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Page 1 of 2 Alberta Electric System Operator, Calgary Place, 2500, 330 - 5th Avenue SW Calgary, AB T2P 0L4

Phone: 403-539-2450 Fax: 403-539-2949 www.aeso.ca 💆 @theaeso

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ISO Tariff – Rate DTS Demand Transmission Service

Applicability

- 1 Rate DTS of the ISO tariff, <u>Demand Transmission Service</u>, 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

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 | \$ 10,177 9,038.00/MW/ month |
| (b) Metered energy | \$1. 20 01/MWh |
| Regional System Charge | |
| (c) Billing capacity | \$2, 281 701.00/MW/mo |
| (d) Metered energy | \$0. <mark>84<u>81</u>/MWh</mark> |
| Point of Delivery Charge | · |
| (e) Substation fraction | \$ 8,635 10,120.00/mont |
| (f) First (7.5 × substation fraction) MW of billing capacity | \$ 3,496 4,108.00/MW/m onth |
| (g) Next (9.5 × substation fraction) MW of billing capacity | \$2, 190 572.00/MW/ mo |

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| Volume in Settlement Period | Charge |
|--|--|
| | nth |
| (h) Next (23 × substation fraction) MW of billing capacity | \$1, 527<u>799</u>. 00/MW/mo nth |
| (i) All remaining MW of billing capacity | \$ 989 1,162.00/MW/mo nth |

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 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

- 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

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**, \$4001,200.00/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**, <u>unless the ISO</u> 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 5 of section 13 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 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.

| 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. | | |

ISO Tariff – Rate DTS Demand Transmission Service (continued)



| 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 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

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 | \$ 10,177 9,038.00/MW/month | |
| (b) Metered energy | \$1. 20 01/MWh | |
| Regional System Charge | | |
| (c) Billing capacity | \$2, 281 701.00/MW/mo nth | |
| (d) Metered energy | \$0. <mark>84<u>81</u>/MWh</mark> | |

- 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 3(1)((d)) above as the greater of:
 - (a) the rate for the regional system charge in subsections 3(1)(c) and 3(1)(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

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- **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

- 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**, \$4001,200.00/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—9_5 of the **ISO** tariff, <u>Changes to System Access Service</u>.
- **8(2)** The **ISO** must apply Rider C<u>of the **ISO** tariff</u>, 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.

| Effective | Description | |
|-------------------|---|--|
| 2019-XX-01 | Updated charges and revised Other System Support Services Charge as applied for in the amended 2018 ISO tariff application. | |
| <u>2018-01-01</u> | 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, <u>Demand Opportunity Service</u>, 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 12 of the ISO tariff, <u>Demand</u>
 <u>Opportunity Service</u>; 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. 79 <u>56</u> /MWh | 7 minutes | Before Rates DTS, FTS, DOS Term and DOS 1 Hour |
| (b) | DOS 1 Hour | \$15. 82MWh 22/MW <u>h</u> | 1 hour | Before Rates DTS, FTS and DOS Term |
| (c) | DOS Term | \$ 91.10 101.96/MW | 7 minutes | Before Rates DTS and FTS |



- <u>3(2)</u> 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), 3(1)((b), or 3(1)((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 Factor Methodology and Requirements, and Factors, which is available to market participants inon the loss factors section of the ISOAESO website;

or

- (b) a minimum amount equal to the Rate DOS charge from subsection 3(1)(a), 3(1)((b), or 3(1)((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**.
- **<u>4(3)</u>** The **market participant** must, in response to a **directive** from the **ISO**, achieve curtailment of its demand opportunity service load within the response time specified in subsection 3(1)(a), 3(1)(b), or 3(1)(c) above, as applicable.
- 4(4) The ISO must apply Rider E<u>of the ISO tariff</u>, 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.
- **<u>4</u>(6)** The terms and conditions of the **ISO tariff** form part of this rate.



| 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 DOS DemandXOS 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 | \$ 7.64 6.96/MWh | i 1 nour | 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

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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.



| | 1 | |
|-------------------|--|--|
| Effective | Description | |
| 2019-XX-01 | Updated charges as applied for in the amended 2018 ISO tariff application. | |
| <u>2018-01-01</u> | 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

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 twenty-four (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 |
|------|-------------------------------------|--|--|
| хом | \$ 7.33 <u>6.96</u> /MWh | i 1 nour | 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 |
|------|--------------|--------------|
| хом | 1 hour | 1 month |

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

| 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. |
| 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 Under-FrequencyUnderfrequency Load Shedding GreditCredits



Applicability

- 1 Rate <u>UFLS UFLS of the **ISO tariff**</u>, <u>Demand Underfrequency Load Shedding Credits</u>, 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**.
- <u>3(2)</u> 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 |

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| 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, <u>suspend</u>, 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**.
- **<u>5</u>(2)** The terms and conditions of the **ISO tariff** form part of this rate.

| Effective | Description |
|------------|--|
| | 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. |
| | 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 | \$ 6,822 7,995.00/month |
| (b) First (7.5 × substation fraction) MW of billing capacity | \$ 2,762 3,245.00/MW/m onth |
| (c) Next (9.5 × substation fraction) MW of billing capacity | \$ 1,730 2,032.00/MW/m onth |
| (d) Next (23 × substation fraction) MW of billing capacity | \$1, 206421 .00/MW/mo nth |
| (e) All remaining MW of billing capacity | \$ 989 1,162.00/MW/mo nth |

Terms

- **3(1)** The **ISO** must apply Rate PSC separately at each **point of delivery**, except where Rate PSC applies to totalized **points of delivery** <u>underin accordance with</u> subsection <u>5 of section 13 10.3</u> of the **ISO tariff**, <u>Settlement and Payment Terms</u>.
- <u>3(2)</u> The **ISO** must provide the primary service credit in conjunction with a reduced maximum local investment in accordance with subsection-<u>8 of section 8 4.7</u> of the **ISO tariff**, <u>Classification and Allocation of Connection Projects Costs</u>.

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ISO Tariff – Rate PSC Primary Service Credit (continued)



- 3(3) The ISO must apply Rider C of the ISO tariff, Deferral Account Adjustment Rider, to system access service provided under this rate.
 - <u>3(4)</u> The terms and conditions of the **ISO tariff** form part of this rate.



| 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(1) Rate STS applies to system access service provided at a point of supply to:
 - (a) thea legal owner of a generating unit or an aggregated generating facility that is not subject to a power purchase arrangement;
 - (b) thea holder of the power purchase arrangement for a generating unit that is subject to a power purchase arrangement;
 - (c) thea legal owner of an industrial system that has been designated as such by the Commission;
 - (d) thea legal owner of an electric distribution system where a generating unit or an aggregated generating facility is connected to the electric distribution system results in electricity flowing into the transmission 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 Factor Methodology and Requirements, and Factors, which is available to market participants in the loss factors section of 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

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 **that** 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 <u>5 of section 13 10.3</u> of the **ISO tariff**, <u>Settlement</u> and Payment Terms.
- **<u>4(2)</u>** 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.
 - **<u>4</u>(4)** The terms and conditions of the **ISO tariff** form part of this rate.

| 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 twenty-four (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 Factor Methodology and Requirements*, and *Factors*, which is available to market participants in the loss factors section of 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

- 43(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 one (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.



| 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 TransAlta Utilities Corporation / FortisAlbertaDow 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)** The charge under Rider A1 is an adjustment to otherwise applicable rates to be made in each settlement period pursuant to the Decision.
- (2) The forecast of the benefit to the ISO arising from the construction contributions made by Dow Chemicals Canada Inc. to TransAlta Utilities Corporation are provided in the following table.

| Year | Forecast Benefit to ISO (Annual) | Forecast Benefit to ISO (Monthly) |
|-----------------|-------------------------------------|-----------------------------------|
| 1998 | \$544,093 | \$ 45,341 |
| 1999 | \$865,378 | \$72,115 |
| 2000 | \$836,603 | \$ 69,717 |
| 2001 | \$807,828 | \$ 67,319 |
| 2002 | \$779,053 | \$ 64,921 |
| 2003 | \$750,278 | \$ 62,523 |
| 2004 | \$721,503 | \$60,125 |
| 2005 | \$692,728 | \$ 57,727 |
| 2006 | \$663,953 | \$ 55,329 |
| 2007 | \$635,178 | \$ 52,932 |
| 2008 | \$606,403 | \$ 50,53 4 |
| 2009 | \$577,628 | \$48,136 |
| 2010 | \$5 48,853 | \$ 45,738 |
| 2011 | \$520,078 | \$43,340 |
| 2012 | \$491,303 | \$40,942 |
| 2013 | \$462,528 | \$38,544 |
| 2014 | \$433,754 | \$36,146 |

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| Year | Forecast Benefit to ISO (Annual) | Forecast Benefit to ISO (Monthly) |
|-----------------|-------------------------------------|---|
| 2015 | \$404,979 | \$33,748 |
| 2016 | \$376,204 | \$31,350 |
| 2017 | \$347,429 | \$28,952 |
| 2018 | \$318,654 | \$26,55 4 |
| 2019 | \$289,879 | \$24,157 |
| 2020 | \$261,104 | \$21,759 |
| 2021 | \$232,329 | \$19,361 |

Terms

- 3 The terms and conditions of the ISO tariff form part of this rider.
- 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 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.
- **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.
- <u>3(2)</u> 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.

ISO Tariff – Rider A1 Transmission Duplication Avoidance Adjustment Dow Chemical Canada Inc. / Dow Hydrocarbons / ASU2 (continued)



- 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

<u>5(1)</u> 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)) | <u>+25 MW</u> | <u>+30 MW</u> |
| Point of supply and point of delivery (B) (Dow Chemical (166S)) | <u>–45 MW</u> | <u>0 MW</u> |
| Point of delivery (C) (Ross Creek (906S)) | <u>+35 MW</u> | <u>+30 MW</u> |
| Point of supply (D) (Dow Cogen (218S)) | 100 MW | <u>0 MW</u> |
| Totalized metered demand (E) | <u>–85 MW</u> | <u>+60 MW</u> |

- 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)

ISO Tariff – Rider A1 Transmission Duplication Avoidance Adjustment Dow Chemical Canada Inc. / Dow Hydrocarbons / ASU2 (continued)



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**.



<u>Schedule 1 — Losses and Other Expenses Charge</u>

<u>6</u>

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

| Effective | Description |
|-----------|---|
| | Revised and reformatted all subsections, and new proposed forecast benefit table to 2041 as applied for in the amended 2018 ISO tariff application. |
| | 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

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.

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- 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

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

| Effective | Description |
|------------|--|
| 2011-07-01 | Revised and reformatted all subsections, as approved in Commission Decision |

ISO Tariff – Rider A2 Transmission Duplication Avoidance Adjustment NOVA Chemicals Corporation – Joffre Industrial System (continued)



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

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**

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

Metering and Totalizing

- **4(1)** Totalization should proceed on the basis of economic indifference to Shell Canada between the Duplication Avoidance Tariff and the construction of duplicate facilities and a net positive benefit to other transmission customers. These principles are met by the terms proposed for the Duplication Avoidance Tariff
- 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 |
| 12-Month Period | Monthly Payment |
| Jan. 1, 2007 – Dec. 31, 2007 | \$ 3,405 |
| Jan. 1, 2008 – Dec. 31, 2008 | \$ 1,655 |
| Jan. 1, 2009 – Dec. 31, 2009 | \$ 4,055 |
| Jan. 1, 2010 – Dec. 31, 2010 | \$ 1,701 |
| Jan. 1, 2011 – Dec. 31, 2011 | \$ 4,264 |
| Jan. 1, 2012 – Dec. 31, 2012 | \$ 1,626 |
| Jan. 1, 2013 – Dec. 31, 2013 | \$ 4,954 |
| Jan. 1, 2014 – Dec. 31, 2014 | \$ 1,605 |
| Jan. 1, 2015 – Dec. 31, 2015 | \$ 1,637 |
| Jan. 1, 2016 – Dec. 31, 2016 | \$ 16,504 |
| Jan. 1, 2017 – Dec. 31, 2017 | \$ 5,665 |
| Jan. 1, 2018 – Dec. 31, 2018 | \$ 1,737 |
| Jan. 1, 2019 – Dec. 31, 2019 | \$ 4,222 |
| Jan. 1, 2020 – Dec. 31, 2020 | \$ 1,807 |
| Jan. 1, 2021 – Dec. 31, 2021 | \$ 15,946 |
| Jan. 1, 2022 – Dec. 31, 2022 | \$ 1,954 |
| Jan. 1, 2023 – Dec. 31, 2023 | \$ 1,918 |
| Jan. 1, 2024 – Dec. 31, 2024 | \$ 1,956 |
| Jan. 1, 2025 – Dec. 31, 2025 | \$ 9,933 |
| Jan. 1, 2026 – Dec. 31, 2026 | \$ 2,265 |
| Jan. 1, 2027 – Dec. 31, 2027 | \$ 2,076 |
| Jan. 1, 2028 – Dec. 31, 2028 | \$ 2,201 |
| Jan. 1, 2029 – Dec. 31, 2029 | \$ 2,160 |
| Jan. 1, 2030 – Dec. 31, 2030 | \$ 2,203 |
| Jan. 1, 2031 – Dec. 31, 2031 | \$ 59,074 |

Transmission Duplication Avoidance Adjustment Shell Canada Corporation – Scotford Industrial System (continued)



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

| Effective | Description |
|-----------|--|
| | 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 totalized for the purpose of settlement under Rate DTS and Rate STS 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 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 the effective date of this rider, an amount equal to the "Monthly Payment" in subsection-7 below for the applicable year.

Terms

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.
- <u>4(2)</u> 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 |

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

Transmission Duplication Avoidance Adjustment
Imperial Oil Resources Limited – Cold Lake Industrial System (continued)



| Effective | Description |
|-----------|--|
| | 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 thirty (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**.

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ISO Tariff – Rider C Deferral Account Adjustment Rider (continued)



- 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.

| Effective | Description |
|--------------------------------|--|
| 2018 2019-XX- 01 | Updated subsections, as approved on an interim basis in Commission Decision 22942-D01-2017 issued on November 28, 2017 Revised applicability and rider provisions as applied for in the 2018 ISO tariff application and to be approved on an interim basis 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_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.

| Effective | Description |
|------------|--|
| 2015-07-01 | Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015. |
| | 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 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.



| Effective | Description |
|-------------------|--|
| <u>2018-01-01</u> | 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 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.



| 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 applies for has requested or accepts receiving system access service from the ISO agrees to be bound by the ISO tariff.
 - <u>1.1(2)</u> Both the **ISO** and <u>a market participants participant</u> are bound by and have the rights and obligations defined in the **ISO**-<u>tariff</u> with respect to **system access service** <u>that</u> the **ISO** provides, including rates, riders, terms and conditions and appendices.
 - 1.1(3) The A rate, rider, section of the terms and conditions or appendix in the ISO tariff becomes is effective as of the date provided in the revision history of each rate, rider, section, or appendix and only when approved by the Commission and each 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) The ISO has certain powers, duties and responsibilities as described in the Act and nothing in the ISO tariff in any way restricts or limits those powers, duties and responsibilities.
- (2) In the event of anya 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.
- <u>1.2(2)</u> In the event of <u>anya</u> conflict between <u>a provision of</u> the **ISO tariff** and a <u>sectionprovision</u> of an agreement for **system access service**, the <u>provision of the</u> **ISO tariff** governs the specific <u>sectionprovision</u> 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) words importing male persons include female persons, words importing female persons include male persons and words importing either sex include corporations;
 - (d) the provisions of the **ISO tariff** will be construed as always speaking and will be applied to circumstances as they arise;
 - (ed)the use of the word "including" is not to be construed as being restrictive;
 - (fe) "may" is to be construed as permissive and empowering and "must", "shall" and "will" are to be construed as imperative;



- (g) all references to a time of **day** in the **ISO tariff** mean mountain standard or mountain daylight time in the Province of Alberta, whichever is in effect on the **day** in question;
- (h(f) words and phrases in bold type have the meanings given to them in the definitions found in the Consolidated Authoritative Documents Glossary; and
- (ig) titles of documents are in italics.

Reasonable Exercise of Discretion

Jurisdiction

<u>1.4(1)</u> The **ISO** and <u>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.</u>

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

| 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 **anya** 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, 4, 5) and 62.3 through 2.12 below.
- 2.2(2) The ISO must provide such 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** <u>underin accordance with</u> any <u>applicable ISO rule</u>, or due to abnormal operating conditions, which include, <u>as defined in the Transmission Regulation</u>, conditions where **transmission facilities** are out of service, **emergency** conditions exist, construction or **commissioning** of **transmission facilities** occurs or **transmission facility** maintenance cannot be coordinated with **planned outages** of a **generating unit** or an **aggregated generating facility**.

Metered Demand Capacity Limitations

- **2.3(1)** 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, subject to subsections 3(3) and 3(4) below.
- (2) The ISO has the right to discontinue system access service if the metered demand exceeds either the rated capacity or the physical capacity of any transmission facilities comprising a market participant's connection, until the market participant installs equipment to limit the metered demand to the rated capacity or physical capacity, as applicable.
- (3) A market participant receiving system access service under Rate DTS may temporarily exceed the rated capacity of transmission facilities comprising its connection, but only where the ISO has approved a transaction under Rate DOS for the market participant at the applicable point of delivery.
- (4) A market participant receiving system access service under Rate STS may temporarily exceed the rated capacity of transmission facilities comprising its connection, but only with the ISO's consent, obtained on a minimum twenty-four (24) hours' notice, which the ISO withhold if the ISO determines that the transmission system cannot safely accommodate the proposed energy without risk of disturbance to other market participants.

Withholding Service

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



2.4(2) The **ISO** must provide a written explanation for limiting, reducing, withholding or terminatinga 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 can not and 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;
 - (e(c) activation of a remedial action scheme;
 - (d) unscheduled or unplanned **emergency** equipment maintenance or other **emergencies**;
 - (de) events of force majeure;
 - (ef) breaches of obligations owed to the ISO by its suppliers or market participants; or
 - (fg) 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, except where 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 planned downtime of 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 **anya** rate, charge or other amount that has accrued or is accruing to the **ISO** and to fully comply with the **ISO tariff areis** not affected during or as the result of any limitation, reduction, interruption, withholding or termination of **system access service**.

Reasonable Exercise of Discretion



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

Technical Requirements and Functional Specifications

- **2.8(1)** A **market participant** receiving **system access service** must comply with **thea** technical requirements set out inrequirement or functional specification of the **ISO-rules**. 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 and on request.
- **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

- 3(1) A market participant is responsible for all the facilities it owns and which are connected to the interconnected electric system, and the ISO has no responsibility in respect of service provided over market participant facilities.
- (22.9(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, obligations and guidelines that apply to the connection, subject to subsection 3(3 2.9(2) below, or
 - (c) additional studies needed to ensure compliance with such changes to the ISO rules, reliability standards or technical requirements, obligations and guidelines.
- (32.9(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 whenif 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

<u>2.10</u> <u>A</u> market participant nor any other person maymust not rearrange, disconnect, remove, connect with or otherwise interfere with anya transmission facility without unless the ISO's prior written consent.



Compliance

- **5(1)** The **ISO** may withhold, suspend or terminate the **system access service** of a **market participant** for failure to comply with the provisions of the **ISO** rules, technical requirements, obligations or guidelines described in subsection 2 above.
- (2) The ISO may waive compliance with subsection 2 above if the ISO determines that non-compliance would not have a detrimental effect on system reliability and where the imposition of the technical requirements, obligations or guidelines would create severe hardship or unnecessary costs to an existing market participant.

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 **anyan** external agency's reporting requirements, which includes:
- **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.
- (2) The ISO must specify the information the market participant must provide.

Operating and Forecast Information

- 3(1) A market participant must provide any of the following information which the ISO may request from time to time but generally not more than once during a 12-month period:
 - (a) a copy of the market participant's operating procedures;
 - (b) a schedule of planned outages for the following two (2) calendar years; or
 - (c) forecast information for the following five (5) calendar years, including:
 - (i) forecast maximum contract capacity by point of delivery or point of supply, by month;
 - (ii) the location and size of any required new point of delivery and point of supply, by year; and
 - (iii) the name and location of any existing **point of delivery** or **point of supply** which may no longer be required, by year.
- (2) The ISO may provide forms for provision of the required update and forecast information.

Effect of Non-Compliance

- **2.12(1)** The **ISO** may, if a **market participant** fails to provide information that may have an impact on affect safety or system reliability:
 - (a) delay or withhold the system access service of the market participant's system access service until the market participant provides the information to the ISO; or



(b) <u>limit, reduce, suspend, withhold or terminate the market participant's agreement for system access service System Access Service Agreement.</u>

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

| Effective | Description |
|------------|--|
| 2019-XX-01 | Revised as applied for in the amended 2018 ISO tariff application. |
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| 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.

<u>Applying for System Access Service or Change to an Existing System Access</u> 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.
- <u>3.6(2)</u> A market participant must execute a <u>System Access Service Agreement</u> for Rate <u>DTS</u> for a <u>contract capacity</u> that, in the <u>ISO's</u> determination approximates the expected maximum coincident sum of the flows at each feeder from the <u>transmission system</u>.
- 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.



Public

- 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;

<u>or</u>

- (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.



| 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. |
| | 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.

Connection Costs

- The ISO must determine the costs of a connection project for a market participant to be those costs reasonably associated with facilities that:
 - (a) a legal owner of a transmission facility owns and operates;
 - (b) are required in order to:
 - (i) provide system access service to a new point of delivery or point of supply; or
 - (ii) increase the capacity of or improve system access service to an existing point of delivery or point of supply; and
 - (c) are reasonably required to meet the market participant's:
 - (i) demand and supply forecast; and
 - (ii) reliability and operating requirements.

Classification of Participant-Related and System-Related Costs

- **34.2(1)** All costs of a connection project will 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.
- <u>4.2(2)</u> Participant-related costs <u>will be those are the costs related deemed necessary by the ISO</u> to <u>accommodate a contiguous connection project including, when taking into account the ISO's transmission system planning obligations, and include costs associated with:</u>
 - (a) the connection substation for the **point of delivery** or **point of supply**, including in all transmission facilities to accommodate an in-out line configurations, where required configuration;
 - (b) newa radial transmission linescircuit, including double-radial configurations, with only ene (1)_transmission source from the transmission system to the connection substation;
 - (e(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**;

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(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 twenty (20)_years and where the share is determined in accordance with subsection-3 of section 9.5.5 of the ISO-tariff, Changes to System Access Service;

(de)line moves or burials of existing transmission line;

- (e) communication at the point of delivery or point of supply;
- (f) communication enhancements, additions, or both required at the nearest substation
 withsolely to provide communications equipment to allow direct communication between it
 andservice for the connection substationproject;
- (g) breakers and associated, changes to protection systems, equipment or settings required for the connection of the new radial transmission lineproject to an existing substation;
- (h) salvage labour required to remove existing transmission facilities to allow the installation of new or replacement facilities for a connection project, except where the cost of the removed facilities is treated as a capital maintenance cost by the owner of the transmission facility;
- 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) a remedial action scheme, if required schemes;
- (k) a phasor measurement unit, if required;
- (I) the advancement 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 included as part of a critical transmission development or regional transmission system project under subsection 3(3)(b) below, calculated as the difference between the present values of the capital costs of the advanced and the as-planned facilities using the discount rate provided in subsection 11 below;
- (m) facilities previously classified as system-related under subsection 3(3)(c) below and nowthat have been reclassified as participant-related to meet the requirements of the connection project; and
- (m) facilities required to connect an isolated community regulated under the *Isolated Generating*<u>Units and Customer Choice Regulation</u>, to the **interconnected electric system**; and
- (n) other facilities that are required to complete the market participant's connection, including transmission facilities 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.
- <u>4.2(3)</u> System-related costs will be those costs related to a connection project including non contiguous components of the project and any costs associated with:
- (a) looped-If the ISO identifies system transmission facilities, which are being transmission facilities that increase the number of electrical paths between any two (2) substations, excluding the substation serving the market 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 and which exclude any new radial transmission line; related:

- (b) radial (a) advancement costs, which are the costs associated with the advancement of system transmission facilities which, within five (5) years of commercial operation, are planned required to become looped as part of a critical accommodate the connection project requesting demand transmission development or regional service, which the ISO calculates, using the discount rate provided in subsection 4.9 below, as:
 - (i) if the system transmission system project: 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;
 - (i) inii) if the ISO's most recent long-term-system transmission system plan;
 - (ii) in afacilities are included in an approved needs identification document filed with and do not have a set in-service-date, the Commission 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) as the ISO reasonably expects will be required in the future;
- and
 - (c)—(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 minimum size required to 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, in the opinion of 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 whichthat the ISO deems, in its opinion, determines to be in excess of those required by good electric industry practice.

Valuation of Facilities for Contribution Determination

54.4(1) The **ISO** must generallymay determine connection project costs based on the replacement costs 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) treatsidentifies the cost of the transformer which is removed, including the cost to remove the transformer as apart of its approved capital maintenance cost;

---or

(b) not reducing the participant-related costs in any other circumstances including when the **legal owner** of the **transmission facility** scraps the transformer—which is removed without treating its cost as a capital maintenance cost.

Allocation of Costs to Market Participants

- **64.5(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 <u>5 4.4(2)</u> above reflecting replacement of a transformer removed from service.
- <u>4.5(2)</u> The **ISO** must allocate the participant-related costs <u>determined referred to</u> in subsection-<u>6 4.5(1)</u> 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 6.4.5(1) and 6(2) above to each market participant by multiplying those costs by the average substation fraction for the market participant determined in accordance with subsection subsections 5.5(3(3) and (4)) of section 9 of the ISO tariff, Changes to System Access Service After Energization.
- 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

- **74.6**(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 **Commission** issues permit and licence for the connection project.
- (2) A market participant executes a System Access Service Agreement.
- 4.6(2) Subject to subsection 4.6(6) below, a market participant must payensure that construction contribution amounts are paid to the legal owner of the transmission facility in accordance with the financial obligation provisions of section—5 of the ISO tariff, Financial Obligations for Connection Projects.



- **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-8 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 **legal ewner's** contribution for a **generating unit** or an **aggregated generating facility** required under section **107** 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

- 84.7(1) The ISO must calculate the maximal maximum local investment:
 - (a) based on the contract capacity and investment term set out in the system access service agreement System Access Service Agreement for a connection project for a market participant taking service under Rate DTS or under Rate DTS with Rate PSC;
 - (b) excluding any contract capacity transferred from another point of delivery; and
 - (c) using an investment term from five (5) to twenty (20) years inclusive, commencing on the date of commercial operation.
- 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) | \$ 78 500 <u>82,100</u> /year | \$16 -480 ,420/year |
| (d) | First (7.5 × substation fraction) MW of contract capacity | \$ <mark>31</mark> 800 <u>33,300</u> /MW/year | \$6- <mark>680,660</mark> /MW/year |
| (e) | Next (9.5 × substation fraction) MW of contract capacity | \$ 19 - <u>20,</u> 900/MW/year | \$4- <u>,</u> 180/MW/year |



| | Column A | Column B | Column C |
|-----|---|---|---------------------------|
| (f) | Next (23 × substation fraction) MW of contract capacity | \$ 13 900<u>14,600</u>/MW/year | \$2- <u>,</u> 920/MW/year |
| (g) | All remaining MW of contract capacity | \$9 .000 ,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.
- <u>4.7</u>(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 <u>8</u> <u>4.7</u>(2) and <u>8</u>(3) above, based on each increment of **contract capacity** and the years for which each increment is contracted, and
 - (b) discounted from the beginning of the first **month** in which the increment of **contract capacity** exists back to the date of **commercial operation** of the connection project, using the discount rate provided in subsection—11 4.9 below.
- **4.7(5)** The **ISO** must determine the maximum local investment as the lesser of:
 - (a) the amount calculated in subsection-8_4.7(2), 8(3) or 8(4) above; or
 - (b) the demand-related costs.

Operations and Maintenance

- 94.8(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.
- <u>4.8(2)</u> 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 twenty (20)_years, whichever is less.



4.8(3) The market participant must use the discount rate provided in subsection 44.9 below in the present value calculation.

Limitations

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

Discount Rate

11<u>4.9</u>(1) The **ISO** must determine the discount rate applicable to the calculation of construction contributions under this section 8 of the **ISO** tariff and payments in lieu of notice under section 9 of the **ISO** tariff as:

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

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 (0) as the tax rate-T in subsection 14.9(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

124.10(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

- <u>5.2(1)</u> A market participant, the ISO or the legal owner of the transmission facilities may initiate a review of the construction contribution that the ISO had previously determined for a connection project when warranted by certain events.
- The ISO must review the 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.
- <u>5.2(3)</u> 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 anyan existing market participant, resulting in sharing of facilities as provided for in subsection 3 5.5 below;
 - (c) facilities connection project costs previously classified as system-related are reclassified as participant-related to meet changes in **market participant** requirements;
 - (d) facilities 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.



(35.2(4) The ISO must determine thea construction contribution under the provisions of section-8_4 of the ISO-tariff, Construction Contributions for Classification and Allocation of Connection Projects Costs, rather than this section-9, when 5, if an increase in contract capacity requires the addition of new equipment construction of transmission facilities at an existing point of delivery or point of supply.

(45.2(5) The ISO must not make anyan adjustment to a construction contribution more than twenty (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 five (5) years after the date of notice of the request for reduction or termination, subject to subsection-5.3(2) below.
- <u>5.3(2)</u> A market participant reducing or terminating contract capacity may choose tomay make a lump sum payment determined by the **ISO** in lieu of all or a portion of the 5-_year notice period in subsection-<u>5.3(1)</u> above.
- 5.3(3) The ISO must determinecalculate the payment in lieu of notice to represent (also known as a "PILON") as a share of the costs of system costs potentially transmission facilities, being transmission facilities that the ISO determines exist for the benefit of market participants, incurred to reasonably accommodate the market participant's contract capacity of a market participant over the 5-year planning horizon of the transmission system, and must calculate the payment:
 - (a) for anya market participant reducing, terminating or changing the start date or terminatingend date for contract capacity under Rate-DTS DTS, after executing a System Access Service Agreement, as the present value of the difference in bulk system and regional system charges whichthat would be attributed to the service-:
 - (i) with and without the reduction or termination of or change of date for contract capacity during the notice period; or change of date for contract capacity
 - (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 anya 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 whichthat would be attributable to the service with and without the termination of the service during the notice period.:
 - (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 11 of section 8 4.9 of the **ISO tariff**, Construction Contributions 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 thirty (30)-days before the reduction or termination of contract capacity is effective.



- <u>5.3(6)</u> The **ISO** may waive or reduce the requirement for payment in lieu of notice if, as determined by the **ISO**-considers that circumstances warrant where:
 - (a) **contract capacity** is transferred to a **system access service** of the same **market participant** at a nearby transmission substation;
 - (b) transmission system benefits arise from the reduction or termination of contract capacity, which benefits may include relief of regional transmission constraints, removal of capacity limitations which would restrict system access service to other market participants or avoidance of future upgrades to the transmission system; or
 - (c) thea market participant who has taken service for at least 20 years:
 - (i) demonstrates to the ISO that a reduction of contract capacity results from anthe market participant's energy or demand reduction initiative of the market participant who has taken service for at least twenty (20) years who: and
 - (i) provides to the **ISO** a clear, thorough and convincing case, with supporting facts, that demonstrates the energy or **demand** reduction resulting from the initiative and
 - (ii) during the ten (10)_years prior to the reduction in contract capacity becoming effective, has not increased contract capacity at the point of delivery at which the reduction in contract capacity occurs.
- **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 if appropriate.

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

Shared Facilities———

- 5.5(1) The ISO must allocate the participant-related costs of shared transmission facilities to market participants whenif transmission facilities are constructed to serve a market participant and then used to serve other but not all market participants within twenty (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-by:



- (a) <u>first, wherewhen a</u> transmission line is shared by two or more substations, <u>by</u> allocating the costs of the shared line to those substations in accordance with subsection-<u>5.</u>5(3) below; and
- (b) second, where when a single substation is shared by two2 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 <u>a</u> transmission line shared by two2 or more substations to the substations by:
 - (a) determining the higher of the sum of all Rate-DTS contract capacities or the sum of all Rate STS contract capacities for each substation in each of the twenty (20) years following commercial operation of the original transmission line, and assigning a contract capacity of zero (0) in anya 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(2)(a) above for the substation in a year by the sum of **contract capacities** determined for all sharing substations in that year;
 - (c) calculating the average percentage share over the full twenty (20)_year period for each substation; and
 - (d) multiplying the cost of the shared transmission line by the average percentage share determined for each substation.
- <u>5.5(4)</u> The **ISO** must allocate the participant-related costs of **transmission facilities** used to provide **system access services** to more than one **market participant** at a single substation to the **market participants** at the substation by:
 - (a) determining the **substation fraction** for each **market participant** in each of the **twenty** (20)—years following **commercial operation** of the original connection project, assigning a **contract capacity** of zero (0)—in any year in which a **market participant** did not receive **system access service**;
 - (b) calculating the average **substation fraction** over the full twenty (20) year period for each market participant; and
 - (c) multiplying the cost of the shared **transmission facilities** by the average **substation fraction** determined for each **market participant**.
- <u>5.5(5)</u> The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections- $\underline{5.5}(2)$, $\underline{5}(3)$ and $\underline{5}(4)$ above:
 - (a) must reduce the participant-related costs allocated to the original market participant; and
 - (b) may refund under subsection—<u>5.</u>6 below, where applicable, in part or in full, a **construction contribution** previously paid by that **market participant**.
- <u>5.5(6)</u> The **ISO**, as a result of the allocation of costs of shared **transmission facilities** under subsections- $\underline{5.5}(2)$, $\underline{5}(3)$, and $\underline{5}(4)$ above:



- (a) must include the allocated share of existing transmission facilities in the determination of participant-related costs for the additional market participants under subsection—3 4.2(2)(d) of section 8 of the ISO tariff, Construction Contributions Classification and Allocation for Connection Projects Costs; and
- (b) may assess construction contributions to the additional market participants under section-8_4 of the ISO tariff, Construction Contributions 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

<u>5.6</u> 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** <u>facilities</u> when <u>constructed</u> <u>facility</u> at the time <u>construction is completed</u>.

Payments and Refunds

- 5.7(1) The market participant must pay a construction contribution adjustment or a payment in lieu of notice:
 - (a) at least thirty (30) days prior to the effective date of a change to a system access service agreement, when System Access Service Agreement, if the payment arises from changes to contract capacity or investment term that do not require construction of a transmission facilities facility; and
 - (b) within thirty (30) days of a request for payment, in all other circumstances.
- <u>5.7(2)</u> The legal owner of the transmission facilities facility must refund a construction contribution adjustment:
 - (a) within thirty (30)-days after the effective date of a change to a system access service agreement, when System Access Service Agreement, if the refund arises from changes to contract capacity or investment term that do not require construction of a transmission facilities facility;
 - (b) within ninety (90)_days after the Commission issues permit and licence for a transmission facilities, where facility, if the refund results from the construction of the transmission facilities facility; and
 - (c) within ninety (90)_days of the ISO determining the amount of the adjustment, in all other circumstances.
- 5.7(3) The market participant must pay:



- (a) anyan increase in **construction contribution** by way of electronic funds transfer or wire transfer to the bank account thea legal owner of thea transmission facilities facility specifies; and
- (b) a payment in lieu of notice by way of electronic funds transfer or wire transfer to the account the **ISO** specifies.
- | <u>5.7(4)</u> The market participant must pay and the legal owner of the transmission facilities facility must refund all adjustments without interest.

5.7(5) A market participant is not required to pay and thea legal owner of thea transmission facilities facility is not required to refund anyan 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). |



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ISO Tariff – Section 6 Financial Obligations for Connection Projects

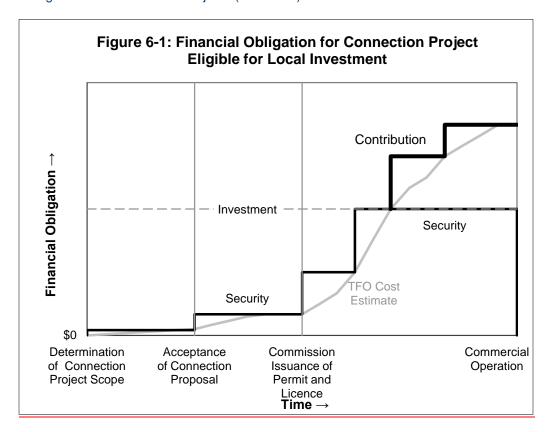
Applicability

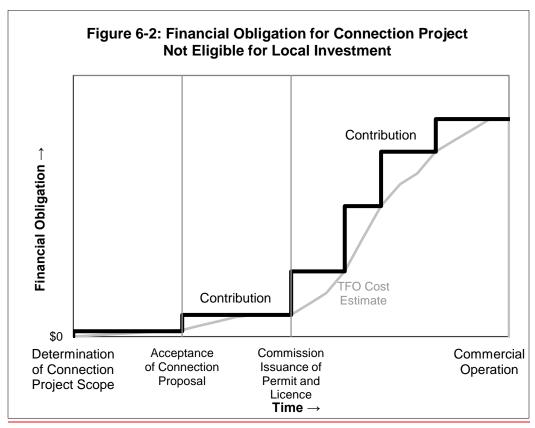
- <u>6.1</u> Section 10 of the ISO tariff This section applies to:
 - (a)_a market participant:
- (i) ____who has requested a new system access service or is receiving changes to an existing system access service under-:
 - (a) Rate-DTS, Demand Transmission Service;
 - (b) Rate FTS, Fort Nelson Demand 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:
 - 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 <u>6.2(4)(a) above; and</u>
 - (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 <u>6.2(3) above</u>, of:
 - (i) the amount from subsection 6.2(4)(b) above; and
 - (ii) whose agreement 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.
- <u>6.2(5)</u> The <u>financial obligation</u> amounts established under subsection 6.2(4) above must include all costs associated with procurement of long lead time equipment, determined by the <u>legal owner</u> of the



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<u>transmission facility</u>, where the procurement occurs prior to the <u>Commission</u>'s issuance of permit and <u>licence for the connection project.</u>

- **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 or was signed on or 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 January 1, 2006; and 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*<u>Deficiency Regulation</u>, 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.
- <u>6.4(3)</u> 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**<u>Classification and Allocation for Connection Projects Costs</u>; 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.
- <u>6.6(3)</u> The ISO must support recovery, through the tariff of the <u>legal owner</u> of the <u>transmission</u> <u>facility</u>, 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.

ISO Tariff – Section 6 Financial Obligations for Connection Projects (continued)



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. | | |
| | 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

(iii) whose Rate STS contract capacity will be or is greater than one (1) MW;

and

(b) the ISO.

Allocation of Rate STS Contract Capacity

- The ISO must allocate Rate STS contract capacity to each generation 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, connected under a Rate STS system access service agreement to which this section of the ISO tariff is applicable, as follows:
 - (a) for with a new system access service agreement for a single new generation facility, the Rate STS contract capacity specified (determined in the agreement must accordance with subsection 7.3 below) that is or will be allocated in its entirety greater than 1 MW;
 - (b) that is or will be connected to the new generation facility; transmission system or an electric distribution system on or after January 1, 2006; and
 - (b) for an existing system access service agreement which is amended to add incremental Rate STS contract capacity for a single new generation facility, the incremental Rate STS contract capacity added to the agreement must be allocated in its entirety to the new generation facility;
 - (c) for a new system access service agreement for two (2) or more new generation facilities, the Rate STS contract capacity specified in the agreement must be allocated among each new generation facility in proportion to its maximum capability; and
 - (d) for an existing system access service agreement which is amended to add incremental Rate STS contract capacity for two (2) or more new generation facilities, the incremental Rate STS contract capacity added to the agreement must be allocated among each new generation facility in proportion to its maximum capability.
 - (c) for which revenue metering equipment to measure hourly **metered energy** has been installed.

Determination of Legal Owner's Contribution for a Generation Facility

| 3(1) ∧ market participant7.2 | The ISO must pay a legal calculate an owner's contribution for |
|--------------------------------------|--|
| generationgenerating facility foras: | |

(a) the capacity determined in accordance with subsection 7.3 below:

multiplied by

(a) new Rate STS contract capacity requirements at a new point of supply for system access service under Rate STS; and

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- (b) incremental Rate STS contract capacity requirements at an existing point of supply for system access service under Rate STS, where such additional requirements are the result of the addition of a new generation facility.
- (2) The ISO must average the twelve (12) months of highest new or incremental Rate STS contract capacity, during the ten (10) years following the date a connection project enters commercial operation, for the determination of a legal (b) the owner's contribution for a generation facility when new or incremental Rate STS contract capacity is staged to include increases or decreases to contract capacity.
- (3) The ISO must calculate the legal owner's contribution for a generation facility as:
 - (a) the amount of new or incremental Rate STS contract capacity calculated in subsection 3(2) above;
 - multiplied by
 - (b) the contribution-rate the ISO determines (i.e., Column B, in subsection 7.4 below) for the area of the transmission system where the generationgenerating facility will be located. Column A, in subsection 7.4 below).

(4Determination of Capacity

7.3(1) The ISO must:

- (a) ____determine the legal 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 rate in accordance with section 29 of the *Transmission Regulation*, which rate will vary between \$10 000/MW and \$50 000/MW based on the 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 generation generating facility will be located; and are as follows:

(b) make the contribution rates publicly available on the AESO website in advance of their effective dates.

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

7.4(2) The ISO must calculate an additional legal planning regions are defined as follows:

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

ISO Tariff – Section 7 Generating Unit Owner's Contribution (continued)



| | Vegreville and Cold Lake areas to the | | |
|--|---------------------------------------|-----------|--------------------|
| | south, Northwest Territories to the | <u>33</u> | Fort Saskatchewan. |
| | north and Saskatchewan to the east. | | |

ISO Tariff – Section 7 Generating Unit Owner's Contribution (continued)



| Planning | Planning Region Description | Planning | Planning Area Name |
|-----------------|--|-----------------|-----------------------|
| <u>Edmonton</u> | This region borders Swan Hills, | <u>31</u> | <u>Wetaskiwin</u> |
| | Athabasca and Fort Sask. areas to the north, Hinton and Dayton Valley to the west, Red Deer and Alliance to the | <u>40</u> | Lake Wabamun |
| | south and Vegreville to the east. | <u>60</u> | <u>Edmonton</u> |
| Central | This region borders Grande Cache, | <u>13</u> | Lloydminster |
| | Fox Creek, Swan Hills, Wabamun, Wetaskiwin, Fort Saskatchewan and | <u>28</u> | Cold Lake |
| | Cold Lake to the north, British Columbia to the west, Saskatchewan | <u>29</u> | Hinton/Edson |
| | to the east and Seebe, Airdrie, Strathmore, Sheerness and Empress to the south. | <u>30</u> | <u>Drayton Valley</u> |
| | | <u>32</u> | Wainwright |
| | | <u>34</u> | Abraham Lake |
| | | <u>35</u> | Red Deer |
| | | <u>36</u> | Alliance/Battle River |
| | | <u>37</u> | <u>Provost</u> |
| | <u>38</u> | <u>Caroline</u> | |
| | | <u>39</u> | <u>Didsbury</u> |
| | | <u>42</u> | <u>Hanna</u> |
| | | <u>56</u> | <u>Vegreville</u> |
| <u>Calgary</u> | | <u>6</u> | <u>Calgary</u> |
| | Airdrie. This region borders Didsbury to the north, Seebe to the west, Strathmore to the south and High River and Hanna to the east. | <u>57</u> | <u>Airdrie</u> |



| Planning | Planning Region Description | Planning | Planning Area Name |
|----------|---|-----------|--------------------|
| South | This region borders Abraham Lake, | <u>4</u> | Medicine Hat |
| | Caroline, Didsbury, Hanna, Calgary and Airdrie to the north, Montana to | <u>43</u> | <u>Sheerness</u> |
| | the south, British Columbia to the west and Saskatchewan to the east. | <u>44</u> | <u>Seebe</u> |
| | | <u>45</u> | Strathmore/Blackie |
| | | <u>46</u> | <u>High River</u> |
| | | <u>47</u> | <u>Brooks</u> |
| | | <u>48</u> | <u>Empress</u> |
| | | <u>49</u> | <u>Stavely</u> |
| | | <u>52</u> | <u>Vauxhall</u> |
| | | <u>53</u> | Fort MacLeod |
| | | <u>54</u> | <u>Lethbridge</u> |
| | | <u>55</u> | 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 when a market participant materially increases Rate STS contract capacity during the ten (10) years following the date a connection project enters commercial operation, where the additional contribution: to the ISO by way of electronic funds transfer or wire transfer to a bank account the ISO specifies.
 - (a) reflects the resulting increase, if any, to the average Rate STS contract capacity determined in subsection 3(7.5(2) above; and
 - (b) is prorated based on any annual amounts previously determined in subsection 5(3) below for years prior to the increase.

Payment of Legal Owner's Contribution for a Generation Facility

- **4(1)** The market participant ISO must payinvoice the legal owner's contribution for owner of a generation generating facility in full to the ISO by the later of:
 - (a) ninety (90) days after the Commission issues permit and licence for the connection project;
 - (b) thirty (30) days before the start of brushing or other vegetation management activities required for the connection project; or
 - (c) where brushing and other vegetation management activities are not required, thirty (30) **days** before the installation of any conductors, transformers, switches or other equipment required for the connection project.



- (2) The market participant must pay the additional legal for the owner's contribution for a generating facility calculated under subsection 3(5) above at least thirty (30) days before the effective date of the increase in Rate STS contract capacity 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.
- <u>7.5(3)</u> The market participant If the construction of transmission facilities is required for a connection project, the owner of a generating facility must pay the <u>legal</u> owner's contribution for a generationthe generating facility in full to the <u>ISO</u> by way of electronic funds transfer or wire transferwithin 30 days of the <u>System Access Service Agreement</u> for Rate STS becoming effective pursuant to the <u>bank account the ISO specifies:subsection 3.7(1)</u> of the <u>ISO tariff</u>, <u>System Service Access Requests</u>.
- 7.5(4) The market participant of transmission facilities is not required for a connection project, the owner of a generating facility must pay the legal owner's contribution for a generation the generating facility in addition of the senstruction contribution determined in section 8 of the ISO tariff, Construction Contributions for Connection Projects. within 30 days after the System Access Service Agreement for Rate STS is executed.

Refund of Legal Owner's Contribution for a Generation Facility

- **57.6(1)** The **ISO** must refund to the market participant the <u>legal owner's a</u> contribution for a generationgenerating facility whereto the owner who originally paid it, or as otherwise directed by the owner who originally paid it, if the generationgenerating facility meets satisfies the **ISO rules** regarding satisfactory annual performance, in accordance with the provisions of this subsection **5** 7.6.
- <u>7.6(2)</u> The **ISO** must refund the <u>legalan</u> owner's contribution for a <u>generationgenerating</u> facility in annual amounts during the refund period, which begins on January 1 following the <u>in-service</u> date <u>stated in</u> the <u>generation facility enters commercial operation System Access Service Agreement for Rate STS</u> and ends <u>nine (9)</u> 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 legal owner's contribution for the generation generating facility, in each of the first through fourth calendar years in the refund period;
 - (b) 11.2% of the legal owner's contribution for the generation generating facility, in the fifth calendar year in the refund period; and
 - (c) 16.6% of the **legal owner**'s contribution for the generation generating facility, in each of the sixth through ninth calendar years in the refund period.
- <u>7.6(4)</u> The **ISO** must refund to the market participant, as follows, an owner's contribution for a generating facility, for each calendar year during the refund period, the annual amount determined under subsection <u>57.6(3)</u> above:
 - (a) in full whenif the generation generating facility fully 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; or
 - (b) reduced in proportion to the performance assessment calculated in accordance with section 505.2 of the **ISO rules**, *Performance Criteria for Refund of Generating Unit Owner's Contribution*, when if the generation generating facility does not fully satisfy the performance criteria during that calendar year. or



- (5) The ISO must determine annual amounts and provide refunds in accordance with subsections 5(2), 5(3) and 5(4) above even if the Rate STS contract capacity is zero (0) in one or more calendar years during the refund period.
- (6) The ISO may reduce a refund if:
 - (a) the refund would have otherwise been reduced in proportion to the performance assessment described in subsection 5(4) above except for a material decrease to Rate STS contract capacity during the ten (10) years following the date a connection project enters commercial operation;
 - (b) the ISO could have potentially avoided an upgrade to or expansion of the transmission system if the lower Rate STS contract capacity had been originally requested; and
 - (c) no transmission system benefits arise from the decrease to Rate STS contract capacity.
 - (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 to the market participant the amount of an owner's contribution for a generating facility determined in accordance with subsections $\frac{5(4)}{5(5)}$, $\frac{7.6(3)}{7.6(3)}$ and $\frac{5(6(4))}{5(5)}$ above by February 28 of the year following the calendar year to which the refund relates.
- (87.6(6)) The ISO must refund the annual amounts without interest.

ReturnAdjustment 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. |
| | Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011. |



ISO Tariff – Section 8 Ancillary Services

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 twelve (12)_months; or
 - (b) The verifiable net opportunity cost related to foregone electricity sales incurred by the market participant to supply the directed ancillary service, taking into account offsetting power pool energy receipts.

Transmission Must-Run Services

- **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**).

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

Maximum Transmission Must-Run Services Compensation

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 **fifteen (15) business days** after the end of the **month** in which the service was provided. The amount of the invoice shall be determined in accordance with the method in subsection **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 regarding confidential information, <u>Confidentiality</u>; 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 |
|-----------|--|
| | 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 applies wishes to pre-qualify for demand opportunity service:
- (a) must:
 - (a) submit to the **ISO** a completed pre-qualification application, available in the demand opportunity service section of on the AESO website or from the **ISO**:
 - (b) submit the pre-qualification application, at least forty-five (45) days prior to submitting a transaction request for demand opportunity service; and
 - (eb) pay a non-refundable fee of \$5-,000 to the **ISO** for evaluation of the **market participant**'s eligibility for demand opportunity service when at the time the pre-qualification application is submitted.
- <u>9.2(3)</u> The **ISO** must approve thea market participant's pre-qualification for demand opportunity service only when if:
 - (a) the market participant meets the commercial eligibility criteria for demand opportunity service provided in subsection-<u>9.</u>3 below;
 - (b) the **market participant**'s use of demand opportunity service would not proceed on occur under any other applicable rate; and
 - (c) there <u>areis</u> sufficient transmission capacity and suitable system <u>operationoperating</u> 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 <u>sucha</u> lower demand opportunity service contract capacity as the ISO determines is available;
 - (b) the specific type or types of demand opportunity service, as listed in Rate DOS, which the market participant requested and is eligible for; and
 - (c) a maximum of one (1)—year from the date the **ISO** approves the **market participant**'s pre-qualification.



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

Commercial Eligibility Criteria

- **9.3(1)** A market participant must provide to satisfy the ISO a clear, thorough and convincing case, with supporting facts, that demonstrates that the market participant would not increase metered demand under Rate- DTS, Demand Transmission Service, if Rate- DOS was not available.
- <u>9.3(2)</u> The market participant must satisfy the ISO that a commercial business opportunity exists for the use of additional electric energy on either a temporary or repeated short-term basis.
- (9.3) The(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)** The market participant must utilize additional electric energy under the DOS Term type of Rate DOS either:
 - (a) for the purposes listed in subsection 3(9.3)(a) or (3(3)(b) above; or
 - (b) for scheduled maintenance of a **generating unit** or an **aggregated generating facility** where the **market participant**:
 - (i) has planned maintenance of an on-site **generating unit** or **aggregated generating facility** that normally supplies electric energy to an industrial process on the same premises complex; and
 - (ii) would reduce the load <u>efat</u> its industrial <u>processcomplex</u> in these circumstances rather than pay the cost of receiving additional electric energy under Rate DTS.
- **9.3(5)** The market participant must not utilize additional electric energy under any type of Rate DOS when:
 - (a) the **market participant** has the opportunity to install facilities that will reduce the consumption of electric energy from the **interconnected electric system**; or
 - (b) the requirement for additional electric energy is the result of a **forced outage**, **unplanned outage** or derate of an on-site **generating unit** or **aggregated generating facility** that



normally supplies electric energy to an industrial <u>process on the same premises_complex</u> or otherwise displaces consumption of electric energy from the **interconnected electric system**.

Transaction Requests

- **9.4(1)** The market participant may submit a transaction request for demand opportunity service after the **ISO** approves athe 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**:
- (a) ___only if the request has the following attributes:
 - (a) it is in accordance with its 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 or types of demand opportunity service;
 - (b) <u>it is</u> for only one Rate DOS type in any single hour, even if the market participant is eligible for multiple Rate DOS types;
 - (c) withit has a minimum continuous duration of eight (8) hours and a maximum continuous duration of one (1) month; and
 - (d) withit 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 in the **demand** opportunity service section of on the AESO website or from the **ISO**, at least one (1)—hour and no more than ten (10)—days before the requested start time of the demand opportunity service transaction.
- **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 subsection subsections 9.4(2) and 4(3) above;
 - (b) the request form has been fully and correctly completed and submitted; and
 - (c) sufficient surplus capacity exists on the **transmission system** to accommodate the requested capacity for the duration of the Rate DOS transaction.
- **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 and Limitations to System Access Service.
- 9.5(3) A market participant must curtail capacity provided under Rate DOS whenif 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-<u>9.</u>2 above and in particular with the commercial eligibility criteria in subsection-<u>9.</u>3 above.
- <u>9.6(2)</u> The **ISO** may charge thea market participant the cost of an audit conducted in accordance with subsection—7.9.6(1) above.
- <u>9.6(3)</u> 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.
- <u>9.6</u>(4) The ISO may, in its sole discretion, recover retroactive amounts for the period during which such market participant did not qualify for, but was billed under, Rate DOS.

Revision History

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

Financial Security Requirements

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

Billing Procedures

- 310.2(1) The ISO must issue a statement of account for system access service no later than fifteen (15)_business days after the end of each settlement period, which statement may include:
 - (a) amounts determined on an initial basis for that **settlement period**;
 - (b) amounts determined on an interim basis for the period two (2)_months prior to that settlement period; and
 - (c) amounts determined on a final basis for the period four (4)_months prior to that settlement period.
- <u>10.2(2)</u> The **ISO** may review <u>anya</u> 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 when 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
 - (5) The ISO may also use estimated values to produce a statement of account if (c) the ISO's billing and settlement system is unable to produce a statement of account.
- (610.2(5) The **ISO** must, when a statement of account is based on estimated values, make an adjustment-on a subsequent statement of account issued in accordance with subsection 3(1)(b) or 3(1)(c) above, to reflect the use of actual or more appropriate estimated values, in a subsequent statement of account issued in accordance with:
 - (7(a) amounts determined on an interim basis for the period 2 months prior to that settlement period; or

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(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

410.3(1) The ISO may totalize multiple points of delivery and, points of supply, or both at separate substations for a single market participant and produce one-1 statement of account for athe market participant that is an industrial facility with multiple points of delivery, points of supply or both 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 point of delivery or point of supplysubstation;
 - (b) reclassification of the site as a **Commission**-designated industrial system; or
 - (c) the existence of a credible transmission bypass alternative.

Adjustments

- **510.4(1)** A **market participant** may request that a statement of account be recalculated and reissued forty-five (45) or more **days** after an amount has been determined on a final basis for a **settlement period**, as a result of:
 - (a) unavailable or incomplete meter data;
 - (b) inaccurate estimates of meter data; or
 - (c) reconciliation with updated estimates of meter data;
- <u>10.4(2)</u> The **ISO** may recover the cost of recalculating and reissuing a statement of account from the market participant that is receiving service through the relevant metering equipment.
- (3) The market participant must pay the ISO \$1 000 for each recalculated and reissued statement Provision of account.

Request for Settlement Data

- 610.5(1) The ISO must make available to a market participant during regular business hours anyupon request data required to verify a statement of account for system access service.
- <u>10.5(2)</u> The market participant must pay all of the costs SO may recover the cost of retrieval and provision of the data data required to verify a statement of account for system access service from the market participant.

Payment Terms

- **710.6(1)** A market participant must pay the amounts shown on the statement of account no later than the twentieth 20 business daydays 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 thea bank account specified by the ISO specifies.

Effect of Non-Compliance

- **810.7(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 anya 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 untilunless 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

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|------------|--|
| 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 when 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 activities that:
 - (i) followor 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; or (ii) are caused by an emergency on the transmission system;
 - (d) compliance with a **directive** the **ISO** issues during an emergency; or
 - (e) an event of force majeure that impacts the ISO.
- <u>11.2(2)</u> 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

- <u>11.</u>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 seven (7)_business days after the end of the settlement period for which the waiver is being requested.
- (3) The ISO must, upon receipt of a peak metered demand waiver request, confirm whether:
 - (a) the peak metered demand was caused by an event set out in subsection 1(1) above; and
 - (b) the ISO has sufficient information to make a determination on the request.
- (4) The ISO must 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

Proposed 2018 ISO Tariff Effective 2018-XX-01 Section 11 Page 1 of 3 Public

ISO Tariff – Section 11 Peak Metered Demand Waivers (continued)



(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. |
| | Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011. |

ALBIETA ELECTRIC SYSTEM OPERATOR

ISO Tariff – Section 12 Miscellaneous

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 such the agreement and the ISO tariff, but only with the ISO's prior consent of the ISO, such consent not to be unreasonably withheld.

(£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.

Compliance With ISO Directives

12.3(2) Subsection 12.3(1) above does not limit the ISO's ability under subsection 2.4—A(1) of the ISO tariff, Provision of System Access Service, to unilaterally limit, reduce, withhold or terminate system access service if a market participant must fails to comply with all directives of the ISO in real-time, including those related to technical requirements and a provision of ancillary services the ISO tariff.

Notifications

512.4(1) The A notice or other document that is required to be given or served by a market participant must give or serve all notices upon the ISO in accordance with under the ISO tariff, must be provided as follows:

(a) in writing, marked "Important" and by;

(b) by personal service, registered letter, or fax, email; and

(a)(c) addressed to:

AESO

2500, 330 - 5th Avenue SW

Calgary, Alberta T2P 0L4

Attention: Commercial Services ISO Tariff

Fax (403) 539-2509

Proposed 2018 ISO Tariff Section 12 Public Effective 2018-XX-01 Page 1 of 3

ISO Tariff – Section 12 Miscellaneous (continued)



with a copy to:

AESO

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

Attention: General Counsel Fax (403) 539-2949

ISOtariffnotice@aeso.ca



- <u>12.4(2)</u> The ISO must give A notice or serve all notices other document that is required to be given or served by the ISO upon thea market participant under the ISO tariff, must be provided as follows:
 - (a) in writing and;
 - (b) by personal service, registered letter, or faxemail; and
 - (c) sent to the address or addresses(es) shown for such the market participant in the relevant agreement for system access service.
- 12.4(3) The market participant and the ISO must deem all notices to be duly given:
 - (a) upon delivery if personally delivered;
 - (b) five (5)_business days after posting if sent by registered mail during normal postal service conditions; or
 - (c) on the same day, if emailed or faxed.

(12.4) The(4) In the event of disruption of normal postal service, a market participant and the ISO must send all notices provide notice by personal delivery in the event of disruption of normal postal services 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. |
| | 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 | - |

Proposed 2018 ISO Tariff Effective 2018-XX-01 Appendix A
Page 1 of 2

<u>Public</u>

ISO Tariff – Appendix A Regulated Generating Units (continued)



| 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 1 | TransAlta | Coal-fired thermal | 280.0 | 2017 |
| Sundance 2 | TransAlta | Coal-fired thermal | 280.0 | 2017 |
| Sundance 3 | TransAlta | Coal-fired thermal | 353.0 | 2020 |
| Sundance 4 | TransAlta | Coal-fired thermal | 353.0 | 2020 |
| Sundance 5 | TransAlta | Coal-fired thermal | 353.0 | 2020 |
| Sundance 6 | TransAlta | Coal-fired thermal | 357.0 | 2020 |
| Sundance Total | | _ | 1,976.0 | _ |
| Three Sisters | TransAlta | Hydro | 2.7 | 2020 |

Revision History

| Effective | Description |
|-----------|--|
| | Updated to remove units with base lives ending before 2018 as applied for in the amended 2018 ISO tariff application. |
| | Updated to remove units with base lives ending before 2014 -as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015. |
| | 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—5 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 Proformas

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 effective executed the 1st[insert] day of |
|--|
| Independent System Operator, operating as AESO, a body corporate 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 body corporate or a-[corporation, incorporated] [partnership] organized] pursuant to the laws of |
| 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) |
| |

Proposed 2018 ISO Tariff Appendix B Public Effective 2018-XX-01 Page 1 of 8



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

2.

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.

2.3. POINT OF DELIVERY, CONTRACT CAPACITY AND OTHER DETAILS

(a) ____

Point of delivery is located <u>at and described as follows:</u>

Substation name and #: [Name

[Name of Substation (123S)];)]



| | Legal Subdivis | sions (LSD): | [insert WxM] ;] |
|-------------|----------------------|---|---|
| | Measurement | Point Identification (MPID): | [insert assigned number] |
| | | | |
| | | | |
| 4. | CONTRACT | CAPACITY(b) | |
| | Contract cap | acity is the following amounts for | and during the following periods: |
| | MW fro i | m [insert date] [insert date] up | to and including <pre>[insert date][insert date];</pre> |
| | | | ncluding [insert date][insert date] ; and |
| | | | ance of the term of this DTS Agreement. |
| _ | | | ance of the term of this DTS Agreement. |
| <u>5.</u> | COMMERCIA | AL OPERATION | |
| | (c) Other | details related to the connection | oroject include: |
| | ———ISO ta | ariff in effect on date of permit an | Hicence: |
| | | Project Costs: | |
| | | | \$ |
| | Syste | m-Related Costs: | <u>\$</u> |
| | Invest | tment: | <u> </u> |
| | (1) | | |
| | (d) Key d | | |
| | | • | nit and licence: [insert date or n/a] |
| | (ii) | Energization authorization date | <u> </u> |
| | (iii) | Commissioning period will co | mmence on: |
| | (iv) | Commercial operation date: | |
| | (V) | Investment term: | [insert number of years] years |
| | , , | commencing on | [insert date] and |
| | | terminating on | [insert date]. |
| | 3 | | |
| | | | rided that the ISO is satisfied with the same, the |
| | commercial c | | rticipant confirming that the facility may begin |
| | <u></u> | | |
| <u>3.6.</u> | _SETTLEMEN | Т | |
| | The ISO shal | Hmust charge, and the market p | articipant shallmust pay, amounts in accordance |
| | with Rate DT | S commencing in the settlemer | t period in which the energization authorization |
| | date occurs. | SO commences the provision of s | ystem access service to the market participant. |
| 4. | CONTRIBUTI | IONS | |
| | As of the ef | fective date of this DTS Agre | ement, the market participant's construction |
| | contribution | | and may be adjusted in accordance with the ISO |
| | tariff. | | |
| | 5 | | |



4.7. ISO OBLIGATION TO PROVIDE SERVICE

Subject to Section 78 and 9 of this DTS Agreement, the ISO shallmust provide system access service under Rate DTS to the market participant at the point of delivery at the contract capacity pursuant to SectionSections 2 and 3 of this DTS Agreement.

5.8. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE

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

6-9. MARKET PARTICIPANT'S PAYMENT OBLIGATION

The market participant shallmust 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.

| Q | | 3 |
|---------------------------------|-------------------------|---|
| 7.10. | OTHE | R RATES AND CONDITIONS |
| (a) | (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 - No |
| | (c) | The market participant is required to comply with a connection remedial action scheme for this point of delivery. |
| | | Yes □ No □ □ |
| 8 <u>-</u> 11. | _ 9. TERM | |
| 10 | | OTS Agreement will commence commences on the effective date Effective Date and will uecontinues unless it is terminated in accordance with the ISO tariff. |
| 10. 9. <u>12.</u> | _ _PRIOF | RAGREEMENTS |
| | | TS Agreement supersedes and replaces, as of the effective date Effective Date, any other ment for system access service under Rate DTS between the parties at the point of |

delivery.

COMMISSIONING

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

12. — 10.1. COMMERCIAL OPERATION



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

| The market par | ticipant re | presents a | nd warrants | to the ISC | 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;
- (a)
- (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:
- (a)(b) (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)

- (b)(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 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.
 - (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.

12.14. NOTICES

(a) Notices will

| (a) | A notice must be provided as per Section 15(in accordance with subsection 12.4) of the |
|-----|--|
| | ISO tariff, Miscellaneous. The market participant's address for notices is: |

| Attention: | | |
|------------|--|--|
| Telephone: | | |
| Fax: | | |
| Email: | | |
| (b) | | |

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



| | (c) | Attention: Telephone: Fax: Email: (c) The market participant must provide any changes to its addressesaddress(es) to the ISO using the method posted on the ISOAESO website as updated from time to time. |
|--------------------|-----------------------|---|
| 13. 15. | 15. _AMENI | DMENTS |
| | (a) | The parties acknowledge that either may request an amendment to this DTS Agreement, including without limitation an amendment to the contract capacity . A party may. The market participant must request such an amendment by complying with the procedure for amending DTS Agreements posted by the ISO on its website. If or, if such procedure is not posted, the party requesting an amendment may provide aby providing notice to the other requesting such amendment ISO . |
| | (b) | Notwithstanding the foregoing, the parties acknowledge that the ISO tariff, <u>ISO rules</u> and the ISO rules 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 shall beis deemed amended upon each such approval. |
| | (c) (c) | Subject to Sectionsubsection 15(b), of this DTS Agreement, this DTS Agreement may only be amended by written instrument executed by the ISO and the market participant. |
| 14. 16. | | LLANEOUS |
| | (a) | The following matters shall be dealt with in accordance with the ISO tariff and the ISO rules: Assignment – Section 15 of the ISO tariff. (ii) Confidentiality – ISO rule 103.1. (iii) 9 will Dispute Resolution – ISO rule 103.2. |
| | (b) (a) | Force majeure shall be dealt with in accordance with the ISO tariff and the ISO rules. (c) Section 7 shall survive the termination of this DTS Agreement for either the time provided for in such section or the longest period provided by law. |
| | (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. |
| | (e) (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 shallwill 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 shallmust extend only to the particular breach so waived and shallmust not limit or affect any rights with respect to any other or future breach. |
| | (f) (d) | Time is of the essence. |
| | (g) | If at any time any one or more of the provisions of this DTS Agreement is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and |



enforceability of the remaining provisions of this DTS Agreement will not in any way be affected or impaired thereby to the fullest extent possible by law.

(h) ____

(e) This DTS Agreement shall beis governed by and interpreted in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein, excluding any conflict of laws principles that may apply therein.

(i) ___

(f) Whenever possible, each provision of this DTS Agreement shallmust 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 anya provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shallwill be severed from this DTS Agreement and will not affect the legality, validity or enforceability of the remainder of this DTS Agreement or any other provision of this DTS Agreement.

(j)

(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 beis reasonably required in order to fully perform and carry out the terms of this DTS Agreement.

(k)

The parties may execute this DTS Agreement by fax, e-mail or other electronic means capable of producing a paper copy, and in separate counterparts, each of which when so executed and delivered shall be an original, and all such counterparts taken together shallwill 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 participa and fully understands all rights and obligations contain | |
|--|--|
| IN WITNESS WHEREOF the ISO and the market pa the effective date Effective Date. | rticipant have executed this DTS Agreement as of |
| Independent System Operator 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 DTS, Demand Transmission Service

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



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



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

SYSTEM ACCESS SERVICE AGREEMENT FOR SUPPLY TRANSMISSION SERVICE RATE

| (STS Agreement) |
|--|
| This STS Agreement effective executed the 1st[insert] day of, 201 (the "effective date"), 20 Between: |
| Independent System Operator, operating as AESO, a body corporate 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 body corporate or 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. C. This STS Agreement sets out the particular details of the system access service that the ISC 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: |
| 2-1. DEFINITIONS AND INTERPRETATION (a) |
| Proposed 2018 ISO Tariff YOS/YOM Proforms Public |



- Unless otherwise defined in this STS Agreement, bolded terms, not including headings, used in this decumentSTS Agreement have the meanings given to them in the Consolidated Authoritative Decuments Document Glossary. In Capitalized terms have the event of any conflict meanings given to them in the preamble or inconsistency between body of this decumentSTS Agreement, including:
 - i. "STS Agreement" means the this System Access Service Agreement for Supply Transmission Service Rate; and the
 - 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 Documents Document

 Glossary, the latter shall prevail 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.
- (b) The ISO tariff shall be the ISO tariff in effect from time to time.
- (a) (c) In the event of any conflict or inconsistency between this document and the ISO tariff, the latter shall prevail.

2____

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, CONTRACT CAPACITY AND OTHER DETAILS

(a) ___

Point of supply is located <u>at</u> and described as follows:

Substation name and #: [Name of Substation (123S)];)]

Legal Subdivisions (LSD): [insert WxM];

Proposed 2018 ISO Tariff Effective 2018-XX-01



| | Measurement Point Identification (MPID): [insert assigned number] | | |
|---------------|---|--|--|
| 4. | CONTRACT CAPACITY(b) | | |
| | Contract capacity is the following amounts for and during the following periods: | | |
| | MW from [insert date][insert date] up to and including [insert date][insert date]; | | |
| | | | |
| | MW [insert date][insert date] up to and including [insert date][insert date]; and | | |
| | MW [insert date][insert date] for the balance of the term of this STS Agreement. | | |
| <u>5.</u> | COMMERCIAL OPERATION | | |
| | (c) Other details related to the connection project include: | | |
| | | | |
| | Total Project Costs: \$ | | |
| | Participant-Related Costs: \$ | | |
| | System-Related Costs: \$ | | |
| | Generating Unit Type: | | |
| | (d) Key dates: | | |
| | (i) Date Commission issued permit and licence: [insert date or n/a] | | |
| | (ii) Energization authorization date: | | |
| | (iii) Commissioning period will commence on: | | |
| | (iv) Commercial operation date: | | |
| 3. | 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 . | | |
| 4.6. | SETTLEMENT | | |
| The I | SO shallmust charge, and the market participant shallmust pay, amounts in accordance with Rate STS commencing in the settlement period in which the energization authorization date occurs. | | |
| 4. | CONTRIBUTIONS AsiSO commences the provision of the effective date of this STS Agreement, system | | |
| | access service to the market participant's: participant. | | |
| | (a) construction contribution is estimated to be \$ [insert amount] and may be adjusted in accordance with the ISO tariff; and | | |
| | (b) legal owner's contribution for a generating unit or an aggregated generating facility is \$ [insert amount] and may be adjusted in accordance with the ISO tariff. | | |
| 5_7 | ISO OBLIGATION TO PROVIDE SERVICE | | |



Subject to Section 78 and 9 of this STS Agreement, the ISO shallmust 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. 6.8. MARKET PARTICIPANT'S OBLIGATION IN RELATION TO SERVICE If the market participant takes system access service under Rate STS, the market participant shallmust take such service at the point of supply at the contract capacity pursuant to Sections 2 and 3 of this STS Agreement. MARKET PARTICIPANT'S PAYMENT OBLIGATION 7.9. The market participant shallmust pay to the ISO for system access service under Rate STS during the term of this STS Agreement the amount required pursuant to such rateRate STS. OTHER CONDITIONS 8.10. The market participant is required to comply with a connection remedial action scheme for this point of supply. Yes 🔲 No 🔲 🗌 9.<u>11.</u> **TERM** This STS Agreement will commence on the effective date Effective Date and will continuecontinues unless it is terminated in accordance with the ISO tariff. 10 10-12. PRIOR AGREEMENTS This STS Agreement supersedes and replaces, as of the effective date Effective Date, any other agreement for system access service under Rate STS between the parties at the point of supply. **COMMISSIONING AND** 11.1. COMMERCIAL OPERATION The market participant must undertake and complete commissioning in accordance with the requirements set out in the ISO rules. Commissioning must be completed within ninety (90) days from the date that it commences. The market participant may request changes to the commissioning period, energization authorization date and commercial operation date but such changes will only be effective if the ISO approves them in writing. **COMMERCIAL OPERATION** Upon completion of commissioning, provided the market participant has met its obligations and the ISO is satisfied that the market participant's generating unit or aggregated generating facility will be safely and reliably integrated into the interconnected electric system, the ISO must issue a commissioning certificate certifying the date the generating unit or aggregated generating facility may begin commercial operation. 12.13. 13. MARKET PARTICIPANT'S REPRESENTATIONS AND WARRANTIES

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





| <u>(a)</u> | the market participant is duly incorporated or organized, validly existing and in good |
|--------------------------|--|
| <u>(α)</u> | 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; |
| (a) | _ |
| (h)<u>(a)</u> | <u>the market participant is duly incorporated or organized, validly existing and in</u> |
| | good standing under the laws of its jurisdiction of incorporation or organization, |
| | and duly registered and authorized to carry on business in the Prevince of |
| | Alberta; |
| (<u>a)(b)</u> | |
| | availability of equitable remedies such as specific performance or injunction; and |
| (c) | _ |
| (b)(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 |
| | (i) does not and will not violate any laws applicable to the market participant ; and (ii) |
| | (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. |
| | 14. |
| _NOTIC | |
| - Notice | |
| (d) | A notice must be provided as per Section 15(in accordance with subsection 12.4) of the ISO tariff, Miscellaneous. The market participant's address for notices is: |
| | 100 tarms, Miscellaricous. |
| | |
| | |
| | |
| | Attention: |
| | Telephone: |
| | Fax: |
| | (b) |
| | (e) The market participant 's address for invoices, if different from the address for |
| | notices, is: |
| | <u></u> |
| | |
| | |
| | Attacktory |
| | Attention: |
| | Telephone: Fax: |
| | Email: |
| | |
| (f) | The market participant must provide any changes to its addresses address (es) to the |
| . , | ISO using the method posted on the ISO AESO website as updated from time to time. |
| 15 | _ |
| AMEN | DMENTS |
| — (-) | |
| (a) | The parties acknowledge that either may request an amendment to this STS Agreement, including without limitation an amendment to the contract capacity. A party may. 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, the partyby requesting an amendment may provide aproviding notice to the other requesting such amendment SO.

(b)

(b) Notwithstanding the foregoing, the parties acknowledge that the ISO tariff-and the, 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 shall be deemed amended upon each such approval.

(c)—

(c) Subject to Section <u>14(b),15(b)</u> of this <u>STS Agreement</u>, this STS Agreement may only be amended by written instrument executed by the **ISO** and the **market participant**.

15.16. MISCELLANEOUS

- (a) The following matters shall be dealt with in accordance with the ISO tariff and the ISO rules:
- (i) Assignment -

Section 15 of the ISO tariff.

- (ii) Confidentiality ISO rule 103.1.
- (iii) Dispute Resolution ISO rule 103.2.
- (b) Force majeure shall be dealt with in accordance with the ISO tariff and the ISO rules.
- (a) Section 7 shall will survive the termination of this STS Agreement for either the time provided for in such section or the longest period provided by law.

(d)

(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.

(e)

(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 <a href="https://shall.nih.google.com/shall.google.com/shal

(f)—

- (d) Time is of the essence.
- (g) If at any time any one or more of the provisions of this STS Agreement is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this STS Agreement will not in any way be affected or impaired thereby to the fullest extent possible by law.

(h)-

(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.

(I)

(f) Whenever possible, each provision of this STS Agreement shallmust 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 anya provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shallwill 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.

| ISO Tariff – Appendix B |
|--|
| System Access Service Agreement Proforma for |
| Rate STS. Supply Transmission XOS and Rate XOM, Export Service (continued) |



| | ss Service Agreement Proforma for spply Transmission XOS and Rate XOM, Export Service (continued) | C |
|-------------------------------|--|------------|
| (j) (g) (k) | Each party will, from time to time, without further consideration, do such further acts a deliver all such further assurances, deeds and documents as shall beis 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 mea capable of producing a paper copy, and in separate counterparts, each of which when executed and delivered shall be an original, and all such counterparts taken togethe shall will constitute one instrument. | so |
| | [Remainder of page intentionally left blank. Signature page to follow.] | |
| | | |
| | s STS Agreement, the market participant acknowledges that it has reviewed the ISO tar | <u>iff</u> |
| IN WITNESS | WHEREOF the ISO and the market participant have executed this STS Agreement as late Effective Date. | of |
| Independent ISO, operating | System Operator g as AESO | |
| Por: Namo: Title: | | |
| [insert legal | name of corporation or partnership] | |
| Por: | | |
| Name: | Date: | |

Title:



ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate STS, Supply Transmission Service

| Date: |
|-------|
| |
| |
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| |
| Date: |
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| |

ALBERTA ELECTRIC SYSTEM OPERATOR

ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate DOS, Demand Opportunity Service

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

If approved, this 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. Prequalification 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 Detail | ls | |
|---|-----------------------------------|---------|
| Market participant: | | _ |
| Party administering demand opportunity service on behalf of t | the market participant: | |
| marketMarket participant □ or | | company |
| Name of primary contact of administrator: | | _ |
| Phone: Fax: | Email: | _ |
| Facility name: | | _ |
| Facility location: LSDSECTWP | RGEMER | |
| Connected substation (name and number): | | _ |
| Point of delivery: | | _ |
| Current demand transmission service contract capacity at the | ne point of delivery: | _ |
| Is this an application to renew a current pre-qualification? | Yes No No No | |
| Technical and Commercial | Information | _ |
| The following information is required in order for the ISO demand opportunity service complies with the criteria set out | | of |
| Requested start date: | | |
| End date: | Twelve (12) months from requester | d |
| start date | start date | |
| Dranged 2019 ICO Toviff DOC Preferms | Dubli | |

ISO Tariff – Appendix B
System Access Service Agreement Proforma for
Rate-DOS, Demand Opportunity Service (continued)



| 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 h | nour 🔲 📗 DOS Term 🔲 📗 | |
| Technical Information: Please provide the following e | n<u>in</u> an attachment labeled "Schedule A". | |
| Load characteristic (static, synchronous mac | hine or induction machine)); | |
| Approximate load factor (demand opportunity) | / service specific load only <mark>-); and</mark> | |
| 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 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: | | |
| | | |
| Under | taking | |
| anya financial, operational, and/or technical empactimpacts the assumptions contained within the provide such information to the ISO in a timely and cand/or reassessing the eligibility of the market particle. | the the the tender of the tend | |
| The market participant confirms that the contents of | f this application are true. | |
| Market participant: | | |
| | | |
| Name: | Title: | |
| (Print name) | (Print title) | |
| Signature: | Date: | |
| | | |

ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate_DOS, Demand Opportunity Service (continued)



Please complete and send to the Alberta Electric System Operator.

Mail: 2500, 330 – 5th Avenue SW

Calgary, Alberta T2P 0L4

Attention: Commercial Services

Fax: (403) 539-2949 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_Effective Date"). |
| Between: |
| Independent System Operator, operating as AESO a body corporate-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 body corporate or 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:

- Α. 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) | | | |
|--|---|---|--|--|--|
| | (b) (a) | | | | |
| | | used in this document Export Agreement have the meanings given to them in the Consolidated Authoritative Documents Document Glossary. In Capitalized terms have the | | | |
| | | event of any conflictmeanings given to them in the preamble or inconsistency between | | | |
| | | body of this document and the Consolidated Authoritative Documents Glossary, the latter | | | |
| | | shall prevail. Export Agreement, including: (b) The ISO tariff shall be | | | |
| | | i. "Export Agreement" means the ISO tariff in 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. | | | |
| | (c) (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. | | | |
| | | | | | |
| | <u>(c)</u> | In the event of any conflict or inconsistency between this document and the ISO tariff, the latter shall prevail. | | | |
| | | the latter shall prevail. | | | |
| 2 | DOINT | OF INTERCONNECTION | | | |
| 2. POINT OF INTERCONNECTION (a) (c) In the event of any conflict or inconsistency between this document | | | | | |
| | | iff, the latter shall prevail. | | | |
| 2. | POINT | OF INTERCONNECTION | | | |
| | | British Columbia Intertie — Saskatchewan Intertie — Montana Intertie | | | |
| | — <u>—</u> | Sitish Columbia intertie Saskatonewan intertie Sitish Montana intertie | | | |
| 3. | SETTLEMENT | | | | |
| 3. | SETTLEMENT | | | | |
| | The IS | ISO shallmust charge, and the market participant shallmust pay, amounts in accordance | | | |
| | | ate XOS or Rate XOM, as applicable, commencing on [insert date]. | | | |
| 4. | ISO OE | BLIGATION TO PROVIDE SERVICE | | | |
| | Subject to Section 75 and 6 of this Export Agreement, the ISO shallmust provide sys | | | | |
| | | e under Rate XOS or Rate XOM, as applicable, to the market participant at the oint 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 shallmust take such system access service at the point Point of interconnection pursuant to Section 2 of this Export Agreement.



6. MARKET PARTICIPANT'S PAYMENT OBLIGATION

The market participant shallmust 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.

| /. | | |
|----|---|------------------------------|
| | This Export Agreement will commencecommences on the | e effective date Effective D |

Date and will continuecontinues for a term of one (1) year, expiring on — 201—.

8. **PRIOR AGREEMENTS**

TEDM

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 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:

- the market participant is duly incorporated or organized, validly existing and in good (a) 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
 - is not in contravention of its constating documents or its by-laws or the provisions (ii) of any loan agreement or other agreement to which it is a party or by which it is bound.

10. NOTICES

| (a) | Notices willA not subsection 12.4) of | • | • | , | |
|-------------|---------------------------------------|---|---|---|--------|
| | notices is: | | | | |
| | Attention: | | | | |
| | Telephone: | | | | |
| opered 2018 | Fax: | | | | Dublic |

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

(b)



| Email: | |
|--------|--|
| | |



The market participant's address for invoices, if different from the address for notices, is: Attention: Telephone: Fax: Email: (c) The market participant must provide any changes to its addresses address(es) to the **ISO** using the method posted on the **ISO**AESO website as updated from time to time. 11. **AMENDMENTS** (a) The parties acknowledge that either may request an amendment to this Export Agreement. A party may The market participant must request such an amendment by complying with the procedure for amending Export Agreements posted by the ISO on its website. If or, if such procedure is not posted, the party requesting an amendment may provide aby providing notice to the other requesting such amendment ISO. (b) Notwithstanding the foregoing, the parties acknowledge that the ISO tariff, ISO rules and the ISO rules 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 shall be is deemed amended upon each such approval. (c) Subject to Sectionsubsection 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. **MISCELLANEOUS** 12. The following matters shall be dealt with in accordance with the ISO tariff and the ISO (a) Assignment - Section 15 of the ISO tariff. Confidentiality ISO rule 103.1. Dispute Resolution - ISO rule 103.2. Force majeure shall be dealt with in accordance with the ISO tariff and the ISO rules. Section 6 shallwill survive the termination of this Export Agreement for either the time provided for in such section or the longest period provided by law. (db) 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. No waiver by any party of any breach (whether actual or anticipated) of any of the terms, (<u>ec</u>) conditions, representations or warranties contained in this Export Agreement shallwill

future breach.

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 shallmust extend only to the particular breach so waived and shallmust not limit or affect any rights with respect to any other or



- (fd) Time is of the essence.
- (g) If at any time any one or more of the provisions of this **Export Agreement** is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this **Export Agreement** will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h(e) This Export Agreement shall beis 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 shallmust 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 anya provision is determined by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shallwill 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.
- (jg) 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.
- (kh) 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 shall be an original, and all such counterparts taken together shallwill constitute one instrument.

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

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



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**Effective Date.

| Independent System Operator ISO, operating as AES | 0 |
|---|-------|
| Per: Name: Title: | Date: |
| [insert legal name of corporation or partnership] | |
| Per: | Date: |
| Name: Title: | |



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

| Per: | |
|-------------------------|---|
| Name: | Title: SYSTEM ACCESS SERVICE AGREEMENT FOR IMPORT OPPORTUNITY SERVICE RATE ("Import Agreement") |
| [insert legs | al name of corporation or partnership] |
| Per: Name: Title: | —————————————————————————————————————— |



ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate IOS, Import Opportunity Service

| "effective date Effective Date"). |
|---|
| Between: |
| Independent System Operator, operating as AESO a body corporate 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 body corporate or 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 document Import Agreement have the meanings given to them in the Consolidated Authoritative Document Glossary. In Capitalized terms have the event of any conflictmeanings given to them in the preamble or inconsistency between body of this document and the Consolidated Authoritative Documents Glossary, the latter shall prevail. Import Agreement, including:
- (b) The ISO tariff shall be the ISO tariff in effect from time to time.

 (c)

 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. |
| | (b)(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 shallmust charge, and the market participant shallmust pay, amounts in accordance with Rate IOS commencing on [insert date]. |
| 4. | ISO OBLIGATION TO PROVIDE SERVICE |
| | Subject to Section 75 and 6 of this Import Agreement, the ISO shallmust provide system access service under Rate IOS to the market participant at the pointPoint 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 shallmust take such system access service at the pointPoint of interconnectionInterconnection pursuant to Section 2 of this Import Agreement. |
| 6. | MARKET PARTICIPANT'S PAYMENT OBLIGATION |
| | The market participant shallmust pay to the ISO for system access service under Rate IOS during the term of this Import Agreement the amount required pursuant to Rate IOS. |
| 7. | TERM |
| | This Import Agreement will commence on the effective date Effective Date and will continue for a term of one (1) year, expiring on |
| 8. | PRIOR AGREEMENTS |
| | This Import Agreement supersedes and replaces, as of the effective date Effective Date, any other agreement for system access service under Rate IOS between the parties at the point Point of interconnection Interconnection pursuant to Section 2 of this Import Agreement. |

ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate IOS, Import Opportunity Service (continued)





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;
- 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

|) | Notices willA notice must be provided as per Section 15(in accordance with subsection 12.4) of the ISO tariff, <i>Miscellaneous</i> . The market participant's address for notices is: |
|---|--|
| | Attention: |
| | Telephone: |
| | Fax: |
| | Email: |
| | The market participant's address for invoices, if different from the address for notices, is: |
| | Attention: |
| | Telephone: |
| | Fax: |
| | Email: |
| | The market participant must provide any changes to its addresses address (es) to the |

ISO using the method posted on the **ISO**AESO website as updated from time to time.



11. **AMENDMENTS**

- (a) The parties acknowledge that either may request an amendment to this Import Agreement. A party mayThe market participant must request such an amendment by complying with the procedure for amending Import Agreements posted by the ISO on its website. If or, if such procedure is not posted, the party requesting an amendment may provide aby providing notice to the other requesting such amendmentISO.
- (b) Notwithstanding the foregoing, the parties acknowledge that the **ISO tariff-and the, 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 shall be deemed amended upon each such approval.
- (c) Subject to Sectionsubsection 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) The following matters shall be dealt with in accordance with the ISO tariff and the ISO rules:
 - (i) Assignment Section 15 of the ISO tariff.
 - (ii) Confidentiality ISO rule 103.1.
 - (iii) Dispute Resolution ISO rule 103.2.
- (b) Force majeure shall be dealt with in accordance with the ISO tariff and the ISO rules.
- (c) Section 6 shallwill survive the termination of this Import Agreement for either the time provided for in such section or the longest period provided by law.
- (db) 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.
- (ec) 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 shallwill 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 shallmust extend only to the particular breach so waived and shallmust not limit or affect any rights with respect to any other or future breach.
- (fd) Time is of the essence.
- (g) If at any time any one or more of the provisions of this Import Agreement is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions of this Import Agreement will not in any way be affected or impaired thereby to the fullest extent possible by law.
- (h (e) This Import Agreement shall beis 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.
- (if) Whenever possible, each provision of this Import Agreement shallmust 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 anya provision is determined

ISO Tariff – Appendix B System Access Service Agreement Proforma for Rate IOS, Import Opportunity Service (continued)



by a court of competent jurisdiction to be illegal, invalid or unenforceable for any reason whatsoever, such provision shallwill 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.

- (jg) 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 beis reasonably required in order to fully perform and carry out the terms of this Import Agreement.
- (kh) 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 shall be an original, and all such counterparts taken together shallwill 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** Effective Date.

| · · · · · · · · · · · · · · · · · · · | |
|---|-------|
| Per: | Date: |
| Name: Title: | |
| | |
| [insert legal name of corporation or partnership] | |
| Per: | Date: |
| Name: | |

Independent System OperatorISO, operating as AESO



ISO Tariff - Appendix B

Construction Commitment Agreement Proforma

ISO Tariff – Appendix B
Construction Commitment Agreement Proforma

THIS CONSTRUCTION COMMITMENT AGREEMENT made

| This Construction | Commitment Agreement effective as of | the day c | ıf, |
|-------------------|--------------------------------------|-----------|-----|
| 201(th | e "Effective Date") | | |

BETWEEN:

[Insert Name of Legal Owner of the Transmission Facility],

a corporation, incorporated <u>underpursuant to</u> the _____ laws of <u>XXX</u>,

with office[s] in the City of [insert city], in the Province of Alberta (hereinafter referred to as [insert option of province]

(the "TFO")

– and –

[Insert Name of Market Participant],

a [corporation, incorporated under] [partnership organized], incorporated pursuant to the _____ laws of XXX,

with office[s] in the City of [insert city], in the Province of ◆ (hereinafter referred to as the "Market Participant[insert province]

(the "market participant")

RECITALS

- A. WHEREAS the Market Participant The market participant has requested system access service from the Independent System Operator System Operator, (the "ISO") and intends to enter into, or amend, a system access service agreement with the ISO in relation to [Insert Connection Project Name and Number as provided by the ISO];
- B. AND WHEREAS the The provision or amendment of system access service will require the construction of a new transmission facilities facility and a commitment by the Market Participant market participant in relation to the expenditure of capital for such construction;
- C. AND WHEREAS the The ISO Tarifftariff requires the Market Participant market participant to provide Financial Security financial security or a construction contribution, or both, to the TFO, to pay a Construction Contribution to the TFO, or both, with respect to the Market



Participant's Financial Obligation for the Connection Project in the amounts determined pursuant to the ISO Tarifftariff;

D. AND WHEREAS priorPrior to commencing the Project Work, as set out in the attached Schedule "A" hereto,", the ISO Tarifftariff requires the Market Participantmarket 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

NOW THEREFORE in 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 hereinin this Construction Contribution Agreement and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties, the parties hereby agree as follows:

Interpretation and Definitions

- 1. In this Agreement:
 - (a) unless the context requires <u>Unless</u> otherwise, <u>words</u> <u>defined</u> in the <u>singular include the</u> <u>plural and words in the plural include the singular;</u>
 - (b) "may" is to be construed as permissive and empowering and "must", "shall" and "will" are to be construed as imperative;
 - (c) the use of the word "this Construction Commitment Agreement, bolded terms, not including" is not to be construed as being restrictive; and
 - (d) capitalized words and phrases 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 Agreement, and in addition the following terms shall have the meanings provided
 below:
 - (i) "Act" means the Electric Utilities Act and any regulations made under it.
 - (b)(a) (ii) "Agreement" means this Construction Commitment Agreement and all amendments hereto, including all Schedules attached herewith and amendments thereto.:

 (iii)
 - (i) "Cancellation Costs" means all Connection Project costs actually incurred by the TFO prior to cancellation of thea Connection Project, or reasonably required to be incurred by the TFO after cancellation of thea Connection Project, including costs arising from preparation of thea connection proposal, preparation of thea facility application and construction of thea Connection Project, as documented in the construction commitment agreement required by subsection 2 of section 5 of the ISO Tarifftariff; third-party



cancellation costs and penalties; costs for material salvage; and reclamation of theany related construction site.;

- (ii) (iv)—"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.
 - (v) "Commercial Operation" means the date upon which a load, generating unit or aggregated generating facility begins to operate on the transmission system in a manner which is acceptable to the ISO and which is expected to be normal for it to so operate, after energization and commissioning.
 - (vi) "Commission" as defined in the Act means the Alberta Utilities Commission established by the Alberta Utilities Commission Act.
- (iii) (vii) —"Connection Project" means <u>a new transmission facilities facility</u> constructed by the TFO at the request of the Market Participant market participant for system access service.:
 - (viii) "Construction Contribution" means the financial contribution in aid of construction, in excess of any available maximum local investment, that a Market Participant must pay for the construction and associated costs of transmission facilities required to provide system access service.
 - (ix) "Financial Obligation" for the purpose of this Agreement means any debt, payment or similar obligation of the Market Participant actually incurred or likely to be incurred in accordance with section 5 of the ISO Tariff or under any terms of an agreement or other document between the Market Participant and the TFO.
 - (x) "Financial Security" for the purpose of this Agreement means sufficient enforceable credit support to secure the Financial Obligations of the Market Participant to the ISO or the TFO.
- <u>(iv)</u> (xi) "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;
- (iv)(vi) "Guarantor" means an entity that provides a guarantee on behalf of the Market Participant.market participant;
 - (xii) "ISO Tariff" as defined in the Act means the tariff prepared by the ISO under section 30 of the Act that has been approved by the Commission, as amended from time to time.
 - (xiii) "Material Adverse Change" for the purpose of this Agreement means a downgrade in the credit rating of the Market Participant or its Guarantor by any credit rating agency, or an event that may result in the materially weaker creditworthiness of the Market Participant or its Guarantor as would be reasonably determined by the TFO.



- (v)(vii) (xiv)—"Project Work" means the work for the Connection Project as set out in Schedule "A" to this Agreement.
- (vi)(viii) (xv)—"Schedules" means the following Schedules attached to this Agreement, and all amendments to such Schedules:

Schedule "A" - Project Work and Financial Obligation

Schedule "B" - Construction Contribution and Financial Security; 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.

Term of Agreement

- 2. This <u>Construction Commitment</u> Agreement <u>shall taketakes</u> effect on the Effective Date and <u>shall remain</u>remains in full force and effect until:
 - (a) the Connection Project begins Commercial Operation operation; or
 - (b) if-upon the occurrence of a Cancellation Event, the Connection Project is cancelled and all amounts owing to the TFO hereunder have been paid in full.

ISO Tariff

- 3. In addition to the obligations of the parties pursuant to this Agreement:
 - (a) the Market Participant shall remain fully subject to the ISO Tariff in respect of the Connection Project; and
 - (b) with the exception of terms stated to be defined for the purpose of this Agreement, in the event of any conflict or inconsistency between the provisions of this Agreement and the ISO Tariff, the provisions of the ISO Tariff shall prevail.

Construction Contribution and Financial Security

4. The Market Participant willmarket participant must pay to the TFO a Construction Contribution contribution required in respect of its Financial Obligation financial obligation for the Connection Project in accordance with section 56 of the ISO Tarifftariff. The Market Participantmarket participant will pay the Construction Contribution construction contribution in the amounts and at the times set out and described in the Schedules (as amended from time to time), each such payment being an absolute transfer of ownership in the funds to the TFO as a payment for the Project Work.



- 5. For a Connection Project that is eligible for local investment, the Market Participantmarket participant will also provide or cause to be provided to the TFO the Financial Securityfinancial security required in accordance with section 56 of the ISO Tariff as security for the payment and performance of all present and future debts, costs and Financial Obligationsfinancial obligations of the Market Participantmarket participant to the TFO arising pursuant to this Construction Commitment Agreement other than those for which the Construction Contribution is paid. The Market Participantmarket participant will provide or cause to be provided the Financial Securityfinancial security in the amounts and at the times set out and described in the Schedules, as amended from time to time.
- 6. The Construction Contribution contribution and Financial Security shall financial security must in aggregate be in an amount adequate to fund the Financial Obligation financial obligation arising from the Project Work, as determined pursuant to section 56 of the ISO Tariff tariff.
- 7. All changes to the Construction Contribution construction contribution and Financial Security shall 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 is unsecured, or if its Guarantor has provided a guarantee as Financial Security inancial security, and the Market Participant market participant becomes aware of any Material Adverse Change a material adverse change in respect of the Market Participant market participant or Guarantor, the Market Participant shall market participant must provide written notice thereof to the TFO and to the ISO within two (2) business days of becoming aware of the occurrence of such Material Adverse Change. Upon the occurrence of a Material Adverse Change material adverse change, the TFO may require the Market Participant market participant to provide additional or replacement Financial Security financial security.
- In determining whether an event of Material Adverse Change material adverse change has
 occurred, consideration must be given to anyan event, circumstance or change which affects or
 wouldis reasonably be expected to affect:
 - (a) the financial condition of the Market Participantmarket participant or anyits Guarantor;
 - (b) the ability of the Market Participantmarket participant or anyits Guarantor to perform its obligations under anya Financial Security; or
 - (c) the assets or business of the Market Participantmarket participant or anyits Guarantor.



Cancellation of Connection Project

- 10. The Connection Project willmust be cancelled if:
 - the Market Participantmarket 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 market participant's failure to meet anya critical requirements information under subsection 7 of section 43.2 of the ISO Tarifftariff; or
 - the **ISO** cancels the Connection Project after reasonably concluding, based on the action or inaction of the Market Participantmarket participant, that the Market Participantmarket participant is not proceeding with the Connection Project.
- 11. The Connection Project may be cancelled by the TFO in accordance with the ISO Tariff-upon the occurrence of any of the following events:
 - the Market Participantmarket participant fails to provide or cause to be provided the Financial Securityfinancial security in the form and amount set out in Schedule "B" concurrently with the execution and delivery of this Construction Commitment Agreement, or thereaftersubsequently 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 hereofof this Construction Commitment Agreement;
 - (b) the **Commission** rejects or fails to approve the relevant application for the Connection Project;
 - (c) the Market Participantmarket participant fails to:
 - (i) execute a **system access service** agreement (as set out in Appendix B of the ISO's standard form); 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's standard form),ISO tariff,

at least three (3) business days prior to the start of the month of planned energization;

in accordance with the ISO tariff;

- (d) the Market Participantmarket participant or anyits Guarantor breaches anya term, condition, agreement or covenant under this Construction Commitment Agreement or the Financial Securityfinancial security and fails to remedy such the breach within five (5) business days of receipt of written notice of such the breach by the TFO to the Market Participantmarket participant;
- (e) anya representation or warranty made or given by the Market Participantmarket

 participant in connection with this Construction Commitment Agreement is shown to be untrue or incorrect as at the date when it was made or given at the Effective Date or



Public

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

ceases to be true and correct during the term of this <u>Construction Commitment</u> Agreement;

- (f) the Market Participantmarket participant or anyits Guarantor is found to be insolvent or bankrupt by a court of competent jurisdiction or makes an authorized assignment of its assets or a compromise or arrangement for the benefit of its creditors, makes a proposal to its creditors under the Bankruptcy and Insolvency Act (Canada), seeks relief under the Companies' Creditors Arrangement Act (Canada), the Winding Up Act (Canada) or any other bankruptcy, insolvency or analogous law in Canada or the United States, files a petition or proposal to take advantage of any act of insolvency, consents to or acquiesces in the appointment of a trustee, receiver, receiver and manager, interim receiver, custodian or other person with similar powers over all or any substantial portion of its assets, files a petition or otherwise commences anya proceeding seeking anya reorganization, arrangement, composition or readjustment under anya 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 Participantmarket participant or anyits Guarantor;
- (g) therea formal or informal proceeding is instituted by or against the Market

 Participantmarket participant or anyits Guarantor-any formal or informal proceeding for the dissolution or liquidation of, settlement of claims against, or winding up of the affairs of, the Market Participantmarket participant or anyits Guarantor, or a resolution is passed for dissolution, liquidation or winding up the Market Participantmarket participant or anyits Guarantor;
- (h) the Market Participantmarket participant or anyits 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;
- 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 market participant or anyits Guarantor;
- (j) the Market Participant creates or permits to exist any charge, security interest, lien, encumbrance or claim against any of the collateral charged under the Financial Security which ranks or could in any event rank in priority to or pari passu with the Financial Security:
- (k) the holder of any(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 does anything to enforce or realize on such charge, security interest, lien, encumbrance or claim; or 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
- (I) with respect to anya letter of credit provided to the TFO, if replacement Financial Securityfinancial security is requested and not provided by the Market



Participant market participant within two (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 anyana applicable grace period;
- (iii) the issuer of suchthe letter of credit disaffirms, disclaims, repudiates or rejects, in whole or in part, or challenges the validity of, such letter of credit;
- (iv) suchthe 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 Participantmarket participant under this Construction Commitment Agreement without the written consent of the TFO;
- (v) there are less than twenty (20) business days remaining until expiry of suchthe letter of credit; or
- (vi) anyan event analogous to a Material Adverse Changematerial adverse change occurs with respect to the issuer of suchthe letter of credit.
- 12. If upon, the Connection Project is cancelled due to the occurrence of a Cancellation Event—the Connection Project is cancelled, the TFO, without limiting or restricting other rights or remedies under contract, at law or in equity:
 - (a) shallmust:
 - (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 Securityfinancial security, and any other security in respect of the Connection Project provided by the Market Participantmarket participant to the TFO under separate construction commitment agreements; and
 - (v) commence <u>sucha</u> legal <u>actionsaction</u> or <u>proceedingsproceeding</u> against the <u>Market Participantmarket participant</u> or its Guarantor as it determines.



- 13. Upon the occurrence of a Cancellation Event, the TFO shallmust use, and shallmust 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 shallmust at all times maintain accurate accounts, records, invoices and third-party invoices for all Connection Project costs, including all Cancellation Costs, which will be are prima facie evidence of the amounts owing to the TFO by the Market Participantmarket participant.
- 15. The Market Participant shall forthwith market participant must, upon demand having been made therefore by the TFO following the occurrence of a Cancellation Event, pay the Cancellation Costs to the TFO-without delay. If the Market Participant market participant fails to pay to the TFO the Cancellation Costs upon demand, the TFO shall havehas all remedies available pursuant to the ISO Tariffariff and may charge the Market Participant 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 market participant represents and warrants to the TFO as follows:
 - the Market Participantmarket 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 construction contribution and Financial Security 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 Participantmarket participant and constitutes a legal, valid and binding obligation of the Market Participantmarket participant, enforceable against it in accordance with its terms, except to the extent that such enforceability may be limited by bankruptcy, insolvency, winding-up, reorganization, and similar laws affecting the enforceability of creditors' rights generally and the availability of equitable remedies such as specific performance or injunction; and
 - (d) the authorization, execution and performance by the Market Participant 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.
 - (i) does not and will not violate any laws applicable to the Market Participant; and
 - (iii)(i) is not in contravention of its constating documents or its by-laws or the previsions 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 market participant as follows:



- 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 <u>Construction</u> <u>Commitment</u> 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 willmarket 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 financial security by the TFO.
- 18. In this <u>Construction Commitment</u> Agreement:
 - (a) anya notice or communication required or permitted to be given under this Construction
 Commitment
 Agreement willmust
 be in writing and will beis
 considered
 toanya
 <a href="mai
 - (i) if to the Market Participantmarket participant:

Attention: •
Fax No: •
E-mail: •

Attention: •
Fax No: •
E-mail: •



(ii) if to the TFO:

•

Attention: • Fax No: •

E-mail: •

E-mail: •

(iii) if to the ISO:

Alberta Electric System Operator 2500, 330 – 5th Ave SW Calgary, Alberta T2P 0L4
Attention:

Fax No: •

E-mail: ISOtariffnotice@aeso.ca

- (iv) to <u>such otheranother</u> address, <u>fax</u> or <u>facsimile transmission numberemail</u> as <u>anya</u> party may designate by providing notice of the same to all parties.
- (b) notice or communication will beis 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 facsimile transmission fax or e-mail during business hours on a **business day**, upon the sender receiving confirmation of the transmission fax or e-mail delivery, and if not transmitted sent during business hours, upon the commencement of business hours on the next **business day**.
- 19. This The market participant must not assign this Construction Commitment Agreement may not be assigned by the Market Participant without the prior written consent of the TFO.
- 20. This The TFO must not assign this Construction Commitment Agreement may not be assigned by the TFO without the prior written consent of the Market Participant 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.market participant.
- 21. Without prejudice to the Market Participant's 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 market participant to proceed with the Connection Project.
- 22. This <u>Construction Commitment</u> Agreement <u>will enureenures</u> to the benefit of and <u>will</u> be binding upon the parties <u>hereto</u> and their respective successors and permitted assigns.
- 23. No failure or delay on the TFO's part in exercising <u>anya</u> power or right <u>hereunder will operateas</u> <u>provided in this Construction Commitment Agreement operates</u> as a waiver <u>thereof of this</u> Construction Commitment Agreement.
- 24. The TFO's rights and remedies hereunder as provided in this Construction Commitment Agreement are cumulative and not exclusive of any rights right or remedies remedy at law or in equity.



25. Time is of the essence.

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Whenever possible, each provision of this Agreement Construction Commitment Agreement must be interpreted in such a manner as to be effective and all documents or instruments delivered hereundervalid 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 Construction Commitment Agreement or any other provision of this Construction Commitment Agreement.

26. If at any time any one or more of the provisions hereof is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions hereof will not in any way be affected or impaired thereby to the fullest extent possible by law.

- This Agreement willis be governed by and interpreted in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein. The Market Participant. 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 anya suit, action or proceeding commenced in such Courts and by anyan order or judgment resulting from such suit, action or proceeding, but the foregoing will in no way limitlimits 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 <u>Construction Commitment</u> Agreement may be varied or amended only by or pursuant to an agreement in writing signed by the parties <u>hereto</u>.
- 29. All Schedules attached hereto will be 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 hereto, as provided in the Schedules.
- 30. This Agreement may be signed in one or more counterparts, originally or by facsimile, 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.]



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 |
|-------------------------|--|
| Ву: | Ву: |
| Name (print): | Name (print): |
| Title (print): | Title (print): |



SCHEDULE "A"

To the Construction Commitment Agreement

Between

[Insert Name of Legal Owner of the Transmission Facility],
a [corporation, incorporated under] [partnership organized], incorporated pursuant to the
_laws of XXX,
with office[s] in the City of [insert city], in the Province of Alberta (hereinafter referred to as [insert province]
_(the "TFO")

[Insert name of Market Participant], a [corporation, incorporated under] [partnership organized], incorporated pursuant to the laws of XXX,

– and –

PROJECT WORK AND FINANCIAL OBLIGATION

For Connection Project [insert project name]

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

The TFO and Market Participantmarket participant have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained herein. this amended Schedule "A".

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

Effective as of the latest date of signature stated below, and upon execution of this amended Schedule "A", 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 <u>[amended]</u> Schedule "A" describes the Project Work to be performed by the TFO for the Connection Project. The Project Work as referenced in the Construction Commitment Agreement includes the following:

[Insert amounts next to applicable selections]



[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.]



| 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 [add description of any additional work]] | 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 Participantmarket 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 construction contribution, if any, is set out onin Schedule "B".

IN WITNESS WHEREOF, the parties acknowledge that they have read this **[amended]** Schedule "A", understand it, and agree to be bound by it and have caused it to be executed by their duly authorized representatives effective as of the latest date of signature stated below.



| [INSERT FULL NAME OF TFO] | [INSERT FULL NAME OF MARKET PARTICIPANT] |
|---------------------------|--|
| Ву: | Ву: |
| Name (print): | Name (print): |
| Title (print): | Title (print): |
| Date: | Date: |



SCHEDULE "B"

To the Construction Commitment Agreement

Between

[Insert Name of Legal Owner of the Transmission Facility],
a [corporation, incorporated under] [partnership organized], incorporated pursuant to the laws of XXX,
with office[s] in the City of [insert city], in the Province of Alberta (hereinafter referred to as [insert province] (the "TFO")

[Insert name of Market Participant],

– and –

a [corporation, incorporated under] [partnership organized], incorporated pursuant to the ____laws of XXX,

CONSTRUCTION CONTRIBUTION AND FINANCIAL SECURITY

For Connection Project [insert project name]

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

The TFO and Market Participantmarket participant have agreed to amend the Construction Commitment Agreement pursuant to the terms and conditions contained herein. this amended Schedule "B".

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

Effective as of the latest date of signature stated below, and upon execution of this amended Schedule "B", 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 Construction contribution and financial security to be provided to the TFO as of [Insert Current Date]. The Construction Contribution Construction contribution and Financial Security financial security as referenced in the Construction Commitment Agreement includes the following:



- 1. Pursuant to subsection 3 of section 5 of the ISO Tariff, a legal owner of an electric distribution system that is regulated by the Commission is not required to provide Financial Security up to the maximum local investment.
- Upon execution of the Construction Commitment Agreement, the Market Participant shallmarket participant must provide to the TFO one or more of the following as determined in accordance with section 56 of the ISO Tarifftariff:
 - (a) Construction Contribution (cash payment) in the amount of Amount in words Canadian dollars plus GST (CDN \$ Amount in numbers + GST); and
 - (b) **Financial** Security in one or more of the following forms:
 - (i) an unconditional and irrevocable standby letter of credit payable on demand to the TFO and issued from a Canadian chartered bank or other comparable financial institution acceptable to the TFO in the amount of Amount in words Canadian dollars plus GST (CDN \$ Amount in numbers + GST);
 - (ii) a cash collateral deposit able to be 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.
- 32. The Market Participant shallmarket 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] |
|---------------------------|--|
| Ву: | Ву: |
| Name (print): | Name (print): |
| Title (print): | Title (print): |
| Date: | Date: |



Public

ISO Tariff – Appendix C Procedure for Foreseeable Transmission Must-Run Service

PROCEDURE FOR FORESEEABLE TRANSMISSION MUST-RUN SERVICE

- 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.
- 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)
- 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)
- 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 <u>8.</u>7 of section <u>11 of</u> 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 6 of section 11 8.6 of the ISO tariff in respect of unforeseeable transmission must-run service.

(Reference #6 in below diagram)

1

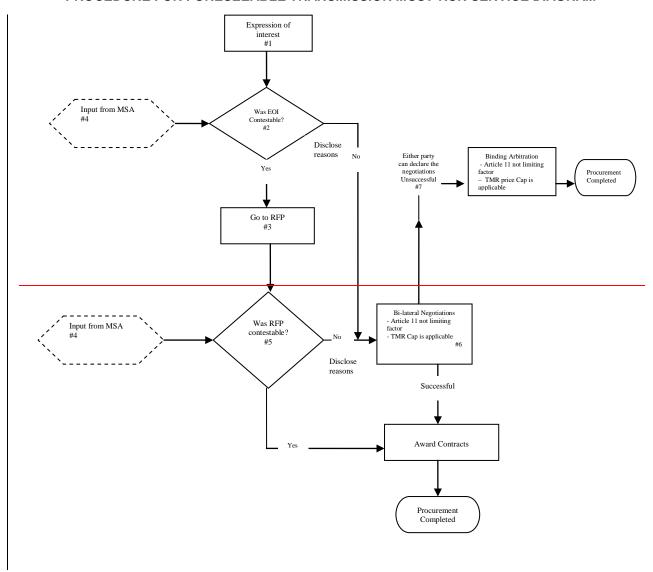
- Any party to the bilateral negotiation process may declare it unsuccessful after thirty (30) **days**, at which time a binding arbitration process shall commence between the **ISO** and the **market participant** (Reference #7 in below diagram). In circumstances where multiple **market participants** may provide transmission must-run services to the **ISO**, the **ISO** shall act fairly and reasonably in its selection as to the party that is subject to binding arbitration. The binding arbitration process shall:
 - (a) be subject to the maximum transmission must-run price specified by subsection 7 of section 11.8. of the ISO tariff, and
 - (b) not be limited by the pricing provisions of subsection-<u>8.</u>6 of section 11 of the **ISO tariff** in respect of unforeseeable transmission must-run service.

(Reference #8 in below diagram)

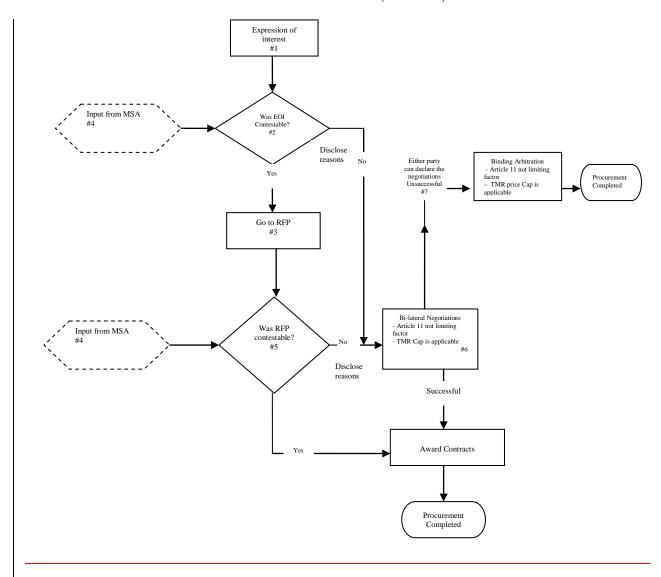


The binding arbitration process shall employ the dispute resolution process established under section 103.2 of the **ISO rules** and proceed directly to arbitration as per section 103.2 of the **ISO rules**. Any arbitrator appointed pursuant to that dispute resolution process shall have an expert understanding 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. |
| | Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011. |