

Information documents are not authoritative. Information documents are for information purposes only and are intended to provide guidance. In the event of any discrepancy between an information document and any authoritative document¹ in effect, the authoritative document governs.

1 Purpose

This information document relates to the following authoritative document:

Section 103.4 of the ISO rules, Power Pool Financial Settlement ("Section 103.4").

The purpose of this document is to provide guidance to pool participants regarding the power pool financial settlement process.

2 Power Pool Settlement Process

Appendix 1 of this information document illustrates the steps in the power pool financial settlement process.

3 Power Pool Statements

Power pool statements are located in the Energy Trading System on the Alberta Electric System Operator ("AESO") website. To access power pool statements, login to the Energy Trading System on the AESO website using a digital certificate. To request a digital certificate, contact the AESO's Digital Certificate Administrator at cert.admin@aeso.ca.

When power pool statements become available on the AESO website, all pool participants receive a message in the Energy Trading System. Additionally, a <u>schedule of power pool settlement dates</u> is available on the AESO website.

3.1 Preliminary Power Pool Statement

Pursuant to subsection 17(1), preliminary power pool statements are available on the AESO website by the end of the 5th business day after the end of each settlement period. Preliminary power pool statements provide pool participants the opportunity to review settlement information and contact the AESO if there is a potential discrepancy prior to a final power pool statement being issued.

3.2 Final Power Pool Statement

Pursuant to subsection 17(2) final power pool statements are available on the AESO website by the end of the 15th business day after the end of each settlement period. Final power pool statements include updated information and corrections to preliminary power pool statements, if applicable. Financial transactions between the AESO and pool participants are made based on final power pool statements.

3.3 Components of the Power Pool Statement

The following information explains the line items that generally appear on preliminary and final power pool statements for a settlement month. A preliminary or final power pool statement for a given pool participant may not include all of the items listed below. An example of a power pool statement is available on the <u>AESO website</u>.

(a) Consumption

(i) Energy Charge – the amount of electric energy consumed or exported by a pool participant (purchaser), minus net settlement instructions.

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¹ "Authoritative documents" is the general name given by the AESO to categories of documents made by the AESO under the authority of the *Electric Utilities Act* and regulations, and that contain binding legal requirements for either market participants or the AESO, or both. Authoritative documents include: the ISO rules, the reliability standards, and the ISO tariff.



- (ii) Prior Period Energy Charge charges resulting from the resettlement of prior period production, listed by month. Supporting documentation is available in the Energy Trading System, which shows the amount of the prior period change for each pool asset by hour. Once logged into the Energy Trading System, click on the following path: Reports/Historical/Settlement Changes Detail - Consumption.
- (iii) Energy Market Trading Charge (Spot Trading Charge) the energy market trading charge is calculated in accordance with subsection 5 of Section 103.6 of the ISO rules, Fees and Charges ("Section 103.6"). The energy market trading charge in effect for the current year is located in information document #2011-003R, Schedule of ISO Fees ("ID #2011-003R") and on the AESO website.

The MWh amount to which the trading charge is applied is shown as a line item on a power pool statement.

The energy market trading charge may apply to the following pool asset types:

- (A) metered physical generation pool assets;
- (B) metered physical load pool assets;
- (C) unmetered sell pool assets; or
- (D) unmetered buy pool assets.

All pool assets are assigned an asset ID when they are initially set up in the Energy Trading System. The <u>asset list</u> can be found on the AESO website. All metered physical load pool assets are assigned an asset ID that identifies the pool participant, load settlement zone and the legal owner of the applicable electric distribution system. An unmetered pool asset has a plus or minus sign included in the asset ID. For example, ABC+ is an unmetered buy pool asset and ABC- is an unmetered sell pool asset.

Some pool participants have unmetered pool assets for trading purposes. These pool assets allow pool participants to trade physical energy without associating it directly with a metered pool asset at the time of trade, and they facilitate the registration of net settlement instructions. The unmetered pool assets also allow pool participants to have a separate reporting unit for their net settlement instructions.

The energy market trading charge is calculated on a pool asset-by-pool asset basis for each hour. It is applied to the greater of the metered volume or the net settlement instructions for each asset for each hour.

- (iv) Prior Period Spot Trading Charge charges resulting from the resettlement of prior period production, listed by month.
- (v) Adjustments to Loads on the Margin (ALM) total monthly ALM is based on the difference between a pool participant's bid price and the pool price for volumes consumed from operating blocks for which dispatches are issued below the pool price.
- (vi) Charges for Payments to a Supplier on the Margin (PSM Charges) total PSM Charges for the current production month. PSM Charges are calculated based on a pool participant's consumption in a settlement interval. PSM Charges are applied to all load based on their proportion of total load in a settlement interval where a pool participant is eligible to receive a PSM Payment.
- (vii) Charges for Adjustments to Loads on the Margin (ALM Charges) total ALM charges for the current production month. ALM Charges are calculated based on a pool participant's consumption in a settlement interval. ALM Charges are applied to all load based on their proportion of total load in a settlement interval where a pool participant is eligible to receive a ALM adjustment.



- (viii) Prior Period PSM Charge charges resulting from the resettlement of the prior period production and the recalculation of PSM Charges, listed by month.
- (ix) Prior Period ALM Charge charges resulting from the resettlement of the prior period production and the recalculation of ALM Charges, listed by month.
- (b) Production
 - (i) Energy Payment the amount of electric energy supplied or imported by a pool participant (supplier), minus net settlement instructions.
 - (ii) Prior Period Energy Payment payments resulting from the resettlement of prior period production, listed by month. Supporting documentation is available in the Energy Trading System, which shows the amount of the prior period change for each pool asset by hour. Once logged into the Energy Trading System, click on the following path: Reports/Historical/Settlement Changes Detail - Production.
 - (iii) Energy Market Trading Charge (Spot Trading Charge) the energy market trading charge is calculated in accordance with subsection 5 of Section 103.6. The <u>energy market trading</u> <u>charge</u> in effect for the current year is located in ID #2011-003R and on the AESO website. For more information on the energy market trading charge, refer to the subsection 3.3(a)(iii) of this information document.
 - (iv) Prior Period Spot Trading Charge charges resulting from the resettlement of prior period production, listed by month.
 - (v) Payments to a Supplier on the Margin (PSM Payment) total monthly PSM Payment based on the difference between a pool participant's offer price and the pool price for volumes produced from operating blocks for which dispatches are issued above the pool price. In any hourly dispatch, a pool participant is eligible for either a transmission constraint rebalancing payment (described below) or a PSM Payment, not both.
 - (vi) Transmission Constraint Rebalancing Payment (TCR Payment) total monthly payment based on the difference between the pool price and the pool participant's offer price for each dispatched operating block, multiplied by the volume of transmission constraint rebalancing energy requested in the settlement interval above the pool price for that operating block. In any hourly dispatch, a pool participant is eligible for either a transmission constraint rebalancing payment or a payment to suppliers on the margin, not both.
 - (vii) Prior Period Production PSM Payment payments resulting from the resettlement of prior period production and the recalculation of PSM Payments, listed by month.
 - (viii) Prior Period Production TCR Payment payment resulting from the resettlement of prior period production and the recalculation of transmission constraint rebalancing payments, listed by month.
 - (ix) Dispatch Down Service Payment total monthly payment to generators which offered in the dispatch down service merit order and were dispatched down in a settlement interval.
 - (x) Prior Period Dispatch Down Service Payment dispatch down service payments resulting from the resettlement of prior period production, and the recalculation of dispatch down service payments.
 - (xi) Dispatch Down Service Charge total monthly charges collected from all source assets active in a settlement interval when a generating pool asset was dispatched down. Pool participants receiving a dispatch down service payment also pay a portion of the dispatch down service charge.
 - (xii) Prior Period Dispatch Down Service Charge charges resulting from the resettlement of the prior production period and the recalculation of dispatch down service charges.



(c) Special Transactions and Adjustments

- (i) Participation Fee a non-refundable fee pursuant to Section 103.6, which all pool participants pay to maintain their pool participant status with the AESO. This charge appears on a pool participant's December power pool statement for the period January to December.
- (ii) Digital Certificate a fee pursuant to Section 103.6, paid by pool participants for a digital certificate required to log in to the Energy Trading System. Digital certificates are renewed annually.
- (iii) Interest and Penalties any amounts charged pursuant to Section 103.7 of the ISO rules, *Financial Default and Remedies* ("Section 103.7"), for a late payment related to settlement.
- (iv) Cash on Deposit funds held by the AESO and applied on the current power pool statement as a prepayment.
- (v) Retailer Specific Adjustment an adjustment to a retailer's statement amount related to updated load settlement data for a specific retailer's consumption. This adjustment is made after final load settlement has occurred and it may be positive or negative. For further information, refer to the <u>AESO website</u>.
- (vi) Retailer Adjustment to Market (RAM Adjustment) a post-final adjustment mechanism adjustment made to all retailers in a settlement zone (as defined in AUC Rule 021, Settlement System Code ("AUC Rule 021")) for the collection or payment required to offset the retailer specific adjustment, described above. This adjustment may be positive or negative. For further information, refer to the <u>AESO website</u>.
- (vii) Transmission Administrator Adjustment a post-final adjustment mechanism for system level meter errors. The AESO makes necessary adjustments in billings between the transmission line losses account and all retailers in the affected zone. This adjustment may be positive or negative. For further information, refer to the AESO website.

3.4 Power Pool Statement Verification

There are various reports used to verify power pool statements in the Energy Trading System. These reports are available in an html or csv (comma separated value) format. The html format is a static web report, while the csv format allows the conversion of reports into an Excel spreadsheet.

Metered volume reports are updated 5 business days after production, while the information for scheduled energy on the transfer paths is updated the next business day. Import and export interchange transactions should be reconciled daily, if possible.

The AESO recommends that pool participants frequently review the settlement reports posted by the AESO throughout the month. By frequently reviewing the settlement reports, pool participants are more likely to identify potential discrepancies and resolve them with the AESO early in the power pool financial settlement process. If any potential discrepancies are identified, please contact the AESO at settlement@aeso.ca as soon as possible.



The following is a list of settlement reports located in the Energy Trading System, which contain pool participant specific data:

	Settlement Report	Location in the Energy Trading System
	Metered Volumes	Reports/Historical/Daily Detail, Daily Summary, or Monthly Summary. Specifically for production or consumption: Reports/Historical/Metering (Specific)
	Net Settlement Instructions	Reports/Historical/Reports/NSI and Meter Volume Breakdown or NSI Detail Report
	Power Pool Statement	Reports/Historical/Pool Statement
	Prior Period Reports	Reports/Historical/Settlement Changes, specifically Production or Consumption
	Energy Market Trading Charges	Reports/Historical/Trading Charge, specifically for Production or Consumption
	PFAM Summary	Reports/Historical/PFAM Summary
	DDS Payments and Charges	Reports/Historical/DDS Payment Summary/DDS Charge Summary or DDS Payment Detail. Hourly DDS Payments and Charges are also included in the Daily Detail Production Report
	PSM, ALM, and TCR Payments and PSM and ALM Charges	Reports/Historical/Uplift Payments Summary/PSM Charges Summary or Detail Uplift Payment. Hourly PSM and TCR Payment and PSM Charge information can also be found in the Daily Detail Production and Daily Detail Consumption Reports, respectively
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The hourly pool price can be found on the AESO website by clicking on the following path: Market & System Reporting/Current and Historical Market Reports/Historical, then select "Pool Price" and the applicable dates.

4 Settlement Dates and Payment Obligations

In accordance with subsection 18 of Section 103.4, the settlement of the final power pool statement occurs on the 20th business day following the end of each production period, unless that date has been accelerated under subsection 19 because of any prior late payments. All amounts owed to pool participants by the AESO are paid or accounted for on the 20th business day following the end of each production period.

4.1 Agent Arrangements

In accordance with Section 201.2 of the ISO rules, *Appointment of Agent*, a pool participant may, with the approval of the AESO, appoint an agent to act on its behalf.

4.2 Method of Receiving and Sending Payment

As required by subsection 21 of Section 103.4, a pool participant must pay any net dollar amount the pool participant owes, as set out in its final power pool statement, to the AESO by electronic fund transfer or wire transfer, to the bank account the AESO specifies. Please note that the AESO does not accept cheques, counter deposits or bank drafts for the payment of final power pool statements.

The AESO uses electronic fund transfers, or wire transfers where electronic fund transfers are not a feasible option, to pay pool participants. Each payment is deposited into a pool participant's bank account on the due date. Any fund transfer fees are generally charged to a pool participant by its bank.



The AESO facilitates the cash clearing of the market, whereby suppliers to the market are paid and purchasers from the market make payments on the same business day. To facilitate this process, amounts owed to the AESO must be received on the specified cash settlement day.

Please submit inquiries regarding banking instructions to: accounting@aeso.ca.

4.3 Late Payment

If a pool participant fails to make a payment by its due date, the pool participant is considered to be in default and it should immediately contact the AESO at accounting@aeso.ca. While contacting the AESO does not relieve the pool participant from potential interest charges or the potential temporary change of settlement dates in accordance with subsection 19 of Section 103.4, it may avoid other consequences for late payment. For additional information regarding the consequences for late payment, please refer to Section 103.7.

The AESO generally contacts a pool participant that is in default in order to understand the circumstances surrounding the default and to determine when the payment is expected to be made. If the AESO is not satisfied with the reasons for late payment, or the expected payment date, the AESO may enforce its rights, including those referred to in Section 103.7, such as realizing on the pool participant's financial security.

In accordance with subsection 17 of Section 103.4, the AESO must issue on its website a final power pool statement to each pool participant on the 15th business day after the end of each settlement period. Subsection 19 provides, among other things, that, if a pool participant has defaulted in the payment for a settlement period 1 time in its 1st calendar year of pool participant registration, then the AESO may require that the pool participant pay the AESO on the 19th business day following the end of the settlement period for the next 6 settlement periods following the date of the 1st default. If four business days are not sufficient for the pool participant to process the settlement payment, the AESO recommends that the pool participant estimate its final net energy charges and pay to the AESO by the due date an amount that is higher than what is expected to be owed in order to avoid late payment and short payment charges.

Any excess amounts received by the AESO from a pool participant are returned if requested, to that pool participant. If not requested, excess amounts are applied as a prepayment for the next settlement period. No interest is paid to the pool participant as a result of any prepayment. The AESO may charge applicable fund transfer fees for repeated off-cycle return of excess funds.

5 Power Pool Statement Discrepancies and Disputes

5.1 Discrepancies on Preliminary Power Pool Statements

(a) Generation/Production

If a pool participant identifies a potential discrepancy in the amount of production on its preliminary power pool statement, the pool participant may contact the meter data manager that it has engaged in order to confirm that all applicable generation has been submitted to the AESO.

(b) Interchange Transaction Importer or Exporter

Pool participants are encouraged to contact the AESO at settlement@aeso.ca to resolve any potential discrepancies related to import/export settlement for interchange transactions. The following information is required to investigate such potential discrepancies:

- (i) the day;
- (ii) the hour ending;
- (iii) the pool asset;
- (iv) the e-Tag number;
- (v) the e-Tag status; and



(vi) the megawatt hours according to a pool participant's records.

Pool participants are encouraged to review import/export data on a regular basis and to report any discrepancies immediately so that corrections can be incorporated into the applicable final power pool statements. The import/export settlement data is posted to the AESO website on the business day following the production date.

For the Montana-Alberta intertie, the import/export settlement volume is determined by applying an adjustment to the e-Tag volume to account for the allocation of the losses on the Alberta portion (from the Alberta border to the point of connection) of the intertie.

(c) Load/Consumption

If the consumption on the preliminary power pool statement does not reconcile to the information provided by a pool participant's load settlement agent, the pool participant is encouraged to confirm the data with the AESO. The metering information used to prepare the preliminary pool statement is the initial settlement data provided by the load settlement agent and it is adjusted for monthly settlements appearing on the final power pool statement. Any adjustment to interim or final data is provided to the AESO in accordance with AUC Rule 021, and the adjustments appear as a prior period energy charge on the power pool statement.

(d) Settlement Timelines

Each production month is settled three times as part of the regular AESO settlement cycle. The production month is settled 1 month (initial), 2 months (interim) and 4 months (final) after the end of the production month in order to comply with AUC Rule 021. Any settlement data (generation or load) that is received by the AESO in advance of these timelines is resettled at the next settlement iteration. Details regarding settlement timing can be found on the AESO website in Settlement Dates.

Please review the pool participant specific report for all net settlement instructions accepted for settlement purposes in the *NSI* and *Meter Volume Breakdown Report* located on the Energy Trading System. To determine which net settlement instructions were in effect for a specific time period, view the *NSI Detail Report*, which can be found on the Energy Trading System by clicking on the following path: Reports/Historical/NSI Detail.

For additional information on net settlement instructions, please refer to Section 103.5 of the ISO rules. *Net Settlement Instructions*.

5.2 Discrepancies on Final Power Pool Statements

Pursuant to subsection 23 of Section 103.4, if a pool participant disputes the information contained in a final power pool statement, then the pool participant must submit a written dispute to the AESO in accordance with subsection 3 of Section 103.2 of the ISO rules, *Dispute Resolution*, prior to the expiry of the applicable formal dispute submission period published by the AESO. Information regarding the formal dispute submission periods can be found on the AESO website.

However, any dispute with respect to load settlement data does not require the pool participant to submit a written dispute to the AESO prior to the expiry of the applicable formal dispute submission period, because such a dispute is governed by AUC Rule 021, which provides for the post-final adjustment mechanism.

Notwithstanding any written dispute, the final power pool statement amount must be paid in full in accordance with subsections 17 and 18 of Section 103.4. Any adjustments made to the amounts owing in a final power pool statement as a result of a written dispute are reconciled on subsequent power pool statements.



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6 Energy Storage

The AESO intends to settle pool assets that include an energy storage resource in the same manner as other pool assets under Section 103.4. The AESO will create the applicable source asset and sink asset depending on the configuration² of the energy storage site. At a minimum, the AESO will associate one source asset and one sink asset with a settlement point.

If the energy storage site provides electric energy to the interconnected electric system, the AESO will pay the pool participant the pool price multiplied by the metered volume of the injection during the applicable settlement interval. If the energy storage site receives electric energy from the interconnected electric system, the pool participant will pay the AESO the pool price multiplied by the metered volume of the withdrawal for the applicable settlement interval. The AESO will apply the energy market trading charge to each MWh of energy transacted through the power pool by the pool participant.

7 Appendix

Appendix 1 – Settlement Process

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² AESO information document ID #2020-013, Energy Storage Guidance Document, provides further information on different energy storage configurations.



Revision History

Posting Date	Description of Changes
2024-04-12	Amendments to subsection 3 to include Adjustments to Loads on the Margin (ALM) settlement to align with ISO Rule 103.4 which was revised as part of the Energy Storage ISO rule amendments.
2022-04-01	Amendments to subsection 4 and Appendix 1 to include payment by electronic fund transfers in alignment with revisions to Section 103.4 of the ISO rules, <i>Power Pool Financial Settlement</i>
2020-06-19	Addition of subsection 6 for energy storage Administrative amendments
2017-01-12	Administrative amendments
2016-09-28	Administrative amendments
2016-02-16	Replaced references to "uplift" with either "PSM" or "TCR" Administrative updates
2015-11-26	Amended "pool participant fee" to "pool participation fee", addition of "non-refundable" and added "for the period January to December to 3.3(c)(i). Addition of transmission constraint rebalancing information to section 3.
2014-04-01	General update to content
2013-08-13	Updated interchange transaction information to include MATL
January 2013	Updated trading charges and settlement dates
January 2012	Updated trading charges and links to website documents
July 2011	Updated the information to align with AUC Rule 021 changes and ISO rules 103.4, <i>Power Pool Financial Settlement</i>
January 2010	General update to content



Appendix 1 Settlement Process

The following is a step-by-step guide to help you access and review your wholesale electricity market settlement.

When are the Pool Statements available?

- Your preliminary statement is available on the fifth business day of each month.
- . This statement is for you to review.
- Payment is not made on this statement.
- Your final statement is available on the 15th business day.
- This is the statement that is **paid** on the **20th** business day.

A message will be posted on the Energy Trading System (ETS) when your statement is ready.

How do I retrieve my statement?

- Statements are available on the secure Energy Trading System (ETS section of the AESO's website www.aeso.ca
- Click the 'ETS log-in' button on the top right-hand corner of the AESO's home page to access the ETS.
- The ETS Section contains your statement and other specific participant reports and information related to the wholesale electricity market settlement.
- You need a digital certificate to access this portion of the website.
- · We do not mail or fax statements.

How do I print my statement?

Once you've used your digital certificate to log onto the AESO's ETS section, click on:

- Reports
- Historical
- Pool Statement
- OK (choose the relevant production month)
- Print your Pool Statement.

How do I review my statement?

There are a number of reports available in the secure area of the AESO's website under "Reports" to help you review your statement.

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To check wholesale electricity market settlement information click on: Reports/Historical/Daily Detail, Daily Summary, Monthly Summary, Trading Charge, Settlement Changes, PFAM Summary or Meter Volumes

To check Net Settlement Instructions click on: Reports/Historical/NSI Details or NSI and Meter Volumes.

(Specific).

What if I have a question, or find a discrepancy in the information?

First check your statement using the reports on the website. If you find a discrepancy please refer to the Settlement Information Document:.

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Generator/Production: contact your Meter Data Manager to ensure all current generation has been submitted to the AESO.

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Importer/Exporter: contact the Energy Market Settlement Analyst to resolve any discrepancy related to import/export settlement.

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Load/Consumption: Confirm your consumption information with the AESO or Load Settlement Agent.

Who do I call if I have questions?

For Pool Settlement and Reports : settlement@aeso.ca

aesofirstcall

1.888.588.AESO(2376)

Your one-stop information resource for electricity market and transmission inquiries, AESO application inquiries as well as research, data and publication requests.

Payment

Payments for settlement related charges must be made by electronic fund transfer or wire transfer, as the AESO does not accept cheques, credit cards or bank drafts. If, according to your Pool Statement, the AESO owes you funds, you will receive this amount through electronic fund transfer or wire transfer on the 20th business day.