

Release Plan for IT Changes

Preliminary Plan for Release 51.1, June 2024

Changes to IESO systems planned as part of Release 51.1 are described below. Unless noted otherwise, the planned deployment dates are:

- Sandbox Build on April 25, 2024
- Non-Real Time Build on May 29, 2024
- Real-Time Build on June 5, 2024

For the annual 2024 IESO IT Release Schedule web page, [click here](#).

Any modification from a previous release plan is noted in the description. More information about the IT Release Plan is found at the end of this document. Questions or concerns about IESO Release Plans can be sent to the email address, pending.changes@ieso.ca or directed to IESO Customer Relations.

ID103226 – Capacity Auction Enhancements 2023 – Implementation of the new Testing Framework and Settlement Changes

Type of change

Non-Real Time, Category 2.

Stakeholder & Document References

Enhancements to the Capacity Auction and Resource Adequacy were introduced and reviewed over a two-year period through regular engagement meetings with stakeholders. The details can be found here:

- Capacity Auction Enhancements Engagement page
<https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Capacity-AuctionEnhancements>
- Resource Adequacy Engagement page
<https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Resource-Adequacy-Engagement>

The following design memos were published during the stakeholder engagement process:

- [Memo 2.1 – Testing Framework](#)
- [Memo 3.1 – Charges and True ups](#)
- [Memo 6.3 – Performance Thresholds](#)
- [Memo 10.1 – Performance Adjustment Factor](#)

The following documents will be updated in relation to this change:

- Market Rules Chapter 7 - System Operations and Physical Markets
- Market Rules Chapter 9 - Settlements and Billing
- Market Rules Chapter 11 - Definitions
- Market Manual 5: Settlements - Part 5.5: Physical Markets Settlement Amounts (MDP_PRO_0033)
- Market Manual 12.0: Capacity Auctions (MAN-44)
- IESO Charge Types and Equations (IMP_LST_0001)
- Format Specifications for Settlement Statement Files and Data Files (IMP_SPEC_0005)

Capacity Auction training materials will be published at a later date.

Applications Impacted

Commercial Reconciliation System (CRS) - Production

Online IESO - Production

The following Online IESO applications will be impacted:

- Capacity Auction
- Settlement Disagreement Management System (SDMS)

Click <https://online.ieso.ca/> to go to Online IESO

Online IESO Sandbox

The following Online IESO applications will be impacted:

- Capacity Auction
- Settlement Disagreement Management System (SDMS)

Click <https://onlinesandbox.ieso.ca/> to go Online IESO Sandbox

IESO Production Participant Reports (Settlement Statements and Data Files)

Click <https://reports.ieso.ca/> to go to the web page on ieso.ca

IESO Sandbox Participant Reports (Settlement Statements and Data Files)

Click <https://reports-sandbox.ieso.ca/> to go to the web page on ieso.ca

Reason for Change

To implement the final design changes for the 2023 Capacity Auction Enhancements.

With input from stakeholders, the IESO has developed three main proposals to enhance the 2023 Capacity Auction which include: introduction of a capacity qualification process, performance assessment framework changes and a demand curve review.

These enhancements will contribute to ratepayer value by strengthening the IESO's ability to secure reliable capacity at low cost, especially as we enter a period of critical supply conditions. The annual Capacity Auction is one of the competitive procurement mechanisms included in the IESO's Resource Adequacy Framework.

The Capacity Auction serves as the short term balancing mechanism in the framework, securing the capacity needed to meet Ontario's short-term resource adequacy needs. The Capacity Auction enables participation from a diverse range of resources that compete to be available for defined obligation periods.

Description of Change

Online IESO – Capacity Auction (CA)

1. Capacity test assessment results will be issued to the Capacity Market Participant (CMP) for each scheduled resource (including the result of the capacity auction capacity test, and for HDR resources only, result of the in-period Cleared UCAP adjustment assessment).

Online IESO – Settlement Disagreements Management System (SDMS)

1. Notice of Disagreement contact will be presented with the Obligation ID when selecting a line item to NOD for either charge type 1318 or charge type 1323.

Commercial Reconciliation System (CRS) - Production

Three new charge types have been defined to settle Capacity Auction charge types (CT) for the UCAP adjustment charge, availability charge true-up payment and capacity charge true-up payment. These are:

1. CT 1323 – “Capacity Obligation – In Period Cleared UCAP Adjustment Charge”
2. CT 1324 – “Capacity Obligation – Availability Charge True-up Payment”
3. CT 1325 – “Capacity Obligation – Capacity Auction Charges True-up Payment”

One charge type has been modified to support the new Capacity Auction test framework for capacity charges:

1. CT 1318 – “Capacity Obligation – Capacity Charge”

These charges will be calculated/reported as part of the existing CRS calculation and statement batch processes and recalculated settlement statements (RCSS).

Expected Impact

For the Online IESO changes, users will receive notifications through email with capacity test assessment results.

For the settlement related changes, charge types for 1318, 1323, 1324 and 1325 will be automatically calculated by CRS and available on the associated settlement statements effective May 1st 2024 RSSC-1 published on July 15th. The changes will be described in further detail in an update to the Format Specifications for Settlement Statement Files and Data Files document that is scheduled be part of the Baseline 51.1.

There will be no system outages related to this change.

ID103301 - Transmission Rights Market Enhancements and Platform Refresh

Type of change

Non-Real Time, Category 2

Stakeholder & Document References

Enhancements to the Transmission Rights Market were introduced and reviewed over a one-year period through regular engagement meetings with stakeholders. The details can be found here:

Transmission Rights Market Enhancement and Platform Refresh Engagement page

<https://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Transmission-Rights-Market-Enhancement-and-Platform-Refresh>

The following documents are anticipated to be updated in relation to this change:

- Market Rules Chapter 3
- Market Rules Chapter 5
- Market Rules Chapter 8
- Market Rules Chapter 9
- Market Rules Chapter 11
- Market Rules Appendix 2
- Market Rules Appendix 8

The following market manuals are anticipated to be updated as part of IESO Baseline Plan:

- [4.4 - Transmission Rights Auction \(MDP_PRO_0029\)](#)
- [6.0 - Participant Technical Reference Manual \(IMO_MAN_0024\)](#)

Transmission Rights training package, an information session, and market participant test plan will be provided prior to the Market Trial in Sandbox environment.

Applications Impacted

As part of the Transmission Rights Market Enhancement and Platform Refresh, access to the Transmission Rights Auction (TRA) platform will be available through Online IESO, accessible via the IESO Gateway. Moreover, reports concerning TRA will undergo updates to accommodate the new functionality of multiple bid laminations.

Transmission Rights Auction (TRA) - Production

Online IESO - Production

The following application can be accessed through Online IESO, via IESO Gateway

- Transmission Rights Auction

Click <https://gateway.ieso.ca/> and go to Online IESO.

Online IESO Sandbox

The following application can be accessed through Online IESO, via IESO Gateway

- Transmission Rights Auction

Click <https://gateway-sbx.ieso.ca> and go to Online IESO Sandbox

IESO Production Participant Reports

Click <https://reports.ieso.ca/> to access the report site

IESO Sandbox Participant Reports

Click <https://reports-sandbox.ieso.ca/> to access the report site

Reason for Change

The IESO is required to upgrade the Transmission Right (TR) Auction platform to align with other IESO systems. The existing platform has been utilized for approximately the last 15 years and the design of Ontario's TR market has generally operated based on its original design since market opening in 2002. An updated platform, which will also deliver a new user interface, will more easily enable IESO to adapt/accommodate changes in the TR market, eliminating additional costs by leveraging existing investments such as infrastructure, security, databases, etc. It will also minimize risks associated with running the TR auction platform on outdated and unsupported technology to sustain reliability of the TR market.

The IESO will leverage this change to also implement a market enhancement permitting multiple bid laminations. The opportunity to upgrade the market with multiple bid laminations came about during a TR Market Review (completed June 2021), which identified opportunities to improve functionality and flexibility for market participants. Additional information on the Transmission Rights Market Enhancement and Platform Refresh project can be found on the webpage here:

<https://www.ieso.ca/en/Sector-Participants/Engagement-Initiatives/Engagements/Transmission-Rights-Market-Enhancement-and-Platform-Refresh>.

Description of Change

This change will:

1. Deliver a modernized Transmission Rights Auction (TRA) platform including a new user interface
2. Enhance the TR market by implementing multiple bid laminations.

Expected Impact

There are two main categories of changes anticipated. Firstly, there will be a new user interface for TRA, which won't necessitate any software or hardware modifications on the participants' end. However, TR auction users will need to acquaint themselves with this new interface. This change is expected to have a minor impact, as it will resemble existing IESO tools, such as the Capacity Auction interface. The second significant change involves enhancing the system to allow TR auction participants to submit multiple bid laminations. This could have a minor to medium impact, as users will have the option to maintain their current bidding strategy or expand it to incorporate different price sensitivities.

There will be no impact to the existing TRA schedule as part of this change. Users can continue to access historical data from the past two years via the new TRA platform. During the implementation day, users will no longer be able to access the existing TRA platform. Post go-live, users can access the TRA platform via Online IESO.

Business User Impact:

The individuals affected by these changes will be users of Transmission Rights Auction platform. Also impacted are the reports specific to Transmission Rights.

Users will be able to log in with their current account and see their organization accordingly once they arrive at the Online IESO Transmission Rights Auction page. This includes users who represent multiple organizations, and they will be able to sign in Gateway with their primary account and switch views between different organizations that they represent on the TRA page. Users who represent multiple organizations will be notified of their primary account information before go-live. If further clarification is required, please email customer.relations@ieso.ca.

A training package and an information session will be provided for users to become familiar with the changes to the Transmission Rights Auction and how to perform multiple bid lamination submission.

Renew SSL certificates

Stakeholder & Document References

On May 25, 2023, the IESO distributed an urgent communication advising market participants to download new intermediate and root certificates from DigiCert on or before May 29, 2023 and import them to their Java Truststore.

The certificates listed below were already issued with the Root Cert – DigiCert Global Root G2 and Intermediate Cert - DigiCert Global G2 TLS RSA SHA256 2020 CA1, so no action for Market Participants to take.

This change will only impact market participants who have not updated the intermediate and root certificates as of May 2023.

Reason for Change

The reason for this change is to renew the SSL certificates ahead of the expiration dates.

On May 29, 2023, the IESO updated the web certificates for IESO Web Services, including new intermediate and root certificates from the IESO's certificate authority (CA), DigiCert.

Market Participants who integrate with IESO Web Services through API will have updated the intermediate and root certificates before May 29, 2023, prior to the IESO updating its certificates otherwise there will have been a loss of API connectivity to IESO Web Services.

Note: Market participants who have already updated the intermediate and root certificates from DigiCert as of May 2023 will NOT be impacted.

Description of Change

The IESO will renew the SSL certificates used for the sandbox sites listed below on April 25, 2024 and for production sites below on June 5, 2024.

Expected Impact

Market participants who have updated the intermediate and root certificates from DigiCert as of May 2023 will not be impacted. Users may need to refresh the webpage when the certificate is renewed.

Market participants who have not updated the intermediate and root certificates from DigiCert as of May 2023 will need to download new certificates from DigiCert and import them to their Java Truststore.

The IESO has drafted instructions to assist Market Participants with downloading and importing the new certificates:

1. Click the following link to go to DigiCert: <https://www.digicert.com/kb/digicert-root-certificates.htm>
2. Search specifically for the following certificates, identified below by the red, bold lettering:

- **Root Certificate – DigiCert Global Root G2**
Serial #: 03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5

<p style="text-align: center;">DigiCert Global Root G2</p> <p style="text-align: center;">Download PEM Download DER/CRT</p>	<p>Valid until: 15/Jan/2038</p> <p>Serial #: 03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5</p> <p>SHA1 Fingerprint: DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4</p> <p>SHA256 Fingerprint: 0B:3C:08:87:60:31:E5:E0:13:8F:8D:D3:9A:23:F9:DE:47:FF:C3:5E:43:C1:14:4C:EA:27:D4:6A:5A:B1:0B:5F</p> <p>Demo Sites for Root: Active Certificate expired revoked</p>
--	---

- **Intermediate Cert - DigiCert Global G2 TLS RSA SHA256 2020 CA1**
Serial #: 0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66

<p style="text-align: center;">DigiCert Global G2 TLS RSA SHA256 2020 CA1</p> <p style="text-align: center;">Download PEM Download DER/CRT</p>	<p>Issuer: DigiCert Global Root G2</p> <p>Valid until: 29/Mar/2031</p> <p>Serial #: 0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66</p> <p>SHA1 Fingerprint: 1B:51:1A:BE:AD:59:06:CE:20:70:77:00:BF:0E:00:43:B1:38:26:12</p> <p>SHA256 Fingerprint: C8:02:5F:9F:06:5F:DF:09:5B:3C:A8:0C:78:67:B9:A5:87:B5:27:79:73:95:79:17:46:3F:08:13:D0:B6:25:A9</p>
---	---

3. Click **Download DER/CRT** to download the certificates.

Once the root and intermediate certificates have been downloaded, they will need to be imported to the Java Truststore. The steps to import the certificates may differ between Market Participants and will differ between Windows and Linux systems.

ID103374 - Renew SSL certificate: outages-sbx.ieso.ca

Type of change

Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
Outages-sbx.ieso.ca	NA

Reason for Change

This change is to renew the certificate for outages-sbx.ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site sbx-outages.ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

ID103375 – Renew SSL certificate: gateway-sbx.ieso.ca

Type of change

Non-Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
gateway-sbx.ieso.ca	NA

Reason for Change

This change is to renew the certificate for gateway-sbx.ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site gateway-sbx.ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

ID103378 – Renew SSL certificate: dispatch-sandbox.ieso.ca

Type of change

Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
dispatch-sandbox.ieso.ca	NA

Reason for Change

This change is to renew the dispatch-sandbox.ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site dispatch-sandbox.ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

ID103387, ID103388– Renew SSL certificate: trsbx.ieso.ca, tr.ieso.ca

Type of change

Non-Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
trsbx.ieso.ca	tr.ieso.ca

Reason for Change

This change is to renew the trsbx.ieso.ca and tr.ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site trsbx.ieso.ca and tr.ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

ID103379 – Renew SSL certificate: weblogicprudential.ieso.ca

Type of change

Non-Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
NA	weblogicprudential.ieso.ca

Reason for Change

This change is to renew the weblogicprudential.ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site weblogicprudential.ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

ID103383 – Renew SSL certificate: ieso.ca

Type of change

Non-Real Time, Category 2

Stakeholder & Document References

No impact

Applications Impacted

Sandbox	Production
NA	ieso.ca

Reason for Change

This change is to renew the ieso.ca ahead of its expiration date.

Description of Change

This change will renew the certificate used on the site ieso.ca so that it expires in 2025.

Expected Impact

Users may need to refresh the page when certificate is renewed.

About the IT Release Plan

Four times a year, the IESO coordinates a release package of changes to IESO systems that will impact users outside the IESO. These changes are categorized as either:

- **Category 2** change (users will have to make a functional change, such as an update to a procedure), or
- **Category 3** change (users will have to modify a technical interface with an IESO system or solution).

For each release, three versions of the Release Plan are published:

1. Preliminary Release Plan
2. Target Release Plan
3. Final Release Plan

The IT Release Schedule provides the planned dates for each release. Dates for specific changes may differ from the calendar dates, but these will be provided in the Release Plan. For the full 2023 Release Schedule on the IESO Web page , [click here](#).

Sandbox Implementation is the date the change is deployed on the IESO Sandbox environment, used for testing and training.

Production Build is the date the change goes live. This may happen during either:

1. Real-Time Build for systems used to interact with the IESO-Controlled Grid or IESO-Administered Market, or
2. Non-Real Time Build for other systems used to interact with the IESO, such as those used for settlements or registration activities.

Efforts are made to minimize the impacts of system outages during planned releases. Planned outages are posted in advance on the IESO Planned IT Outages Web page. [Click here for a link](#).