Smart Grid Data Hub
User Manual for Data Submission
Revision Date: September 6, 2012

Overview

This document describes how projects funded under the Smart Grid Investment Grant (SGIG) and Smart Grid Demonstration Projects (SGDP) programs can manually submit their metrics and benefits data. This document also describes how to upload supporting project documentation using the Project Documentation tab on the user interface.

Login ID and Password

As a user of the system you will be given an account and system credentials once your Metrics and Benefits Reporting Plan (MBRP) is approved. Your credentials are comprised of a login ID and a password.

- IDs will be assigned and sent via e-mail to the prime project contact upon completion of the MBRP.
- The prime contact can request that others be added to the approved list.
- IDs will be given to these additional people via e-mail.
- Users can create their own passwords once IDs are provided.

Your account is associated with one or more projects. You will only be able to upload and view data associated with your projects.

If you are the prime contact for your project and do not have your system credentials, you may request an ID and password by sending an email to project-admin@smartgrid.gov.

Data Submission Process Overview

The general process for data submission is:

1. The data are collected and recorded in the data submission form downloaded from the appropriate submission record in the Data Hub via the Action button. (Note: The Action button is a recently implemented enhancement to the Data Hub and replaces the links used previously.)
2. The data are uploaded to the Data Hub using the Action button for the appropriate submission record. As the data are uploaded they are checked for basic form errors such as missing required data, letters in number only fields, etc. Submissions that do not pass the check are not accepted.
3. Once the data are received by the Data Hub, they are in a “Submitted” state. A reviewer will screen the data to ensure that it is reasonable. For example if your project only has 10,000

households but your data show that you installed 100,000 meters, the reviewer would flag it as a potential error and ask for clarification.
4. The reviewer either accepts the data or returns the submission to the user for clarification or correction. If the data is returned to the user in a "reviewed" state, the user must make the correction and upload the data again (Step 2).
5. Once the reviewer has accepted the data it becomes available in the Data Hub reporting structure. In most cases the process stops here and no further action is required by the user for the given submission.
6. If someone on your project team finds errors in the reported data, contact the reviewer and request that the submission to be placed in the "Reviewed" status (see Step 4). Moving a submission to the "Reviewed" status enables you to re-submit the corrected data for a given submission.
7. If your project team has supporting documentation (e.g. interim reports, final reports, tariff sheets, etc.) that you would like associated with your project within the data hub reporting structure, the supporting documentation may be uploaded to the data hub using the "Project Documentation" tab.

Possible Submission States

A submission is in one of five possible states depending on where it is in the process:

- **Pending Submission** –There has been no data submitted.
- **Submitted** -- Data have been submitted, have passed an automatic check for errors and omissions, and is ready to be reviewed.
- **Reviewed** -- The reviewer has checked the data for internal consistency and has returned the data to the user for clarification or correction.
- **Partially Accepted** – The reviewer has checked the data for internal consistency, and decided to accept some of the data metrics for analysis. Other metrics in the submission are not ready for acceptance yet. This state only applies to impact_semiannually submissions.
- **Accepted** -- The reviewer has checked the data for internal consistency and reviewer questions have been satisfactorily addressed by the project team. The data is released for analysis.

Note: A user may only submit data if the submission is in the "Pending Submission" or "Reviewed" state. The data may not be modified if they are classified as "Submitted" or "Accepted."

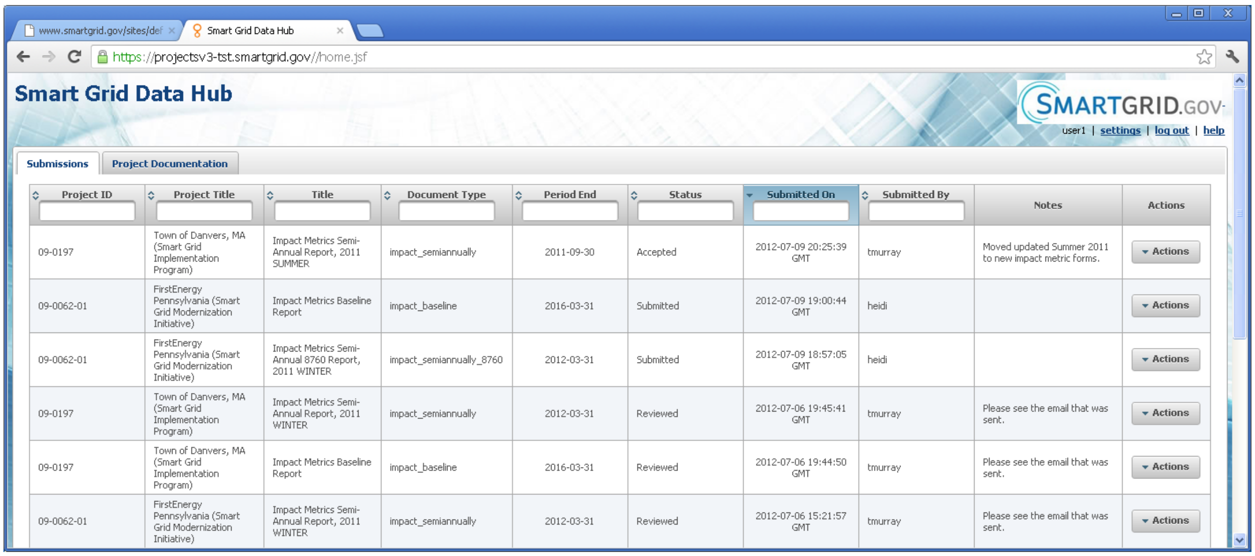
Initial Setup

When you first receive your system credentials, you must log into the system and change your password.

1. Open your browser.
2. Go to https://projects.smartgrid.gov/ . The login page will be displayed.

Figure 1: Log in screen.

3. Enter your credentials and click the “Submit” button. The screen will then refresh and display the user console.



Project ID	Project Title	Title	Document Type	Period End	Status	Submitted On	Submitted By	Notes	Actions
09-0197	Town of Danvers, MA (Smart Grid Implementation Program)	Impact Metrics Semi-Annual Report, 2011 SUMMER	impact_semiannually	2011-09-30	Accepted	2012-07-09 20:25:39 GMT	tmurray	Moved updated Summer 2011 to new impact metric forms.	Actions
09-0062-01	FirstEnergy Pennsylvania (Smart Grid Modernization Initiative)	Impact Metrics Baseline Report	impact_baseline	2016-03-31	Submitted	2012-07-09 19:00:44 GMT	heidi		Actions
09-0062-01	FirstEnergy Pennsylvania (Smart Grid Modernization Initiative)	Impact Metrics Semi-Annual 8760 Report, 2011 WINTER	impact_semiannually_8760	2012-03-31	Submitted	2012-07-09 18:57:05 GMT	heidi		Actions
09-0197	Town of Danvers, MA (Smart Grid Implementation Program)	Impact Metrics Semi-Annual Report, 2011 WINTER	impact_semiannually	2012-03-31	Reviewed	2012-07-06 19:45:41 GMT	tmurray	Please see the email that was sent.	Actions
09-0197	Town of Danvers, MA (Smart Grid Implementation Program)	Impact Metrics Baseline Report	impact_baseline	2016-03-31	Reviewed	2012-07-06 19:44:50 GMT	tmurray	Please see the email that was sent.	Actions
09-0062-01	FirstEnergy Pennsylvania (Smart Grid Modernization Initiative)	Impact Metrics Semi-Annual Report, 2011 WINTER	impact_semiannually	2012-03-31	Reviewed	2012-07-06 15:21:57 GMT	tmurray	Please see the email that was sent.	Actions

Figure 2: User Console display.

4. Click the “Settings” link in the upper right corner underneath the Smartgrid.gov logo.
5. Enter your information and update the “Current Password”, “New Password” and “Confirm Password” fields and click “Submit”.

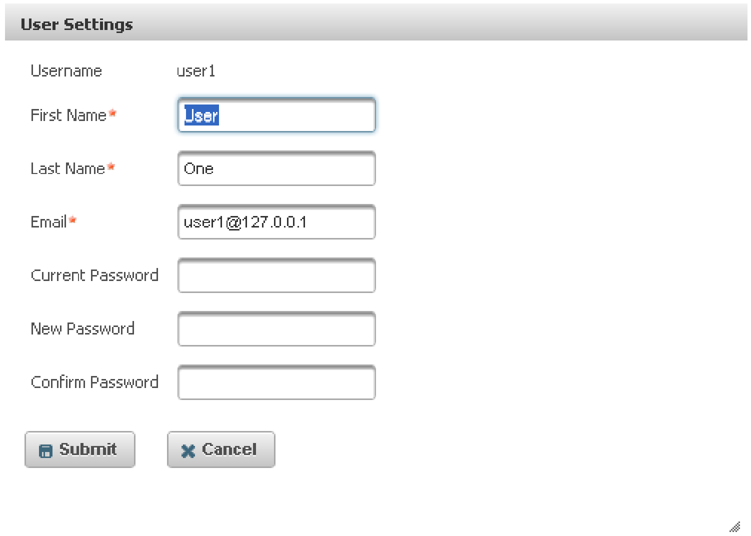


Figure 3: "User Settings" dialog box with sample information.

6. If the change was successful, you will see a "Settings Saved" message.
7. If there was an error, a message will be displayed. Correct the error and click "Submit" again.

When you have completed the password change, your initial setup is completed.

Submitting Metrics and Benefits Data

The following sections describe the various routes through the submission process.

Gathering Preliminary Information

Before you begin, make sure you know the following details:

- **The "Project ID" for each project on which you are reporting:** Project IDs will be provided with your login ID and password. If you do not know your project ID, please contact the program administrator at project-admin@smartgrid.gov.
- **The "Data Type" for the data you are submitting.** Data types are list in the project MBRP. Build and impact are two examples of data type.
- **The "Period End" date for the submission.** Period end dates are specified in the MBRP. One example is the January - March 2012 quarter.

Log In

1. Open your browser.
2. Go to https://projects.smartgrid.gov/ . The login page will be displayed.
3. Enter your credentials and click "Submit" The user console will be displayed.
4. Locate the submission that you want to file.

Locate the Submission

The user console will display a list of the submissions for the project(s) you are associated with similar to the list shown in Figure 4.

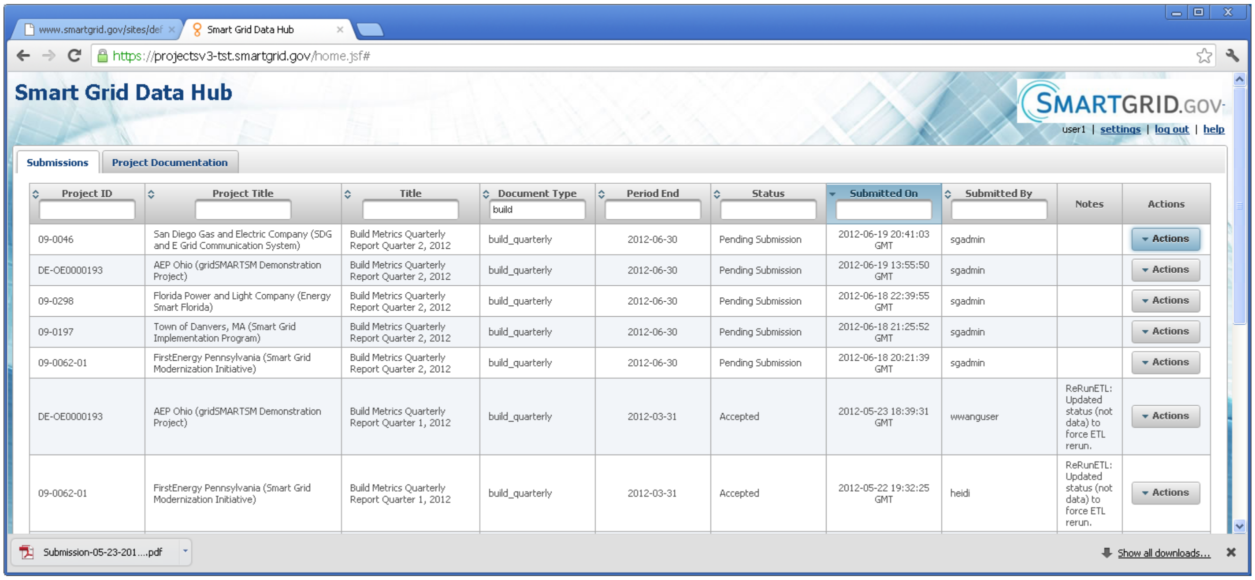


Figure 4: Submission table in the user console.

Locate the submission you want to file. Verify that it has the correct Title, Document Type, and Period End date. Verify that it is in "Pending Submission" or "Reviewed" status. If the submission is not in "Pending Submission" or "Reviewed" status, you will not be able to upload your data.
Columns in the submission table can be filtered and sorted to help the user find the submission of interest. In Figure 4, the records in the submission table have been sorted in descending order by “Submitted On” date (column heading highlighted in blue), and filtered to show only build submissions (“Document Type” field has been populated with the word “build”.) It is important to note here that filter arguments are case sensitive.

Once you have located the submission record of interest from the list presented in the submission table, you can choose to either submit your data in a PDF form or an XML document.

PDF Submission

The PDF option presents you with a downloadable form to fill out and submit. You will download a PDF file, fill it out, and submit it to the system. The PDF option requires the Adobe Acrobat Reader (or a similar tool) be installed on your computer. The Adobe Acrobat Reader may be downloaded at http://get.adobe.com/reader/.

Once you have located the submission that you want to file and verified the Status and Period End date:

1. Click on the Actions button for the submission you are working on, and select the “Download Data” action from the drop down menu that appears under the Actions button.

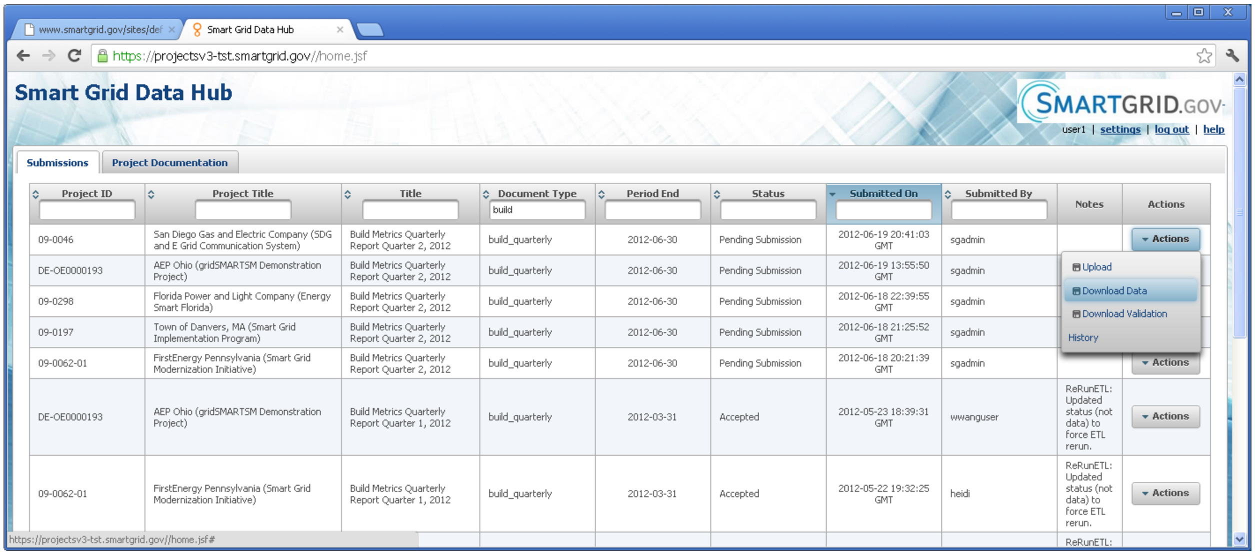


Figure 5: Selecting Download Data action via the Action button.

2. Open the PDF with the Adobe Acrobat Reader.
3. Fill out all the required fields in the PDF document
4. Save and close the PDF document.

You may save and close the document as often as you wish. You may pass the document on to other members of your team to complete if you do not have all the necessary data. Once all the data has been entered you can upload the data either by using the embedded "Submit" button in the PDF, or by using the Upload Action in the Data Hub.

Submitting the PDF Using the Embedded Submit Button

To submit the data from an open PDF document, use the "Submit" button embedded in the PDF document:

1. Open the PDF using Adobe Acrobat Reader.
2. Scroll down to the last page. You may want to verify that the data in the document are correct.
3. Click the "Submit" button at the bottom of the last page.
4. The PDF document will check for missing data and other errors. If any errors are reported, fix them in the document and repeat step
5. If there are no errors you will be asked for your user name and password.
6. The PDF will be submitted to the Data Hub. The Data Hub will then verify that the submission needs to be filed and that the submitted data are of the correct form (e.g.; numbers are listed in number fields, dates are listed in date fields, etc.)
7. If there are errors, Adobe Acrobat Reader will display a new PDF document describing what the errors are. Switch back to the submission PDF, correct the data errors and click on the Submit" button at the bottom of the form (Step 4).
8. If there are no errors, Adobe Acrobat Reader will display a new PDF document that reads "Created Submission:" followed by a number.
9. The status of the submission will automatically change to "Submitted" in the Data Hub.

At this point you have successfully submitted the data and may log out or submit more data for your project(s). You may save and close the submission PDF.

Submitting the PDF Using the Upload Action in the Data Hub

To upload data from a saved PDF file on your system:

1. Log in to the Smart Grid Data Hub.
2. Locate the submission record for which you want to file.
3. Click on the Actions button for the submission record you are ready to file. Select the "Upload" option from the drop down menu that appears under the Actions button.

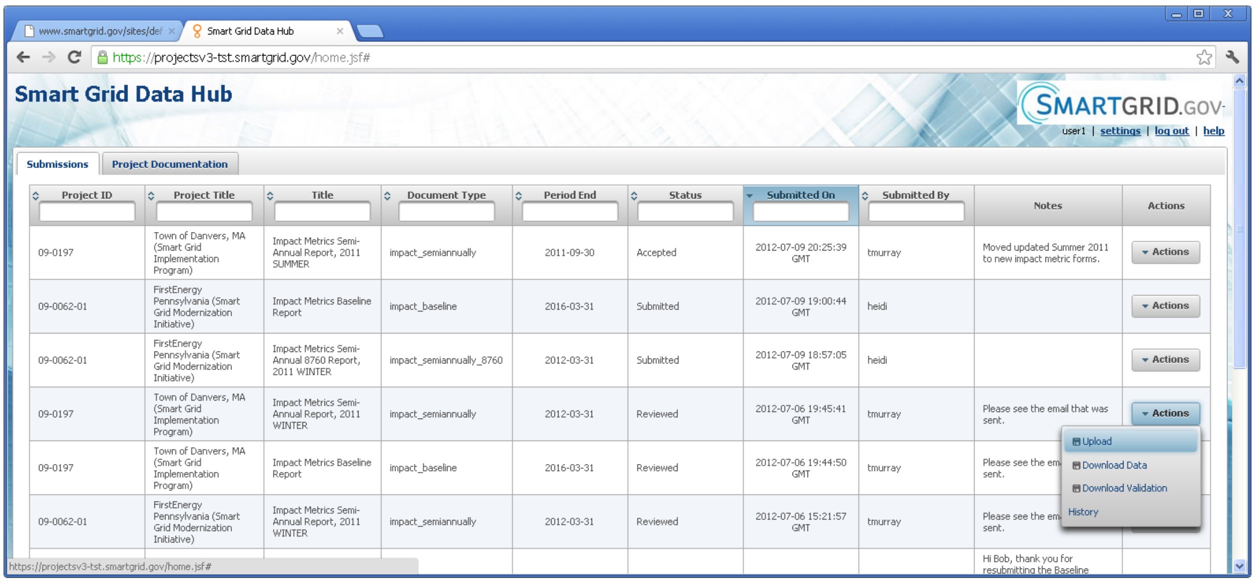


Figure 6: User console display with Upload action indicated.

4. The Data Hub will present a dialog box similar to the one shown in Figure 7. Click on the "Select Submission" button in the dialog box. Your system browser will open a window and allow you to select the PDF file from your system. For impact submissions, the user will also be asked if the data in the submission needs to be marked commercially valuable. This new aspect of the dialog box is a Department of Energy requirement that will be used to classify impact metric data in the event of a Freedom of Information Act (FOIA) request for data generated by the SGIG and SGDP projects.

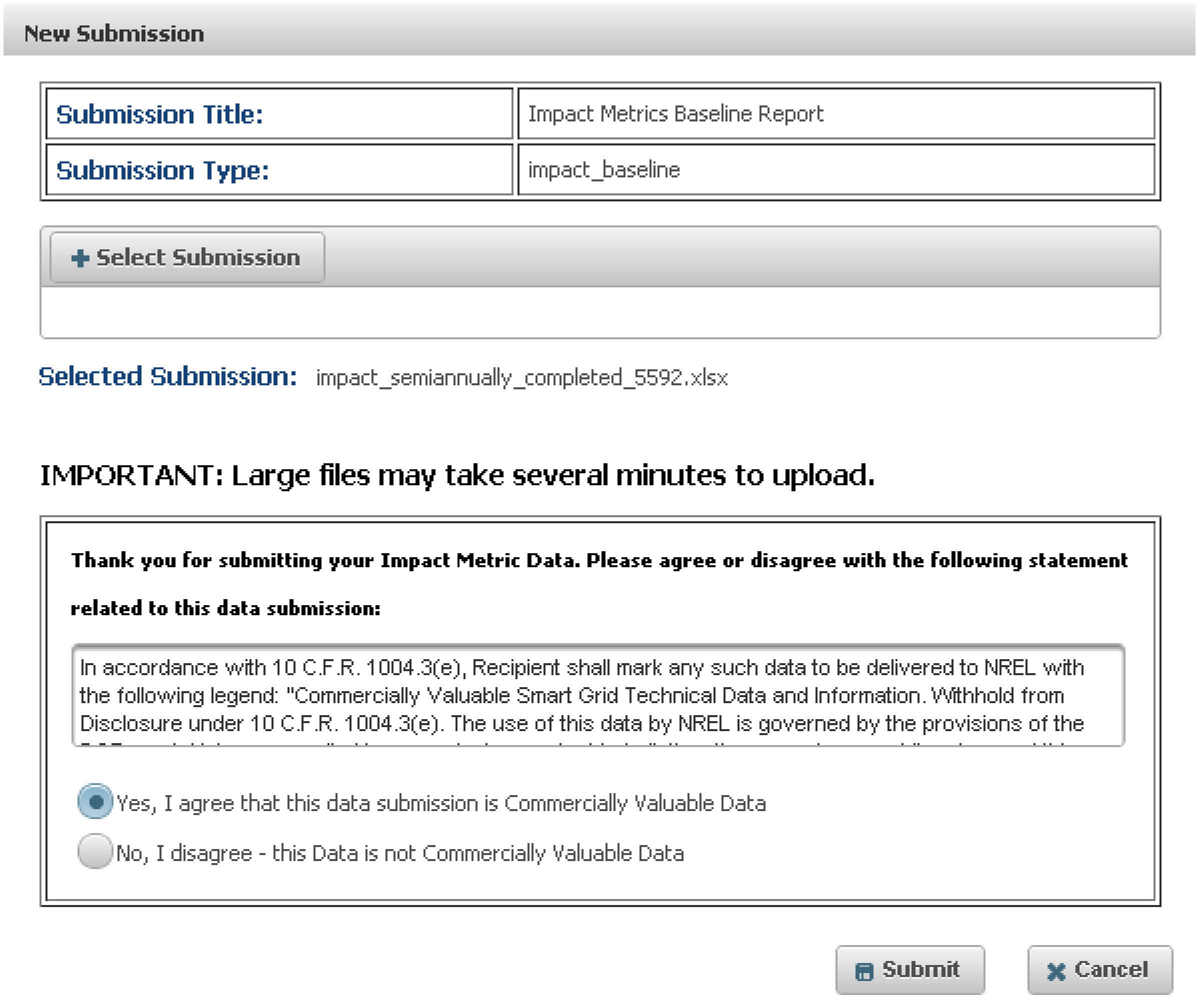


Figure 7: Selecting the PDF file to upload.

5. Once a PDF file has been selected for submission, the name of the file will appear in the dialog box next to “Selected Submission:” and the Submit button will become active for the user.
6. Click the Submit button in the dialog box. A progress bar will indicate the progress of the upload process to the Data Hub. It is import to note that large files may take several minutes to upload, depending on your internet connection speed.
7. If there are errors, you will see an error dialog box that describes the errors. To correct the errors:
    a. Open the PDF document with the Adobe Acrobat Reader.
    b. Correct the data in error.
    c. Save the document.
    d. Return to step 3 to submit the updated PDF file.
8. If there are no errors you will see a dialog box that says "Submission Successful".
9. The status of the submission will automatically change to "Submitted" in the Data Hub.

At this point you have successfully submitted the data and may log out or upload more data for your project(s).

XML Submission

The XML submission process is intended for users who have a strong understanding of XML document creation and validation. This document does not cover the specifics of creating and validating XML documents.

Start by downloading the XML Schema Document (XSD). The XSD is used to validate the XML document. In addition, it is used by some tools to assist in the creation of the XML document.

1. Click on the Actions button for the submission you are working on, and select the “Download Validation” action from the drop down menu that appears under the Actions button. This will download the XSD file to your system.

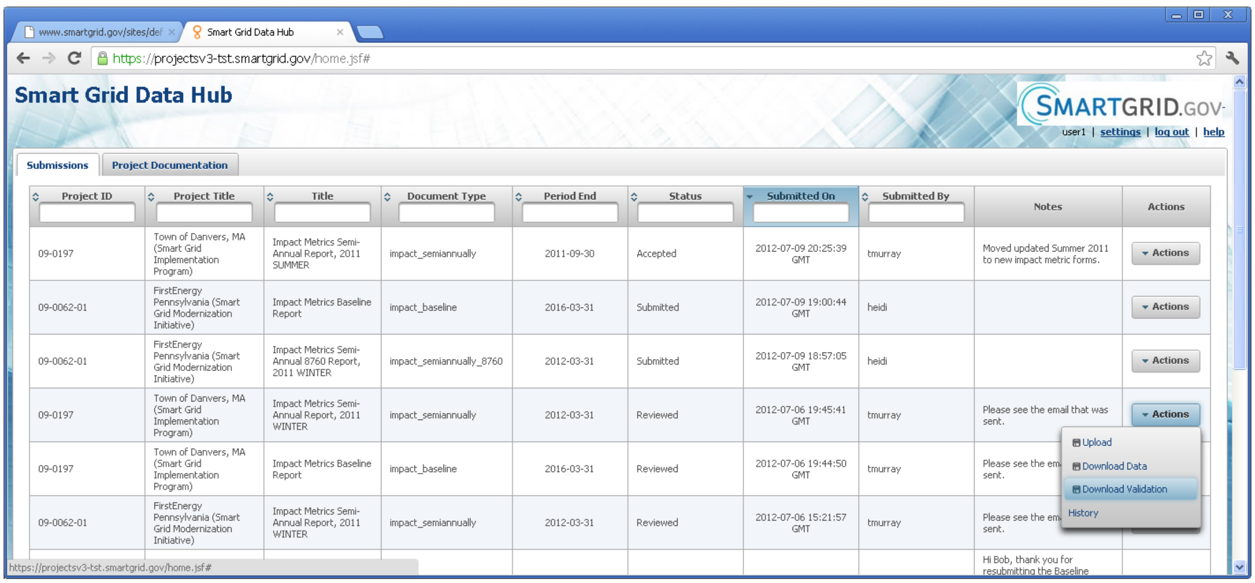


Figure 8: User console display with “Download Validation” action indicated.

At this point you will likely log out of the Smart Grid Data Hub while you create your XML document using the XSD file and your XML editing program. (The process to create and validate such a document is beyond the scope of this document.) Once your XML file is created and saved, contact project-admin@smartgrid.gov to proceed with the upload of your XML file.

Correcting Errors

Occasionally a submission will be returned by a reviewer for further clarification or correction. A reviewer may return a submission for any number of reasons related to data quality and reasonableness. When the reviewer returns the submission, he or she will explain why the submission was returned. Returned submissions have a status of "Reviewed."

To locate submissions with issues:

1. Log in to the Smart Grid Data Hub.
2. In the entry field at the top of the Status column in the Submissions table, key in the word “Reviewed”. The submissions will be filtered to show only the submissions in the Reviewed status. It is important to note here that filter arguments are case sensitive.

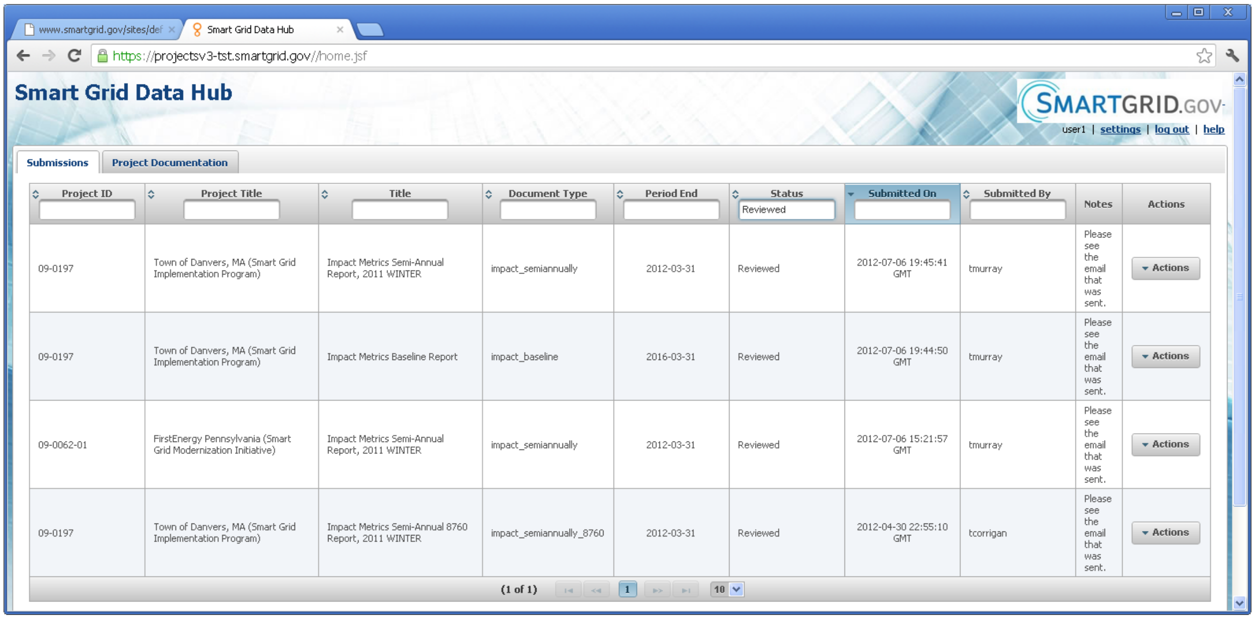


Figure 9: User console display filtered to show submissions with a "Reviewed" status.

3. The "Notes" column and correspondence from the reviewer will specify the issues with the submission.
4. Click on the Actions button for the submission you are working on, and select the "Download Data" action from the drop down menu that appears under the Actions button. Open the PDF with Adobe Acrobat Reader.
5. Correct the fields that have issues.
6. Re-submit the PDF using one of the PDF submission methods detailed above.

Submitting Project Documentation

The following section describes the process for uploading supporting documentation for your project to the data hub. Supporting project documentation (outside of the build and impact metric data submission process which is described above), could include interim project reports, final project reports, relevant tariff sheets, etc. The goal of this process it to provide a centralized archive for storing all relevant project documentation so that it may be organized and made available to the Data Hub reporting structure.

To submit supporting project documentation:

1. Log in to the Smart Grid Data Hub.
2. The default presentation is the Submissions tab (which is used for submitting build and impact metric data). Move to the project documentation tab by clicking on the Project Documentation tab which is located to the right of Submissions tab in the upper left hand corner of the screen and underneath the Smart Grid Data Hub title as shown in Figure 10.

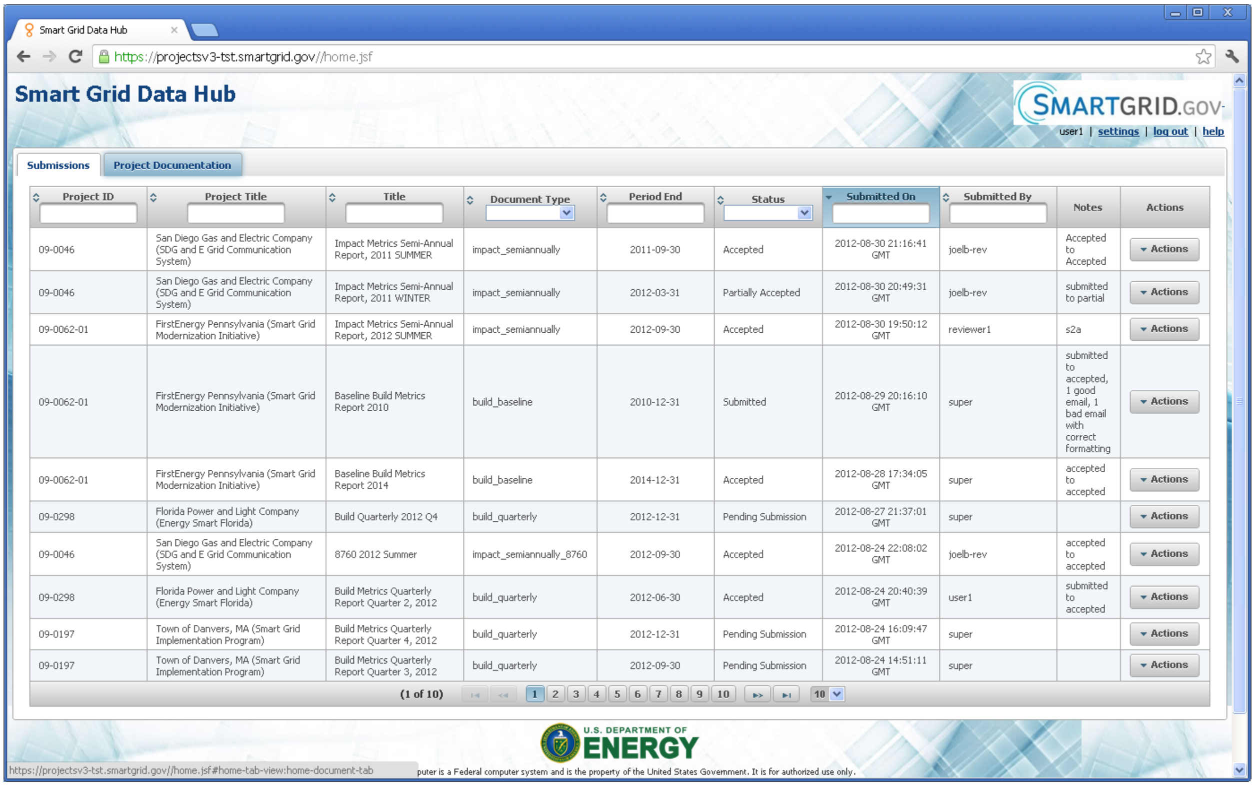


Figure 10: User console display with the Project Documentation tab highlighted in blue. Click on the Project Documentation tab to begin the process for submitting supporting project documentation.

3. To add new project documentation, click on the Add Project Documentation button in the upper right hand corner of the screen.

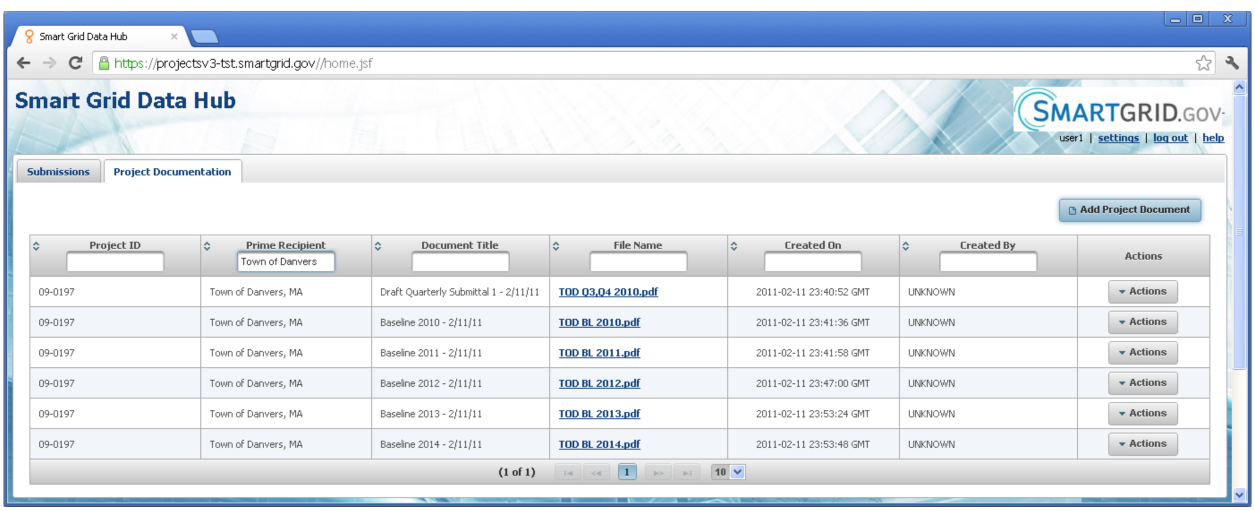


Figure 11: Click on the Add Project Document button (highlighted in blue) to add a new project document to your project.

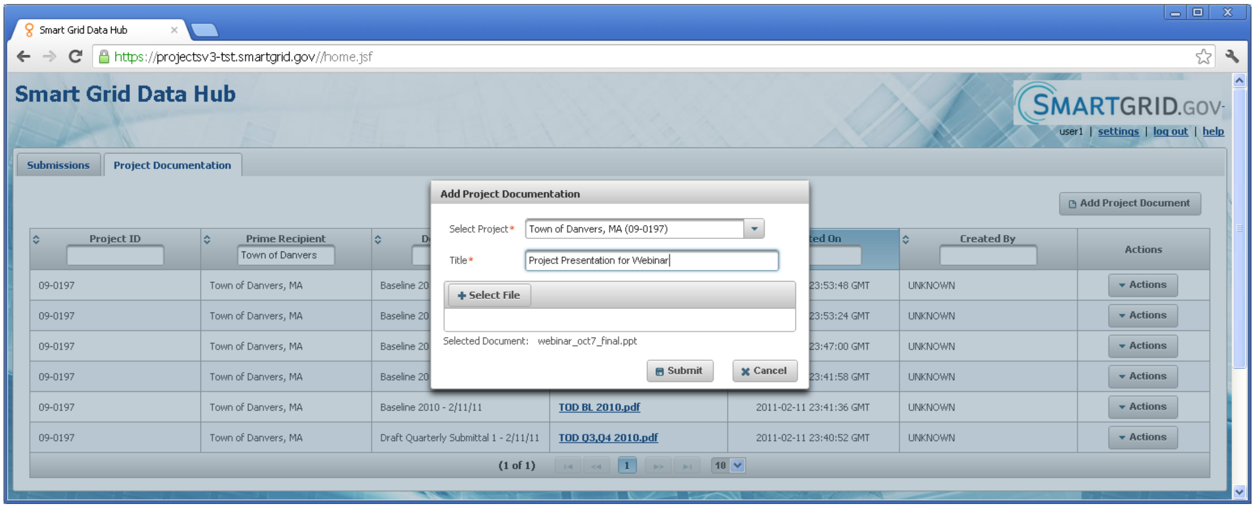


Figure 12: Dialog box that allows a user to enter project document information and attach a file.

4. Click the Submit button to upload the selected document to the Data Hub. The user interface will indicated a successful upload with a message and the uploaded document will appear as a new record in the Project Documentation table. Figure 13 shows the newly uploaded document (Project Presentation for Webinar) at the top of the table.

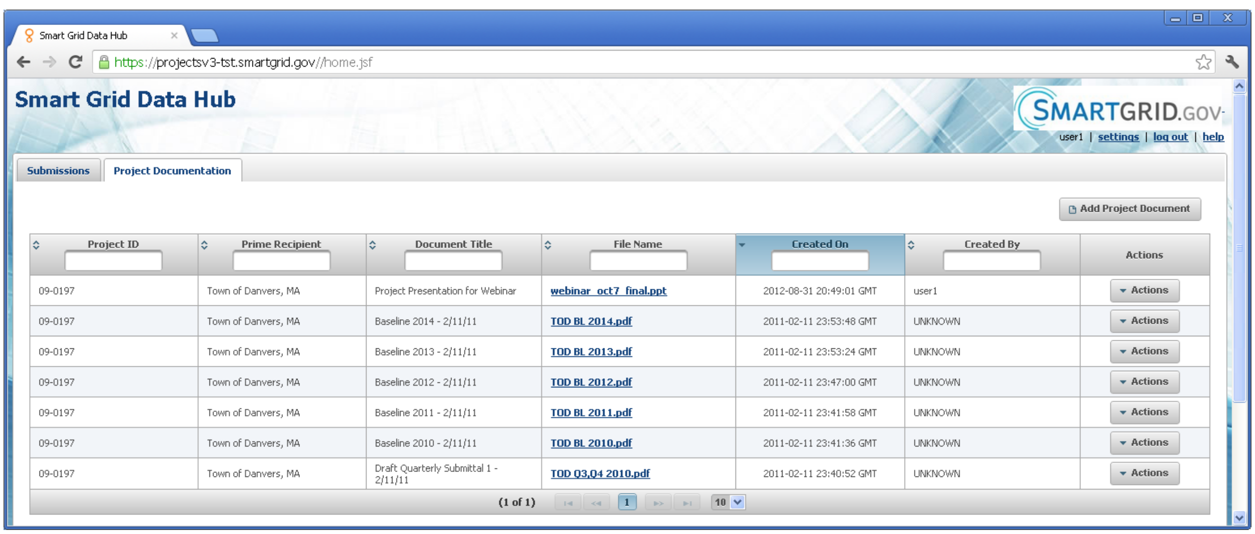


Figure 13: Project Documentation table showing a newly uploaded document by user1.

5. To remove a project document, click on the Actions button for the document you need to delete and select the Remove action as shown in Figure 14.

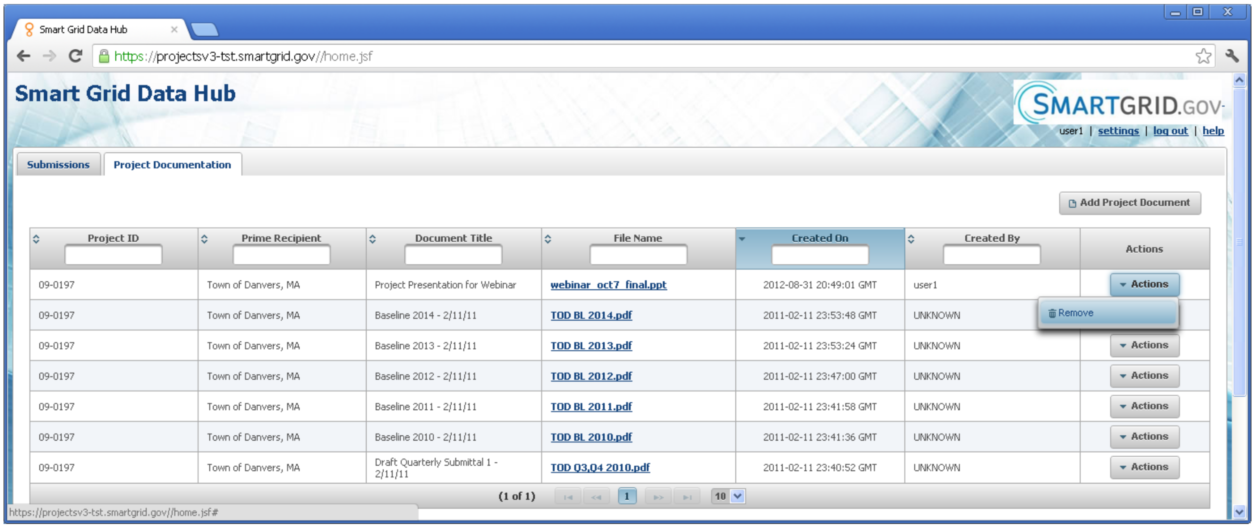


Figure 14: Click on the Actions button and select Remove to delete a project document.

6. Confirm the document deletion by clicking the Yes button in the Remove Project Document dialog box as shown in Figure 15. A successful document deletion will be indicated by a confirmation message on the screen.

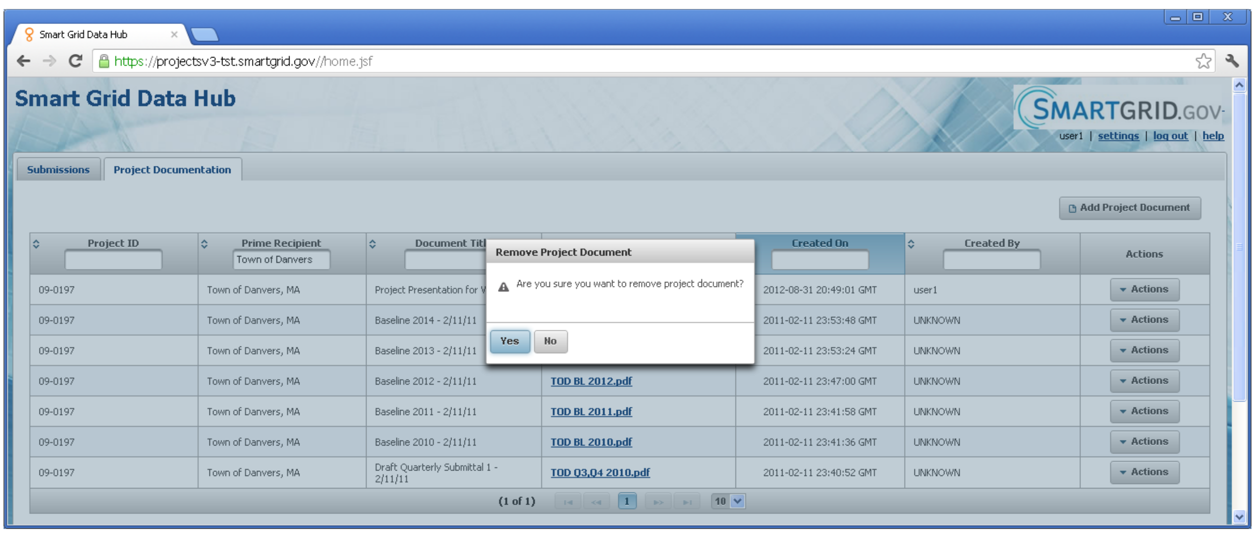


Figure 15: Click the Yes button to confirm the document deletion action.