

Revised Blackline – Proposed ISO Tariff Revisions | 2022 ISO Tariff Modernization Application

Rates

Rate DTS	Demand Transmission Service
Rate PSC	Primary Service Credit
Rate STS	Supply Transmission Service

Terms and Conditions

Section 3	System Access Service Requests
Section 4	Classification and Allocation of Connection Projects Costs
Section 5	Changes to System Access Service
Section 6	Financial Obligations for Connection Projects
Section 7	Generating Unit Owner's Contribution
Section 8	Ancillary Services
Section 10	Settlement and Payment Terms

Applicability

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

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

Rate

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

Connection Charge

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

Volume in Settlement Period	Charge
Bulk System Charge	
(a) Coincident metered demand	\$10,501.00/MW/month
(b) Metered energy	\$1.15/MWh
Regional System Charge	
(c) Billing capacity	\$2,775.00/MW/month
(d) Metered energy	\$0.87/MWh
Point of Delivery Charge	
(e) Substation fraction	\$14,332.00/month
(f) First (7.5 × substation fraction) MW of billing capacity	\$4,717.00/MW/month
(g) Next (9.5 × substation fraction) MW of billing capacity	\$2,797.00/MW/month
(h) Next (23 × substation fraction) MW of billing capacity	\$1,873.00/MW/month
(i) All remaining MW of billing capacity	\$1,153.00/MW/month

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

Operating Reserve Charge

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

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

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

- (a) **metered energy** for the Rate DTS **market participant** in the hour; and
- (b) **pool price** in the hour multiplied by 6.19%.

Transmission Constraint Rebalancing Charge

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

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

Voltage Control Charge

6 The ISO must determine the voltage control charge as the product of **metered energy** in the **settlement period** multiplied by \$0.01/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 \$25.00/MW/month; and
- (b) when **power factor** is less than 90% during the interval of highest **metered demand** in the **settlement period**, \$400.00/MVA multiplied by the **apparent power** difference calculated during the interval of highest **metered demand** in the **settlement period** as the difference between the metered **apparent power** and 111% of **metered demand**, unless the ISO waived the application of such a charge prior to December 31, 2016.

Terms

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

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

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

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

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

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

Revision History

Effective	Description
2022-01-01	Updated charges as approved on a final basis in Commission Decision 26980-D01-2021 issued on December 17, 2021.
2021-01-01	Updated charges as approved on a final basis in Commission Decision 26054-D01-2020 issued on December 18, 2020.
2020-04-01	Updated charges as approved on an interim refundable basis in Commission Decision 25175-D01-2020 issued February 28, 2020 and on a final basis approved in Commission Decision 25175-D02-2020.
2019-01-01	Updated charges, as approved in Commission Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated charges, as approved in Commission Decision 23065-D01-2017 issued on November 28, 2017.
2017-01-01	Updated charges, as approved on an interim refundable basis in Commission Decision 22093-D01-2016 issued on December 2, 2016 and on a final basis in Commission Decision 22093-D02-2017 on April 4, 2017.
2016-04-01	Updated charges, as approved in Commission Decision 21302-D01-2016 issued on March 31, 2016.
2016-01-01	Updated charges, as approved in Commission Decision 20753-D02-2015 issued on December 21, 2015.
2015-11-26	Updated subsections and charges, as approved in Commission Decision 20623-D01-2015 issued on November 5, 2015.
2015-07-01	Updated subsections and charges, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2013-10-01	Updated charges, as approved on an interim refundable basis in Commission Decision 2013-325 issued on August 28, 2013 and on a final basis in Commission Decision 2014-242 issued on August 21, 2014.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

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	\$11,322.00/month
(b) First (7.5 × substation fraction) MW of billing capacity	\$3,726.00/MW/month
(c) Next (9.5 × substation fraction) MW of billing capacity	\$2,210.00/MW/month
(d) Next (23 × substation fraction) MW of billing capacity	\$1,480.00/MW/month
(e) All remaining MW of billing capacity	\$1,153.00/MW/month

Terms

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

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

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

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

Revision History

Effective	Description
2022-01-01	Updated charges as approved on a final basis in Commission Decision 26980-D01-2021 issued on December 17, 2021.
2021-01-01	Updated charges as approved in Commission Decision 26054-D01-2020 issued on December 18, 2020.
2020-04-01	Updated charges as approved on an interim refundable basis in Commission Decision 25175-D01-2020 issued February 28, 2020 and revised Other System Support Services Charge waiver, as approved on a final basis in Commission Decision 25175-D02-2020 issued on November 30, 2020.
2019-01-01	Updated credit levels, as approved in Commission Decision 24036-D01-2018 issued on December 18, 2018.
2018-01-01	Updated credit levels, as approved in Commission Decision 23065-D01-2017 issued on November 28, 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.

Applicability

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

Rate

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

Terms

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

Revision History

Effective	Description
2022-01-01	Updated charges as approved on a final basis in Commission Decision 26980-D01-2021 issued on December 17, 2021.
2021-01-01	Updated charges and removed the Regulated Generating Unit Connection Cost section, as approved in Commission Decision 26054-D01-2020 issued on December 18, 2020.
2020-04-01	Updated charges, as approved on an interim refundable basis in Commission Decision 25175-D01-2020 issued February 28, 2020 and on a final basis in Commission Decision 25175-D02-2020 issued on November 30, 2020.
2019-01-01	Updated charges, as approved in Commission Decision 24036-D01-2018 issued on December 18, 2018.
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.

Applicability

3.1(1) This section applies to a **market participant** who has requested a new **system access service** or changes to an existing **system access service** under:

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

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

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

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

- (a) the requested Rate STS **contract capacity** or requested change in Rate STS **contract capacity**, including **contract capacity** by stage, if applicable;
- (b) the **maximum capability** of each **generating unit** or **aggregated generating facility**;
- (c) the requested Rate DTS **contract capacity** or requested change in Rate DTS **contract capacity**, including **contract capacity** by stage, if applicable;
- (d) generation type(s) in the case of a **generating unit** or **aggregated generating facility**;
- (e) in-service date, including the dates relating to any staged **contract capacity** request;
- (f) location of the load or generation related to the request of the **market participant**; and
- (g) if load or generation related to the request of the **market participant** are or will be part of a **Commission**-designated industrial system, or if the **market participant** has otherwise obtained an approval from the **Commission** that permits the export to the **interconnected electric system** of electric energy in excess of the **market participant**'s own self-supply requirements, 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**~~ a new or amended **permit and licence** is required to respond to the request.

3.3(3) If ~~the construction of **transmission facilities**~~ a new or amended **permit and licence** 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**~~ a new or amended **permit and licence** is not required under subsection 3.3(2) above, then the **market participant** must follow the **ISO**'s behind the fence or contract change process. The **ISO** must prepare if applicable, an amendment to the **market participant's System Access Service Agreement** substantially in the form included in Appendix A of the **ISO tariff**, *System Access Service Agreement Proformas*, and may require payment of a **construction contribution** in accordance with section 4 of the **ISO tariff**, *Classification and Allocation of Connection Project Costs*, or 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**~~ a new or amended **permit and licence** 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; and
- ~~(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)~~ (b) 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 connection alternative includes or depends upon the construction of system transmission facilities, then the **market participant** must:

- (a) accept the preferred connection alternative and pay any applicable advancement costs determined by the **ISO** in accordance with subsection 4.2(3)(a) of section 4 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 A 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 connection alternative includes or depends upon the construction of system transmission facilities, then the **market participant** must:

- (a) accept the **ISO's** preferred connection 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 **market participant** providing **financial security**, **construction contribution** or both for a connection project must enter into a *Construction Commitment Agreement* with the **legal owner** of the **transmission facility**, substantially in the form included in Appendix A 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 **market participant** 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 A of the **ISO tariff**, *System Access Service Agreement Proformas*, ~~as applicable~~:

- (a) if ~~the construction of transmission facilities~~ **a new or amended permit and licence** 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~~ **a new or amended permit and licence** is not required for a connection project, ~~within 30 days of the issuance of a letter at the time specified 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 on the AESO website.~~

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

3.6(3) A market participant must execute a *System Access Service Agreement* for Rate STS for a **contract capacity** that, in the **ISO's** determination approximates the expected maximum coincident sum of the flows to the **transmission system**.

3.6(4) 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 that requires a new or amended permit and licence~~, 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(5) 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(4) 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(6) 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(4) above.

3.6(7) ~~If the construction of transmission facilities is not required for a connection project, the~~ **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~~ **time specified by the AESO** pursuant to subsection 3.6(1)(b) above.

~~**3.6(8)** 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 owner of the generating facility (as that term is used in section 7 of ISO tariff, *Generating Unit Owner's Contribution*) 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*.~~

~~**3.6(9)** For a connection project that requires a *System Access Service Agreement* for Rate STS, the contribution for a generating facility calculated in accordance with section 7 of the ISO tariff, *Generating Unit Owner's Contribution* must be paid by the owner of the generating facility in full to the ISO:~~

- ~~(a) if the construction of **transmission facilities** is required for the connection project, within 30 days of the *System Access Service Agreement* for Rate STS becoming effective pursuant to subsection 3.7(1) below; or~~
- ~~(b) if the construction of **transmission facilities** is not required for the connection project, within 30 days of the *System Access Service Agreement* for Rate STS becoming effective pursuant to subsection 3.7(4) of the ISO tariff below.~~

(a)

Effective Date of Agreement for System Access Service

3.7(1) If ~~the construction of **transmission facilities**~~ a new or amended permit and licence 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** for the connection project;~~
- (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**~~ a new or amended permit and licence 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**~~ a new or amended permit and licence is required for a connection project, the ISO may cancel a ~~system access service request~~ connection project 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.

~~Transitional Election of GUOC and System Access Service Agreement Provisions~~

~~**3.8(1)** If, prior to the effective date of this ISO tariff, a connection project that requires the construction of **transmission facilities** is in Stage 4 or 5 of the ISO's connection process or if a connection project that does not require the construction of **transmission facilities** is in Stage 5 of the AESO's behind the fence process and a power plant approval has been issued by the Commission for any associated generating facility, then the market participant may elect, by no later than 11:59 pm Mountain Time of the 14th day following the effective date of this ISO tariff to pay the contribution for a generating facility according to either:~~

- ~~(a) the ISO tariff that was in effect immediately prior to this ISO tariff, in which case:
 - ~~(i) a System Access Service Agreement for Rate STS must be executed at the time and in the form specified in the prior ISO tariff;~~
 - ~~(ii) the contribution for a generating facility must be calculated and paid in accordance with the prior ISO tariff; and~~
 - ~~(iii) subsection 3.6(8) above does not apply; or~~~~
- ~~(b) this ISO tariff, in which case:
 - ~~(i) if the permit(s) and licence(s) required to construct and operate the **transmission facilities** have been issued by the Commission prior to the effective date of this ISO tariff:
 - ~~(A) a System Access Service Agreement for Rate STS must be executed within 90 days from the effective date of this ISO tariff;~~
 - ~~(B) the System Access Service Agreement for Rate STS becomes effective either immediately upon execution of the System Access Service Agreement for Rate STS if it does not include conditions precedent referred to in subsections 3.6(5) and 3.6(6) above or in accordance with subsection 3.7(1) above if the System Access Service Agreement for Rate STS includes an unsatisfied condition precedent referred to in one or both of subsections 3.6(5) and 3.6(6) above;~~
 - ~~(C) the evidence required to be provided in accordance with subsection 3.6(8) above must be provided to the ISO within the 14 day election period; and~~
 - ~~(D) the contribution for a generating facility must be calculated in accordance with section 7 of this ISO tariff, *Generating Unit Owner's Contribution*, and paid either within 30 days from the execution of the System Access Service Agreement for Rate STS if it becomes effective upon execution, or in accordance with subsection 3.6(9)(a) above if the System Access Service Agreement for Rate STS includes an unsatisfied condition precedent referred to in one or both of subsections 3.6(5) and 3.6(6) above; or~~~~
 - ~~(ii) if the permit(s) and licence(s) required to construct and operate the **transmission facilities** have not been issued by the Commission prior to the effective date of this ISO tariff:~~~~

- ~~(A) a *System Access Service Agreement* for Rate STS must be executed within 90 days from the effective date of this **ISO tariff** and becomes effective in accordance with subsection 3.7(1) above;~~
 - ~~(B) the evidence required to be provided in accordance with subsection 3.6(8) above must be provided to the **ISO** within the 14 day election period; and~~
 - ~~(C) the contribution for a generating facility must be calculated in accordance with section 7 of this **ISO tariff**, *Generating Unit Owner's Contribution*, and it must be paid within 30 days of the *System Access Service Agreement* for Rate STS becoming effective;
or~~
- ~~(iii) if the construction of **transmission facilities** is not required:~~
- ~~(A) a *System Access Service Agreement* for Rate STS must be executed within 90 days from the effective date of this **ISO tariff** and becomes effective immediately upon execution;~~
 - ~~(B) the evidence required to be provided in accordance with subsection 3.6(8) above must be provided to the **ISO** within the 14 day election period; and~~
 - ~~(C) the contribution for a generating facility must be calculated in accordance with section 7 of this **ISO tariff**, *Generating Unit Owner's Contribution*, and must be paid within 30 days of the *System Access Service Agreement* for Rate STS becoming effective.~~

~~**3.8(2)** The **ISO** may deny the election of a **market participant** to pay the contribution for a generating facility according to this **ISO tariff** if the **ISO** determines such denial would be consistent with the **ISO's transmission system** planning obligations and the safe, reliable and economic operation of the **interconnected electric system**.~~

~~**3.8(3)** If a **market participant** that is eligible to make an election in accordance with subsection 3.8(1):~~

- ~~(a) does not make the election within 14 days from the effective date of this **ISO tariff**, or~~
- ~~(b) elects to pay the contribution for a generating facility according to subsection 3.8(1)(b) but fails to provide the evidence required in accordance with subsections 3.6(8) and 3.8(1)(b) above, or fails to execute a *System Access Service Agreement* for Rate STS within 90 days from the effective date of this **ISO tariff**,~~

~~then subsection 3.8(1)(a) above shall be deemed to apply to the **market participant**.~~

~~**3.8(4)** If prior to the effective date of this **ISO tariff**, a connection project that requires the construction of **transmission facilities** is in Stage 4 or Stage 5 of the **ISO's** connection process, or Stage 5 of the **ISO's** "Behind the Fence" process, for **system access service** under Rate DTS, *Demand Transmission Service*, then a *System Access Service Agreement* for Rate DTS must be executed at the time and in the form specified in the prior **ISO tariff**.~~

Amending a System Access Service Request

3.9(1) A **market participant** must, in a timely manner, amend or withdraw notify the **ISO** of any changes to the information provided in 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.~~

3.9(2) ~~The ISO, upon receipt of an amended~~ If a market participant changes the information provided in a system access service request that includes changes to critical information, the ISO may:

(a) accept the ~~amendment~~ change, subject to such ~~requirements or further amendments~~ as information or requirements that the ISO determines to be necessary that may include:

- (i) revised or new connection studies; and
- (ii) revised or new connection alternatives;

or

(b) reject the ~~amended system access service request~~ change.

3.9(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.

3.9(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.

Cancellation Due to Action or Inaction

3.10 The ISO may cancel a connection project after reasonably concluding, based on the action or inaction of the market participant, that the market participant is not proceeding with the market participant's system access service request.

Alternative Processes

3.4011 The ISO may satisfy the provisions of this section through processes other than those described above and, in particular, alternative processes may be utilized if the ISO anticipates the impact on the **transmission system** may be significant.

Revision History

Effective	Description
2021-01-01	Revised and reformatted all subsections, as approved in Commission Decision 25175-D02-2020 issued on November 30, 2020.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.

Applicability

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

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

Classification of Participant-Related and System-Related Costs

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

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

- (a) the connection substation for the **point of delivery** or **point of supply**, including all **transmission facilities** to accommodate an in-out line configuration;
- ~~(b) a radial circuit, including double radial configurations, with only 1 transmission source from the transmission system to the connection substation;~~
- (b) a radial circuit;
- (c) a new additional transmission line for a **point of delivery** or **point of supply** that is served from an additional transmission source and that is either required only to serve the **point of delivery** or **point of supply** or is requested by a **market participant**;
- (d) a share of existing **transmission facilities** that were constructed to connect another **market participant**, where the existing facilities originally began **commercial operation** within the past 20 years and where the share is determined in accordance with subsection 5.5 of the **ISO tariff, Changes to System Access Service**;
- (e) line moves or burials of existing transmission line;
- (f) communication enhancements, additions, or both required solely to provide communications service for the connection project;
- (g) breakers, changes to protection systems, equipment or settings required for the connection project to an existing substation;
- (h) salvage labour required to remove existing **transmission facilities** to allow the installation of new or replacement facilities for a connection project;
- (i) changes to protection systems, equipment or settings related to the addition of a **generating unit** or an **aggregated generating facility** on an **electric distribution system** served through the connection substation;
- (j) **remedial action schemes**;

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

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

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

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

Facilities in Excess of Good Electric Industry Practice

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

Valuation of Facilities for Contribution Determination

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

4.4(2) The **ISO** must, when a connection project involves the installation of a transformer that replaces a smaller transformer which was removed from service at a substation, determine connection project costs by:

- (a) reducing the participant-related costs for the connection project by the replacement cost new of the removed transformer when the **legal owner** of the **transmission facility** either:
 - (i) deems the transformer which is removed to be re-deployable for use at another substation or suitable for use as an operating spare; or
 - (ii) identifies the cost of the transformer, including the cost to remove the transformer as part of its approved capital maintenance;or
- (b) not reducing the participant-related costs in any other circumstances including when the **legal owner** of the **transmission facility** scraps the transformer.

Allocation of Costs to Market Participants

4.5(1) The **ISO** must allocate to the **market participant** at the substation at which **system access service** is provided the balance of participant-related costs remaining after:

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

4.5(2) The **ISO** must allocate the participant-related costs referred to in subsection 4.5(1) above among **market participants** receiving **system access service** at a single substation, which services may be solely under Rate DTS, solely under Rate STS or under a combination of both.

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

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

4.5(5) The **ISO** must deem costs allocated to a **market participant** taking service under Rate STS to be:

- (a) for a **market participant** that is not the **legal owner** of an **electric distribution system**, supply-related costs; and
- (b) for a **market participant** that is the **legal owner** of an **electric distribution system**, zero (0).

Determination of Construction Contribution

4.6(1) The **ISO** must calculate the **construction contribution** in accordance with the **construction contribution** provisions of the **ISO tariff** in effect on the date on which the **market participant** executes a *System Access Service Agreement*.

4.6(2) Subject to subsection 4.6(5) below, a **market participant** must pay the **construction contribution** amounts to the **legal owner** of the **transmission facility** in accordance with the **financial obligation** provisions of section 6 of the **ISO tariff**, *Financial Obligations for Connection Projects*.

4.6(3) The **ISO** must calculate the **construction contribution**:

- (a) for a **market participant** receiving service under Rate DTS, as the demand-related costs less the local investment determined under subsection 4.7 below.
- (b) for a **market participant** receiving service under Rate STS, as the supply-related costs.

4.6(4) A **market participant** 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(5) Subsection 4.6(2) above does not apply to a connection project in respect of which a **market participant** has submitted a proposal to the **ISO** for the construction and temporary operation of a transmission facility in accordance with section 5 of the *Transmission Deficiency Regulation*.

Determination of Local Investment

4.7(1) The **ISO** must calculate the maximum local investment:

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

4.7(2) The **ISO** must calculate the maximum local investment for a connection project for a new **point of delivery** as the sum of annual amounts for each year in the investment term by adding the products of the values from each of rows (c) through (g) of the table below, where the product for a row is calculated by multiplying:

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

Column A	Column B	Column C
Tier	Investment for Service Under Rate DTS	Investment for Service Under Rate DTS with Rate PSC
(c) Substation fraction (for new points of delivery only)	\$106,850/year	\$22,440/year
(d) First ($7.5 \times$ substation fraction) MW of contract capacity	\$35,150/MW/year	\$7,380/MW/year
(e) Next ($9.5 \times$ substation fraction) MW of contract capacity	\$20,850/MW/year	\$4,380/MW/year
(f) Next ($23 \times$ substation fraction) MW of contract capacity	\$14,000/MW/year	\$2,940/MW/year
(g) All remaining MW of contract capacity	\$8,550/MW/year	\$0/MW/year

4.7(3) The **ISO** must calculate the maximum local investment for a connection project that accommodates a **contract capacity** increase at an existing **point of delivery** using:

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

4.7(4) The **ISO** must calculate the maximum local investment for a connection project that includes increases or decreases to **contract capacity** over the investment term as the sum of the investment for each incremental amount of **contract capacity**, to be:

- (a) calculated in accordance with subsections 4.7(2) and (3) above, based on each increment of **contract capacity** and the years for which each increment is contracted, and
- (b) discounted from the beginning of the first **month** in which the increment of **contract capacity** exists back to the date of **commercial operation** of the connection project, using the discount rate provided in subsection 4.9 below.

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

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

Operations and Maintenance

4.8(1) A **market participant** taking service under Rate DTS must pay, as part of the **construction contribution**, an operations and maintenance charge to be added to any participant-related costs of facilities which are deemed to be in excess of those required by **good electric industry practice** in subsection 4.3 above.

4.8(2) The **market participant** must estimate and the **ISO** must agree to the operations and maintenance charge calculated:

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

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

Discount Rate

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

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

where:

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

4.9(2) The **ISO** must use zero as the tax rate T in subsection 4.9(1) above for a **legal owner of transmission facilities** that does not pay income tax, including a non-income tax paying municipal **legal owner of transmission facilities**.

Miscellaneous

4.10(1) The **ISO** must make reasonable efforts to ensure that, where **transmission facilities** must be relocated, the party causing the relocation pays all reasonable costs associated with the relocation.

4.10(2) The **ISO** must, where new facilities between adjacent **balancing authority areas** are required, allocate the costs of such facilities to the **ISO** and to the party responsible for costs in the other **balancing authority area** based on the extent to which each benefits directly from the facilities.

4.10(3) 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.

Revision History

Effective	Description
2021-07-01	Revisions to provisions regarding the deeming of costs per Commission Decision 26215-D01-2021 issued on April 29, 2021, as varied in Commission Decision 26215-D02-2021 issued on June 3, 2021.
2021-01-01	Revised and reformatted subsections as approved in Commission Decision 25175-D02-2020 issued on November 30, 2020 and updated investment levels, as approved in Commission Decision 26054-D01-2020 issued on December 18, 2020.
2019-01-01	Updated investment levels, as approved in Commission Decision 24036-D01-2018 issued on December 18, 2018.
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.

Applicability

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

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

Events Resulting in Adjustments to Construction Contributions and Contract Capacity

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

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

- (a) prior to determining whether to adjust any contract capacity amount, the **ISO** must discuss the potential adjustment with the **market participant**; and
- (b) the **ISO** must not adjust contract capacity unless the deviation from actual flows is 10 per cent or greater than the contract capacity amount.

5.2(3) A **market participant** may dispute a decision made by the **ISO** under subsection 5.2(2) in accordance with Section 103.2 of the ISO rules, *Dispute Resolution*.

5.2(4) The **ISO** must review a **construction contribution** determination and may determine a **construction contribution** adjustment is required when:

- (a) a **market participant** materially increases or decreases **contract capacity** or investment term or terminates **system access service**, prior to the expiry of the investment term for a connection project;
- (b) one or more additional **market participants** use facilities originally installed for an existing **market participant**, resulting in sharing of facilities as provided for in subsection 5.5 below;
- (c) connection project costs previously classified as system-related are reclassified as participant-related to meet changes in **market participant** requirements;
- (d) connection project costs previously classified as participant-related are reclassified as system-related;
- (e) a material error in the original **construction contribution** is identified; or
- (f) the estimated or actual cost of the connection project materially varies from the original estimate.

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

5.2(6) The ISO must not make an adjustment to a **construction contribution** more than 20 years after **commercial operation** of a connection project.

Reductions or Terminations of Contract Capacity

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

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

5.3(3) The ISO must calculate the payment in lieu of notice (also known as a “PILON”) as a share of the costs of **system transmission facilities**, ~~being transmission facilities that the ISO determines exist for the benefit of market participants,~~ incurred to reasonably accommodate a **market participant’s contract capacity** over the 5-year planning horizon of the **transmission system**, and must calculate the payment for a **market participant** reducing, terminating or changing the start date or end date for **contract capacity** under Rate DTS, after executing a *System Access Service Agreement*, as the present value of the difference in bulk system and regional system charges that would be attributed to the service:

- (a) with the reduction or termination of or change of date for **contract capacity** during the notice period; and
- (b) 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**.

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

5.3(5) ~~A market participant~~ may make a payment in lieu of notice at any time prior to or during the 5-year notice period, for the remainder of the notice period and the ISO must receive such payment at least 30 ~~days~~ before the reduction or termination of **contract capacity** ~~is effective.~~

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

- (a) **contract capacity** is transferred to a **system access service** of the same **market participant** at a nearby transmission substation;
- (b) **transmission system** benefits arise from the reduction or termination of **contract capacity**, which may include relief of regional transmission constraints, removal of capacity limitations which would restrict **system access service** to other **market participants** or avoidance of future upgrades to the **transmission system**; or

~~(c) a market participant who has taken service for at least 20 years:~~

- ~~(i) demonstrates to the ISO that a reduction of **contract capacity** results from the market participant’s energy or demand reduction initiative; and~~

~~(d)~~(c) during the 10-year period prior to the reduction in **contract capacity** becoming effective, has not increased **contract capacity** at the **point of delivery** at which the reduction in **contract capacity** occurs.

5.3(7) The ISO may, at any time during the remainder of a notice period for which a payment in lieu of notice was made:

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

Metered Demand Above Pre-Notice Contract Capacity

5.4(1) The ISO must determine the **contract capacity** immediately following the 5-year notice period required by subsection 5.3(1) above to be the maximum of:

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

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

Shared Facilities

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

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

- (a) when a transmission line is shared by two or more substations, by allocating the costs of the shared line to those substations in accordance with subsection 5.5(3) below; and
- (b) when a single substation is shared by 2 or more **market participants**, by allocating the shared costs associated with the substation to those **market participants** in accordance with subsection 5.5(4) below.

5.5(3) The ISO must allocate the participant-related costs of a transmission line shared by 2 or more substations by:

- (a) determining the higher of the sum of all Rate DTS **contract capacities** or the sum of all Rate STS **contract capacities** for each substation in each of the 20 years following **commercial operation** of the original transmission line, and assigning a **contract capacity** of zero in a year in which a substation did not exist;
- (b) calculating the percentage share of the transmission line attributable to each substation by dividing the **contract capacity** determined in subsection 5.5(3)(a) above for the substation in a year by the sum of **contract capacities** determined for all sharing substations in that year;

- (c) calculating the average percentage share over the full 20-year period for each substation; and
- (d) multiplying the cost of the shared transmission line by the average percentage share determined for each substation.

5.5(4) The ISO must allocate the participant-related costs of **transmission facilities** used to provide **system access services** to more than one **market participant** at a single substation to the **market participants** at the substation by:

- (a) determining the **substation fraction** for each **market participant** in each of the 20 years following **commercial operation** of the original connection project, assigning a **contract capacity** of zero in any year in which a **market participant** did not receive **system access service**;
- (b) calculating the average **substation fraction** over the full 20-year period for each **market participant**; and
- (c) multiplying the cost of the shared **transmission facilities** by the average **substation fraction** determined for each **market participant**.

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

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

5.5(6) The ISO, as a result of the allocation of costs of shared **transmission facilities** under subsections 5.5(2), (3) and (4) above:

- (a) must include the allocated share of existing **transmission facilities** in the determination of participant-related costs for the additional **market participants** under subsection 4.2(2)(d) of the **ISO tariff, Classification and Allocation for Connection Projects Costs**; and
- (b) may assess **construction contributions** to the additional **market participants** under section 4 of the **ISO tariff, Classification and Allocation for Connection Projects Costs**.

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

Determination of Construction Contribution

5.6 The ISO must determine the amount of an adjustment to a **construction contribution** paid for a connection project in accordance with the **construction contribution** provisions described in the **ISO tariff** as applied to the **transmission facility** at the time construction is completed.

Payments and Refunds

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

~~(a) at least adjustment within 30 days prior to the effective date of a change to a System Access Service Agreement, if the payment arises from changes to **contract capacity** or investment term that do not require construction of a **transmission facility**; and~~

~~within 30 days of a request for payment, in all other circumstances.~~

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

(a) within 30 **days** after the effective date of a change to a *System Access Service Agreement*, if the refund arises from changes to **contract capacity** or investment term that do not require construction of a **transmission facility**;

(b) within 90 **days** after the **Commission** issues **permit and licence** for a **transmission facility**, if the refund results from the construction of the **transmission facility**; and

(c) within 90 **days** of the **ISO** determining the amount of the adjustment, in all other circumstances.

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

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

(b) a payment in lieu of notice by way of electronic funds transfer or wire transfer to a bank account the **ISO** specifies.

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

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

Revision History

Effective	Description
2021-01-01	Updated to remove the subsection relating to Regulated Generating Unit Connection Costs, as approved in Commission Decision 26054-D01-2020 issued on December 18, 2020.
2021-01-01	Updated \$0.00/MWh charge, as approved in Commission Decision 25175-D01-2020 issued on November 30, 2020.
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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Applicability

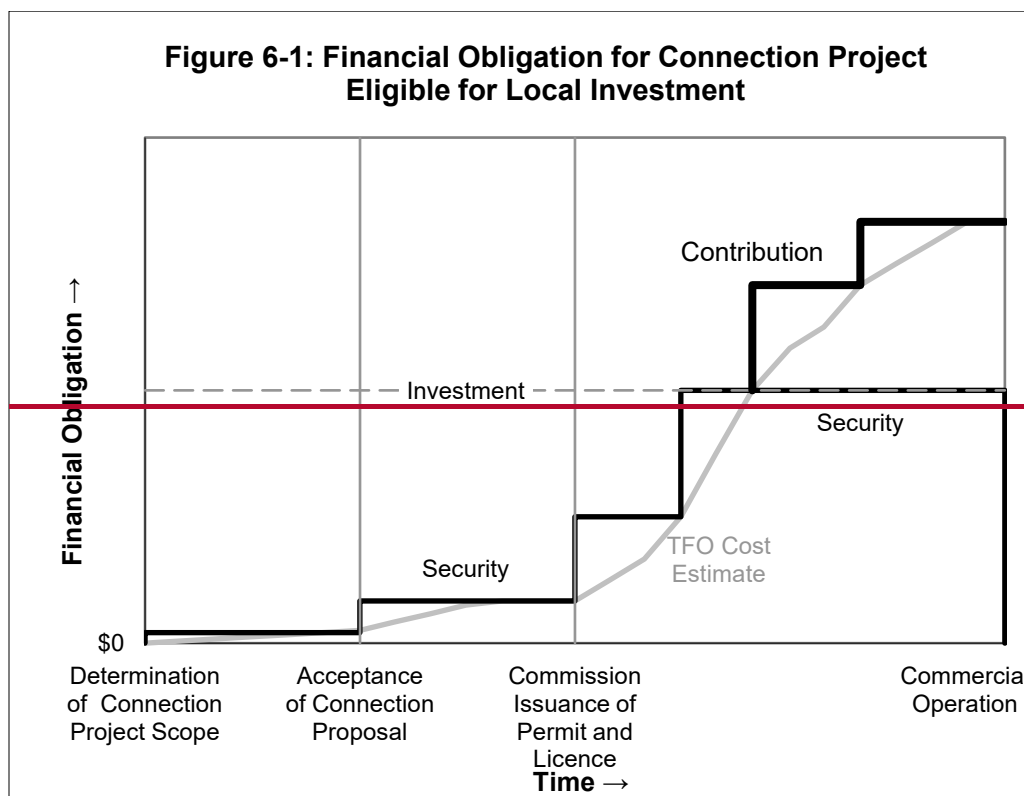
6.1 This section applies to a **market participant** who has requested a new **system access service** or changes to an existing **system access service** under:

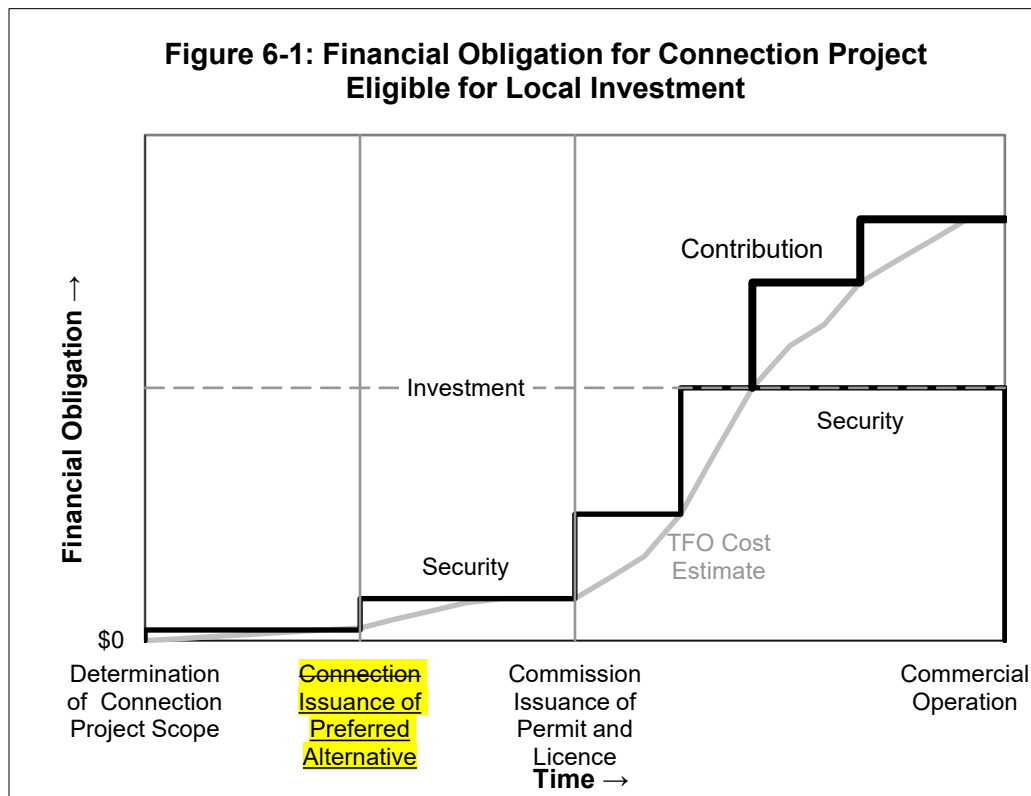
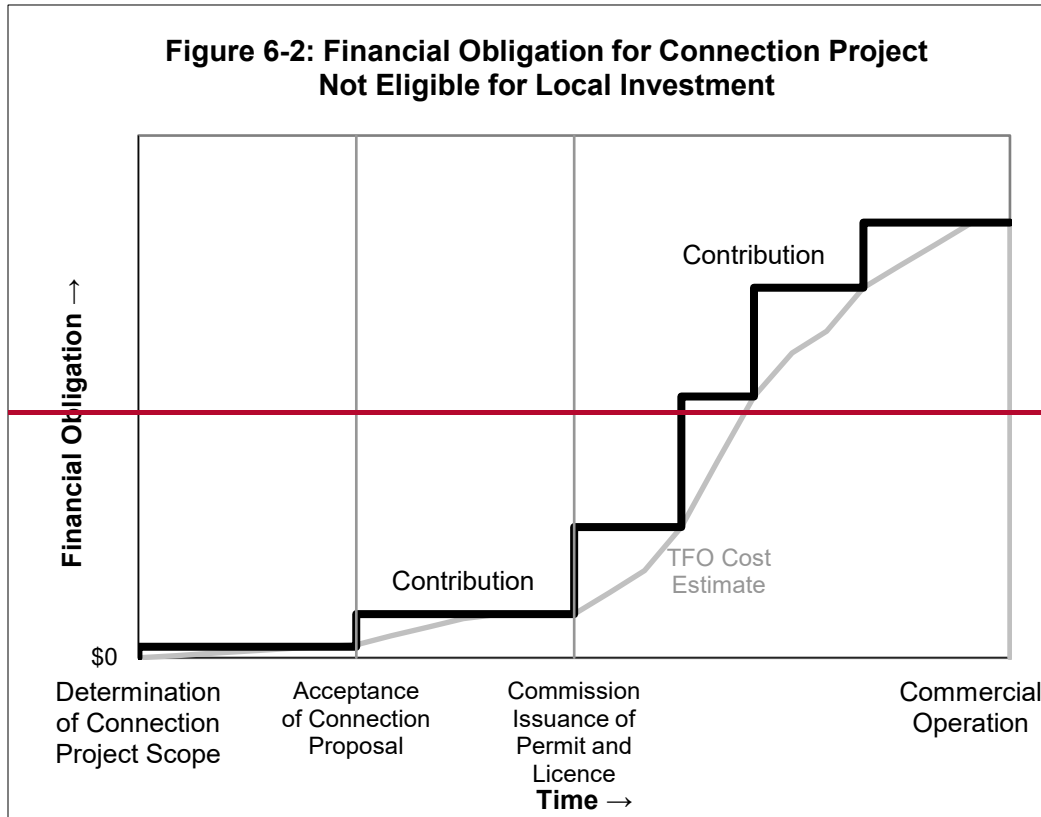
- (a) Rate DTS, *Demand Transmission Service*;
- (b) Rate FTS, *Fort Nelson Demand Transmission Service*;
- (c) Rate PSC, *Primary Service Credit*; or
- (d) Rate STS, *Supply Transmission Service*.

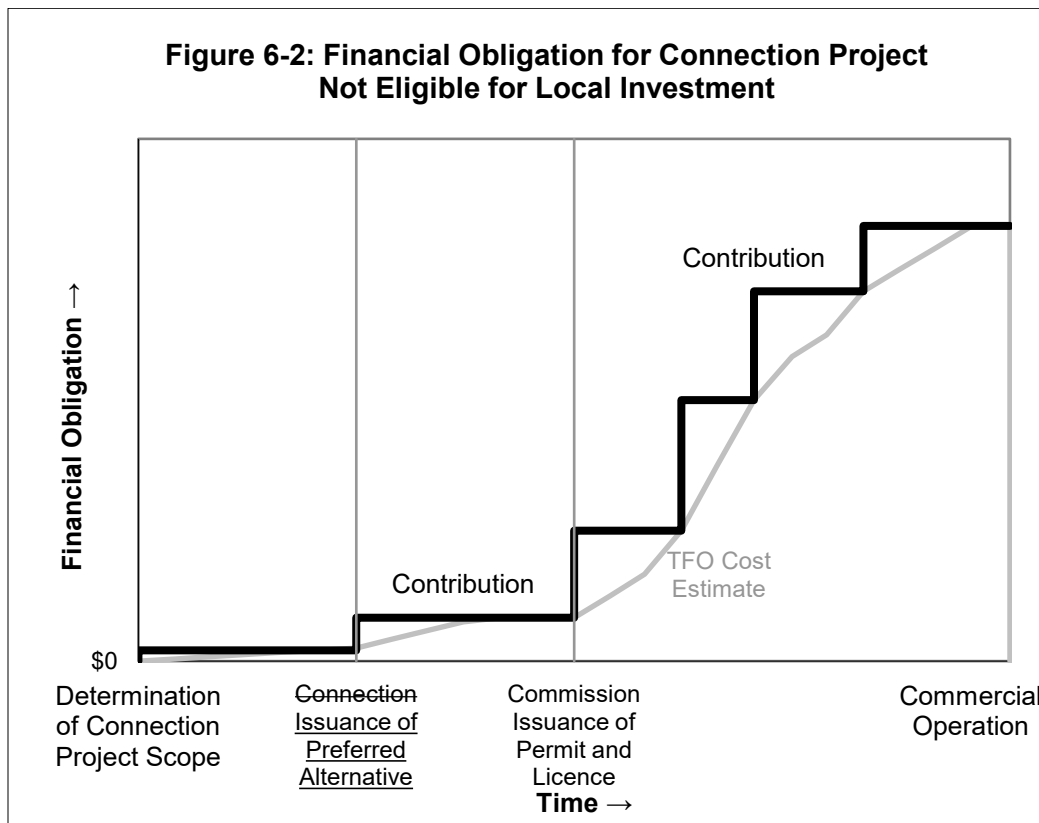
Amount of Financial Obligation

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

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







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

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

- (a) other than advancement costs calculated by the **ISO** pursuant to subsection 4.2(3)(a) of the **ISO tariff**, participant-related costs of the connection project estimated or incurred in accordance with section 4 of the **ISO tariff**, *Classification and Allocation for Connection Projects Costs*, including:
 - (i) costs estimated in advance or incurred by the **legal owner** of the **transmission facility** for ~~preparing~~assisting in the determination of the ISO's preferred connection ~~proposal~~alternative 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~~issuance of the ~~preferred~~ connection ~~proposal~~alternative, the **financial obligation** amount is equal to the total estimated or actual cost that the **legal owner** of the **transmission facility** incurs ~~during preparation for assisting in the determination~~ of the ISO's preferred connection proposal alternative;
- (b) from the ISO's ~~acceptance~~issuance of the ~~preferred~~ connection ~~proposal~~alternative to the **Commission's** issuance of **permit and licence** for the connection project, the **financial obligation** amount is the sum of:
 - (i) the amount from subsection 6.2(4)(a) above; and
 - (ii) the estimated or actual cost that the **legal owner** of the **transmission facility** incurs during preparation and submission of the facility application to the **Commission**;and
- (c) after the **Commission's** issuance of **permit and licence** for the connection project, the **financial obligation** amount is the sum, up to the total amount established in subsection 6.2(3) above, of:
 - (i) the amount from subsection 6.2(4)(b) above; and
 - (ii) the estimated or actual cost that the **legal owner** of the **transmission facility** incurs during the stages of construction and completion of the connection project, as illustrated in Figures 6-1 or 6-2 above, as applicable.

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

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

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

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

Payment of Advancement Costs

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

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

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

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

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

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

6.4(3) The **market participant** must provide **financial security** that is satisfactory to the **legal owner** of the **transmission facility** in the form of:

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

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

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

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

Form and Provision of Construction Contribution

6.5(1) The **market participant** must pay the **construction contribution** for:

- (a) any **financial obligation** amount in excess of the maximum local investment for a connection project that is eligible for local investment determined under section 4 of the **ISO tariff Classification and Allocation for Connection Projects Costs**; or
- (b) the total amount of the **financial obligation** for a connection project that is not eligible for local investment, such as for **system access service** provided under Rate STS.

6.5(2) The **market participant** must pay the **construction contribution**:

- (a) documented in “Schedule A” of the *Construction Commitment Agreement*, as 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 pay the **construction contribution** 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**, pay:

- (a) all costs the **legal owner** of the **transmission facility** incurs or is required to incur while assisting in the preparation and determination of the ISO’s preferred connection proposal, alternative 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 **market participant** providing the **financial security, construction contribution** or other amounts accepts that the **legal owner** of the **transmission facility** must, upon failure of payment of the costs described in subsection 6.6(1) above before or on the payment due date as specified by the **legal owner** of the **transmission facility**:

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

6.6(3) The **ISO** must support recovery, through the tariff of the **legal owner** of the **transmission facility**, of any costs that are unrecoverable under subsection 6.6(2) above.

6.6(4) The **market participant** 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** 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 **market participant** 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**, under any *Construction Commitment Agreement* between the **legal owner** of the **transmission facility** and the **market participant**, in partial or full satisfaction of any costs owing by the **market participant** under subsection 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**, under any *System Access Service Agreement* between the **ISO** and the **market participant**, in partial or full satisfaction of any costs owing by the **market participant** under subsection 6.6(1) above.

Return of Financial Security

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

6.7(2) The **market participant** 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 satisfy a request for **financial security** or **construction contribution** or for additional or replacement **financial security** or **construction contribution** within 30 **days** of such request.

6.8(2) A **market participant** who provided **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 provide **financial security** or **construction contribution**; or
- (b) the **ISO** or the **legal owner** of the **transmission facility** becomes aware of an unreported event or change under subsection 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 **market participant** provides **financial security** or **construction contribution** or the financial position of the **market participant** no longer constitutes a **material adverse change**.

6.8(5) The **market participant** must continue to meet all **financial obligations** for amounts that have accrued or are accruing, to the **ISO** or to the **legal owner** of the **transmission facility** with respect to the connection project, notwithstanding any suspension of work on the connection project under subsection 6.8(3) above.

Revision History

Effective	Description
2021-01-01	Revised and reformatted all subsections, as approved in Commission Decision 25175-D02-2020 issued on November 30, 2020.
2015-07-01	Updated subsections, as approved in Commission Decision 3473-D01-2015 issued on June 17, 2015.
2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

Applicability

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

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

Determination of Owner’s Contribution

7.27.2(1) The ISO must calculate an owner’s contribution for a generating facility:

- (a) for a connection project that requires new or amended **permit and licence**, in accordance with the owner’s contribution rates and **ISO tariff** in effect on the date that evidence of ability to pay the contribution for a generating facility is provided to the **ISO** in accordance with subsection 7.4(1) below; or
- (b) for a connection project that does not require new or amended **permit and licence**, in accordance with the owner’s contribution rates and **ISO tariff** in effect on the date that the owner’s contribution for a generating facility is paid in accordance with subsection 7.4(2) below.

7.2(2) The **ISO** must calculate an owner’s contribution for a generating facility as:

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

Owner’s Contribution Rates

7.3(1) An owner’s contribution rates for the area of the **transmission system** where the generating facility will be located are as follows:

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

7.3(2) The planning regions are defined as follows:

Planning Region	Planning Region Description	Planning Area Number	Planning Area Name
Northwest	This region borders Fort McMurray and Athabasca to the east, Wabamun and Hinton/Edson to the south, British Columbia to the west and the Northwest Territories to the north.	17	Rainbow Lake
		18	High Level
		19	Peace River
		20	Grande Prairie
		21	High Prairie
		22	Grande Cache
		23	Valleyview
		24	Fox Creek
		26	Swan Hills
Northeast	This region borders High Level, Peace River, High Prairie, Swan Hills and Wabamun areas to the west, Edmonton, Fort Saskatchewan, Vegreville and Cold Lake areas to the south, Northwest Territories to the north and Saskatchewan to the east.	25	Fort McMurray
		27	Athabasca/ Lac La Biche
		33	Fort Saskatchewan.
Edmonton	This region borders Swan Hills, Athabasca and Fort Sask. areas to the north, Hinton and Dayton Valley to the west, Red Deer and Alliance to the south and Vegreville to the east.	31	Wetaskiwin
		40	Lake Wabamun
		60	Edmonton

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

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

Invoice and Evidence, Payment and Notification of Owner’s Contribution

7.4(1)—~~The ISO must invoice For a connection project that requires a new or amended permit and licence, the owner of a generating facility for the owner’s contribution for a generating facility prior to must, at the time that of executing a System Access Service Agreement is required to be executed in accordance with subsections subsection 3.6(1), 3.8(1) and 3.8(3) of the ISO tariff, System Access Service Requests, provide the ISO with evidence satisfactory to the ISO that the owner of the generating facility has sufficient funds available to pay any contribution for a generating facility. For purposes of the foregoing, evidence acceptable to the ISO includes financial security that meets the requirements of section 103.3 of the ISO rules, Financial Security Requirements.~~

7.4(2)—~~The owner of a generating facility must pay the owner’s contribution for a generating facility in full to the ISO by way of electronic funds transfer or wire transfer to a bank account the ISO specifies and at the time specified in accordance with subsections:~~

- ~~(a) for generating facilities for which a new or amended System Access Agreement under Rate STS is required, within 30 days of the System Access Service Agreement for Rate STS becoming effective pursuant to subsections 3.7(1) or 3.7(4) of Section 3.6(9), 3.8(1) and 3.8(3) of the ISO tariff, System Access Service Requests;~~
- ~~(b) for generating facilities for which a new or amended System Access Agreement under Rate STS is not required, but for which a system access service request must be submitted pursuant to subsection 3.2(1) of the ISO tariff, System Access Service Requests, prior to completion of Stage 3/4 of the AESO’s Behind the fence process; and~~
- ~~(c) for all other generating facilities, at least three (3) business days prior to the date of energization for the generating facility.~~

7.4(3) The ISO must provide reasonable notice to the owner of a generating facility to provide any evidence required under subsection 7.4(1) and any payment required under subsection 7.4(2).

7.4(4) For the purpose of calculating the refund of an owner’s contribution for a generating facility under subsection 7.5 below, the ISO in the notice of payment required under subsection 7.4(3) must specify the energization date for the generating facility that has been initially requested by the owner of the generating facility.

Refund of Owner’s Contribution

7.5(1) The ISO must refund a contribution for a generating facility to the owner who originally paid it, or as otherwise directed by the owner who originally paid it, if the generating facility satisfies the ISO rules regarding satisfactory annual performance, in accordance with the provisions of this subsection 7.5.

7.5(2) The ISO must refund an owner’s contribution for a generating facility in annual amounts during the refund period, which begins on January 1 following the ~~initial contract capacity~~energization date specified in ~~section 4 of the System Access Service Agreement~~notification for Rate STS payment issued under subsection 7.4(3) and ends 9-calendar years later on December-31.

7.5(3) The ISO must calculate the annual amounts during the refund period as:

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

7.5(4) The ISO must refund, as follows, an owner’s contribution for a generating facility, for each calendar year during the refund period, the annual amount determined under subsection 7.5(3) above:

- (a) in full if the generating facility completely satisfies the performance criteria established in section 505.2 of the ISO rules, *Performance Criteria for Refund of Generating Unit Owner’s Contribution*, during that calendar year;
- (b) ~~(b) reduced~~reduced to zero dollars if the generating facility does not fully satisfy the performance criteria established in proportion to the performance assessment calculated in accordance with section 505.2 of the ISO rules, Performance Criteria for Refund of Generating Unit Owner’s Contribution, if the generating facility does not fully satisfy the performance criteria during that calendar year; or
- ~~(c)~~ reduced to zero dollars if the generating facility has not energized:
 - ~~(i)~~ before the start of the first calendar year following the ~~initial contract capacity~~energization date~~(s)~~ specified in ~~section 4 of the System Access Service Agreement~~the notification for Rate STS; or
 - (c) ~~(ii)~~ payment issued under subsection 7.4(3) and before the start of the calendar years that follow.

7.5(5) The **ISO** must refund the amount of an owner’s contribution for a generating facility determined in accordance with subsections 7.5(3) and (4) above by February 28 of the year following the calendar year to which the refund relates.

7.5(6) The **ISO** must refund the annual amounts without interest.

Adjustment of Refunds

7.6(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.

7.6(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.

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2011-07-01	Revised and reformatted all subsections, as approved in Commission Decision 2011-275 issued on June 24, 2011.

General

8.1 Ancillary services are provided by **market participants** when the **ISO** determines there is a need for such services to maintain system **reliability** and ensure the reliable operation of the **interconnected electric system**. **Market participants** required by the **ISO** to provide **ancillary services** shall be directed to do so in accordance with **ISO rules** and will be compensated as provided in subsections 8.2 through 8.7 below, as applicable.

Contracted Ancillary Services

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

Directed Ancillary Services Other Than Transmission Must-Run Services

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

- (a) The product of the MW hour directed and the highest price paid in the hour to **market participants** providing the same **ancillary service** pursuant to subsection 8.2 above and that the existing contract was the result of a competitive process conducted in the prior **12 months**; or
- (b) The verifiable net opportunity cost related to foregone electricity sales incurred by the **market participant** to supply the directed **ancillary service**, taking into account offsetting **power pool** energy receipts.

Transmission Must-Run Services

8.4(1) Transmission must-run services are **ancillary services** provided by **market participants** with **generating units** in response to a **directive** provided by the **ISO** to ensure safe and reliable electrical service for a region of the **interconnected electric system**.

8.4(2) Transmission must-run services are foreseeable if the **ISO**, taking into account reasonable procurement timing requirements, determines transmission must-run services are required to meet **ISO** transmission **reliability** criteria which includes consideration of expected operating conditions and transmission **planned outages**. Transmission must-run services are unforeseeable transmission must-run services if they do not constitute foreseeable transmission must-run services.

Arrangements and Compensation for Foreseeable Transmission Must-Run Services

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

Compensation for Unforeseeable Transmission Must-Run Services

8.6(1) If at the time the **market participant** is directed to provide unforeseeable transmission must-run service the **market participant** does not have an existing contract, then the amount to be paid to the

market participant in the applicable **settlement period** for unforeseeable transmission must-run service is equal to variable costs plus fixed costs, where:

- (a) variable costs means the hourly difference of the **pool price** subtracted from the energy price, which shall not be less than zero (0), multiplied by the corresponding hourly energy generated (MWh) by the specific directed **generating unit** in compliance with the **directive** to provide unforeseeable transmission must-run service, where:
 - (i) Energy price (\$/MWh) is the product of the heat rate multiplied by the fuel cost, added to the sum of the variable Rate STS charges ~~and, the~~ variable O&M charge and the Cost of Emissions 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.
 - (vi) Cost of Emissions charge (\$/MWh) is the actual compliance cost of emissions incurred or paid under applicable Provincial or Federal emissions legislation or regulation, prorated for the amount of time that the generating unit of the market participant is providing unforeseeable transmission must-run service in response to a directive, and divided by the total generation for the generating unit in the applicable compliance period.
- (b) Fixed costs are equal to the average monthly fixed cost multiplied by the greater of the must-run ratio or the minimum must-run ratio, where:
 - (i) Average monthly fixed cost is equal to one-twelfth of the sum of the annual costs in items (A) through (H) as follows:
 - (A) annual amortization and depreciation amounts for the **market participant's** investment or for the **power purchase arrangement** acquisition cost related to the specific directed **generating unit**, consistent with amounts reported in the **market participant's** audited financial statements and adjusted for cogeneration infrastructure not utilized for generation purposes;
 - (B) the product of the unamortized or undepreciated capital investment multiplied by a deemed debt percentage of 70% and multiplied by a debt interest rate that is equal to the current 10-year Government of Canada bond interest rate plus 0.5% and where the unamortized or undepreciated capital investment is the greater of
 - (1) the **market participant's** initial cost of property, plant and equipment for the specific directed **generating unit** or the **market participant's** initial **power purchase arrangement** acquisition cost related to the specific directed **generating unit**, less accumulated depreciation or amortization, as the case may be, related to the specific directed **generating unit**; or
 - (2) 25% of the **market participant's** initial cost of property, plant and equipment for the specific directed **generating unit** or the **market participant's** initial **power**

purchase arrangement acquisition cost related to the specific directed **power purchase arrangement**.

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

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

8.6(2) In lieu of the variable and fixed costs in subsections 8.6(1)(a) and (b) above, if a **market participant** can demonstrate foregone future energy sales due to a transmission must-run **directive**, then the verifiable net opportunity cost related to foregone electricity sales incurred by the **market participant** to supply the directed transmission must-run service, taking into account offsetting **power pool** energy receipts. This applies only to **market participants** that have responded to a transmission must-run **directive** using hydroelectric generating units.

Maximum Transmission Must-Run Services Compensation

8.7 The maximum monthly amount to be paid by the **ISO** for transmission must-run service results in the recovery of fixed, operating and maintenance costs, including a reasonable rate of return for the service provider and is equal to the average monthly fixed cost plus variable costs as provided for in subsection 8.6 above.

Invoicing

8.8 A **market participant** that provide unforeseeable transmission must-run service in response to a **directive** from the **ISO** will submit an invoice to the **ISO** within 15 **business days** after the end of the **month** in which the service was provided. The amount of the invoice shall be determined in accordance with the method in subsection 8.6 above and will separately itemize the values used for each component specified (fixed and variable costs).

Audit Rights

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

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

Revision History

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Applicability

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

Billing Procedures

10.2(1) The **ISO** must issue a statement of account for **system access service** no later than 15 **business days** after the end of each **settlement period**, which statement may include:

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

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

10.2(3) The **ISO** may choose not to issue a statement of account on an interim or final basis if it would result in a charge or refund of less than \$1,000.

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

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

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

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

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

Totalized Billing at Separate Substations

10.3(1) The **ISO** may totalize multiple **points of delivery**, **points of supply**, or both, at separate substations, for a single **market participant** and produce 1 statement of account for the **market participant** that is an industrial complex or the **legal owner** of an **electric distribution system** that is obtaining **system access service** on behalf of a **market participant** that is an industrial complex.

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

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

Adjustments

10.4(1) A **market participant** may request that a statement of account be recalculated and reissued 45 or more **days** after an amount has been determined on a final basis for a **settlement period**, as a result of:

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

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

Provision of Settlement Data

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

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

Payment Terms

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

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

Effect of Non-Compliance

10.7(1) The **ISO** may charge interest and other amounts, suspend or terminate **system access service** and take other action in accordance with section 103.7 of the **ISO rules**, *Financial Default and Remedies*, if a **market participant**:

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

10.7(2) The **ISO** must not reinstate **system access service** to a **market participant** unless the **market participant** has paid all **financial obligations** owing to the **ISO** in full and has restored or secured its credit facility in a manner satisfactory to the **ISO**.

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