Form 714 Viewer Getting Started Guide

This brief guide provides information to prepare, install, and use the Form 714 Viewer system. This system consists of various applications and data files, and it allows the general public to download and view Form 714 data from FERC for local viewing and analysis on the user's PC. There are additional functions to give users direct access to the data for custom analysis and review.

High Level Overview

The Form 714 Viewer software is designed to provide the best performance, maximum availability, and richest set of features to assist users in viewing Form 714 data that has been filed with FERC. The Viewer software is essentially a desktop application that can operate autonomously from FERC; a constant Internet connection is not required, and FERC resources do not have to be on-line, once data has been downloaded from FERC. A rough comparison would be to consider the data download as a sort of "file copy" function. Once the "file" is copied to the user's PC, they can do whatever they like with it (of course, in the case of Form 714, the data consists of many files).

Preparation

There are some important steps that should be taken prior to installing the Form 714 Viewer software. Since most companies "lock down" a user's ability to install software, it will be likely that the company's technical staff will need to be involved during the installation process. It is highly recommended they review this guide as well. If the user's computer and resources are not prepared correctly, the installation and initial running of the system will probably not be successful.

The Form 714 Viewer software is a standard "desktop application" type of software which has specific Internet communications features. The Viewer software can be thought of as having 2 main pieces: "application" and "database." A key point here is that the "application" part of the system should not be stored in the same place (on disk) as the "database" part of the system. So, at least 2 locations need to be planned for prior to installation.

The Form 714 Viewer software makes use of standard Internet communication protocols to obtain data and updates from FERC. Specifically, the protocols used are HTTP and FTP. HTTP is the protocol used by web browsers so it usually is not a problem. But **some companies have FTP turned off** (or blocked) by default. So, the IT group may need to check and turn on (or allow) FTP (note: all that is needed is to allow FTP communication with the FERC site "eforms1.ferc.gov" - all FTP traffic is initiated from the user's computer and FERC never 'pushes' anything out over FTP). Note that the **Windows XP firewall often has FTP turned off** as well, so not only the company's firewall needs to be checked, but also the local computer settings (if running Windows XP or later).

Above, there were 2 "locations" discussed: one for the application and one for the database. Generally, the application location will be on the user's local hard drive, and the database location will be on a network drive. However, if maximum portability is desired, the database can be downloaded to the local drive as well. Also, if there are expected to be more than 1 user accessing the data, a network drive location would be better; only 1 person would have to download data and all other users would simply "point" to that downloaded database. The primary issue with these 2 locations is that the end user must have "Full" access rights to these locations. E.g. read, write, delete, create folder, delete folder, and so on. So, because of some company policies, it may be better to not install the application in the usual c:\program files\..... location. Some companies have a separate local drive (e.g. D: drive) where they allow the user more access rights.

To summarize, to prepare for installation, the following need to be considered:

- Company IT people may need to be involved in installation
- Communication setup: specifically allowing FTP with FERC ("eforms1.ferc.gov")
- Locations (folders) where the application and database will be placed

Installation

The Viewer software is a standard desktop type application. As such, during installation, it will make modifications to the Windows "registry", etc, that normally require 'administrative' access to the computer. If the Form 714 user does not have administrative rights to their computer, the installation will probably have to be performed by an IT person at the company.

Using any web browser, navigate to the FERC web site and go to the Form 714 home page. The starting URL is http://www.ferc.gov/docs-filing/eforms.asp, and from there choose Electric (a tab) and find the link "Form No. 714"

| lick on the categories below to view additional information. Electric Gas Hydropower Oil Service Companies | | |
|---|--|--|
| Forms | | |
| Form No. 1: Annual Report of Major Electric Utility Form No. 3-Q: Quarterly Financial Report of Electric Utilities, Licensees, ; Form No. 423: Cost and Quality of Fuels for Electric Plants Form No. 523: Application for Authorization of the Issuance of Securities | | |
| Form No. 714: Annual Electric Control and Planning Area Report Form No. 714: Annual Electric Control and Planning Area Report | | |

After clicking on that link, the browser will be taken to the Form 714 specific area and will have a set of items something like following:

>> Overview
>> Form No. 714
>> Instructions
>> Electronic Submission Software
>> Pre-Electronic Filing Data: 1993-2004
>> 2007 letter to respondents
>> Viewer Instructions and Download

From these links, select the Viewer Instructions and Download item. This will bring up a page giving an overview of installing the Viewer software. Look for the links on the right side of the page and find the following (actual appearance may differ slightly):

| Viewer |
|---------------------------|
| » Software [EXE] |
| » Software Updates [EXE] |
| » Instructions & Download |

Click on the Software [EXE] link to begin the installation process.

There are 2 ways to install, either open and run directly from the FERC site, or download the file first, and then run it locally. Either way will work fine for the Form 714 Viewer software.

The following are some of the screens seen during installation (note: not every screen is shown):



| 🛃 FERC Form 714 Viewer - InstallShie | ld Wizard | × |
|--------------------------------------|-------------------------|---------------|
| Customer Information | 2 | |
| Please enter your information. | | |
| User Name: | | |
| user name | | |
| Organization: | | |
| company | | |
| | | |
| | | |
| Install this application for: | | |
| Anyone who uses this of | computer (all users) | |
| Only for me (Charlie Co | leman) | |
| | | |
| InstallShield | | |
| | < <u>B</u> ack <u>N</u> | lext > Cancel |

An important thing to note is that if an IT person was required to install the software, the "Anyone who uses this computer (all users)" should be selected.

| 🙀 FERC Fo | rm 714 Viewer - InstallShield Wizard | x |
|---------------|---|---|
| | ion Folder xt to install to this folder, or click Change to install to a different folder. | |
| | Install FERC Form 714 Viewer to: C:\Program Files\Form714viewer\ | |
| InstallShield | < <u>B</u> ack <u>Next ></u> Cancel | _ |

Remember in the preparation discussion that the end user who will use the Viewer software will need to have "Full" access rights to the application location (folder) as well as the database location (folder). The above screen shows the default folder for the application. The Change button should be used to set the application location to a different location, if necessary, where access rights can be granted accordingly.

| 🙀 FERC Form 714 Viewer - InstallShiel | d Wizard | | × |
|--|------------------|-------------------------|-----------------|
| Ready to Install the Program | | | A. |
| The wizard is ready to begin installation | | | |
| If you want to review or change any of exit the wizard. | your installatio | n settings, click Back. | Click Cancel to |
| Current Settings: | | | |
| Setup Type: | | | |
| | | | |
| Destination Folder: | | | |
| C:\Program Files\Form714viewer\ | | | |
| User Information: | | | |
| Name: user name | | | |
| Company: company | | | |
| | | | |
| InstallShield | | | |
| | < <u>B</u> ack | Install | Cancel |

Review the settings and if things are acceptable click the Install button.

A screen describing the installation status will appear:



And eventually the final installation screen will display:

| 🙀 FERC Form 714 Viewer - In | stallShield Wizard | × |
|-----------------------------|---|---|
| | InstallShield Wizard Completed The InstallShield Wizard has successfully installed FERC Form 714 Viewer. Click Finish to exit the wizard. | |
| | < <u>B</u> ack Finish Cancel | |

Note: if the above message did not appear, or if some other error message was displayed, the Form 714 Viewer system will probably not function correctly.

At this point, the Form 714 Viewer Application has been installed on the user's computer. Note: if there are expected to be multiple users of the Form 714 Viewer software (e.g. several people entered Form 714 data), the Form 714 Viewer software needs to be installed on each user's computer.

Getting Data from FERC (data download)

The first thing that should be done after the installation is has been completed is to download data from FERC. Remember, just installing the software does not provide any Form 714 data. The user must select which data they would like to download and view before the Viewer software can be used.

So, to get things started, invoke the Viewer software using the Windows Start menu as with any other desktop application.

| | F | Programs | |
|------|------------------|-----------|---|
| ЦЗ | 1 | Documents | |
| SSIO | 5 | Settings | |
| ofe | R) | Search | |
| 8 | 2 | Help | 🔚 FERC Applications 🔹 🕅 Form 714 Viewer Data Download |
| 8 | , 700 | Run | Form 714 Viewer |

Select the Form 714 Viewer Data Download item. A startup screen will appear, similar to below, and then a Data Download window will be displayed



| 5 | Form 714 Viewer Data Download | _ 🗆 × |
|---|--|---------------------------|
| | List of Available Companies: | |
| | | <u>^</u> |
| | | |
| | | |
| | | |
| | | - |
| | | |
| | Retrieve Company Listing | Internet Setup Options |
| | | |
| | Enter Year to Download: 2006 | |
| | Get all companies for the specified year | |
| | Destination for Data or Location of Existing Data: | |
| | c:\Form714viewerdata\ | |
| | , Internet Source site of data: | |
| | eforms1.ferc.gov | |
| | | |
| | | |
| | Begin Download Finished | |
| | | |
| | | |
| | | |

At this point, if the IT person knows there are special communications requirements, or to view the current communications settings, click the Internet Setup Options button. This screen will appear:

| | e) | Authentication (in | ' required) |
|-------------------------|-----------|--------------------|-------------|
| lost (Name/IP Address): | Port: | Authentication Us | ername/ID: |
| ogon Name/ID: | Password: | Authentication Pa | ssword: |
| company FTP Proxy se | | Remote Po | |
| Remote Host Setting: | | | |

The items on the above window will probably only need to be modified if unusual settings are employed

at the company. Most modern firewalls/proxys operate 'transparently' and these settings do not have to be altered. But, if the Form 714 Viewer software informs the user that FERC could not be contacted, etc, these settings may need adjustment. If you displayed this window, close it now by clicking the Close button.

So, to see the available company list, click the Retrieve Company Listing button on the Data Download window. It should update with something like the following:

| Form 714 Viewer Data Download | <u> </u> |
|--|---------------------------|
| List of Available Companies: | |
| Alabama Electric Cooperative, Inc. | |
| Alabama Power Company | |
| Alcoa Power Generating Inc. | |
| Allete (Minnesota Power) | |
| Alliant Energy-East | |
| Alliant Energy-West | |
| Ameren (Illinois Power Co. Control Area) | • |
| Retrieve Company Listing | Internet Setup Options |
| Enter Year to Download: 2006 | |
| Get all companies for the specified year | |
| Destination for Data or Location of Existing Data: | |
| c:/Form714viewerdata\ | |
| 1 | |
| Internet Source site of data: | |
| eforms1.ferc.gov | |
| | |
| Begin Download Finished | |
| Server response received - process completed | |

Now, note the "Destination for Data or Location of Existing Data" in the middle of the window. Remember, in the preparation, this location was supposed to be decided upon. The recommendation is a network folder. The above shows the default location, on the local hard drive. The button to the right of the location can be used to 'browse' folders, looking for the location where the database should be set up. Again, note the user must have Full access rights to the folder where the database will be placed.

After the location has been set correctly, select the company to download from the list (click on the name). Then click the Begin Download button.

After a few moments, if the download and database creation was successful, a message like the following should be displayed:



Click the OK button. At this point, another company can be selected and/or the data year can be changed. To download additional companies or year, simply select the company, verify the year, and click Begin Download again. After each successful download, the above dialog will appear for the company downloaded.

To continue into the Viewer, click the Finished button on the Data Download screen.

The system will run through a few other checks, and then the main application will appear. The display will look something like the following:

| Schedule Selector | _ 🗆 × |
|---|------------------|
| elect Company/Year: [Test Company A] | ▼ 2006 ▼ |
| Title of Schedule | Page Reference 🔺 |
| Part I - Schedule 1. Identification and Certification | 1 |
| Part II - Schedule 1. Generating Plants Included in Reporting Balancing Authority Area | 2 |
| Part II - Schedule 2. Balancing Authority Area Monthly Capabilities at Time of Monthly Peak Deman | 3 |
| Part II - Schedule 3. Balancing Authority Area Net Energy for Load and Peak Demand Sources by I | 4 |
| Part II - Schedule 4. Adjacent Balancing Authority Area Interconnections | 5 |
| Part II - Schedule 5. Balancing Authority Area Scheduled and Actual Interchange | 6 |
| Part II - Schedule 6. Balancing Authority Area System Lambda Data and Description of Economic D | 7a-7b |
| Part III - Schedule 1. Electric Utilities That Compose the Planning Area | 8 |
| Part III - Schedule 2. Planning Area Hourly Demand and Forecast Summer and Winter Peak Demand | 9a-9b |
| | |
| | |
| | |

Note the "Select Company/Year:" option near the top of the Schedule Selector window. The year may be blank on a first time run, so make sure the desired company and year are selected.

If this point has been reached, the Form 714 Viewer software has been successfully installed and company data has been successfully downloaded. To view data, simply select the desired item from the list and click the Select button.

The next time the software is invoked, the data download function does *not* need to be run again. From the Windows Start button, the Viewer software can be directly invoked:

| | | Programs | |
|----------|-------------|-----------|---|
| B | <u></u> | Documents | |
| SSI0 | | Settings | |
| ofe | | Search | · · · · · · · · · · · · · · · · · · · |
| B | <i>></i> | Help | FERC Applications 🔸 🕅 Form 714 Viewer Data Download |
| × | | Run | ¥ Form 714 Viewer |

That is, the item; "Form 714 Viewer" can be invoked without downloading data again. However, if other companies' data are desired, or if the user wants to ensure they have the latest data for a given company, the "Form 714 Viewer Data Download" item would be used to download data from FERC.

Multiple user set up

Above there was a brief mention about cases where a company (or site) may have more than 1 person that desires to view Form 714 data. If that will not be an issue, just ignore this section. Otherwise, here are the general steps to set up additional users.

First, install the software on 1 user's machine and go all the way through the data download process (as described above). Of course, clearly make note of the folder where the database was placed ("Destination for Data or Location of Existing Data"). It will probably be on a network drive if it is to be viewed by multiple users.

Next, on each additional user's machine, install the software as usual. However, when using the Viewer Data Download function, do not download data; simply use the "browse" button (the 3 dots) to locate the folder where the Viewer data had already been downloaded to. *Do not* click the Begin Download button.

Simply fill in the proper location, and then click the Finished button.

Of course, the database location should be somewhere that all users have Full access rights (which would generally imply a network folder/location).

Note: If special communications settings had to be entered to get the initial user to function (on the Internet Setup Options screen), those setting will have to be duplicated in each user's Internet Setup Options as well.

Brief Software Overview

At this point, the software is installed and data has been downloaded. The following will describe a few of the features and functions in the Viewer software.

Remember the main interface from above:

| Schedule Selector elect Company/Year: [Test Company A] | × |
|---|----------------|
| Fitle of Schedule | Page Reference |
| Part I - Schedule 1. Identification and Certification | 1 |
| Part II - Schedule 1. Generating Plants Included in Reporting Balancing Authority Area | 2 |
| Part II - Schedule 2. Balancing Authority Area Monthly Capabilities at Time of Monthly Peak Dem | an 3 |
| Part II - Schedule 3. Balancing Authority Area Net Energy for Load and Peak Demand Sources t | iyi 4 |
| Part II - Schedule 4. Adjacent Balancing Authority Area Interconnections | 5 |
| Part II - Schedule 5. Balancing Authority Area Scheduled and Actual Interchange | 6 |
| Part II - Schedule 6. Balancing Authority Area System Lambda Data and Description of Economi | c C 7a-7b |
| Part III - Schedule 1. Electric Utilities That Compose the Planning Area | 8 |
| Part III - Schedule 2. Planning Area Hourly Demand and Forecast Summer and Winter Peak Dem | and 9a-9b |
| | |

To bring up a schedule for viewing, select the item and click the Select button (or double-click the item). So, if Part II - Schedule 2 were selected, the following would appear

| Repo Print Pr | eview | | | × | | | | | | | _ [|
|---------------|-------------------|---|--|--|--|---|--|--------------------------|------------------------------|---|-----|
| 14 4 | Ch. | | Zoom 💌 | Þ a 💻 | | | | | | | |
| | | | guistory Commission | An | nual Electric B | alancing Autho | rity Area and Pi | anning ut | Illy Code: 55555 | | |
| | FER | FERC Form No. 714 Dea Report Utility Neme (Text Company A) | | | | | | | | | |
| | | For the Year Ending December 31, 2006 | | | | | | | | | |
| | The | Pert II - Schedule 2. Belencing Authority Area Nonhity Capebilities at Time of Manifely Peak Demaid The peak demand and other ferms used in this schedule are defined in the Form 714 inductions. Please test readther instructions, then complete this Schedule. The value in column (c) for them onth of the annual | | | | | | | | | |
| | | | ld equal the total in colu | | | | | | | | |
| | | | | Not Copability a | t the Time of the Month | ly Peak Demansi, Based | on Balancing Authority Ar | | | | |
| | Net C | | | Net Capability | skillty from Plants Reported on Schedule II | | External to the Belancing Authority Area Net Unit or Firm Capability (MWY) | | | | |
| | | | | Una | valskie Capatility Duet | α | | | | | |
| | Line No (8) | Manth (b) | Available Capability (MW) (C) | Planned Outage and Denating (MVV) (C) | Unplemed Outege and Denting (MAN) (C) | Other Outage and Disating* (MMY) (0) | Tatel (c + d + e + f) (MIVV) (g) | Available (MM) (h) | Nat Available (MVV) () | Totel Cepabilitγ (g + h + i) (MWO) (j) | |
| | 1 | Jan | 2.121.212 | 4.545.454 | 212.12 | 6,969,696 | 15,668,865 | 232.5 | | 18,222,220 | |
| | 2 | Feb | 33,333,339 | 585,856 | 32,322 | 212,121 | 34,143,432 | 349,4 | 134 232,329 | 94,719,169 | |
| | 3 | Mar | 434,343 | 76767 | 343,434 | 32,323,232 | 39,177,776 | 454,6 | 545 343,434 | 33,975,755 | |
| | 4 | Apr | 6 | 1 | 1 | 1 | 9 | 2,323,3 | 232 45,454 | 2,368,695 | |
| | 5 | Mar | 2,323,232 | 78,787 | 6,986,856 | 45,464 | 9,013,129 | 34,2 | 943 65,656 | 9,113,128 | |
| | 6 | Jun | 3,232,232 | 656,969 | 676,767 | 585,856 | 5,373,844 | 3,434,5 | 343 767,670 | 9,575,663 | |
| | 7 | Ju | 343,434 | 90,909 | 767,978 | 67,676 | 1,209,057 | 329,3 | 232 7,887,578 | 9,501,007 | |
| | 8 | Aug | 454,545 | 2,323,232 | 6,969,696 | 767,878 | 12,555,553 | 21,2 | 212 896,969 | 1 3,475,754 | |
| | 9 | Sep | 2 | 2 | 2 | 2 | 8 | 34, | 134 909,090 | 943,532 | |
| | 10 | Oct | 676,767 | 454,545 | 232,329 | 7,678,767 | 9,242,422 | 546,4 | 154 334,344 | 10,122,220 | |
| | 11 | Nov | 11,111 | 56,966 | 464,545 | 545,454 | 1,067,675 | 56, | 556 45,454 | 1,169,695 | |
| | 12 | Dac | 898, 869 | 676,767 | 5,856,565 | 7,678,767 | 14,909,000 | 6,365,6 | 050 0,505,850 | 28,040,400 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

The above is a 'preview' of what the data would look like if it were printed in paper form. Note the "Print Preview" window in the upper left area of the screen. If there are additional pages (some schedules can have continuation pages), the "triangle" buttons will be enabled (e.g. to go to the next/previous page). The button with the picture of a printer on it will print the displayed data (all pages). To exit the preview, click the button with a picture of a door.

Also note that the data can be printed, in Form (paper) format, by using the File | Print menu option.

In addition to viewing schedules, data can be directly exported to Excel spreadsheet files. To do this, select the item on the Schedule Selector window and click the Export button. The following window will appear:

| Data Export to Excel Spreadsher Current Data to Export: | et format | | | |
|--|--------------------|-------------------|---------------------------|-------|
| Part II - Schedule 2. Balancing A | Authority Area Mor | thly Capabilities | at Time of Monthly Peak D | emand |
| Filename to Export to (include co | mplete path): | | | |
| C:\PROGRAM FILES\FORM714VIE | WER\exportdata.xl | 3 | | |
| ☑ Open exported file after creati | on | | | |
| | Export | Close | R | |

Note the "Filename to Export to..." option. The default will be exportdata.xls, however if multiple schedules are going to be exported, the name of the file should be changed (otherwise each export will simply overwrite the previous one):

Lastly, it is important to remember to not attempt to export to a file that is already open and being viewed by a spreadsheet program. The export cannot be performed to a file that is open by another program.

Some notes about data downloads from FERC

Remember, the data downloaded from FERC is a local, temporary copy. It is not updated automatically. So, as additional years of data are filed with FERC, the company data for those years will need to be

downloaded.

For advanced users, those that are used to working with databases, the complete data set of Form 714 can be accessed via ODBC. The ODBC driver to use is Visual Foxpro (the ODBC driver for version 6 is fine). The name of the database is Form714.dbc. Note, when using ODBC to access the database, it is recommended to turn *off* the "Exclusive" mode. That way, accessing the data will not interfere with other Form 714 Viewer functions.

On the previous data download screen, it was shown how to download a single company at a time. But there is another option for those that do more generic analysis or desire data from many companies. Remember the Data Download window:

| Form 714 Viewer Data Download | _ 🗆 🗵 |
|--|----------------|
| List of Available Companies: | |
| | A |
| | |
| | |
| | |
| | - |
| | Internet Setup |
| Retrieve Company Listing | Options |
| | |
| Enter Year to Download: 2006 | |
| Get all companies for the specified year | |
| Destination for Data or Location of Existing Data: | |
| c:\Form714viewerdata\ | |
| , Internet Source site of data: | |
| eforms1.ferc.gov | |
| | |
| | |
| Begin Download Finished | |
| | |
| | |
| | |

Note the option labeled "Get all companies for the specified year" (just under the Retrieve Company Listing button). If that option is checked, the data download function will download all company data for the specified year. It will do this even if a company listing is displayed and one of the companies is selected. The "Get all companies..." option overrides the individual selection.

Note that companies file at different times. Therefore, it is recommended to use the "Get all companies..." download function only after the filing deadline for the given year. If a company has not yet filed with FERC, their data will not be available for downloading.

The Form 714 Viewer software application will automatically update itself. That is, if there are changes to some schedules, or improvements to output layouts, updates may occur. But these updates only affect the application part of the system. Company data is not updated automatically.

Final Notes

Usually, most of the problems are encountered in the set up of the software. These are the key items in that regard:

- The user must have full access rights to the application folder
- The user must have full access rights to the database folder
- HTTP and FTP are used to communicate with FERC. FTP is often shut off by default and needs to be turned on/enabled
- If special proxy configurations are used by a company, each user's Form 714 Viewer software will need to be configured accordingly (the Internet Setup Options window)
- The Form 714 Viewer database is a local copy at the user's facility
- If there are multiple users, they can 'point to' the same folder

• Company data is not updated automatically. To ensure the latest company data is obtained, the company data can be redownloaded at any time.

For assistance in troubleshooting communications set up problems, FERC has a "Communications Tester" application that can be downloaded separately. Its sole purpose is to run the series of communications tests using HTTP and FTP to verify the company site can communicate with FERC. The link to get to the FERC Communications Test Application is http://www.ferc.gov/docs-filing/eforms/test-app.asp.