

NET SETTLEMENT INSTRUCTION MANUAL

Updated November 2018



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1. Introduction

This manual is intended for staff involved in entering and maintaining submissions data or staff involved in entering and maintaining pool asset constraints.

Net Settlement Instructions Overview

Registered pool participants buy and sell their electricity in the wholesale market and receive the hourly pool price per megawatt hour (MWh) traded. As an alternative to buying and selling at the wholesale market price, pool participants can enter into Net Settlement Instructions (NSIs).

NSIs allow buyers and sellers to enter directly into contracts with other pool participants for an agreed upon amount of power, at a negotiated price, over a specified period of time in the future. The AESO has no visibility of the contracted price; however the AESO must have visibility of the MW volumes sold for each NSI in order to net against the actual metered volumes. This allows the AESO to determine the amount of MWs settled financially through the AESO.

NSIs can be attractive to pool participants looking for stable pricing arrangements to hedge against the fluctuating hourly pool price. Entering into NSIs can also reduce the security that is required from pool participants since their exposure to the market is reduced.

2. System Requirements

The supported platform for the Energy Trading System is Windows 7 and Internet Explorer version 11.

Digital Certificates

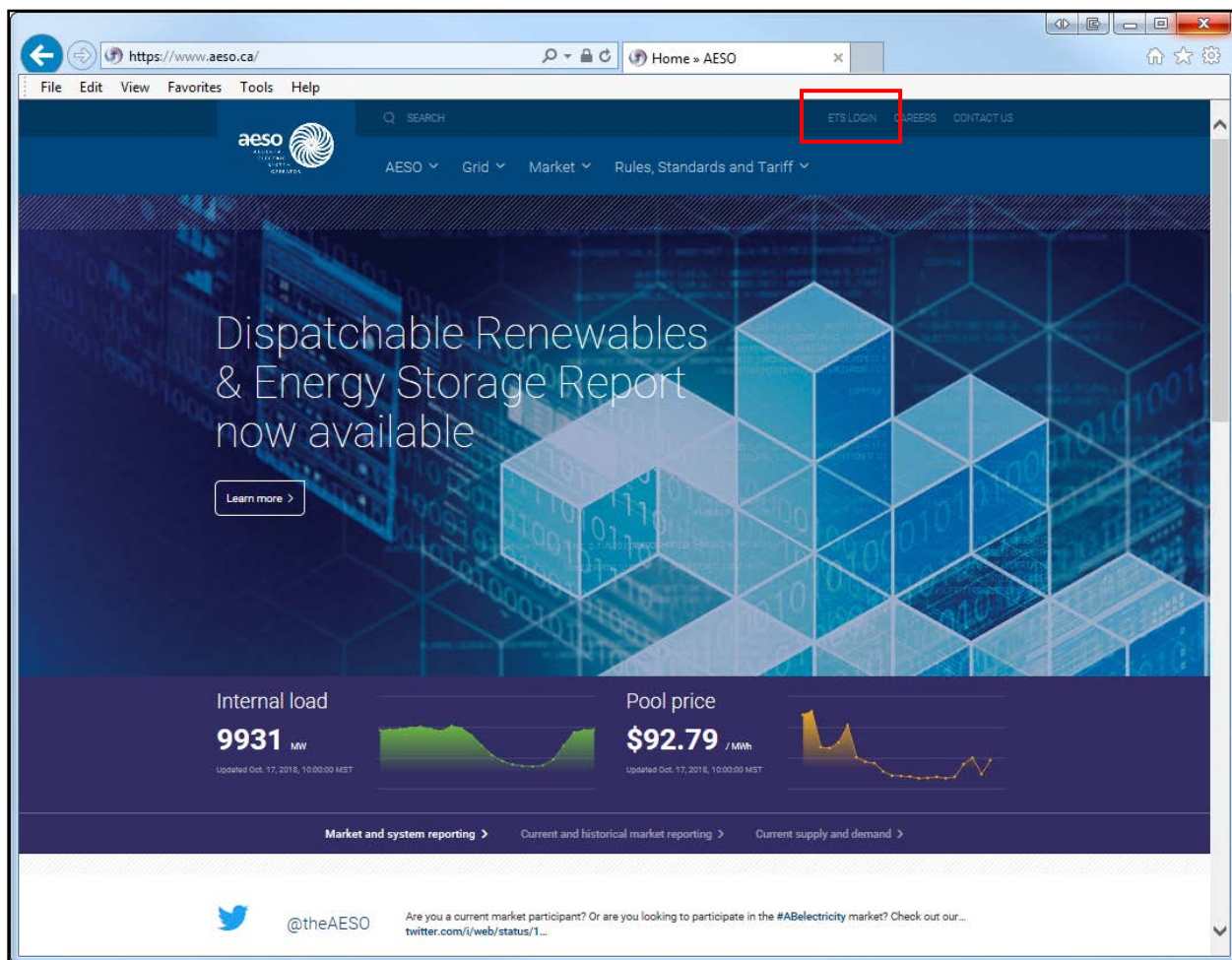
Certain communication with the AESO, including the process to submit bids and offers, register/accept net settlement instructions (NSI), and retrieve statements is handled through the Internet. To ensure that the Internet-based communication between participants and the AESO is secure, participants must purchase a digital certificate.

3. Create a Net Settlement Instruction

Step 1: Navigate to the NSI Section

- Through the [AESO website](https://www.aeso.ca/), log on to the system. Click on the “ETS Login” icon on the top right corner of the screen.

Note: Do not open multiple browser sessions at the same time as any changes made may not be saved.



- If applicable, select your certificate and click “OK”.
- Select the ETS menu.

Note: The left-hand side of the screen will populate with links that you have access to.

Welcome Training1 TRAINING ABCE Training1 of ABC Electric

Version: 10.2.0.25

ETS Reports

NSI

File Upload

Submission

AIES Event Log

[Click here for information about 'Energy Emergency Alerts'](#)

| Date/Time | Comments |
|------------------|------------------------|
| 05/24/2018 23:03 | Keephills #2 on line. |
| 05/24/2018 22:02 | Sheerness 2 off line |
| 05/22/2018 21:45 | Keephills 2 Off line. |
| 05/22/2018 11:01 | Battle River 3 on line |

Supply Surplus Report

| Date (HE) | Status |
|---------------|--------|
| 05/25/2018 12 | 2 |
| 05/25/2018 13 | 2 |
| 05/25/2018 14 | 2 |
| 05/25/2018 15 | 2 |

System Marginal Price

Projected Pool Price for Hour Ending 11 is \$33.64 as of 10:54.

| Date (HE) | Time | Price (\$) | Volume (MW) |
|---------------|-------|------------|-------------|
| 05/25/2018 11 | 10:52 | 40.10 | 3 |
| 05/25/2018 11 | 10:21 | 33.26 | 243 |

Estimated Cost of Constraint Report

| Date (HE) | Estimated Cost (\$) | Estimated TCR Charge (\$/MWh) | Location of Constraints |
|---------------|---------------------|-------------------------------|-------------------------|
| 05/25/2018 11 | - | - | - |
| 05/25/2018 10 | 0.00 | 0.00 | - |
| 05/25/2018 | | | |

DDS Market Report

| Date/Time | Available DDS (MW) |
|------------------|--------------------|
| 05/25/2018 07:15 | 80 |
| 05/25/2018 07:02 | 55 |
| 05/25/2018 | 80 |

Pool Price

| Date (HE) | Price (\$) | 30Ravg (\$) | ALL Demand (MW) |
|---------------|------------|-------------|-----------------|
| 05/25/2018 11 | - | - | - |
| 05/25/2018 10 | 31.74 | 64.50 | 9779.0 |

- Under the ETS menu, select “NSI”.

NSI

File Upload

Submission

Net Settlement Instruction

Forward Market

New Search

Start

1. Select NSI Type

% Output

MW Amount

2. Select Profile Type

Flat

Daily

Weekly

Next

- From the “Select NSI Type” list, choose a NSI Type.
- From the “Select Profile Type” list, choose a Profile Type.

Note: When selecting “Daily” or “Weekly”, a grid will appear to input the MW values for either the day or entire week.

Step 2: Enter the NSI Data

- Enter the required information in the Helper tab on the left.

Net Settlement Instruction Forward Market

New Search

Start Helper

NSI Name:

Eligible Participant

Customer:

Source:

Pool Purchase

Customer:

Source:

Duration: (mm/dd/yyyy HH24:00)

Begins:

Ends:

Note that the Net Settlement Instructions are registered in Actual Time as opposed to Hour Ending (HE).

Helper

Start Time:

End Time:

Amount(MW)

Fill

| Hr Ending | Amount(MW) |
|-----------|------------|
| 01 | |
| 02 | |
| 03 | |
| 04 | |
| 05 | |
| 06 | |
| 07 | |
| 08 | |
| 09 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |

Submit

- Input NSI Name.
 - Note:** Any name can be used that will help identify the specific NSI.
- Complete the Eligible Participant list box by selecting the Customer: Company Name and Source: Asset Name.
 - Note:** This asset must be a source asset.
- Complete the Pool Purchase list box by selecting the Customer: Company Name and Source: Asset Name.
 - Note:** This asset must be a sink asset.
- Enter the Duration of the NSI using the calendar pop up and time list.
 - Note:** The “Begins” and “Ends” time fields represent the actual time as opposed to the Hour Ending (HE) columns in the Helper section to the right.
- Enter the NSI MW values using the Helper fields on the right or using the grid.
 - To use the Helper field, select the Start Time.
 - Select the End Time.
 - Enter the Amount (MW).

- Click "Fill" button to populate each cell.
- Each selected HE cell will be populated; review the data entry for the NSI.

Note: Please ensure the "Begins" time aligns with the HE time in the Helper section. For example, HE 01 is the time between 24:00 a.m. - 24:59 a.m. Data can be entered directly into each cell or by utilizing the Helper fields.

Net Settlement Instruction Forward Market

New Search

Start Helper

NSI Name:

Eligible Participant

Customer:

Source:

Pool Purchase

Customer:

Source:

Duration: (mm/dd/yyyy HH24:00)

Begins:

Ends:

Note that the Net Settlement Instructions are registered in Actual Time as opposed to Hour Ending (HE).

Helper

Start Time:

End Time:

Amount(MW)

| Hr Ending | Amount(MW) |
|-----------|------------|
| 01 | |
| 02 | |
| 03 | |
| 04 | |
| 05 | |
| 06 | |
| 07 | |
| 08 | |
| 09 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | |
| 18 | |
| 19 | |
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| 21 | |
| 22 | |
| 23 | |
| 24 | |

- Select "Submit" once you have verified the information is correct.
- Save or Print the acknowledgment.

Note: The functionality for submitting NSIs in the ETS training environment is currently not available, therefore an acknowledgement in the training environment will not be populated and an error will appear.

However, once you have submitted in the production environment of the ETS, an acknowledgement screen will appear containing the validation results of the NSI submission. A NSI number associated with the NSI contract will be automatically generated. This number is used to later view the NSI contract. Save or print the acknowledgement for your records.

The NSI data must be submitted no less than 20 minutes before the beginning of the settlement interval in which the NSI is to take effect.

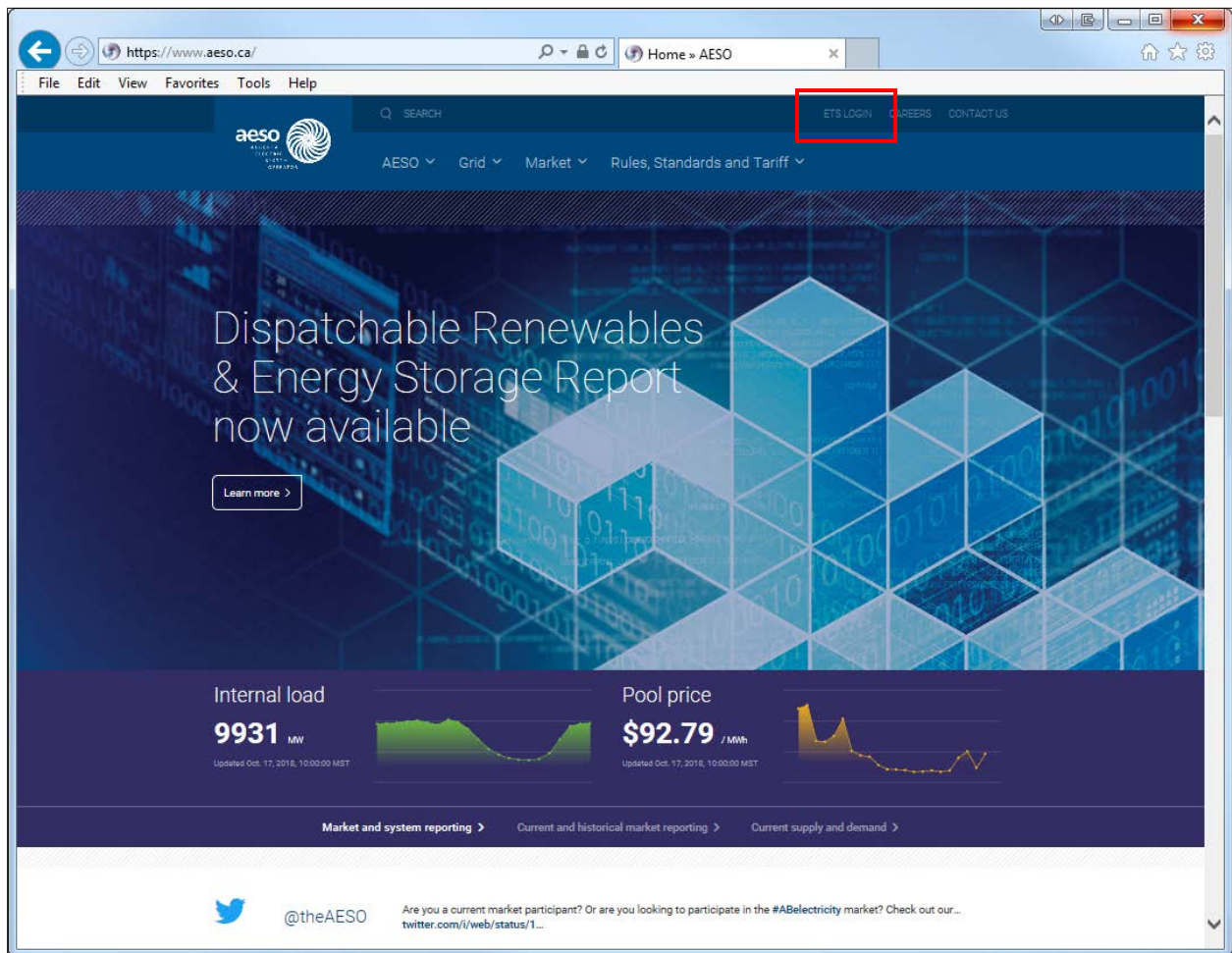
4. Accepting a Net Settlement Instruction

Once a Net Settlement Instruction (NSI) has been entered into the Energy Trading System (ETS), the non-initiating counterparty must log in to ETS and accept the NSI.

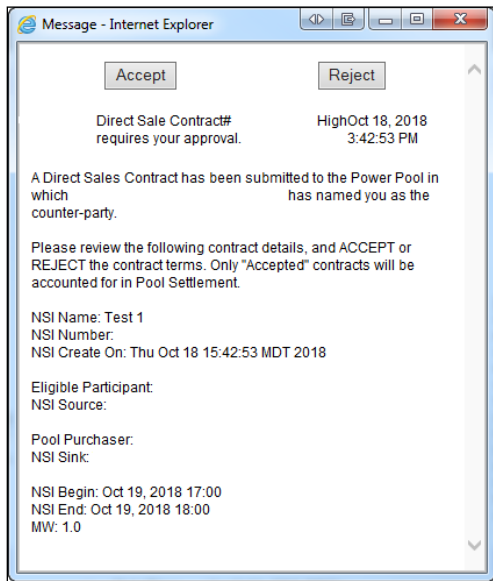
Step 1: Navigate to the NSI Section – to be completed by the counterparty

- Through the [AESO website](https://www.aeso.ca/), log on to the system. Click on the “ETS Login” icon on the top right corner of the screen.

Note: Do not open multiple browser sessions at the same time as any changes made may not be saved.



- If applicable, select your certificate and click on the “OK” button.
- Once you are logged in, you will receive a pop up on your screen informing you that an NSI request is pending.

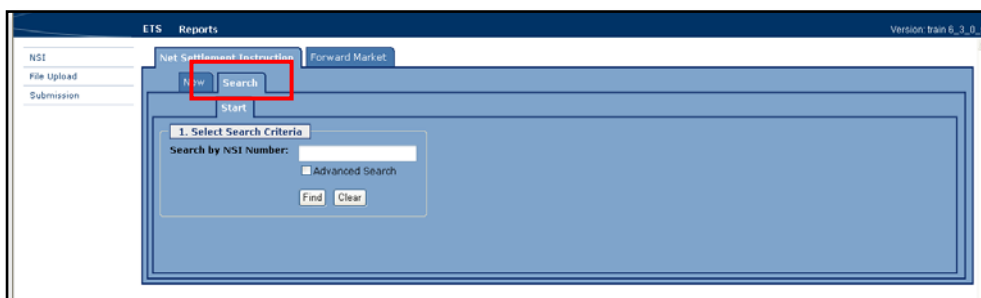


- Confirm the details are correct and click the “Accept” button. After a moment the window will close. The NSI is now in place.
- If the details are incorrect, click the “Reject” button to deny the NSI.

5. View a Net Settlement Instruction

Option 1: View NSI with NSI Number

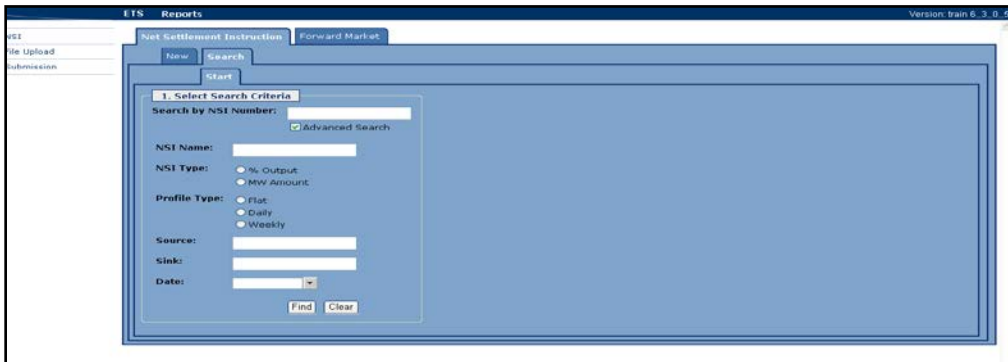
- From the NSI section, click on the “Search” tab.



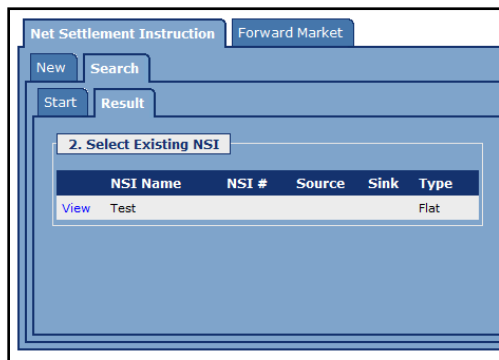
- From “Select Search Criteria” enter the NSI number assigned.
- Click “Find”.

Option 2: View NSI Using Advanced Search

- From the Search tab click “Advanced Search” to broaden the search criteria.



- Enter one or multiple fields with NSI information you know.
- Click “Find”.



- A list of results that match the criteria will appear on the Results tab. Select the desired NSI.

Troubleshooting

I noticed an error in my MW values or dates. How do I correct or cancel the NSI?

If the NSI has yet to take effect, the AESO can reject the NSI upon notification. If you discover the NSI error once the effective time has begun, a de-registering process must be completed before the NSI can be rejected. De-registering a NSI can take up to 3 business days.

Send requests for rejection or de-registration to info@aeso.ca. Please see [ISO Rule Section 103.5](#).

I am attempting to set up a NSI between two forward market (virtual) assets, but my attempts have been unsuccessful.

Forward market assets, also referred to as virtual assets, are unmetered assets used for trading purposes. Either the source asset or the sink asset must be a metered asset when registering a NSI. Therefore, in this case you must modify the NSI to include one metered asset before you can submit correctly.

I entered a begin date and time of October 24, 2007 at 01:00, but according to the NSI volume report there's no volumes reported for October 24, 2007 during HE 01.

The "Begin" and "End" times are measured in actual time as opposed to hour ending. For example, HE 01 is the time between 24:00 a.m. - 24:59 a.m., whereas 01:00 represents the actual start time. A 01:00 begin time coincides with the HE 02 MW volumes.