

# Release Plan for IT Changes

## Final Plan for Release 51.0, March 2024

Changes to IESO systems planned as part of Release 51.0 are described below. Unless noted otherwise, the planned deployment dates are:

- Sandbox Build on January 25, 2024
- Non-Real Time Build on February 28, 2024
- Real-Time Build on March 6, 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](mailto:pending.changes@ieso.ca) or directed to IESO Customer Relations.

## Type of change

Real Time, Category 3.

## 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.

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

## Applications Impacted

Sandbox	Production
<b>Energy Market Interface (EMI)</b>	<b>Energy Market Interface (EMI)</b>
emisandbox.ieso.ca	emi.ieso.ca

## Reason for Change

The reason for this change is to renew the SSL certificates for emi.ieso.ca and emisandbox.ieso.ca 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, 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 emisandbox.ieso.ca on January 25, 2024 and emi.ieso.ca on March 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 Cert – DigiCert Global Root G2**

Serial #: 03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5

<b>DigiCert Global Root G2</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Valid until: 15/Jan/2038 Serial #: <b>03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5</b> SHA1 Fingerprint: DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4 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 Demo Sites for Root: <a href="#">Active Certificate</a> <a href="#">expired</a> <a href="#">revoked</a>
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- **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

<b>DigiCert Global G2 TLS RSA SHA256 2020 CA1</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Issuer: DigiCert Global Root G2 Valid until: 29/Mar/2031 Serial #: <b>0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66</b> SHA1 Fingerprint: 1B:51:1A:BE:AD:59:06:CE:20:70:77:00:BF:0E:00:43:B1:38:26:12 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
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3. Click **Download DER/CRT** to download the certificates.
4. 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.

## Type of change

Non-Real Time, Category 3.

## 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.

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

## Applications Impacted

Sandbox	Production
N/A	<b>IESO Reports Site</b> reports.ieso.ca

## Reason for Change

The reason for this change is to renew the SSL certificate for reports.ieso.ca ahead of the expiration date.

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, 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

This change will renew the SSL certificate used for reports.ieso.ca on February 28, 2024 out to 2025.

## 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.

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- **Root Cert – DigiCert Global Root G2**

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<b>DigiCert Global Root G2</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Valid until: 15/Jan/2038 Serial #: <b>03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5</b> SHA1 Fingerprint: DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4 SHA256 Fingerprint: 0B:3C:0B: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 Demo Sites for Root: <a href="#">Active Certificate</a> <a href="#">expired</a> <a href="#">revoked</a>
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Serial #: 0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66

<b>DigiCert Global G2 TLS RSA SHA256 2020 CA1</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Issuer: DigiCert Global Root G2 Valid until: 29/Mar/2031 Serial #: <b>0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66</b> SHA1 Fingerprint: 1B:51:1A:BE:AD:59:06:CE:20:70:77:00:BF:0E:00:43:B1:38:26:12 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
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**This change will only impact market participants who have not updated the intermediate and root certificates as of May 2023.**

### Applications Impacted

Sandbox	Production
N/A	<b>IESO Gateway (Okta Tenant)</b> gateway.ieso.ca

### Reason for Change

The reason for this change is to renew the SSL certificate for reports.ieso.ca ahead of the expiration date.

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, 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

This change will renew the SSL certificate used for gateway.ieso.ca on February 28, 2024 out to 2025.

### 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.

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<b>DigiCert Global Root G2</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Valid until: 15/Jan/2038 Serial #: <b>03:3A:F1:E6:A7:11:A9:A0:BB:28:64:B1:1D:09:FA:E5</b> SHA1 Fingerprint: DF:3C:24:F9:BF:D6:66:76:1B:26:80:73:FE:06:D1:CC:8D:4F:82:A4 SHA256 Fingerprint: 0B:3C:0B: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 Demo Sites for Root: <a href="#">Active Certificate</a> <a href="#">expired</a> <a href="#">revoked</a>
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<b>DigiCert Global G2 TLS RSA SHA256 2020 CA1</b> <a href="#">Download PEM</a>   <a href="#">Download DER/CRT</a>	Issuer: DigiCert Global Root G2 Valid until: 29/Mar/2031 Serial #: <b>0c:f5:bd:06:2b:56:02:f4:7a:b8:50:2c:23:cc:f0:66</b> SHA1 Fingerprint: 1B:51:1A:BE:AD:59:06:CE:20:70:77:00:BF:0E:00:43:B1:38:26:12 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
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## 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 2024 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](#).