

# **CAISO RIG certificates install and renewal Procedure**

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## 1.0 PURPOSE

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The purpose of this document is to outline the process for CAISO Remote Intelligent Gateways (RIGs) digital security certificate installations and renewals.

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## 2.0 CERTIFICATE INSTALL AND RENEWAL

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It is important for each site to fully understand the role that certificates play within the RIG, and their options for managing them. Below is a brief outline of the process:

Upon receipt of a certificate request, the ISO will provide each RIG with an end user certificate. This certificate must then be installed into the RIG device so that the RIG can achieve authentication to the ISO EMS so that the exchange of data can occur. **It is the responsibility of the owner to either generate the certificate request independently, or coordinate certificate functions from a Service Provider, based on CAISO's requirements set in the RIG Technical Specification document. It is also the responsibility of the owner to either generate the necessary key files and install the certificate into the RIG independently, or coordinate the key generation and installation of the certificate into the RIG with the intended Service Provider.**

End user certificates have a validity period of one or three years and without a valid certificate, the RIG is not able to communicate with the ISO. While CAISO does track all certificates, **it is the responsibility of the plant to track their assigned certificate's validity period, and ensure that they have a means by which to generate a key pair, certificate request and install a new certificate into the RIG prior to the current certificate's expiration.**

There are several ways that certificate requests can be generated and installed into the RIG. Some RIGs have the ability to create key pair files and generate certificate requests. Others may need to have the request generated by the vendor. The Generator Owner should check with their RIG Vendor and or RIG Owners Manuals to determine the process for generating new certificate requests, and how this process will be handled. This will allow the Generator Owner to determine how to accomplish the key generation, certificate request and certificate installation procedures: either independently or from a Service Provider. In either case, the certificate must be installed into the RIG at the site.

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## 3.0 PROCEDURE

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1. A certificate request will be generated (from a new key pair) and submitted to the CAISO for signing. If this is a service provided by the RIG Vendor, then the vendor should generate the keys/request and send the request to

- the CAISO for signing.
2. CAISO will use the certificate request to issue/re-issue a signed certificate.
  3. The certificate will be returned to the owner or the vendor for installation into the RIG.
  4. **Note: In any event, the certificate must be installed in the RIG while the device is on site (at the plant). Verify secure communication to the ISO.**

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## 4.0 ACCEPTANCE

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The RIG is able to continue secure communication to the ISO once the new certificate, based on a new key pair, is installed.