## **Render FERC Forms**

## **Template Set Files**

In order to render a form the appropriate template set zip file must be used. The template set file is a zip file that defines the logic to render a specific form such as Form 1. A separate template set file is used to generate each form. For example, the Form 1 template set file is used to render the Annual Form1. Separate template set files are used to render the Quarterly Form and the Form 1F. The template set file is processed using the Arelle processor. The Arelle processor and software supporting FERC eForms submissions can be used to render the files locally. Test submissions can also be made to the eForms portal that will also render the filing.

The latest template set files will be available on the eForms portal at <a href="https://eCollection.ferc.gov/taxonomyHistory">https://eCollection.ferc.gov/taxonomyHistory</a>.

## **Using the Arelle XULE Processor**

To render forms using the Arelle processor the XULE plugin and FERC render plugin are used. These plugins will be included in the Arelle distribution. The ferc-render plugin is also available at <a href="https://github.com/xbrlus/ferc-renderer">https://github.com/xbrlus/ferc-renderer</a>. The FERC renderer plugin is comprised of two files.

- render.py
- render-constants.xule

One is a python file and the other is a XULE file. These two files must be in a subdirectory called FERC. This directory is included within the plugins directory of the Arelle software.

Arelle can be downloaded from the Arelle website at <a href="https://arelle.org/arelle/pub/">https://arelle.org/arelle/pub/</a>

In addition to the Arelle processor and rendering plugins the filer needs to download the appropriate template set zip file from the FERC. This file defines the xhtml layout required to render each schedule and is used by Arelle to render the form as an inline XBRL document.

The files can be rendered using the Arelle command line and passing the location of the XBRL instance and template set as parameters.

## **Command line operation.**

In order to render the filings using Arelle on a PC the following command is used:

arellecmdline --plugins "FERC/render" --ferc-render-render --ferc-render-template-set "{Location of template set file}\RenderingTemplates\_Form\_1.zip" -f "{Location of the XBRL submission file}\electricCo.xbrl" --ferc-render-inline "{Location of rendered form}\ElectricCo.html" --ferc-render-debug

The parameters are as follows:

- --plugins: This argument references the FERC renderer plugin called by Arelle. This is included as part of the Arelle distribution and is also available at XBRL.US
- --ferc-render-template-set: This argument references the location of the template set zip file provided by FERC.
- --ferc-render-render: Indicates that the instance file should be rendered.
- -f: This argument is used to define the location of the instance file.
- --ferc-render-inline: This argument is used to define the name and location of the rendered inline XBRL form.
- --ferc-render-debug: This argument provides messages back to the standard out to indicate the status of the rendering process.