacity	\$1,162.00/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 6.44%.

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 \$0.09/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 \$46.00/MW/month; and
- (b) when **power factor** is less than 90% during the interval of highest **metered demand** in the **settlement period**, \$1,200.00/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
2019-XX-01	Updated charges, and revised Other System Support Services Charge as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-11-26	Updated subsections and charges, as approved in Commission Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2013 and on a final basis in Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate FTS Fort Nelson Demand Transmission Service

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 Settlement Period	Charge
Bulk System Charge	
(a) Coincident metered demand	\$9,038.00/MW/month
(b) Metered energy	\$1.01/MWh
Regional System Charge	
(c) Billing capacity	\$2,701.00/MW/month
(d) Metered energy	\$0.81/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 6.44%.

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 \$0.09/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 \$46.00/MW/month; and
- (b) when **power factor** is less than 90% during the interval of highest **metered demand** in the **settlement period**, \$1,200.00/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 of 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
2019-XX-01	Updated charges and revised Other System Support Services Charge as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-11-26	Updated subsections and charges, as approved in Commission Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2013 and on a final basis in Commission Decision 2014-242 issued on August 21, 2014
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate DOS Demand Opportunity Service

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 Directive Response Time	Recall Priority
(a) DOS 7 Minutes	\$4.56/MWh	7 minutes	Before Rates DTS, FTS, DOS Term and DOS 1 Hour
(b) DOS 1 Hour	\$15.22/MWh	1 hour	Before Rates DTS, FTS and DOS Term
(c) DOS Term	\$101.96/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), (b), or (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
2019-XX-01	Updated charges as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission 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 Commission Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2014 and on a final basis, in Commission Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 3(2) approved on an interim basis in Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate XOS Export Opportunity Service



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 Directive Response Time	Recall Priority
XOS	\$6.96/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) 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 the 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
2019-XX-01	Updated charges as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission 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 Commission Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2014 and on a final basis, in Commission Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 3(2) approved on an interim basis in Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate XOM

Export Opportunity Merchant Service

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 Directive Response Time	Recall Priority
XOM	\$6.96/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
2019-XX-01	Updated charges as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Introduced for export service over Alberta-Montana intertie , as approved on interim refundable basis in Commission Decision 2013-325 issued on August 28, 2013.

ISO Tariff – Rate UFLS Demand Underfrequency Load Shedding Credits

Applicability

1 Rate UFLS of the **ISO tariff**, *Demand Underfrequency Load Shedding Credits*, 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*; 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(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.

2(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.

2(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**.

3(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

Relay Trip Setting	Credit Level (\$/MW of Rate UFLS Capacity/month)
58.3 Hz	\$45.00
58.1 Hz	\$40.00
58.0 Hz	\$35.00

Effect of Non-Compliance

4 The **ISO** may limit, reduce, suspend, 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**.

5(2) The terms and conditions of the **ISO tariff** form part of this rate.

Revision History

Effective	Description
2019-XX-01	Revised effect of non-compliance as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate PSC Primary Service Credit



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 Settlement Period	Credit
(a) Substation fraction	\$7,995.00/month
(b) First (7.5 × substation fraction) MW of billing capacity	\$3,245.00/MW/month
(c) Next (9.5 × substation fraction) MW of billing capacity	\$2,032.00/MW/month
(d) Next (23 × substation fraction) MW of billing capacity	\$1,421.00/MW/month
(e) All remaining MW of billing capacity	\$1,162.00/MW/month

Terms

3(1) The **ISO** must apply Rate PSC separately at each **point of delivery**, except where Rate PSC applies to totaled **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
2019-XX-01	Updated credit levels and revised terms, as applied for in the amended 2018 ISO tariff application. Revised terms approved on an interim basis in Commission Decision 22942-D01-2017 until approved as final at the conclusion of the 2018 ISO tariff proceeding.
2018-01-01	Updated credit levels, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017 and revised terms as approved on an interim basis in Commission Decision 22942-D01-2017.
2017-01-01	Updated credit levels, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated credit levels, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated credit levels, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and credit levels, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate STS Supply Transmission Service



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 \$75.00/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
2019-XX-01	Updated charges and revised applicability as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission 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 Commission Decision 2014-242 issued on August 21, 2014.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2014 and on a final basis, in Commission Decision 2014-242 issued on August 21, 2014 except for the losses charge component in subsection 2(1) approved on an interim basis in Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rate IOS Import Opportunity Service



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 the 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

- 3(1)** The **ISO** must apply Rate IOS separately at each **point of interconnection**.
- 3(2)** A **market participant** must achieve curtailment of its import opportunity service within 1 hour in response to a **directive** from the **ISO**.
- 3(3)** The **ISO** must apply Rider E of the **ISO tariff**, *Losses Calibration Factor 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
2019-XX-01	Updated reference for Rule 501.10 as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections and charges, as approved in Commission 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 Commission 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 Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission 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 Dow Chemical Canada Inc. (Dow) 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) For each metering time interval, the **metered demand** and **metered energy** for certain **points of delivery** and **points of supply** associated with Dow's facility, as more particularly described in Board Decision U98125, will be totaled for the purpose of settlement under Rate DTS of the **ISO tariff**, *Demand Transmission Service*, and Rate STS of the **ISO tariff**, *Supply Transmission Service*, as described in subsections 4 and 5 below.

2(2) Dow must make the following payments to the **ISO**:

- (a) Capital Charge: A lump-sum payment of \$5,071,038 collected upon implementation of this rider, and which Dow paid in full by December 31, 1998;
- (b) Losses and Other Expenses Charge: For each **settlement period**, commencing on January 1, 2022, an amount equal to the "Monthly Payment" in subsection 6 below for the applicable year.

Terms

3(1) All terms in the **ISO's** July 24, 1998 Application for Transmission Bypass Avoidance Rate Dow Transmission Bypass will be applicable.

3(2) Rider A1 expires on December 31, 2041, the date at which the physical bypass option, had it been constructed, would have reached its end of life.

Metering and Totalizing

4(1) Had Dow built the duplicate facilities, the Dow Chemical (166S) transmission substation would be a **point of supply** when the Dow 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 Dow Hydro Carbons (258S), Dow Chemical (166S) and Ross Creek (906S) transmission substations, and the **points of supply** at the Dow Gen (218S) and Dow Hydro Carbons (258S) transmission substations, 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.

4(2) During operation of the duplication avoidance tariff, the **ISO** will totalize the metered data for Dow's load and generation served from the Dow Hydro Carbons (258S), Dow Chemical (166S), Ross Creek (906S) and Dow Co-Gen (218S) transmission substations. This will ensure that payments by Dow to the **ISO** under Rate DTS and Rate STS are equivalent to the costs Dow would have incurred for the duplicate facilities.

4(3) Charges under Rate DTS and Rate STS will be calculated using the totalized **metered demand** and the totalized **metered energy** for Dow at the Dow Hydro Carbons (258S), Dow Chemical (166S), Ross Creek (906S) and Dow Co-Gen (218S) transmission substations. The meters to be totalized at Dow Hydro Carbons (258S) are 258S, T1 and T2. The meters to be totalized at Dow Chemical (166S) are 166S, T1, T2, T3A and T3B. The meters to be totalized at Ross Creek (906S) are 906S, T1 and T3. The meters to be totalized at Dow Co-Gen (218S) are 218S, TR1 and TR2. These **meter** points may change from time to time.

Example of Totalizing

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

	Time Interval 1	Time Interval 2
Point of delivery (A) (Dow Hydro Carbons (258S))	+25 MW	+30 MW
Point of supply and point of delivery (B) (Dow Chemical (166S))	–45 MW	0 MW
Point of delivery (C) (Ross Creek (906S))	+35 MW	+30 MW
Point of supply (D) (Dow Cogen (218S))	–100 MW	0 MW
Totalized metered demand (E)	–85 MW	+60 MW

5(2) In time interval 1, under the duplication avoidance tariff, Dow's **demand** requirement is 25 MW at Dow Hydro Carbons (258S) and 35 MW at Ross Creek (906S) transmission substations. At the same time, Dow cogeneration facilities are producing 145 MW of power, 45 MW at Dow Chemical (166S) and 100 MW at Dow Cogen (218S). The net delivery to the **interconnected electric system** is 85 MW at the Dow Chemical (166S) and Dow Cogen (218S) transmission substations. Had Dow built the duplicate facilities, the **metered energy** delivered by the **interconnected electric system** to Dow requirement at the Dow Chemical (166S) transmission substation would be zero, and the **metered energy** received by the **interconnected electric system** from the generator output at the Dow Chemical (166S) and Dow Cogen (218S) transmission substations would be 85 MW (145 MW of generation minus 60 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 –85 MW, where the negative sign signifies a net energy receipt by the **interconnected electric system**.

5(3) In time interval 2, the cogeneration facility is not operating and Dow's load remains at 60 MW (30 MW at the Dow Hydro Carbons (258S) transmission substation, and 30 MW at the Ross Creek (906S) transmission substation). The result is a net load of +60 MW for that time interval, where the positive sign signifies a net energy delivery from the **interconnected electric system**.

Schedule 1 — Losses and Other Expenses Charge

6	12-Month Period	Monthly Payment
	Jan. 1, 2022 – Dec. 31, 2022	\$ 3,018
	Jan. 1, 2023 – Dec. 31, 2023	\$ 3,082
	Jan. 1, 2024 – Dec. 31, 2024	\$ 3,145
	Jan. 1, 2025 – Dec. 31, 2025	\$ 3,208
	Jan. 1, 2026 – Dec. 31, 2026	\$ 3,273
	Jan. 1, 2027 – Dec. 31, 2027	\$ 3,339
	Jan. 1, 2028 – Dec. 31, 2028	\$ 3,408
	Jan. 1, 2029 – Dec. 31, 2029	\$ 3,476
	Jan. 1, 2030 – Dec. 31, 2030	\$ 3,545
	Jan. 1, 2031 – Dec. 31, 2031	\$ 3,616
	Jan. 1, 2032 – Dec. 31, 2032	\$ 3,688
	Jan. 1, 2033 – Dec. 31, 2033	\$ 3,763
	Jan. 1, 2034 – Dec. 31, 2034	\$ 3,839
	Jan. 1, 2035 – Dec. 31, 2035	\$ 3,916
	Jan. 1, 2036 – Dec. 31, 2036	\$ 3,996
	Jan. 1, 2037 – Dec. 31, 2037	\$ 4,078
	Jan. 1, 2038 – Dec. 31, 2038	\$ 4,161
	Jan. 1, 2039 – Dec. 31, 2039	\$ 4,246
	Jan. 1, 2040 – Dec. 31, 2040	\$ 4,332
	Jan. 1, 2041– Dec. 31, 2041	\$ 4,421

Revision History

Effective	Description
2019-XX-01	Revised and reformatted all subsections, and new proposed forecast benefit table to 2041 as applied for in the amended 2018 ISO tariff application.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rider A2

Transmission Duplication Avoidance Adjustment

NOVA Chemicals Corporation – Joffre Industrial System



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, of the **ISO tariff, Demand Transmission Service**, and Rate STS of the **ISO tariff, Supply Transmission Service**, 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(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.

4(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.

4(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(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 point of delivery (A)	+65 MW	+130 MW
535S point of supply (B) (cogeneration facility)	–365 MW	0 MW
Totalized metered demand and metered energy (C)	–300 MW	+130 MW

5(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**.

5(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

12-Month Period	Monthly Payment
Jan. 1, 2017 – Dec. 31, 2017	\$ 2,151
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 Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rider A3

Transmission Duplication Avoidance Adjustment

Shell Canada Corporation – Scotford Industrial System



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(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.

2(3) Shell Canada will receive a primary service credit in respect of the duplicate facilities as is provided to other Rate DTS of the **ISO tariff**, *Demand Transmission Service*, 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 24 years of the term of the Duplication Avoidance Tariff. At the end of 24 years, the undepreciated value would be zero. The termination notice period, for both the **ISO** and Shell Canada, will be 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.

4(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.

4(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(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.

4(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 point of delivery (A)	+60 MW	+60 MW
409S point of supply and point of delivery (B)	-70 MW	+20 MW
Totalized metered demand and metered energy (C)	-10 MW	+80 MW

5(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**.

5(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

12-Month Period	Monthly Payment
Jan. 1, 2005 – Dec. 31, 2005	\$ 1,669
Jan. 1, 2006 – Dec. 31, 2006	\$ 1,820
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

12-Month Period	Monthly Payment
Jan. 1, 2033 – Dec. 31, 2033	\$ 7,777
Jan. 1, 2034 – Dec. 31, 2034	\$ 2,479
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 Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rider A4

Transmission Duplication Avoidance Adjustment

Imperial Oil Resources Limited – Cold Lake Industrial System



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 of the **ISO tariff, Demand Transmission Service**, and Rate STS of the **ISO tariff, Supply Transmission Service**, as described in subsections 4 and 5 below.

2(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.

4(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.

4(3) Charges under Rate DTS and Rate STS will be calculated using the totalized **metered demand** and the totalized **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(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
Point of delivery (A) (Mahikan)	+45 MW	+45 MW
Point of supply and point of delivery (B) (Leming Lake)	–100 MW	+60 MW
Totalized metered demand and metered energy (C)	–55 MW	+105 MW

5(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**.

5(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

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

7

12-Month Period	Monthly Payment
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

12-Month Period	Monthly Payment
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
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 Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rider C

Deferral Account Adjustment Rider



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(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.

2(3) The **ISO** must publish the Rider C charge or credit, including its calculation, on the **ISO** website at least 30 **days** prior to the beginning of the calendar quarter in which it will apply.

2(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.

2(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**.

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

Revision History

Effective	Description
2019-XX-01	Updated subsections, as approved on an interim basis in Commission Decision 22942-D01-2017 issued on November 28, 2017 until approved as final at the conclusion of the 2018 ISO tariff proceeding.
2018-01-01	Updated subsections, as approved on an interim basis in Commission Decision 22942-D01-2017 issued on November 28, 2017.
2015-11-26	Updated subsections, as approved in Commission Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Rider E Losses Calibration Factor Rider

Applicability

1(1) Rider E of the **ISO tariff**, *Losses Calibration Factor Rider*, applies to **system access service** provided under:

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

1(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(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.

2(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.

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

ISO Tariff – Rider F Balancing Pool Consumer Allocation Rider

Applicability

1(1) Rider F of the **ISO tariff**, *Balancing Pool Consumer Allocation Rider*, applies to **system access service** provided under:

- (a) Rate DTS of the **ISO tariff**, *Demand Transmission Service*; and
- (b) Rate DOS of the **ISO tariff**, *Demand Opportunity Service*.

1(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.

1(3) Rider F applies in all **settlement periods** from January 1, 2018 to December 31, 2018.

Rider

2(1) The **ISO** must determine Rider F as a charge of \$3.10/MWh of **metered energy** during the **settlement period**.

2(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
2018-01-01	Updated to reflect \$3.10/MWh charge for 2018 consumption, as approved in Commission 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 Commission 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 Commission 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 Commission Decision 2014-317 issued on November 13, 2014.
2014-01-01	Updated to reflect \$5.50/MWh credit for 2014 consumption, as approved in Commission Decision 2013-425 issued on November 28, 2013.
2013-01-01	Updated to reflect \$5.50/MWh credit for 2013 consumption, as approved in Commission Decision 2012-306 issued on November 14, 2012.
2012-01-01	Updated to reflect \$5.50/MWh credit for 2012 consumption, as approved in Commission Decision 2011-476 issued on December 14, 2011.
2011-07-01	Revised and reformatted all subsections, as approved in Commission 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 \$0.09/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
2018-01-01	Updated to \$0.09/MWh charge, as approved in Commission 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 Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated to \$0.05/MWh charge, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated to \$0.06/MWh charge, as approved in Commission 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 Commission Decision 2014-330 issued on December 3, 2014 and on a final basis in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 1

Applicability and Interpretation of ISO Tariff

Applicability

1.1(1) A **market participant** who has requested or is receiving **system access service** from the **ISO** agrees to be bound by the **ISO tariff**.

1.1(2) Both the **ISO** and a **market participant** are bound by and have the rights and obligations defined in the **ISO tariff** with respect to **system access service** that the **ISO** provides, including rates, riders, terms and conditions and appendices.

1.1(3) A rate, rider, section of the terms and conditions or appendix in the **ISO tariff** is effective as of the date provided in the revision history of the rate, rider, section of the terms and conditions or appendix, as applicable.

1.1(4) A rate, rider, section of the terms and conditions or appendix of the **ISO tariff** remains in effect until the **Commission** approves its replacement or amendment.

Conflict

1.2(1) In the event of a 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.

1.2(2) In the event of a conflict between a provision of the **ISO tariff** and a provision of an agreement for **system access service**, the provision of the **ISO tariff** governs the specific provision in conflict without affecting or impairing the remaining sections of the agreement for **system access service**.

Interpretation

1.3 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) the provisions of the **ISO tariff** will be construed as always speaking and will be applied to circumstances as they arise;
- (d) the use of the word “including” is not to be construed as being restrictive;
- (e) “may” is to be construed as permissive and empowering and “must”, “shall” and “will” are to be construed as imperative;
- (f) words and phrases in bold type have the meanings given to them in the definitions found in the *Consolidated Authoritative Documents Glossary*; and
- (g) titles of documents are in italics.

Reasonable Exercise of Discretion

1.4 The **ISO** and a **market participant** who has requested or is receiving **system access service** must act reasonably in exercising any discretion available to them under the **ISO tariff**.

Dispute Resolution

1.5 A **market participant** 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*.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 2 Provision of System Access Service

Applicability

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

Provision of Service

2.2(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 2.2(3) and 2.3 through 2.12 below.

2.2(2) The **ISO** must provide **system access service** up to the **contract capacity** of the **market participant**.

2.2(3) The **ISO** may limit, reduce or interrupt **system access service** in accordance with any **ISO rule**, or due to abnormal operating conditions, which include 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**.

Capacity Limitations

2.3 A **market participant** receiving **system access service** under Rate DTS, *Demand Transmission Service*, or Rate STS, *Supply Transmission Service*, must ensure that **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.

Withholding Service

2.4(1) The **ISO** may limit, reduce, suspend, withhold or terminate **system access service** if a **market participant** fails to comply with the **ISO rules**, **reliability standards**, or the **ISO tariff**.

2.4(2) The **ISO** must provide a written explanation for a decision to limit, reduce, suspend, withhold or terminate **system access service**, based on a finding of non-compliance pursuant to subsection 2.4(1) above, to an affected **market participant** who submits a written request to the **ISO** for those details.

Service Not Guaranteed

2.5(1) The **ISO** must take reasonable precautions to guard against **system access service** limitations, reductions and interruptions, but does not guarantee uninterrupted **system access service**.

2.5(2) Interruptions may be caused by events including:

- (a) scheduled or planned facility maintenance activities;
- (b) construction, **commissioning** and facility testing activities;
- (c) activation of a **remedial action scheme**;
- (d) unscheduled or unplanned **emergency** equipment maintenance or other **emergencies**;
- (e) events of **force majeure**;

- (f) breaches of obligations owed to the **ISO** by its suppliers or **market participants**; or
- (g) as otherwise expressly allowed by a rate or rider in the **ISO tariff**.

2.5(3) If a **market participant** accepts a tapped transmission line configuration, being a transmission line with 3 or more terminals where 2 or more terminals are system sources, for **system access service**, the **market participant** acknowledges and accepts that the tapped transmission line configuration may, compared to other configurations, result in more frequent interruptions and less **outage** coordination flexibility related to abnormal operating conditions, including instances where **transmission facilities** are out of service, **emergency** conditions exist, construction or **commissioning** of **transmission facilities** occurs, and **transmission facility** maintenance cannot be coordinated with **planned outages** of a **generating unit** or an **aggregated generating facility**.

2.5(4) The **ISO** must make reasonable efforts to restore **system access service** as soon as practicable after a limitation, reduction or interruption, unless the limitation, reduction or interruption is due to the **market participant** failing to comply with the **ISO rules**, **reliability standards** or the **ISO tariff**.

Interruptions for Construction, Commissioning and Facility Testing

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

Market Participant's Continuing Financial Obligations

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

Technical Requirements and Functional Specifications

2.8(1) A **market participant** receiving **system access service** must comply with a technical requirement or functional specification of the **ISO** that applies to the connection of the **market participant's** facility to the **interconnected electric system**.

2.8(2) The **ISO** must post a technical requirement referred to under subsection 2.8(1) above on the AESO website.

2.8(3) The **ISO** may limit, reduce, suspend, withhold or terminate the **system access service** being provided to a **market participant** for failure to comply with a technical requirement or functional specification referred to under subsection 2.8(1) above.

2.8(4) The **ISO** may waive compliance with a technical requirement referred to under subsection 2.8(1) above if the **ISO** determines that non-compliance would not have a material effect on **reliability**.

Facilities Owned by a Market Participant

2.9(1) 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 **market participant's** connection;
- (b) changes to the **ISO rules**, **reliability standards**, functional specification or technical requirements that apply to the connection, subject to subsection 2.9(2) below, or

- (c) additional studies needed to ensure compliance with changes to the **ISO rules**, **reliability standards** or technical requirements.

2.9(2) 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 if 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

2.10 A **market participant** must not rearrange, disconnect, remove, connect with or otherwise interfere with a **transmission facility** unless the **ISO's** prior written consent is obtained.

System Access Information

2.11(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 an external agency's reporting requirements.

2.11(2) The **ISO** must specify the information the **market participant** must provide under subsection 2.11(1) above, which may include:

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

Effect of Non-Compliance

2.12(1) The **ISO** may, if a **market participant** fails to provide information that may affect safety or **reliability**:

- (a) withhold the **market participant's system access service** until the **market participant** provides the information to the **ISO**; or
- (b) limit, reduce, suspend, withhold or terminate the **market participant's System Access Service Agreement**.

2.12(2) The **ISO** is not responsible for any delay, interruption, damage or other problems affecting a **market participant's system access service** caused by a delay in the provision of information required from the **market participant** under subsection 2.11(1), above.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 3 System Access Service Requests



Applicability

3.1(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*.

Applying for System Access Service or Change to an Existing System Access Service

3.2(1) A **market participant** wishing to receive a new **system access service** or change an existing **system access service** must submit a request for **system access service** to the **ISO**, in the form specified by the **ISO** on the AESO website.

3.2(2) A **market participant** must provide the following critical information, as part of its request under subsection 3.2(1) above:

- (a) if the **market participant** is not the **legal owner** of an **electric distribution system**:
 - (i) the requested **contract capacity** or requested change in **contract capacity** by generation, load, or combination of both, including **contract capacity** by stage if applicable; and
 - (ii) the **maximum capability** of each **generating unit** or **aggregated generating facility** by feeder;
- (b) if the **market participant** is the **legal owner** of an **electric distribution system**:
 - (i) the requested Rate STS **contract capacity** or requested change in Rate STS **contract capacity**, including **contract capacity** by stage if applicable, as assessed by feeder by taking the sum of the **maximum capability** of a **generating unit** or **aggregated generating facility** that will be connected at each feeder to the **transmission system**, less the minimum feeder load level;
 - (ii) the **maximum capability** of each **generating unit** or **aggregated generating facility** by feeder, connected to the **electric distribution system**; and
 - (iii) the requested Rate DTS **contract capacity** or requested change in Rate DTS **contract capacity**, including **contract capacity** by stage, if applicable, using the expected coincident sum of the flows from each feeder connected to the **transmission system**;
- (c) generation type(s) in the case of a **generating unit** or **aggregated generating facility**;
- (d) in-service date, including the dates relating to any staged **contract capacity** request;

- (e) location of the load or generation related to the request of the **market participant**; and
- (f) if load and generation related to the request of the **market participant** are or will be located with the **market participant**'s existing industrial complex or other facility, whether the load and generation will be metered on a gross or net basis.

3.2(3) In addition to the critical information set out in subsection 3.2(2) above, the **ISO** may establish additional critical information as part of the **ISO**'s connection process and a **market participant** must provide any additional critical information that exists at the time the **market participant** makes a **system access service** request.

3.2(4) If a **market participant** requesting **system access service** is the **legal owner** of an **electric distribution system** and its **system access service** request contemplates a load transfer from one **point of delivery** to another **point of delivery**, or is related to another **system access service**, then the **market participant** must include the following additional critical information as part of its **system access service** request:

- (a) a list of the related **system access service** request(s);
- (b) the amount of any load transfer from one **point of delivery** to another **point of delivery**;
- (c) all distribution and transmission connection alternatives, or combinations of both, that have been considered by the **legal owner** of the **electric distribution system**;
- (d) the larger geographical area considered, including any **point of delivery** or **point of supply** in the area;
- (e) a complete description of why the **system access service** request is necessary; and
- (f) any other information that the **ISO** determines to be relevant.

3.2(5) 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 point of connection, unless the **market participant** is requesting or currently receiving **system access service** under both Rate DTS, *Demand Transmission Service*, and under Rate STS, *Supply Transmission Service*, at a single **point of connection**.

Review of System Access Service Request

3.3(1) The **ISO** may, at any point in the **ISO**'s connection process, reject a **system access service** request submitted to the **ISO** under subsection 3.2 above if the **ISO** determines the request to be incomplete.

3.3(2) If the **ISO** determines a **system access service** request under subsection 3.2 above to be complete, then the **ISO** must determine whether the construction of **transmission facilities** is required to respond to the request.

3.3(3) If the construction of **transmission facilities** is required under subsection 3.3(2) above, then the **market participant** must follow the connection process described on the AESO's website and pay a **construction contribution** in accordance with section 4, of the **ISO tariff**, *Classification and Allocation of Connection Projects Costs*.

3.3(4) If the construction of **transmission facilities** is not required under subsection 3.3(2) above, then the **market participant** must follow the contract change process. The **ISO** must prepare an amendment to the **market participant's System Access Service Agreement** substantially in the form included in Appendix B of the **ISO tariff, System Access Service Agreement Proformas**, and may require an adjustment to the **construction contribution** in accordance with section 5 of the **ISO tariff, Changes to System Access Service**.

ISO Preferred Alternative

3.4(1) If the construction of **transmission facilities** is required for a connection project, the **ISO** must determine how to respond to the **system access service** request, and select the **ISO's** preferred connection alternative taking into account relevant factors including the following:

- (a) the overall long-term cost of a connection alternative, including, as applicable:
 - (i) if the **system access service** request was submitted by the **legal owner** of an **electric distribution system**, all distribution costs;
 - (ii) costs classified as participant-related in accordance with subsection 4.2(2) of the **ISO tariff, Classification and Allocation of Connection Projects Costs**;
 - (iii) costs associated with system **transmission facilities**, being **transmission facilities** that the **ISO** determines will benefit many **market participants**, identified in subsections 3.4(1)(b) and (c) below; and
 - (iv) all other transmission costs (including the costs of any non-wires solutions) not included in subsections 3.4(1)(a)(i), (ii) and (iii) above required for the connection;
- (b) if the **system access service** request is for Rate DTS, the effect of a connection alternative on the **transmission system**, including all transmission constraints, under Category A and Category B conditions as described in **reliability standards**, as a result of the connection alternative, and the system **transmission facilities** required to resolve the transmission constraints; and
- (c) if the **system access service** request is for Rate STS, the effect of a connection alternative on the **transmission system**, including:
 - (i) all transmission constraints under Category A conditions as described in **reliability standards**, that are a result of the connection alternative, and the system **transmission facilities** required to resolve the transmission constraints;
 - (ii) all transmission constraints under Category B conditions as described in **reliability standards**, that are a result of the connection alternative, the system **transmission facilities** required to operationally manage the transmission constraints, and the operating procedures required to manage the Category B transmission constraints; and
 - (iii) all transmission constraints under Category B conditions as described in **reliability standards**, that are a result of the connection alternative and cannot be managed operationally, then the system **transmission facilities** required to resolve the transmission constraints.

and;

- (d) if the **system access service** request is for both Rate DTS and Rate STS, the **ISO** must consider the effect on the **transmission system** separately for Rate DTS and Rate STS.

3.4(2) For a **system access service** request for Rate DTS under subsections 3.4(1)(b) or (d) above, if the **ISO's** preferred alternative includes system **transmission facilities**, then the **market participant** must:

- (a) accept the preferred alternative and pay any applicable advancement costs determined by the **ISO** in accordance with subsection 4.2(3)(a) of the **ISO tariff**, *Classification and Allocation of Connection Projects Costs*;
- (b) amend the **market participant's system access service** request to connect at a reduced **contract capacity** that:
 - (i) can be accommodated by the existing **transmission system**; and
 - (ii) as determined by the **ISO**, allows for a minimum of 5 years of area growth following the **market participant's** projected in-service date, or such other reduced **contract capacity** or period of time that the **ISO** determines to be consistent with the **ISO's transmission system** planning obligations and the safe, reliable and economic operation of the **interconnected electric system**;
- (c) amend the **market participant's system access service** request to connect at an in-service date that is a minimum of 5 years following the execution of an agreement for **system access service** for Rate DTS substantially in the form included in Appendix B of the **ISO tariff**, *System Access Service Agreement Proformas*; or
- (d) withdraw the **system access service** request.

3.4(3) For a **system access service** request for Rate STS under subsections 3.4(1)(c) or (d) above, if the **ISO's** preferred alternative includes system **transmission facilities**, then the **market participant** must:

- (a) accept the **ISO's** preferred alternative;
- (b) amend the **market participant's system access service** request to connect at a reduced **contract capacity** that the **ISO** determines to be consistent with the **ISO's transmission system** planning obligations and the safe, reliable and economic operation of the **interconnected electric system**; or
- (c) withdraw the **system access service** request.

3.4(4) If the construction of **transmission facilities** is required for a connection project, the **ISO** must examine a connection alternative that does not give rise to any transmission constraints as described in subsection 3.4(1)(b) or (c) above.

3.4(5) Estimates required by the **ISO** to compare connection alternatives must be prepared with the same accuracy range, completed, at a minimum, to the level required for **need identification documents** and include all costs that have identified in subsection 3.4(1)(a) above.

3.4(6) The **ISO** must calculate a **construction contribution** for a connection project and must classify all transmission costs of the connection project as either participant-related or system-related in accordance with section 4 of the **ISO tariff**, *Classification and Allocation of Connection Projects Costs*.

Construction Commitment Agreement

3.5(1) The person providing **financial security, construction contribution** or both for a connection project must enter into a *Construction Commitment Agreement*, substantially in the form included in Appendix B of the **ISO tariff, System Access Service Agreement Proformas** with the **legal owner** of a **transmission facility**, unless:

- (a) the **market participant** is a **legal owner** of an **electric distribution system**; or
- (b) the **market participant** and the **legal owner** of the **transmission facility** are **affiliates**.

3.5(2) The **person** providing **financial security, construction contribution** or both for a connection project must provide the **ISO** with an executed copy of a *Construction Commitment Agreement* referred to in subsection 3.5(1), as well as a record of the **financial security** and **construction contribution** unless the **legal owner** of the **transmission facility** provides a copy of the same to the **ISO**.

Execution of Agreement for System Access Service

3.6(1) A **market participant** must execute a *System Access Service Agreement* for Rate DTS or for Rate STS substantially in the form included in Appendix B of the **ISO tariff, System Access Service Agreement Proformas**, as applicable:

- (a) if the construction of **transmission facilities** is required for a connection project, before the **ISO** submits a **needs identification document** to the **Commission** or, before the **ISO** approves the connection project under the abbreviated needs approval process provided for under the *Transmission Deficiency Regulation*; or
- (b) if the construction of **transmission facilities** is not required for a connection project, within 30 days of the issuance of a letter by the **ISO** acknowledging completion of an engineering connection assessment for the project, or within such later time period that the **ISO** determines to be reasonable in the circumstances.

3.6(2) A **market participant** must execute a *System Access Service Agreement* for Rate DTS for a **contract capacity** that, in the **ISO's** determination approximates the expected maximum coincident sum of the flows at each feeder from the **transmission system**.

3.6(3) A **market participant** must execute a *System Access Service Agreement* for Rate STS for a **contract capacity** that, in the **ISO's** determination:

- (a) if a **market participant** is not the **legal owner** of an **electric distribution system**, approximates the expected maximum coincident sum of the flows at each feeder into the **transmission system**; or
- (b) if a **market participant** is the **legal owner** of an **electric distribution system**, approximates the sum by feeder to the **transmission system**, of the **maximum capability** of all **generating units** or **aggregated generating facilities** that will be connected at the feeder to the **transmission system**, less minimum load at the feeder at the time when all of **maximum capability** of all generating units at the feeder is available.

3.6(4) Notwithstanding subsections 3.6(2) and 3.6(3) above, a **market participant** may execute a *System Access Service Agreement* for Rate DTS or Rate STS in respect of an industrial complex at a **contract capacity** determined by the **market participant** and on either a gross or net metered basis.

3.6(5) Prior to executing a *System Access Service Agreement* for Rate DTS or Rate STS for a connection project when the construction of **transmission facilities** is required, a **market participant** must inform the **ISO** of any regulatory approvals and non-financial matters that the **market participant** expects could cause a delay or prevent the achievement of the in-service date that has been requested by the **market participant**, together with the expected dates for the receipt of the regulatory approvals and successful resolution of the non-financial matters.

3.6(6) The **ISO** must include as a condition precedent in Section 2 of the *System Access Service Agreement*, the receipt of any regulatory approvals identified by the **market participant** pursuant to subsection 3.6(5) above that the **ISO** determines could cause a delay or prevent the achievement of the in-service date that has been requested by the **market participant**.

3.6(7) The **ISO** may, in its discretion, include as a condition precedent in Section 2 of the *System Access Service Agreement*, the successful resolution of any non-financial matters identified by the **market participant** pursuant to subsection 3.6(5) above.

3.6(8) If the construction of **transmission facilities** is not required for a connection project, the **ISO** may reject a system access service request if a **market participant** does not execute a *System Access Service Agreement* for Rate DTS or Rate STS by the date required pursuant to subsection 3.6(1)(b) above.

3.6(9) At the time of executing a *System Access Service Agreement* for Rate STS, the **market participant** must provide the **ISO** with evidence satisfactory to the **ISO** that the **market participant** has sufficient funds available to pay any contribution for a **generating facility** calculated in accordance with section 7 of the **ISO tariff**, *Generating Unit Owner's Contribution*. For purposes of the foregoing, such evidence may include a fully executed, enforceable and irrevocable assignment of funds, satisfactory to the **ISO**, that unconditionally directs the payment when due of any contribution for a **generating facility** calculated in accordance with section 7 of the **ISO tariff**, *Generating Unit Owner's Contribution*.

Effective Date of Agreement for System Access Service

3.7(1) If the construction of **transmission facilities** is required for a connection project, a *System Access Service Agreement* for Rate DTS or Rate STS becomes effective immediately following the later of:

- (a) the issuance by the **Commission** of the permit(s) and licence(s) required to construct and operate the **transmission facilities**;
- (b) the receipt by the **market participant** of any regulatory approvals included as a condition precedent in Section 2 of the *System Access Service Agreement*; and
- (c) the successful resolution of any non-financial matters included as a condition precedent in Section 2 of the *System Access Service Agreement*.

3.7(2) Until such time as conditions precedent related to any regulatory approvals or non-financial matters included in Section 2 of a *System Access Service Agreement* have been satisfied, the **market participant** must provide the **ISO** with quarterly updates or as otherwise specified by the **ISO** regarding the status of the regulatory approvals or non-financial matters, including updates to the expected dates for the receipt of any regulatory approvals and the successful resolution of non-financial matters.

3.7(3) A **market participant** must promptly inform the **ISO** when any regulatory approvals that are the subject of conditions precedent have been received or non-financial matters that are the subject of conditions precedent have been successfully resolved.

3.7(4) If the construction of **transmission facilities** is not required for a connection project, a *System Access Service Agreement* for Rate DTS or Rate STS becomes effective the day it is executed.

3.7(5) If the construction of **transmission facilities** is required for a connection project, the **ISO** may cancel a **system access service** request and terminate the related *System Access Service Agreement* for Rate DTS or Rate STS if the *System Access Service Agreement* for Rate DTS or Rate STS does not become effective within 1 year of issuance by the **Commission** of the permit(s) and licence(s) required to construct and operate the **transmission facilities**.

3.7(6) The **ISO** must include the critical information of a specific connection project in the **ISO's** forecast, **transmission system** plans and engineering connection assessments when the related *System Access Service Agreement* for Rate DTS or Rate STS becomes effective in accordance with subsection 3.7(1) or (4) above.

Amending a System Access Service Request

3.8(1) A **market participant** must, in a timely manner, amend or withdraw a **system access service** request if the information provided in, or in connection with, a **system access service** request ceases to be accurate and, in the case of an amended **system access service** request, the **market participant** must clearly identify the change and reasons for the change.

3.8(2) The **ISO**, upon receipt of an amended **system access service** request that includes changes to critical information, may:

- (a) accept the amendment, subject to such requirements or further amendments as the **ISO** determines to be necessary that may include:
 - (i) revised or new connection studies; and
 - (ii) revised or new connection alternatives;

or

- (b) reject the amended **system access service** request.

3.8(3) The **ISO** may, at any point in the **ISO's** connection process, cancel a **system access service** request if a **market participant** fails to notify the **ISO** of a change to the critical information required under subsections 3.2(2), 3.2(3) and 3.2(4) above in a timely manner.

3.8(4) A **market participant** may reapply for **system access service** under subsection 3.2(1) above, if the **ISO** rejects or cancels the **system access service** request.

Alternative Processes

3.9 The **ISO** may satisfy the provisions of this section through processes other than those described above and, in particular, alternative processes may be utilized if the **ISO** anticipates the impact on the **transmission system** may be significant.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 4

Classification and Allocation of Connection Projects Costs

Applicability

4.1 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*.

Classification of Participant-Related and System-Related Costs

4.2(1) All costs of a connection project as determined by the **ISO** under subsection 3.4 of the **ISO tariff**, *System Access Service Requests*, must be classified as either participant-related or system-related.

4.2(2) Participant-related costs are the costs deemed necessary by the **ISO** to accommodate a connection project, when taking into account the **ISO's transmission system** planning obligations, and include costs associated with:

- (a) the connection substation for the **point of delivery** or **point of supply**, including all **transmission facilities** to accommodate an in-out line configuration;
- (b) a **radial circuit**, including double-radial configurations, with only 1 transmission source from the **transmission system** to the connection substation;
- (c) a new additional transmission line for a **point of delivery** or **point of supply** that is served from an additional transmission source and that is either required only to serve the **point of delivery** or **point of supply** or is requested by a **market participant**;
- (d) 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 20 years and where the share is determined in accordance with subsection 5.5 of the **ISO tariff**, *Changes to System Access Service*;
- (e) line moves or burials of existing transmission line;
- (f) communication enhancements, additions, or both required solely to provide communications service for the connection project;
- (g) breakers, changes to protection systems, equipment or settings required for the connection project 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;

- (i) changes to protection systems, equipment or settings related to the addition of a **generating unit** or an **aggregated generating facility** on an **electric distribution system** served through the connection substation;
- (j) **remedial action schemes**;
- (k) a phasor measurement unit;
- (l) the replacement cost new, which is the current cost of similar new equipment having the nearest equivalent capability to the equipment being valued, of existing **system transmission facilities** that have been reclassified as participant-related to meet the requirements of the connection project;
- (m) facilities required to connect an isolated community regulated under the *Isolated Generating Units and Customer Choice Regulation*, to the **interconnected electric system**; and
- (n) other facilities that are required to complete the **market participant's** connection, including facilities that, in the **ISO's** opinion will be required in the future, or that are required to enable the **market participant** to meet all relevant technical requirements for the connection project.

4.2(3) If the **ISO** identifies system **transmission facilities**, being **transmission facilities** that are required by the **ISO** and that the **ISO** determines will benefit many **market participants**, as being required to accommodate a **market participant's** new or increased Rate DTS capacity, then the **ISO** must classify the following costs as participant-related:

- (a) advancement costs, which are the costs associated with the advancement of system **transmission facilities** required to accommodate the connection project requesting demand transmission service, which the **ISO** calculates, using the discount rate provided in subsection 4.9 below, as:
 - (i) if the system **transmission facilities** are not included in an approved **needs identification document**, the difference between the cost of the applicable system **transmission facilities** and the calculated future value of the system **transmission facilities**, based on a 5 year period;
 - (ii) if the system **transmission facilities** are included in an approved **needs identification document** and do not have a set in-service-date, the difference between the cost of the applicable system **transmission facilities** and the calculated future value of the system **transmission facilities**, based on a 5 year period; or
 - (iii) if the system **transmission facilities** are included in an approved **needs identification document** and have a scheduled in-service date that can be advanced, the difference between the present value of the capital costs of the advanced and the planned facilities for the number of **months** that the in-service date will be advanced;
- and
- (b) avoidable construction costs , which are the net costs associated with maintaining, at the **market participant's** request, the in-service date for system **transmission facilities** currently under construction, and which the **ISO** determines could be avoided by delaying the completion of construction.

4.2(4) System-related costs are the costs of the connection project that have not been classified as participant-related in accordance with subsection 4.2(2) and (3) above, and include incremental **transmission facilities** in excess of the **ISO's** preferred connection alternative in accordance with subsection 3.4 of the **ISO tariff**, *System Access Service Requests*, to serve the **market participant** where, as determined by the **ISO**, economics or **transmission system** planning support the development of such **transmission facilities**.

Facilities in Excess of Good Electric Industry Practice

4.3 A **market participant** must pay, as part of the **construction contribution**, any participant-related costs of facilities that the **ISO** determines to be in excess of those required by **good electric industry practice**.

Valuation of Facilities for Contribution Determination

4.4(1) The **ISO** may determine connection project costs based on the replacement cost new of equipment, which is the current cost of similar new equipment having the nearest equivalent capability to the equipment being valued.

4.4(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) identifies the cost of the transformer, including the cost to remove the transformer as part of its approved capital maintenance;or
- (b) not reducing the participant-related costs in any other circumstances including when the **legal owner** of the **transmission facility** scraps the transformer.

Allocation of Costs to Market Participants

4.5(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 4.3 above reflecting facilities in excess of those required by **good electric industry practice**; and
- (b) the reduction of costs, if any, under subsection 4.4(2) above reflecting replacement of a transformer removed from service.

4.5(2) The **ISO** must allocate the participant-related costs referred to in subsection 4.5(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.

4.5(3) The **ISO** must allocate the participant-related costs referred to in subsections 4.5(1) and (2) above to each **market participant** by multiplying those costs by the average **substation fraction** for the **market participant** determined in accordance with subsections 5.5(3) and (4) of the **ISO tariff**, *Changes to System Access Service*.

4.5(4) The ISO must deem costs allocated to a **market participant** taking service under Rate DTS to be demand-related costs.

4.5(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

4.6(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 **market participant** executes a *System Access Service Agreement*.

4.6(2) Subject to subsection 4.6(6) below, a **market participant** must ensure that **construction contribution** amounts are paid to the **legal owner** of the **transmission facility** in accordance with the **financial obligation** provisions of section 6 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

4.6(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 4.7 below.

(b) for a **market participant** receiving service under Rate STS, as the supply-related costs.

4.6(4) A **market participant** receiving service under Rate STS must also pay the ISO any contribution for a **generating unit** or an **aggregated generating facility** required under section 7 of the **ISO tariff**, *Generating Unit Owner's Contribution*.

4.6(5) A **market participant** must inform the ISO, in writing, and in a timely manner, of any disagreement with the ISO's determination of the **construction contribution**.

4.6(6) Subsection 4.6(2) above does not apply to a connection project in respect of which a **market participant** has submitted a proposal to the ISO for the construction and temporary operation of a transmission facility in accordance with section 5 of the *Transmission Deficiency Regulation*.

Determination of Local Investment

4.7(1) The ISO must calculate the maximum 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 5 to 20 years inclusive, commencing on the date of **commercial operation**.

4.7(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) Substation fraction (for new points of delivery only)	\$82,100/year	\$16,420/year
(d) First ($7.5 \times$ substation fraction) MW of contract capacity	\$33,300/MW/year	\$6,660/MW/year
(e) Next ($9.5 \times$ substation fraction) MW of contract capacity	\$20,900/MW/year	\$4,180/MW/year
(f) Next ($23 \times$ substation fraction) MW of contract capacity	\$14,600/MW/year	\$2,920/MW/year
(g) All remaining MW of contract capacity	\$9,400/MW/year	\$0/MW/year

4.7(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.

4.7(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 4.7(2) and (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 4.9 below.

4.7(5) The **ISO** must determine the maximum local investment as the lesser of:

- (a) the amount calculated in subsection 4.7(2), (3) or (4) above; or
- (b) the demand-related costs.

Operations and Maintenance

4.8(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 4.3 above.

4.8(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**; and
- (b) over the useful life of those facilities or 20 years, whichever is less.

4.8(3) The **market participant** must use the discount rate provided in subsection 4.9 below in the present value calculation.

Discount Rate

4.9(1) The **ISO** must determine the discount rate 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**.

4.9(2) The **ISO** must use zero as the tax rate T in subsection 4.9(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

4.10(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.

4.10(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
2019-XX-01	Updated investment levels and revised as applied for in the amended 2018 ISO tariff application.
2018-01-01	Updated investment levels, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated investment levels, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016.
2016-04-01	Updated investment levels, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated investment levels, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-07-01	Updated investment levels, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015 except for subsection 3 which remains as approved in Commission Decision 2011-275 issued on June 24, 2011
2013-10-01	Updated investment levels, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2013 and on a final basis in Commission Decision 2014-242 issued on August 21, 2014 except for subsection 3 which remains as approved in Commission Decision 2011-275 issued on June 24, 2011.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 5

Changes to System Access Service



Applicability

5.1 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*.

Events Resulting in Adjustments to Construction Contributions and Contract Capacity

5.2(1) A **market participant**, the **ISO** or the **legal owner** of a **transmission facility** may initiate a review of the **construction contribution** that the **ISO** had previously determined for a connection project.

5.2(2) If the **ISO** determines that the contract capacity amount in a *System Access Service Agreement* for Rate DTS or Rate STS previously determined by the **ISO** in respect of subsections 3.6(2) and (3) of the **ISO tariff**, *System Access Service Request*, does not reflect the actual flows, the **ISO** may adjust the contract capacity to reflect such actual flows and the **market participant** must pay any recalculated amounts for any **construction contribution** in accordance with this section 5 of the **ISO tariff**, *Changes to System Access Service*, and any contribution for a **generating unit** or **aggregated generating facility** calculated in accordance with section 7 of the **ISO tariff**, *Generating Unit Owner's Contribution*, as applicable.

5.2(3) The **ISO** must review a **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 an existing **market participant**, resulting in sharing of facilities as provided for in subsection 5.5 below;
- (c) connection project costs previously classified as system-related are reclassified as participant-related to meet changes in **market participant** requirements;
- (d) connection project costs 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.

5.2(4) The ISO must determine a **construction contribution** under the provisions of section 4 of the **ISO tariff, Classification and Allocation of Connection Projects Costs**, rather than this section 5, if an increase in **contract capacity** requires the construction of **transmission facilities** at an existing **point of delivery** or **point of supply**.

5.2(5) The ISO must not make an adjustment to a **construction contribution** more than 20 years after **commercial operation** of a connection project.

Reductions or Terminations of Contract Capacity

5.3(1) The ISO must make a reduction or termination of **contract capacity** effective 5 years after the date of notice of the request for reduction or termination, subject to subsection 5.3(2) below.

5.3(2) A **market participant** may make a lump sum payment determined by the ISO in lieu of all or a portion of the 5 year notice period in subsection 5.3(1) above.

5.3(3) The ISO must calculate the payment in lieu of notice (also known as a “PILON”) as a share of the costs of system **transmission facilities**, being **transmission facilities** that the ISO determines exist for the benefit of **market participants**, incurred to reasonably accommodate a **market participant's contract capacity** over the 5 year planning horizon of the **transmission system**, and must calculate the payment:

- (a) for a **market participant** reducing, terminating or changing the start date or end date for **contract capacity** under Rate DTS, after executing a *System Access Service Agreement*, as the present value of the difference in bulk system and regional system charges that would be attributed to the service:
 - (i) with the reduction or termination of or change of date for **contract capacity** during the notice period; and
 - (ii) with the **contract capacity** or start date or end date for **contract capacity** indicated in the *System Access Service Agreement* last executed by the **market participant**;and
- (b) for a **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 that would be attributable to the service:
 - (i) with the termination of the service during the notice period; and
 - (ii) with the service continuing to the end of the **generating unit's** base life as listed in Appendix A.

5.3(4) The ISO must use the discount rate provided in subsection 4.9 of the **ISO tariff, Classification and Allocation for Connection Projects Costs**, in the present value calculation in subsection 5.3(3)(a) and (b) above.

5.3(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 30 **days** before the reduction or termination of **contract capacity** is effective.

5.3(6) The ISO may waive or reduce the requirement for payment in lieu of notice if, as determined by the ISO:

- (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 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) a **market participant** who has taken service for at least 20 years:
 - (i) demonstrates to the ISO that a reduction of **contract capacity** results from the **market participant's** energy or **demand** reduction initiative; and
 - (ii) during the 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.

5.3(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**.

Metered Demand Above Pre-Notice Contract Capacity

5.4(1) The ISO must determine the **contract capacity** immediately following the 5 year notice period required by subsection 5.3(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.

5.4(2) A **market participant** may provide an additional notice of reduction to request a subsequent reduction of **contract capacity** to the original notice level, if the highest **metered demand** affects the maximum determined under subsection 5.4(1) above.

Shared Facilities

5.5(1) The ISO must allocate the participant-related costs of shared **transmission facilities** to **market participants** if **transmission facilities** are constructed to serve a **market participant** and then used to serve other but not all **market participants** within 20 years after **commercial operation** of the original connection project.

5.5(2) The ISO must allocate the participant-related costs of shared **transmission facilities**:

- (a) when a transmission line is shared by two or more substations, by allocating the costs of the shared line to those substations in accordance with subsection 5.5(3) below; and

- (b) when a single substation is shared by 2 or more **market participants**, by allocating the shared costs associated with the substation to those **market participants** in accordance with subsection 5.5(4) below.

5.5(3) The **ISO** must allocate the participant-related costs of a transmission line shared by 2 or more 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 20 years following **commercial operation** of the original transmission line, and assigning a **contract capacity** of zero in a 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 5.5(3)(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 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.

5.5(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 20 years following **commercial operation** of the original connection project, assigning a **contract capacity** of zero in any year in which a **market participant** did not receive **system access service**;
- (b) calculating the average **substation fraction** over the full 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**.

5.5(5) The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections 5.5(2), (3) and (4) above:

- (a) must reduce the participant-related costs allocated to the original **market participant**; and
- (b) may refund under subsection 5.6 below, where applicable, in part or in full, a **construction contribution** previously paid by that **market participant**.

5.5(6) The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections 5.5(2), (3) and (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 4.2(2)(d) of the **ISO tariff**, *Classification and Allocation for Connection Projects Costs*; and

- (b) may assess **construction contributions** to the additional **market participants** under section 4 of the **ISO tariff**, *Classification and Allocation for Connection Projects Costs*.

5.5(7) The **ISO** must reclassify the participant-related costs of a connection project as system-related costs if, within 20 years after **commercial operation** of the original connection project, **transmission facilities** are constructed to serve a **market participant** and are then, in the determination of the **ISO**, used for the benefit of many **market participants**, based on calculating the average percentage share over the full 20 year period for the original connection project and the time the **ISO** reclassified the costs as system-related.

Determination of Construction Contribution

5.6 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 facility** at the time construction is completed.

Payments and Refunds

5.7(1) A **market participant** must pay a **construction contribution** adjustment or a payment in lieu of notice:

- (a) at least 30 **days** prior to the effective date of a change to a *System Access Service Agreement*, if the payment arises from changes to **contract capacity** or investment term that do not require construction of a **transmission facility**; and
- (b) within 30 **days** of a request for payment, in all other circumstances.

5.7(2) A **legal owner** of a **transmission facility** must refund a **construction contribution** adjustment:

- (a) within 30 **days** after the effective date of a change to a *System Access Service Agreement*, if the refund arises from changes to **contract capacity** or investment term that do not require construction of a **transmission facility**;
- (b) within 90 **days** after the **Commission** issues permit and licence for a **transmission facility**, if the refund results from the construction of the **transmission facility**; and
- (c) within 90 **days** of the **ISO** determining the amount of the adjustment, in all other circumstances.

5.7(3) The **market participant** must pay:

- (a) an increase in **construction contribution** by way of electronic funds transfer or wire transfer to the bank account a **legal owner** of a **transmission facility** specifies; and
- (b) a payment in lieu of notice by way of electronic funds transfer or wire transfer to a bank account the **ISO** specifies.

5.7(4) A **market participant** must pay and a **legal owner** of a **transmission facility** must refund all adjustments without interest.

5.7(5) A **market participant** is not required to pay and a **legal owner** of a **transmission facility** is not required to refund an adjustment amount less than \$10 000.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011, and in Commission Decision 2011-333 issued on August 4, 2011 for subsection 5(6).

ISO Tariff – Section 6

Financial Obligations for Connection Projects

Applicability

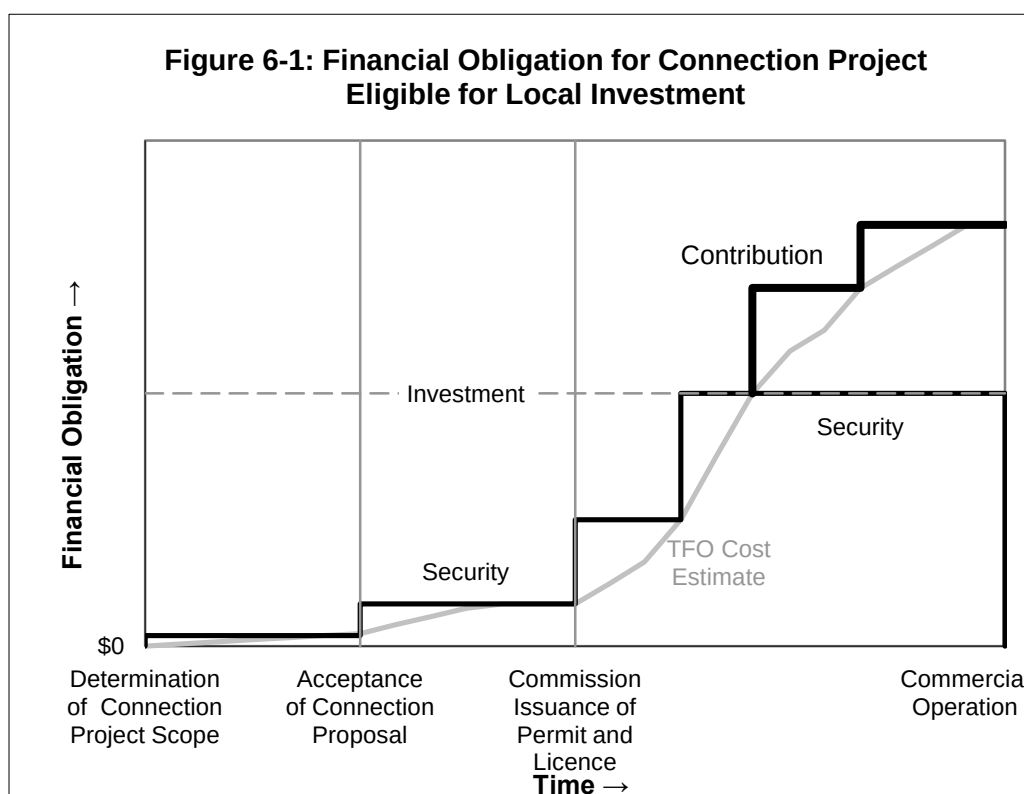
6.1 This section applies to a **market participant** who has requested a new **system access service** or changes to an existing **system access service** under:

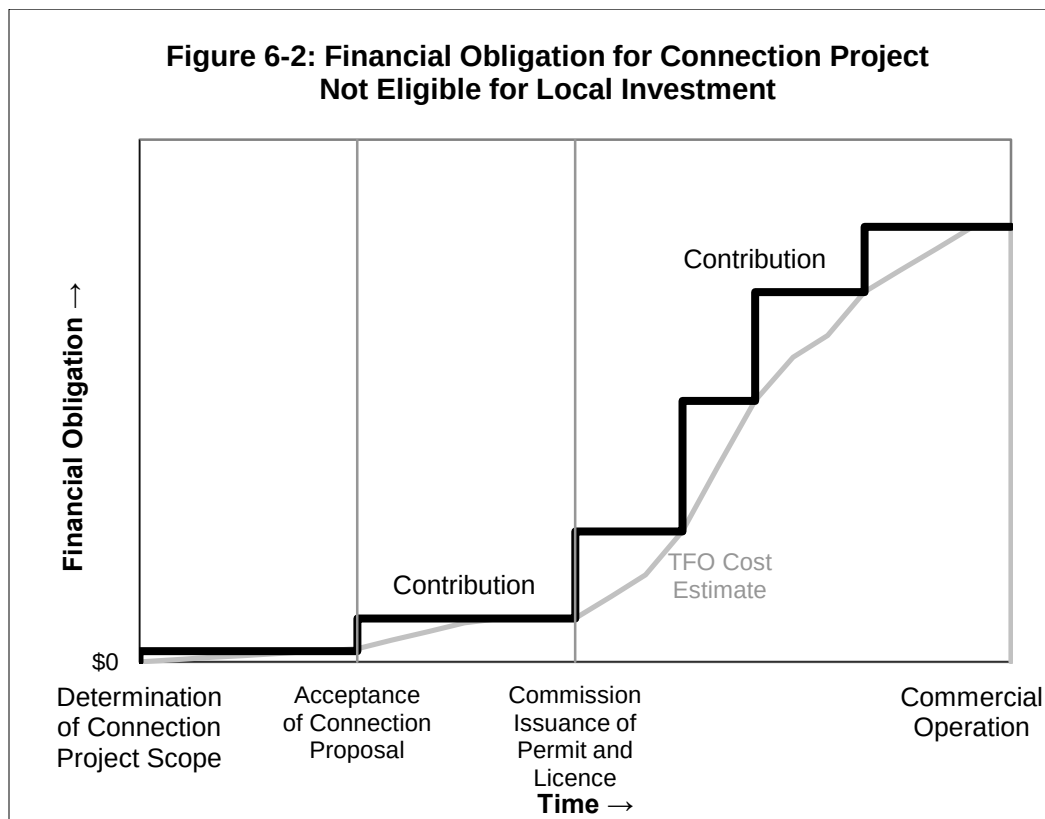
- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate FTS, *Fort Nelson Demand Transmission Service*;
- (c) Rate PSC, *Primary Service Credit*; or
- (d) Rate STS, *Supply Transmission Service*.

Amount of Financial Obligation

6.2(1) A **market participant** must ensure that its **financial obligation**, which consists of the **financial security** and **construction contribution**, excluding the amount of any advancement costs calculated by the **ISO** pursuant to subsection 4.2(3)(a) of the **ISO tariff**, *Classification and Allocation of Connection Projects Costs*, are provided as described in the following subsections, which **financial obligations** are illustrated:

- (a) in Figure 6-1 below, for a connection project eligible for local investment; and
- (b) in Figure 6-2 below, for a connection project not eligible for local investment.





6.2(2) The **market participant** must ensure that the **financial obligation** for a connection project is satisfied at all times after the **ISO** determines the connection project scope in accordance with subsection 3.3(3) of the **ISO tariff**, *System Access Service Requests*.

6.2(3) The **ISO** must determine the total amount of the **financial obligation** for a connection project, which must include but not exceed:

- (a) other than advancement costs calculated by the **ISO** pursuant to subsection 4.2(3)(a) of the **ISO tariff**, participant-related costs of the connection project estimated or incurred in accordance with section 4 of the **ISO tariff**, *Classification and Allocation for Connection Projects Costs*, 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 4.8(2) of the **ISO tariff**, *Classification and Allocation for Connection Projects Costs*.

6.2(4) The **financial obligation** for the connection project shall be the amounts and timing determined as follows by the **legal owner** of the **transmission facility** for the connection project as the project progresses through the stages illustrated in Figure 6-1 or 6-2 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 6.2(4)(a) above; 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 6.2(3) above, of:
 - (i) the amount from subsection 6.2(4)(b) above; 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 6-1 or 6-2 above, as applicable.

6.2(5) The **financial obligation** amounts established under subsection 6.2(4) above must include all costs associated with procurement of long lead time equipment, determined by the **legal owner** of the **transmission facility**, where the procurement occurs prior to the **Commission's** issuance of permit and licence for the connection project.

6.2(6) The **financial obligation** amounts may be based on certain assumptions made by the **legal owner** of the **transmission facility** regarding the **market participant's** request for **system access service** and which may be revised 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.

6.2(7) The **financial obligation** amounts established by subsections 6.2(4) and (5) above will be based on the amounts set out in "Schedule A" of a *Construction Commitment Agreement* substantially in the form included in Appendix B of the **ISO tariff**, *System Access Agreement Proformas*.

Payment of Advancement Costs

6.3 If the construction of **transmission facilities** is required for a connection project, a **market participant** must pay in full to the **legal owner** of the **transmission facility** for the connection project any advancement costs calculated by **ISO** pursuant to subsection 4.2(3)(a) of the **ISO tariff, Classification and Allocation of Connection Projects Costs**, within 30 **days** after the *System Access Service Agreement* for Rate DTS becomes effective pursuant to subsection 3.7(1) of the **ISO tariff, System Access Service Requests**.

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

6.4(1) A **market participant** must provide **financial security** for a connection project except:

- (a) where the **market participant** is a **legal owner** of an **electric distribution system** that is regulated by the **Commission**; or
- (b) if the project is proposed by the **market participant** under section 5(2) of the *Transmission Deficiency Regulation*, in respect of the **transmission facilities** that the **market participant** requesting **system access service** is proposing to construct.

6.4(2) The **market participant** must provide the **financial security** to the **legal owner** of the **transmission facility** as illustrated in Figure 6-1 above:

- (a) in the amount of and at the time defined for the **financial obligation** described in subsection 6.2 above; and
- (b) up to the maximum local investment determined for the connection project under section 4 of the **ISO tariff, Classification and Allocation for Connection Projects Costs**.

6.4(3) The **market participant** must provide **financial security** that is 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**.

6.4(4) If acceptable to the **legal owner** of the **transmission facility**, the **market participant** may

- (a) provide unsecured credit, up to an unsecured credit limit determined by the **legal owner** of the **transmission facility**; or
- (b) pay a **construction contribution** in lieu of **financial security**.

6.4(5) A **market participant** may provide **financial security** in amounts greater than those a **legal owner** of the **transmission facility** establishes in subsection 6.2(3) above but this does not reduce the amount of **construction contribution** required by subsection 6.5 below.

Form and Provision of Construction Contribution

6.5(1) The **market participant** must ensure a **construction contribution** is paid for:

- (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 4 of the **ISO tariff Classification and Allocation for Connection Projects Costs**; 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.

6.5(2) The **market participant** must ensure the **construction contribution** is paid:

- (a) as documented in “Schedule A” of the *Construction Commitment Agreement* required by subsections 6.2(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.

6.5(3) The **market participant** may ensure the **construction contribution** is paid in amounts greater than those documented in “Schedule A” of the *Construction Commitment Agreement* required by subsection 6.2(7) above.

Cancellation

6.6(1) The **market participant** must, upon cancellation of a connection project at any time prior to **commercial operation**, ensure payment of:

- (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 6.2(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.

6.6(2) The **person** who provided the **financial security, construction contribution** or other amounts accepts that the **legal owner** of the **transmission facility** must, upon failure of payment of the costs described in subsection 6.6(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 for the connection project without further notice;
- (b) retain any realized **financial security, construction contribution** or other amounts paid for the connection project 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.

6.6(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 6.6(2) above.

6.6(4) The **person** who provided the **financial security, construction contribution** or other amounts is entitled to the return of any **financial security, construction contribution** or other amounts by the **legal owner** of the **transmission facility** that is in excess of the costs described in subsection 6.6(1) above.

6.6(5) A connection project may be deemed to be cancelled pursuant to subsection 6.6(1) above if a **market participant** or other **person** takes action that, in the opinion of the **legal owner** of the **transmission facility**, indicates the termination or abandonment of an intention to proceed to **commercial operation** of the connection project.

6.6(6) The **person** who provided the **financial security, construction contribution** or other amounts accepts that 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** or other **person**, under any *Construction Commitment Agreement* between the **legal owner** of the **transmission facility** and the **market participant** or other **person**, in partial or full satisfaction of any costs owing by the **market participant** or other **person** under subsection 6.6(1) above.

6.6(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** or other **person**, under any *System Access Service Agreement* between the **ISO** and the **market participant** or other **person**, in partial or full satisfaction of any costs owing by the **market participant** or other **person** under subsection 6.6(1) above.

Return of Financial Security

6.7(1) The **person** who paid the **construction contribution** is entitled to the return of any **financial security** held for the connection project by the **legal owner** of the **transmission facility**, within 90 **days** after **commercial operation** of the connection project.

6.7(2) The **person** who paid the **construction contribution** is entitled to the return of any **construction contribution** paid in excess of the actual cost of the connection project by the **legal owner** of the **transmission facility**, within 90 **days** after the **legal owner** of the **transmission facility** provides the final cost report for the connection project to the **ISO**.

Effect of non-compliance

6.8(1) A **market participant** must ensure a request for **financial security** or **construction contribution** or for additional or replacement **financial security** or **construction contribution** is satisfied within 30 **days** of such request.

6.8(2) A **person** who provides **financial security** or **construction contribution** for a connection project must report any event of default by it to a lender for borrowed funds or any **material adverse changes** in its financial position within 2 **business days** of such event.

6.8(3) A **market participant** must accept suspension by the **legal owner** of the **transmission facilities** of all work related to the connection project if:

- (a) a **market participant** fails to ensure **financial security** or **construction contribution** is provided; or
- (b) the **ISO** or the **legal owner** of the **transmission facility** becomes aware of an unreported event or change under subsection 6.8(2) above.

6.8(4) A **market participant** must accept the continued suspension by the **legal owner** of the **transmission facilities** of work on the connection project until the required **financial security** or **construction contribution** is provided or the financial position of the **person** who provided **financial security** or **construction contribution** no longer constitutes a **material adverse change**.

6.8(5) The **market participant** must continue to ensure all **financial obligations** are met 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 6.8(3) above.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 7 Generating Unit Owner's Contribution

Applicability

7.1 This section of the **ISO tariff** applies to the owner (as that term is defined in the **Act**) of a generating facility, being a **generating unit** or an **aggregated generating facility**:

- (a) with a capacity (determined in accordance with subsection 7.3 below) that is or will be greater than 1 MW;
- (b) that is or will be connected to the **transmission system** or an **electric distribution system** on or after January 1, 2006; and
- (c) for which revenue metering equipment to measure hourly **metered energy** has been installed.

Determination of Owner's Contribution

7.2 The **ISO** must calculate an owner's contribution for a generating facility as:

- (a) the capacity determined in accordance with subsection 7.3 below;
multiplied by
- (b) the owner's contribution rate (i.e., Column B, in subsection 7.4 below) for the area of the **transmission system** where the generating facility will be located (i.e., Column A, in subsection 7.4 below).

Determination of Capacity

7.3(1) The **ISO** must determine the capacity of a generating facility, for the purposes of calculating the owner's contribution for a generating facility, to be:

- (a) if no load is being added at the same time at the same transmission point of connection, the **maximum capability** of the generating facility; or
- (b) if load is proposed to be added within 12 **months** of adding generation at the same transmission point of connection according to a **system access service** request or *System Access Service Agreement* for Rate DTS or for Rate STS, the **maximum capability** of the generating facility, less minimum load proposed to be added.

7.3(2) If the **ISO** determines that the capacity determined in accordance with subsection 7.3(1) above does not reflect the actual **maximum capability** or actual minimal load, the **ISO** may adjust the capacity for the purpose of recalculating the owner's contribution for the generating facility.

Owner's Contribution Rates

7.4(1) An owner's contribution rates for the area of the **transmission system** where the generating facility will be located are as follows:

Column A	Column B
Planning Region	Contribution Rate
Northwest	\$10,000 / MW
Northeast	\$20,000 / MW
Edmonton	\$30,000 / MW
Central	\$50,000 / MW
Calgary	\$40,000 / MW
South	\$20,000 / MW

7.4(2) The planning regions are defined as follows:

Planning Region	Planning Region Description	Planning Area Number	Planning Area Name
Northwest	This region borders Fort McMurray and Athabasca to the east, Wabamun and Hinton/Edson to the south, British Columbia to the west and the Northwest Territories to the north.	17	Rainbow Lake
		18	High Level
		19	Peace River
		20	Grande Prairie
		21	High Prairie
		22	Grande Cache
		23	Valleyview
		24	Fox Creek
		26	Swan Hills
Northeast	This region borders High Level, Peace River, High Prairie, Swan Hills and Wabamun areas to the west, Edmonton, Fort Saskatchewan, Vegreville and Cold Lake areas to the south, Northwest Territories to the north and Saskatchewan to the east.	25	Fort McMurray
		27	Athabasca/ Lac La Biche
		33	Fort Saskatchewan.

Planning	Planning Region Description	Planning	Planning Area Name
Edmonton	This region borders Swan Hills, Athabasca and Fort Sask. areas to the north, Hinton and Dayton Valley to the west, Red Deer and Alliance to the south and Vegreville to the east.	31	Wetaskiwin
		40	Lake Wabamun
		60	Edmonton
Central	This region borders Grande Cache, Fox Creek, Swan Hills, Wabamun, Wetaskiwin, Fort Saskatchewan and Cold Lake to the north, British Columbia to the west, Saskatchewan to the east and Seebe, Airdrie, Strathmore, Sheerness and Empress to the south.	13	Lloydminster
		28	Cold Lake
		29	Hinton/Edson
		30	Drayton Valley
		32	Wainwright
		34	Abraham Lake
		35	Red Deer
		36	Alliance/Battle River
		37	Provost
		38	Caroline
		39	Didsbury
		42	Hanna
Calgary	This region includes Calgary and Airdrie. This region borders Didsbury to the north, Seebe to the west, Strathmore to the south and High River and Hanna to the east.	6	Calgary
		57	Airdrie

Planning	Planning Region Description	Planning	Planning Area Name
South	This region borders Abraham Lake, Caroline, Didsbury, Hanna, Calgary and Airdrie to the north, Montana to the south, British Columbia to the west and Saskatchewan to the east.	4	Medicine Hat
		43	Sheerness
		44	Seebe
		45	Strathmore/Blackie
		46	High River
		47	Brooks
		48	Empress
		49	Stavely
		52	Vauxhall
		53	Fort MacLeod
		54	Lethbridge
		55	Glenwood

Payment of Owner's Contribution

7.5(1) The owner of a generating facility must pay the owner's contribution for a generating facility to the **ISO** by way of electronic funds transfer or wire transfer to a bank account the **ISO** specifies.

7.5(2) The **ISO** must invoice the owner of a generating facility for the owner's contribution for a generating facility prior to the time that a *System Access Service Agreement* is required to be executed in accordance with section 3 of the **ISO tariff**, *System Access Service Requests*.

7.5(3) If the construction of **transmission facilities** is required for a connection project, the owner of a generating facility must pay the owner's contribution for the generating facility in full to the **ISO** within 30 days of the *System Access Service Agreement* for Rate STS becoming effective pursuant to subsection 3.7(1) of the **ISO tariff**, *System Service Access Requests*.

7.5(4) If the construction of **transmission facilities** is not required for a connection project, the owner of a generating facility must pay the owner's contribution for the generating facility in full to the **ISO** within 30 days after the *System Access Service Agreement* for Rate STS is executed.

Refund of Owner's Contribution

7.6(1) The **ISO** must refund a contribution for a generating facility to the owner who originally paid it, or as otherwise directed by the owner who originally paid it, if the generating facility satisfies the **ISO rules** regarding satisfactory annual performance, in accordance with the provisions of this subsection 7.6.

7.6(2) The **ISO** must refund an owner's contribution for a generating facility in annual amounts during the refund period, which begins on January 1 following the in-service date stated in the *System Access Service Agreement* for Rate STS and ends 9 calendar years later on December 31.

7.6(3) The **ISO** must calculate the annual amounts during the refund period as:

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

7.6(4) The **ISO** must refund, as follows, an owner's contribution for a generating facility, for each calendar year during the refund period, the annual amount determined under subsection 7.6(3) above:

- (a) in full if the generating facility completely 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;
- (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**, if the generating facility does not fully satisfy the performance criteria during that calendar year; or
- (c) reduced to zero dollars if the generating facility has not energized:
 - (i) before the start of the first calendar year following the in-service date in the *System Access Service Agreement* for Rate STS; or
 - (ii) before the start of the calendar years that follow.

7.6(5) The **ISO** must refund the amount of an owner's contribution for a generating facility determined in accordance with subsections 7.6(3) and (4) above by February 28 of the year following the calendar year to which the refund relates.

7.6(6) The **ISO** must refund the annual amounts without interest.

Adjustment of Refunds

7.7(1) The **ISO** must revise the refund of an annual amount without interest, in whole or in part, if the **ISO** determines that an error was made or that an inappropriate amount was refunded.

7.7(2) An owner 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
2019-XX-01	Inclusion of rates and revised as applied for in the amended 2018 ISO tariff application.
2013-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

General

8.1 **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 8.2 through 8.7 below, as applicable.

Contracted Ancillary Services

8.2 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

8.3 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 8.2 above and that the existing contract was the result of a competitive process conducted in the prior **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

8.4(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**.

8.4(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

8.5 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

8.6(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.

8.6(2) In lieu of the variable and fixed costs in subsections 8.6(1)(a) and (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

8.7 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 8.6 above.

Invoicing

8.8 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 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 8.6 above and will separately itemize the values used for each component specified (fixed and variable costs).

Audit Rights

8.9 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**, *Confidentiality*; 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 Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 9 Demand Opportunity Service



Applicability

9.1 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

9.2(1) A **market participant** must pre-qualify on an annual basis for demand opportunity service to receive **system access service** under Rate DOS.

9.2(2) A **market participant** who wishes to pre-qualify for demand opportunity service:

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

9.2(3) The **ISO** must approve a **market participant's** pre-qualification for demand opportunity service only if:

- (a) the **market participant** meets the commercial eligibility criteria for demand opportunity service provided in subsection 9.3 below;
- (b) the **market participant's** use of demand opportunity service would not occur under any other applicable rate; and
- (c) there is sufficient transmission capacity and suitable system operating conditions capable of accommodating the request.

9.2(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 a lower demand opportunity service **contract capacity** as the **ISO** determines is available;
- (b) the specific type of demand opportunity service, as listed in Rate DOS, which the **market participant** requested and is eligible for; and
- (c) a maximum of 1 year from the date the **ISO** approves the **market participant's** pre-qualification.

9.2(5) The **ISO** must notify a **market participant**, in writing, of approval or denial of pre-qualification for demand opportunity service, within **45 days** of receiving a pre-qualification application.

Commercial Eligibility Criteria

9.3(1) A **market participant** must satisfy the **ISO** that the **market participant** would not increase **metered demand** under Rate DTS, *Demand Transmission Service*, if Rate DOS was not available.

9.3(2) A **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.

9.3(3) A **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.

9.3(4) A **market participant** must utilize additional electric energy under the DOS Term type of Rate DOS either:

- (a) for the purposes listed in subsection 9.3(3) 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 complex; and
 - (ii) would reduce the load at its industrial complex in these circumstances rather than pay the cost of receiving additional electric energy under Rate DTS.

9.3(5) A **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 complex or otherwise displaces consumption of electric energy from the **interconnected electric system**.

Transaction Requests

9.4(1) A **market participant** may submit a transaction request for demand opportunity service after the **ISO** approves the **market participant's** pre-qualification for demand opportunity service under subsection 9.2 above.

9.4(2) A **market participant** may submit a transaction request for demand opportunity service for a **point of delivery** only if the request has the following attributes:

- (a) it is in accordance with the **market participant's** confirmed pre-qualification under subsection 9.2(4) above, specifically:
 - (i) up to its pre-qualified capacity; and
 - (ii) for the pre-qualified type of demand opportunity service;
- (b) it is for only one Rate DOS type in any single hour, even if the **market participant** is eligible for multiple Rate DOS types;
- (c) it has a minimum continuous duration of 8 hours and a maximum continuous duration of **1 month**; and
- (d) it has a start date and end date in the same **month**.

9.4(3) A **market participant** must submit a completed transaction request form, available on the AESO website or from the **ISO**, at least 1 hour and no more than **10 days** before the requested start time of a demand opportunity service transaction.

9.4(4) The **ISO** must approve a transaction request for demand opportunity service if it determines that:

- (a) the request meets the requirements of subsections 9.4(2) and (3) above;
- (b) the request form has been fully and correctly completed; and
- (c) sufficient surplus capacity exists on the **transmission system** to accommodate the requested capacity for the duration of the Rate DOS transaction.

9.4(5) The **ISO** must notify a **market participant** when a transaction request has been approved or has been denied approval.

9.4(6) A **market participant** may not cancel or revise a Rate DOS transaction request after it is approved by the **ISO**.

Recallable Service

9.5(1) The **ISO** must recall demand opportunity service in advance of recalling **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**.

9.5(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 System Access Service*.

9.5(3) A **market participant** must curtail capacity provided under Rate DOS if 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

9.6(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 9.2 above and the commercial eligibility criteria in subsection 9.3 above.

9.6(2) The **ISO** may charge a **market participant** the cost of an audit conducted in accordance with subsection 9.6(1) above.

9.6(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.

9.6(4) The **ISO** may recover retroactive amounts for the period during which a **market participant** did not qualify for, but was billed under, Rate DOS.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 10 Settlement and Payment Terms



Applicability

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

Billing Procedures

10.2(1) The **ISO** must issue a statement of account for **system access service** no later than 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 2 **months** prior to that **settlement period**; and
- (c) amounts determined on a final basis for the period 4 **months** prior to that **settlement period**.

10.2(2) The **ISO** may review a statement of account and may issue a new statement of account based on the results of that review.

10.2(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.

10.2(4) The **ISO** may use estimated values to produce a statement of account if:

- (a) **metered demand** or **metered energy** data is not available or is incomplete;
- (b) **metering equipment** fails or the data is under dispute; or
- (c) the **ISO's** billing and settlement system is unable to produce a statement of account.

10.2(5) The **ISO** must, when a statement of account is based on estimated values, make an adjustment, to reflect the use of actual or more appropriate estimated values in a subsequent statement of account issued in accordance with:

- (a) amounts determined on an interim basis for the period 2 **months** prior to that settlement period; or
- (b) amounts determined on a final basis for the period 4 **months** prior to that settlement period.

10.2(6) The **ISO** may deduct from a statement of account any amounts it owes to the **market participant** or its **affiliates**.

Totalized Billing

10.3(1) The **ISO** may totalize multiple **points of delivery**, **points of supply**, or both at separate substations for a single **market participant** and produce 1 statement of account for the **market participant** that is an industrial complex.

10.3(2) The **ISO** must base its decision to totalize on a review of:

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

Adjustments

10.4(1) A **market participant** may request that a statement of account be recalculated and reissued 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;

10.4(2) The **ISO** may recover the cost of recalculating and reissuing a statement of account from the **market participant**.

Provision of Settlement Data

10.5(1) The **ISO** must make available to a **market participant** upon request data required to verify a statement of account for **system access service**.

10.5(2) The **ISO** may recover the cost of retrieval and provision of data required to verify a statement of account for **system access service** from the **market participant**.

Payment Terms

10.6(1) A **market participant** must pay the amounts shown on the statement of account no later than 20 **business days** after the end of the **settlement period**.

10.6(2) The **market participant** must make payment by way of electronic funds transfer or wire transfer to a bank account specified by the **ISO**.

Effect of Non-Compliance

10.7(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 a **financial obligation** to the **ISO** for **system access service**, on or before a specified due date for that **financial obligation**.

10.7(2) The **ISO** must not reinstate **system access service** to a **market participant** unless 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
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Section 11

Peak Metered Demand Waivers



Applicability

11.1 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

11.2(1) The **ISO** may waive peak **metered demand** for a **market participant** for the purpose of calculating **billing capacity** if 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 or load transfer between **point of delivery** activities that are part of an **electric distribution system** that follows a **forced outage**, **planned outage** or **unplanned outage of transmission facilities** or facilities that are part of an **electric distribution system**;
- (d) compliance with a **directive** the **ISO** issues; or
- (e) an event of **force majeure** that impacts the **ISO**.

11.2(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

11.3(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**.

11.3(2) The **market participant** must submit the *Peak Metered Demand Waiver Request* form to the **ISO** no later than **7 business days** after the end of the **settlement period** for which the waiver is being requested.

11.3(3) The **ISO** may, 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
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

Applicability

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

Assignment

12.2(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 the agreement and the **ISO tariff**, but only with the **ISO's** prior consent.

12.2(2) The **ISO's** consent under subsection 12.2(1) above must not be unreasonably withheld.

12.2(3) 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 12.2(1) above, including any and all retrospective adjustments due to deferral account reconciliation or any other adjustments.

Termination by Mutual Agreement

12.3(1) 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.

12.3(2) Subsection 12.3(1) above does not limit the **ISO's** ability under subsection 2.4(1) of the **ISO tariff**, *Provision of System Access Service*, to unilaterally limit, reduce, withhold or terminate **system access service** if a **market participant** fails to comply with a provision of the **ISO tariff**.

Notifications

12.4(1) A notice or other document that is required to be given or served by a **market participant** upon the **ISO** under the **ISO tariff**, must be provided as follows:

- (a) in writing;
- (b) by personal service, registered letter, or email; and
- (c) addressed to:

AESO
2500, 330 – 5th Avenue SW
Calgary, Alberta T2P 0L4
Attention: ISO Tariff
ISOtariiffnotice@aeso.ca

12.4(2) A notice or other document that is required to be given or served by the **ISO** upon a **market participant** under the **ISO tariff**, must be provided as follows:

- (a) in writing;
- (b) by personal service, registered letter, or email; and
- (c) sent to the address(es) shown for the **market participant** in the relevant agreement for **system access service**.

12.4(3) A **market participant** and the **ISO** must deem all notices to be duly given:

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

12.4(4) In the event of disruption of normal postal service, a **market participant** and the **ISO** must provide notice by personal service or email.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission 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 Generating Unit	Legal Owner	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 Generating Unit	Legal Owner	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 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
2019-XX-01	Updated to remove units with base lives ending before 2018 as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated to remove units with base lives ending before 2014 as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Appendix B

System Access Service Agreement Proformas

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 6 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

Revision History

Effective	Description
2019-XX-01	Revised as applied for in the amended 2018 ISO tariff application.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

ISO Tariff – Appendix B

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



[insert Substation Name and No – DTS - Date – Project No]

SYSTEM ACCESS SERVICE AGREEMENT FOR DEMAND TRANSMISSION SERVICE RATE ("DTS Agreement")

This DTS Agreement executed the [insert] day of , 20 .
Between:

Independent System Operator, operating as AESO,
a statutory corporation established pursuant to the
Electric Utilities Act (Alberta)
with offices in the City of Calgary, in the Province of Alberta
(the "ISO")

and

[insert legal name of corporation or partnership],
a **[corporation, incorporated] [partnership organized]** pursuant to the laws of XXX,
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 DTS Agreement have the meanings given to them in the *Consolidated Authoritative Document Glossary*. Capitalized terms have the meanings given to them in the preamble or body of this DTS Agreement, including:

- i. “DTS Agreement” means the this System Access Service Agreement for Demand Transmission Service Rate; and
 - ii. “Effective Date” means the date that is this DTS Agreement comes into effect, in accordance with Section 2 below.
- (b) Should the **ISO tariff, ISO rules** or *Consolidated Authoritative Document Glossary* be amended from time to time during the term of this DTS Agreement by approval of the **Commission**, then such amended **ISO tariff, ISO Rules or Consolidated Authoritative Document Glossary** will apply to this DTS Agreement and this DTS Agreement shall be deemed amended upon each such approval.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

2. EFFECTIVE DATE

- (a) If the construction of **transmission facilities** is required for a connection project, this **DTS Agreement** becomes effective immediately following the later of:
 - (i) the issuance by the **Commission** of the permit(s) and licence(s) required to construct and operate the **transmission facilities**;
 - (ii) if applicable, the receipt by the **market participant** of the following regulatory approvals;
[list approvals, if applicable];
and
 - (iii) if applicable, the successful resolution of the following non-financial matters:
[list non-financial matters].
- (b) If the construction of transmission facilities is not required for a connection project, this **DTS Agreement** becomes effective on the day it is executed, shown above.

3. POINT OF DELIVERY

Point of delivery is located at and described as follows:

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

4. CONTRACT CAPACITY

Contract capacity is the following amounts for and during the following periods:

- MW [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.

5. COMMERCIAL OPERATION

Upon completion of **commissioning** and provided that the **ISO** is satisfied with the same, the **ISO** must provide notice to the **market participant** confirming that the facility may begin **commercial operation**.

6. SETTLEMENT

The **ISO** must charge, and the **market participant** must pay, amounts in accordance with Rate DTS commencing in the **settlement period** in which the **ISO** commences the provision of **system access service** to the **market participant**.

7. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 8 and 9 of this DTS Agreement, the **ISO** must provide **system access service** under Rate DTS to the **market participant** at the **point of delivery** at the **contract capacity** pursuant to Sections 2 and 3 of this DTS Agreement.

8. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE

If the **market participant** takes **system access service** under Rate DTS, the **market participant** must take such **system access service** at the **point of delivery** at the **contract capacity** pursuant to Sections 2 and 3 of this DTS Agreement.

9. MARKET PARTICIPANT'S PAYMENT OBLIGATION

The **market participant** must 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.

10. 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 ☐

11. TERM

This DTS Agreement commences on the Effective Date and continues unless it is terminated in accordance with the **ISO tariff**.

12. 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**.

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) A notice must be provided in accordance with subsection 12.4 of the **ISO tariff**, *Miscellaneous*. 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 address(es) to the **ISO** using the method posted on the AESO website as updated from time to time.

15. AMENDMENTS

- (a) The parties acknowledge that either may request an amendment to this DTS Agreement. The **market participant** must request such an amendment by complying with the procedure for amending DTS Agreements posted by the **ISO** on its website or, if such procedure is not posted, by providing notice to the **ISO**.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff**, **ISO rules** and *Consolidated Authoritative Document Glossary* may be amended from time to time during the term of this DTS Agreement by approval of the **Commission** and that this DTS Agreement is deemed amended upon each such approval.
- (c) Subject to subsection 15(b) of this DTS Agreement, this DTS Agreement may only be amended by written instrument executed by the **ISO** and the **market participant**.

16. MISCELLANEOUS

- (a) Section 9 will survive the termination of this DTS Agreement for either the time provided for in such section or the longest period provided by law.
- (b) 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.
- (c) 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 will 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 must extend only to the particular breach so waived and must not limit or affect any rights with respect to any other or future breach.
- (d) Time is of the essence.
- (e) This DTS Agreement is 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.
- (f) Whenever possible, each provision of this DTS Agreement must 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 a provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision will 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.

- (g) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as is reasonably required in order to fully perform and carry out the terms of this DTS Agreement.
- (h) The parties may execute this DTS Agreement by fax, e-mail or other electronic means capable of producing a paper copy, and in separate counterparts, each of which when so executed and delivered, and all such counterparts taken together will constitute one instrument.

[Remainder of page intentionally left blank. Signature page to follow.]

ISO Tariff – Appendix B
System Access Service Agreement Proforma for
Rate DTS, Demand Transmission Service (continued)

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.

ISO, 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



[Insert Substation Name and No – STS – Date – Project No]

SYSTEM ACCESS SERVICE AGREEMENT FOR SUPPLY TRANSMISSION SERVICE RATE (“STS Agreement”)

This STS Agreement executed the [insert] day of , 20 .
Between:

Independent System Operator, operating as AESO,
a statutory corporation established pursuant to the
Electric Utilities Act (Alberta)
with offices in the City of Calgary, in the Province of Alberta
(the “ISO”)

and

[insert legal name of corporation or partnership],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of [insert city], in the Province of [insert province]
(the “market participant”)

RECITALS:

- C. 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**.
- D. 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 STS Agreement have the meanings given to them in the *Consolidated Authoritative Document Glossary*. Capitalized terms have the meanings given to them in the preamble or body of this STS Agreement, including:

- i. “STS Agreement” means the this System Access Service Agreement for Supply Transmission Service Rate; and
 - ii. “Effective Date” means the date that this STS Agreement comes into effect in accordance with Section 2 below.
- (b) Should the **ISO tariff**, **ISO rules** or *Consolidated Authoritative Document Glossary* be amended from time to time during the term of this STS Agreement by approval of the **Commission**, then such amended **ISO tariff**, **ISO Rules** or *Consolidated Authoritative Document Glossary* will apply to this STS Agreement and this STS Agreement shall be deemed amended upon each such approval.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

2. EFFECTIVE DATE

- (a) If the construction of **transmission facilities** is required for a connection project, this **STS Agreement** becomes effective immediately following the later of:
 - (i) the issuance by the **Commission** of the permit(s) and licence(s) required to construct and operate the **transmission facilities**;
 - (ii) if applicable, the receipt by the **market participant** of the following regulatory approvals;
[list approvals, if applicable];
and
 - (iii) if applicable, the successful resolution of the following non-financial matters:
[list non-financial matters].
- (b) If the construction of transmission facilities is not required for a connection project, this **STS Agreement** becomes effective on the day it is executed, shown above.

3. POINT OF SUPPLY

Point of supply is located at and described as follows:

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

4. CONTRACT CAPACITY

Contract capacity is the following amounts for and during the following periods:

MW [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.

5. COMMERCIAL OPERATION

Upon completion of **commissioning** and provided that the **ISO** is satisfied with the same, the **ISO** must provide notice to the **market participant** confirming that the facility may begin **commercial operation**.

6. SETTLEMENT

The **ISO** must charge, and the **market participant** must pay, amounts in accordance with Rate STS commencing in the **settlement period** in which the **ISO** commences the provision of **system access service** to the **market participant**.

7. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 8 and 9 of this STS Agreement, the **ISO** must provide **system access service** under Rate STS to the **market participant** at the **point of supply** at the **contract capacity** pursuant to sections 2 and 3 of this STS Agreement.

8. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE

If the **market participant** takes **system access service** under Rate STS, the **market participant** must take such service at the **point of supply** at the **contract capacity** pursuant to sections 2 and 3 of this STS Agreement.

9. MARKET PARTICIPANT'S PAYMENT OBLIGATION

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

10. OTHER CONDITIONS

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

Yes ☐

No ☐

11. TERM

This STS Agreement commences on the Effective Date and continues unless it is terminated in accordance with the **ISO tariff**.

12. 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**.

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

- (d) A notice must be provided in accordance with subsection 12.4 of the **ISO tariff, Miscellaneous**. The **market participant's** address for notices is:

Attention: _____
Telephone: _____
Fax: _____
Email: _____

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

Attention: _____
Telephone: _____
Fax: _____
Email: _____

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

15. AMENDMENTS

- (a) The parties acknowledge that either may request an amendment to this STS Agreement. The **market participant** must request such an amendment by complying with the procedure for amending STS Agreements posted by the **ISO** on its website or, if such procedure is not posted, by requesting providing notice to the **ISO**.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff, ISO rules, and Consolidated Authoritative Document Glossary** may be amended from time to time during the term of this STS Agreement by approval of the **Commission** and that this STS

Agreement is deemed amended upon each such approval.

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

16. MISCELLANEOUS

- (a) Section 9 will survive the termination of this STS Agreement for either the time provided for in such section or the longest period provided by law.
- (b) 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.
- (c) 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 will 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 must extend only to the particular breach so waived and must not limit or affect any rights with respect to any other or future breach.
- (d) Time is of the essence.
- (e) 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.
- (f) Whenever possible, each provision of this STS Agreement must 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 a provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision will 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.
- (g) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as is reasonably required in order to fully perform and carry out the terms of this STS Agreement.
- (h) The parties may execute this STS Agreement by fax, e-mail or other electronic means capable of producing a paper copy, and in separate counterparts, each of which when so executed and delivered, and all such counterparts taken together will constitute one instrument.

[Remainder of page intentionally left blank. Signature page to follow.]

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.

ISO, 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.

This application, if approved by the **ISO**, 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.

Unless otherwise defined in this application, bolded terms, not including headings, used in this application have the meanings given to them in the *Consolidated Authoritative Document Glossary*. Capitalized terms have the meanings given to them in the preamble or body of 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: _____
Twelve (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 in an attachment labeled “Schedule A”.

1. Load characteristic (static, synchronous machine or induction machine);
2. Approximate load factor (demand opportunity service specific load only); and
3. Expected **power factor**.

Schedule A: ☐ Attached

Commercial Information: Please read the eligibility criteria in the **ISO tariff** and provide a comprehensive business case in an attachment 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

Undertaking

The **market participant** undertakes to notify the **ISO** upon the occurrence of a financial, operational, and/or technical change, where such changes materially impacts 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:
(Print name)

Title:
(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

Email: dos.applications@aeso.ca

ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate XOS and Rate XOM, Export Service



SYSTEM ACCESS SERVICE AGREEMENT FOR RATE XOS AND RATE XOM, EXPORT SERVICE (“Export Agreement”)

This Export Agreement effective the 1st day of _____, 201____ (the “Effective Date”).

Between:

Independent System Operator, operating as AESO
a statutory corporation established pursuant to the
Electric Utilities Act (Alberta)
with offices in the City of Calgary, in the Province of Alberta

(the “ISO”)

and

[insert legal name of corporation or partnership],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
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 Export Agreement have the meanings given to them in the *Consolidated*

Authoritative Document Glossary. Capitalized terms have the meanings given to them in the preamble or body of this Export Agreement, including:

- i. “Export Agreement” means the this System Access Service Agreement for Rate XOS and RATE XOM, Export Service;
 - ii. “Effective Date” means date that the Export Agreement comes into effect, as stated in the preamble of this Export Agreement; and
 - iii. “Point of Interconnection” means the British Columbia **Intertie**, Saskatchewan **Intertie** or Montana **Intertie**, as indicated in section 2 of this Export Agreement.
- (b) Should the **ISO tariff**, **ISO rules** or *Consolidated Authoritative Document Glossary* be amended from time to time during the term of this Export Agreement by approval of the **Commission**, then such amended **ISO tariff**, **ISO Rules** or *Consolidated Authoritative Document Glossary* will apply to this Export Agreement and this Export Agreement shall be deemed amended upon each such approval.
- (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** must charge, and the **market participant** must 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 5 and 6 of this Export Agreement, the **ISO** must 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** must 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** must pay to the **ISO** for **system access service** under Rate XOS or Rate XOM, as applicable, during the term of this Export Agreement the amount required pursuant to Rate XOS or Rate XOM, as applicable.

7. **TERM**

This Export Agreement commences on the Effective Date and continues 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 pursuant to Section 2 of this Export Agreement.

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 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.

10. **NOTICES**

- (a) A notice must be provided in accordance with subsection 12.4 of the **ISO tariff, Miscellaneous**. 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 address(es) to the **ISO** using the method posted on the AESO website as updated from time to time.

11. AMENDMENTS

- (a) The parties acknowledge that either may request an amendment to this Export Agreement. The **market participant** must request such an amendment by complying with the procedure for amending Export Agreements posted by the **ISO** on its website or, if such procedure is not posted, by providing notice to the **ISO**.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff**, **ISO rules** and *Consolidated Authoritative Document Glossary* may be amended from time to time during the term of this Export Agreement by approval of the **Commission** and that this Export Agreement is deemed amended upon each such approval.
- (c) Subject to subsection 11(b) of this this Export Agreement, this Export Agreement may only be amended by written instrument executed by the **ISO** and the **market participant**.

12. MISCELLANEOUS

- (a) Section 6 will survive the termination of this Export Agreement for either the time provided for in such section or the longest period provided by law.
- (b) 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.
- (c) 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 will 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 must extend only to the particular breach so waived and must not limit or affect any rights with respect to any other or future breach.
- (d) Time is of the essence.
- (e) This Export Agreement is 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.

- (f) Whenever possible, each provision of this Export Agreement must 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 a provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision will 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.
- (g) 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.
- (h) The parties may execute this Export Agreement by fax, e-mail or other electronic means capable of producing a paper copy, and in separate counterparts, each of which when so executed and delivered, and all such counterparts taken together will constitute one instrument.

[Remainder of page intentionally left blank. Signature page to follow.]

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.

ISO, 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



SYSTEM ACCESS SERVICE AGREEMENT FOR IMPORT OPPORTUNITY SERVICE RATE ("Import Agreement")

This Import Agreement effective the 1st day of _____, 201____ (the "Effective Date").

Between:

Independent System Operator, operating as AESO
a statutory corporation established pursuant to the
Electric Utilities Act (Alberta)
with offices in the City of Calgary, in the Province of Alberta
(the "ISO")

and

[insert legal name of corporation or partnership],
a [corporation, incorporated] [partnership organized], incorporated pursuant to the laws of XXX,
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 Import Agreement have the meanings given to them in the *Consolidated Authoritative Document Glossary*. Capitalized terms have the meanings given to them in the preamble or body of this Import Agreement, including:
 - i. "Import Agreement" means the this System Access Service Agreement for Import Opportunity Service Rate;
 - ii. "Effective Date" means date that the Import Agreement comes into effect, as stated in the preamble of this Import Agreement; and

iii. “Point of Interconnection” means the British Columbia **Intertie**, Saskatchewan **Intertie** or Montana **Intertie**, as indicated in section 2 of this Import Agreement.

(b) Should the **ISO tariff**, **ISO rules** or *Consolidated Authoritative Document Glossary* be amended from time to time during the term of this Import Agreement by approval of the **Commission**, then such amended **ISO tariff**, **ISO Rules** or *Consolidated Authoritative Document Glossary* will apply to this Import Agreement and this Import Agreement shall be deemed amended upon each such approval.

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

4. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 5 and 6 of this Import Agreement, the **ISO** must 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** must 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** must 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 commences on the Effective Date and continues for a term of 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 pursuant to Section 2 of this Import Agreement.

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 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.

10. NOTICES

- (a) A notice must be provided in accordance with subsection 12.4 of the **ISO tariff, Miscellaneous**. 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 address(es) to the **ISO** using the method posted on the AESO website as updated from time to time.

11. **AMENDMENTS**

- (a) The parties acknowledge that either may request an amendment to this Import Agreement. The **market participant** must request such an amendment by complying with the procedure for amending Import Agreements posted by the **ISO** on its website or, if such procedure is not posted, by providing notice to the **ISO**.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff**, **ISO rules**, and *Consolidated Authoritative Document Glossary* may be amended from time to time during the term of this Import Agreement by approval of the **Commission** and that this Import Agreement is deemed amended upon each such approval.
- (c) Subject to subsection 11(b) of this Import Agreement, this Import Agreement may only be amended by written instrument executed by the **ISO** and the **market participant**.

12. **MISCELLANEOUS**

- (a) Section 6 will survive the termination of this Import Agreement for either the time provided for in such section or the longest period provided by law.
- (b) 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.
- (c) 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 will 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 must extend only to the particular breach so waived and must not limit or affect any rights with respect to any other or future breach.
- (d) Time is of the essence.
- (e) This Import Agreement is 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.
- (f) Whenever possible, each provision of this Import Agreement must 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 a provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision will 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.
- (g) Each party will, from time to time, without further consideration, do such further acts and deliver all such further assurances, deeds and documents as is reasonably required in order to fully perform and carry out the terms of this Import Agreement.
- (h) The parties may execute this Import Agreement by fax, e-mail or other electronic means capable of producing a paper copy, and in separate counterparts, each of which when so executed and delivered, and all such counterparts taken together will constitute one instrument.

[Remainder of page intentionally left blank. Signature page to follow.]

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.

ISO, 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 effective as of the _____ day of _____, 201____ (the “Effective Date”)

BETWEEN:

[Insert Name of Legal Owner of the Transmission Facility],
a corporation, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**

(the “TFO”)

– and –

[Insert Name of Market Participant],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**
(the “**market participant**”)

RECITALS

- A. The **market participant** has requested **system access service** from the **ISO**, operating as the Alberta Electric System Operator, 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. The provision or amendment of **system access service** will require the construction of a new **transmission facility** and a commitment by the **market participant** in relation to the expenditure of capital for such construction;
- C. The **ISO tariff** requires the **market participant** to provide **financial security** or a **construction contribution**, or both, to the TFO, in the amounts determined pursuant to the **ISO tariff**;
- D. Prior to commencing the Project Work, as set out in the attached Schedule “A”, the **ISO tariff** requires the **market participant** to enter into an agreement substantially in the form of this Construction Commitment Agreement with the TFO and to hold the TFO harmless from any negative financial consequences related to the cancellation of the Connection Project; and
- E. The **ISO tariff** contains additional terms and conditions of **system access service**. This Construction Commitment 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 Construction Commitment Agreement by reference.

In consideration of the mutual covenants and agreements set forth in this Construction Contribution 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:

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

Interpretation and Definitions

1.

- (a) Unless otherwise defined in this Construction Commitment Agreement, bolded terms, not including headings, used in this Construction Commitment Agreement have the meanings given to them in the *Consolidated Authoritative Document Glossary*. Capitalized terms have the meanings given to them in the preamble or body of this Construction Commitment Agreement, including:
 - (i) “Cancellation Costs” means all Connection Project costs actually incurred by the TFO prior to cancellation of a Connection Project, or reasonably required to be incurred by the TFO after cancellation of a Connection Project, including costs arising from preparation of a connection proposal, preparation of a facility application and construction of a Connection Project, as documented in the construction commitment agreement required by section 5 of the **ISO tariff**; third-party cancellation costs and penalties; costs for material salvage; and reclamation of any related construction;
 - (ii) “Cancellation Event” means an event described in paragraph 10 or 11 of this Construction Commitment Agreement which leads to or may lead to the cancellation of the Connection Project;
 - (iii) “Connection Project” means a new **transmission facility** constructed by the TFO at the request of the **market participant for system access service**;
 - (iv) “Construction Commitment Agreement” means this Construction Commitment Agreement;
 - (v) “Effective Date” means date that this Construction Commitment Agreement comes into effect, as stated in the preamble of this Construction Commitment Agreement;
 - (vi) “Guarantor” means an entity that provides a guarantee on behalf of the **market participant**;
 - (vii) “Project Work” means the work for the Connection Project as set out in Schedule “A” to this Agreement.
 - (viii) “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; and
- (b) Should the **ISO tariff**, **ISO rules**, or *Consolidated Authoritative Document Glossary* be amended from time to time during the term of this Construction Commitment Agreement by approval of the **Commission**, then such amended **ISO tariff**, **ISO Rules**, or *Consolidated Authoritative Document Glossary* will apply to this Construction Commitment Agreement and this Construction Commitment Agreement shall be deemed amended upon each such approval.
- (c) In the event of any conflict or inconsistency between this document and the **ISO tariff**, the latter shall prevail.

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

Term of Agreement

2. This Construction Commitment Agreement takes effect on the Effective Date and remains in full force and effect until:
 - (a) the Connection Project begins **commercial operation**; or
 - (b) 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.

Construction Contribution and Financial Security

4. The **market participant** must pay to the TFO a **construction contribution** required in respect of its **financial obligation** for the Connection Project in accordance with section 6 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, 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 6 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 Construction Commitment 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.
6. The **construction contribution** and **financial security** must in aggregate be in an amount adequate to fund the **financial obligation** arising from the Project Work, as determined pursuant to section 6 of the **ISO tariff**.
7. All changes to the **construction contribution** and **financial security** must 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** is unsecured, or if its Guarantor has provided a guarantee as **financial security**, and the **market participant** becomes aware of a **material adverse change** in respect of the **market participant** or Guarantor, the **market participant** must provide written notice thereof to the TFO and to the **ISO** within 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 a **material adverse change** has occurred, consideration must be given to an event, circumstance or change which affects or is reasonably expected to affect:
 - (a) the financial condition of the **market participant** or its Guarantor;
 - (b) the ability of the **market participant** or its Guarantor to perform its obligations under a Financial Security; or
 - (c) the assets or business of the **market participant** or its Guarantor.

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

Cancellation of Connection Project

10. The Connection Project must 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 a critical information under subsection 3.2 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 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 Construction Commitment Agreement, or subsequently 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 of this Construction Commitment Agreement;
 - (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 as set out in Appendix B of the **ISO tariff**; or
 - (ii) enter into an amendment of its existing **system access service** agreement with respect to the Connection Project as set out in Appendix B of the **ISO tariff**,
 in accordance with the **ISO tariff**;
 - (d) the **market participant** or its Guarantor breaches a term, condition, agreement or covenant under this Construction Commitment Agreement or the **financial security** and fails to remedy the breach within 5 **business days** of receipt of written notice of the breach by the TFO to the **market participant**;
 - (e) a representation or warranty made or given by the **market participant** in connection with this Construction Commitment Agreement is shown to be untrue or incorrect when it was made or given at the Effective Date or ceases to be true and correct during the term of this Construction Commitment Agreement;
 - (f) the **market participant** or its 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

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

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 a proceeding seeking a reorganization, arrangement, composition or readjustment under a 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 its Guarantor;

- (g) a formal or informal proceeding is instituted by or against the **market participant** or its Guarantor for the dissolution or liquidation of, settlement of claims against, or winding up of the affairs of, the **market participant** or its Guarantor, or a resolution is passed for dissolution, liquidation or winding up the **market participant** or its Guarantor;
- (h) the **market participant** or its 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 its Guarantor;
- (j) the **market participant** creates or permits to exist a 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 equally with the **financial security**;
- (k) the holder of a charge, security interest, lien, encumbrance or claim against a collateral charged under the **financial security** does anything to enforce or realize on the charge, security interest, lien, encumbrance or claim; or
- (l) with respect to a letter of credit provided to the TFO, if replacement **financial security** is requested and not provided by the **market participant** within 2 **business days** of the request 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 an applicable grace period;
 - (iii) the issuer of the letter of credit disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such letter of credit;
 - (iv) the letter of credit expires or terminates, or ceases to be in full force and effect for the purposes of this Construction Commitment Agreement (in either case other than in accordance with its terms) prior to the satisfaction of all obligations of the **market participant** under this Construction Commitment Agreement without the written consent of the TFO;
 - (v) there are less than 20 **business days** remaining until expiry of the letter of credit; or
 - (vi) an event analogous to a **material adverse change** occurs with respect to the issuer of the letter of credit.

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

12. If, the Connection Project is cancelled due to the occurrence of a Cancellation Event, the TFO, without limiting or restricting other rights or remedies under contract, at law or in equity:
 - (a) must:
 - (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 a legal action or proceeding against the **market participant** or its Guarantor.
13. Upon the occurrence of a Cancellation Event, the TFO must use, and must 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 must at all times maintain accurate accounts, records, invoices and third-party invoices for all Connection Project costs, including all Cancellation Costs, which are prima facie evidence of the amounts owing to the TFO by the **market participant**.
15. The **market participant** must, upon demand having been made by the TFO following the occurrence of a Cancellation Event, pay the Cancellation Costs to the TFO without delay. If the **market participant** fails to pay to the TFO the Cancellation Costs upon demand, the TFO has 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 Construction Commitment 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

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

- (d) the authorization, execution and performance by the **market participant** of this Construction Commitment 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 Construction Commitment 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 Construction Commitment 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** must 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 Construction Commitment Agreement and the **financial security** by the TFO.
18. In this Construction Commitment Agreement:
- (a) a notice or communication required or permitted to be given under this Construction Commitment Agreement must be in writing and is considered to have been duly given if delivered by hand or courier, transmitted by fax, or delivered by e-mail, to each party set out below:
 - (i) if to the **market participant**:
 -
 - Attention: •
 - Fax No: •
 - E-mail: •

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

- (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
 - E-mail: ISOtariiffnotice@aeso.ca
 - (iv) to another address, fax or email as a party may designate by providing notice of the same to all parties.
 - (b) notice or communication is 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 hours on the next **business day**, and if sent by fax or e-mail during business hours on a **business day**, upon the sender receiving confirmation of the fax or e-mail delivery, and if not sent during business hours, upon the commencement of business hours on the next **business day**.
19. The **market participant** must not assign this Construction Commitment Agreement without the prior written consent of the TFO.
 20. The TFO must not assign this Construction Commitment Agreement without the prior written consent of the **market participant**, except that the TFO may assign its interest in this Construction Commitment 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 Construction Commitment Agreement is to be construed as an obligation on the part of the **market participant** to proceed with the Connection Project.
 22. This Construction Commitment Agreement enures to the benefit of and will be binding upon the parties and their respective successors and permitted assigns.
 23. No failure or delay on the TFO's part in exercising a power or right as provided in this Construction Commitment Agreement operates as a waiver of this Construction Commitment Agreement.
 24. The TFO's rights and remedies as provided in this Construction Commitment Agreement are cumulative and not exclusive of a right or remedy at law or in equity.
 25. Time is of the essence.
 26. Whenever possible, each provision of this Construction Commitment Agreement must be interpreted in such a manner as to be effective and valid under applicable law, however, each provision of this Construction Commitment Agreement is intended to be severable and if a provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision will be severed from this Construction Commitment Agreement and will not affect the legality, validity or enforceability of the remainder of this

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

Construction Commitment Agreement or any other provision of this Construction Commitment Agreement.

27. This Agreement is be governed by and interpreted in accordance with the laws of the Province of Alberta and the laws of Canada. 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 a suit, action or proceeding commenced in such Courts and by an order or judgment resulting from such suit, action or proceeding, but the foregoing in no way limits the right of the TFO to commence suits, actions or proceedings based on this Construction Commitment Agreement in any jurisdiction it may deem appropriate.
28. This Construction Commitment Agreement may be varied or amended only by or pursuant to an agreement in writing signed by the parties.
29. All Schedules are deemed fully to be a part of this Agreement. The Schedules may be varied or amended provided such amendments are signed by the parties, as provided in the Schedules.
30. This Agreement may be signed in one or more counterparts, originally or by fax, e-mail or other electronic means capable of producing a paper copy, and each such counterpart taken together will form one and the same agreement.

[Remainder of page intentionally left blank. Signature page to follow.]

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

THE TFO AND THE MARKET PARTICIPANT have executed this Construction Commitment 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] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**
(the “TFO”)

– and –

[Insert name of Market Participant],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**
(the “market participant”)

PROJECT WORK AND FINANCIAL OBLIGATION

For Connection Project **[insert project name]**

[Author: If this is an amended Schedule “A”, keep the language in the following first three paragraphs and the word “amended” in the fourth paragraph and in the “IN WITNESS WHEREOF” paragraph:

The TFO and **market participant** have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained this amended Schedule “A”.

In consideration of the premises in this amended Schedule “A”, the mutual covenants and agreements set forth and for other good and valuable consideration (the receipt and sufficiency of which is acknowledged by each of the parties), the parties agree to amend this Schedule “A” as provided below.

Effective upon execution of this amended Schedule “A”, being the latest date of signature stated below, the Schedule “A” effective on **[insert date]** is deleted in its entirety and replaced with this amended Schedule “A”.]

This **[amended]** 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:

[Author: The table below should be revised to reflect the agreed upon Project Work and payment schedule, including any agreed upon changes to the description of work, number of stages or number of steps.]

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

Project Work	Estimated Costs	Date of Issue
[add description of work. For example: 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]	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) [add description of any additional work]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 5 and 6 Costs: Construction Costs – Step 1 [add description of any additional work]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 5 and 6 Costs: Construction Costs – Step 2 [add description of any additional work]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Stages 5 and 6 Costs: Construction Costs – Step 3 [add description of any additional work]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
[Additional construction steps as required]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
[Additional detail for any stages as required]	Amount in words Canadian dollars plus GST (CND \$ Amount in numbers + GST).	
Total Costs as of [Insert Date]		

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 do 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 in 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.

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

[INSERT FULL NAME OF TFO]

By: _____

Name (print): _____

Title (print): _____

Date: _____

[INSERT FULL NAME OF MARKET PARTICIPANT]

By: _____

Name (print): _____

Title (print): _____

Date: _____

SCHEDULE “B”

To the Construction Commitment Agreement

Between

[Insert Name of Legal Owner of the Transmission Facility],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**
(the “TFO”)

– and –

[Insert name of Market Participant],
a **[corporation, incorporated] [partnership organized]**, incorporated pursuant to the laws of XXX,
with office[s] in the City of **[insert city]**, in the Province of **[insert province]**
(the “market participant”)

CONSTRUCTION CONTRIBUTION AND FINANCIAL SECURITY

For Connection Project **[insert project name]**

[Author: If this is an amended Schedule “B”, keep the language in the following first three paragraphs and the word “amended” in the fourth paragraph and in the “IN WITNESS WHEREOF” paragraph:

The TFO and **market participant** have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained this amended Schedule “B”.

In consideration of the premises in this amended Schedule “B”, the mutual covenants and agreements set forth and for other good and valuable consideration (the receipt and sufficiency of which is acknowledged by each of the parties), the parties agree to amend this Schedule “B” as provided below.

Effective upon execution of this amended Schedule “B”, being the latest date of signature stated below, the Schedule “B” effective on **[insert date]** is deleted in its entirety and replaced with this amended Schedule “B”.]

This **[amended]** 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. Upon execution of the Construction Commitment Agreement, the **market participant** must provide to the TFO one or more of the following as determined in accordance with section 6 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:

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma (continued)

- (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 capable of being 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.

2. The **market participant** must 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: _____

ISO Tariff – Appendix C

Procedure for Foreseeable Transmission Must-Run Service



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 8.7 of the **ISO tariff, Ancillary Services**,
- (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 8.6 of the **ISO tariff** in respect of unforeseeable transmission must-run service.

(Reference #6 in below diagram)

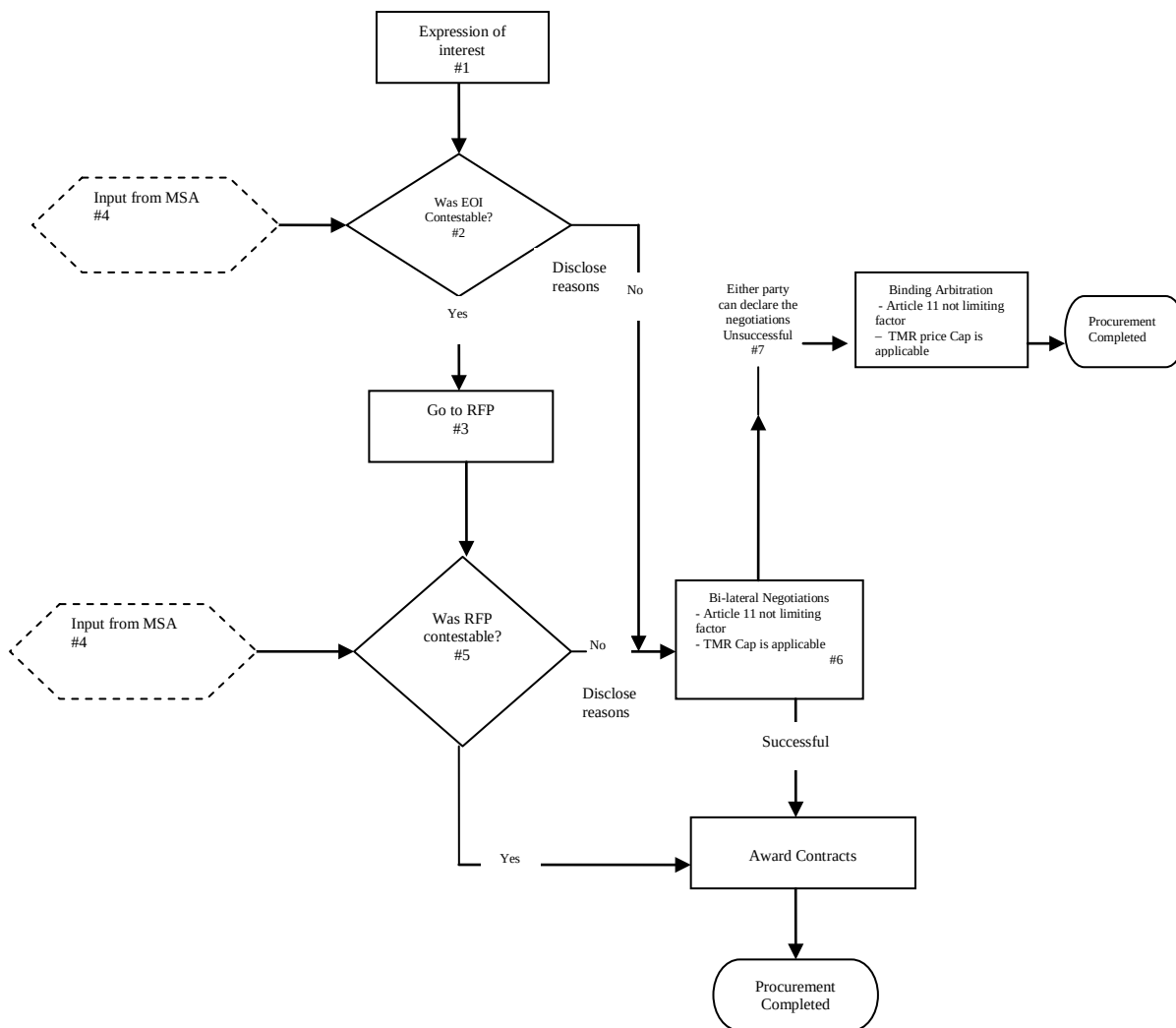
6 Any party to the bilateral negotiation process may declare it unsuccessful after thirty (30) **days**, at which time a binding arbitration process shall commence between the **ISO** and the **market participant** (Reference #7 in below diagram). In circumstances where multiple **market participants** 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 8. of the **ISO tariff**, and
- (b) not be limited by the pricing provisions of subsection 8.6 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
2018-XX-01	Revised as applied for in the 2018 ISO tariff application.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.