Honeywell

Honeywell Online Tools (H.O.T.) for Fire Voltage Drop Calculator (VDC) User Guide

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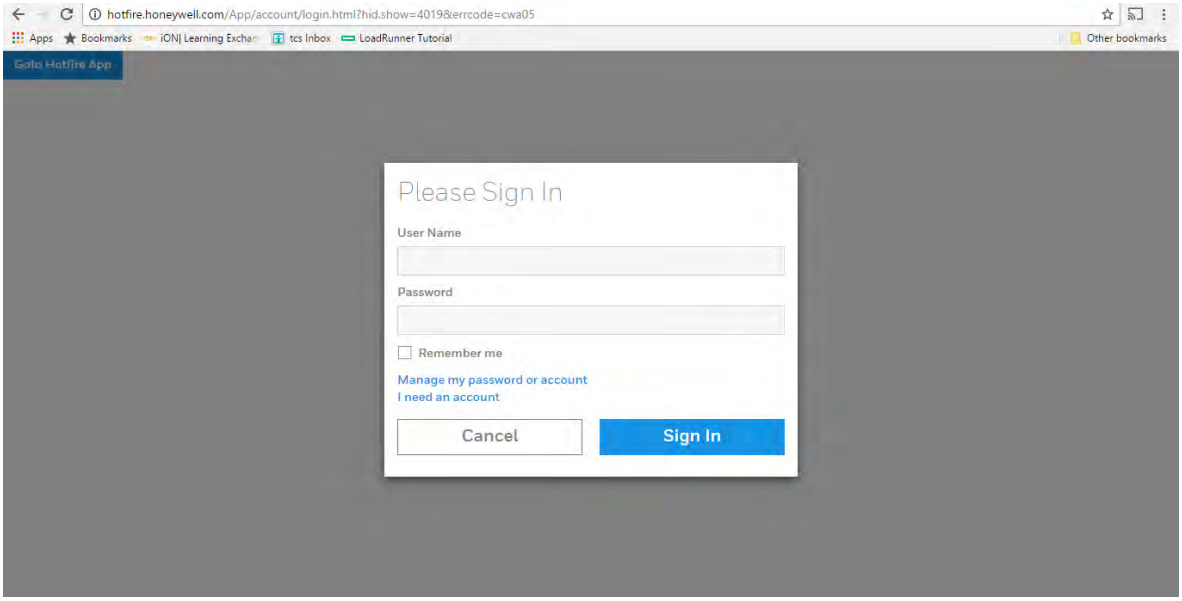
1. Features

1.1 Login to the Application – Si

Type the URL https://hotfire.honeywell.com on any browser. Click on Sign In/Register button at the top right corner. Type the 'Username' and 'Password' and click 'Sign In' button. Select the ‘Remember me’ check box so it will remember the login credentials. Users with other active Honeywell accounts, such as ESD and eVance loggings can try using the same credentials.



1.2 Managing the password or Account details

If you click on the 'Manage my password or account' link, you will navigate to https://cwa.honeywell.com/profile, where you can do the following operations:

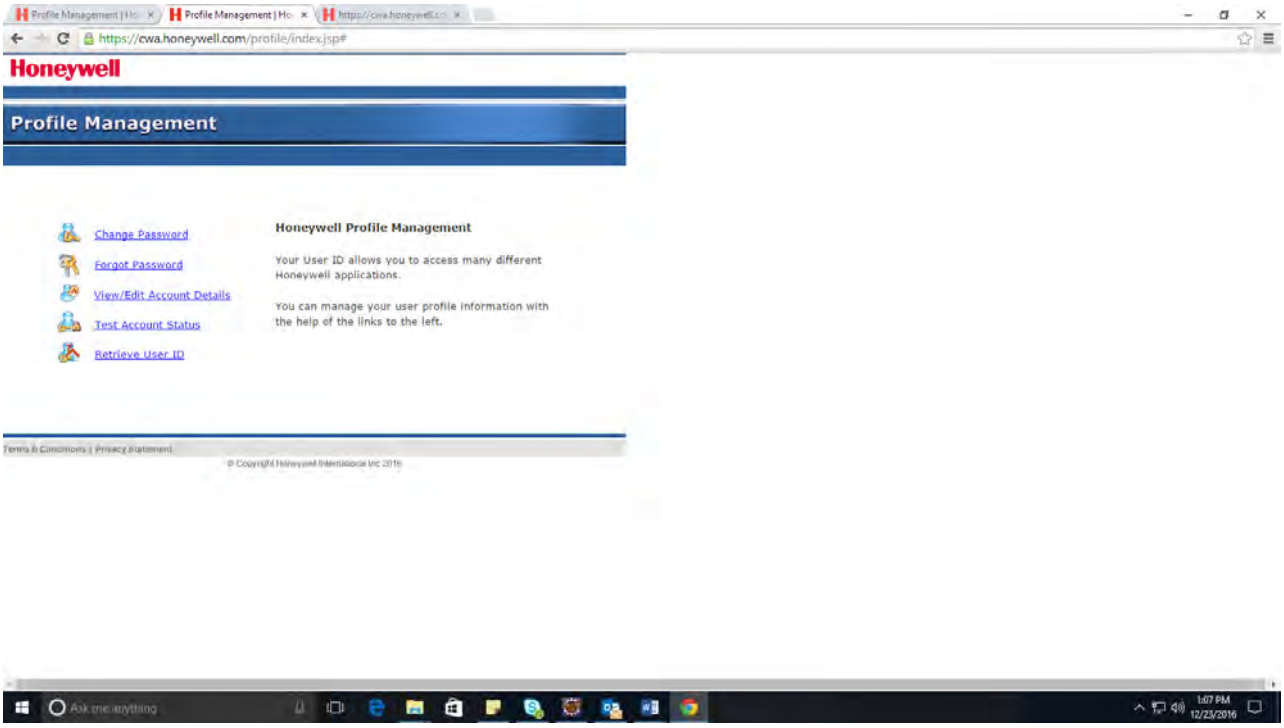
a) Change Password – To change the existing known password.

b) Forgot Password – To set the password for an account, in which the password is forgotten.

c) View/Edit Account details – To view the details of the account and edit it.

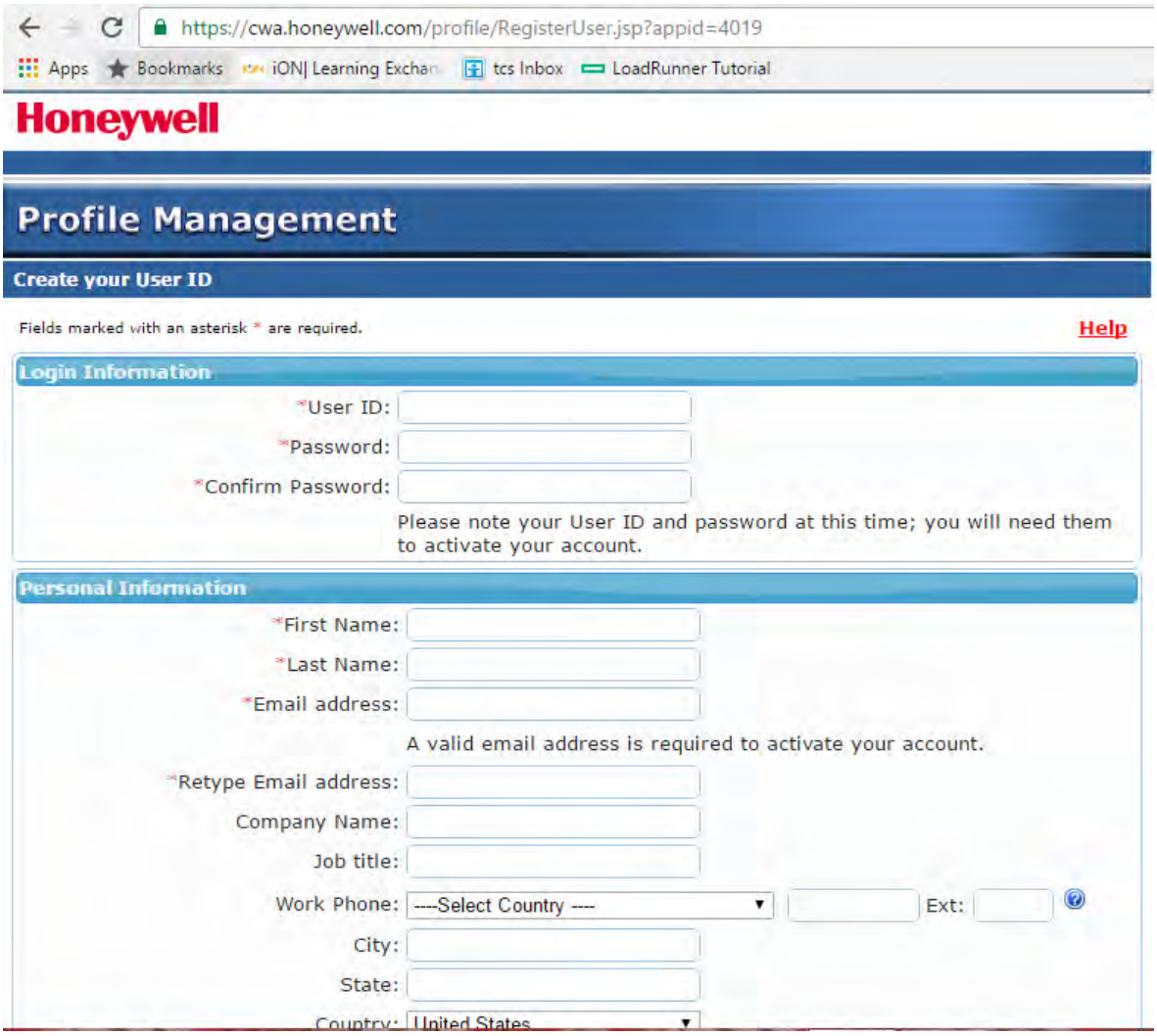
d) Test Account Status – To check the authentication of user.

e) Retrieve User ID – To retrieve a User ID you will have to enter your email ID.



1.3 Login to the Application – Sign Up

If you don't have valid credentials, click on 'I need an account' in the Sign In page which will navigate to the new profile Registration page (https://cwa.honeywell.com/profile/RegisterUser.jsp?appid=4019) as displayed below.



2. Projects Home page

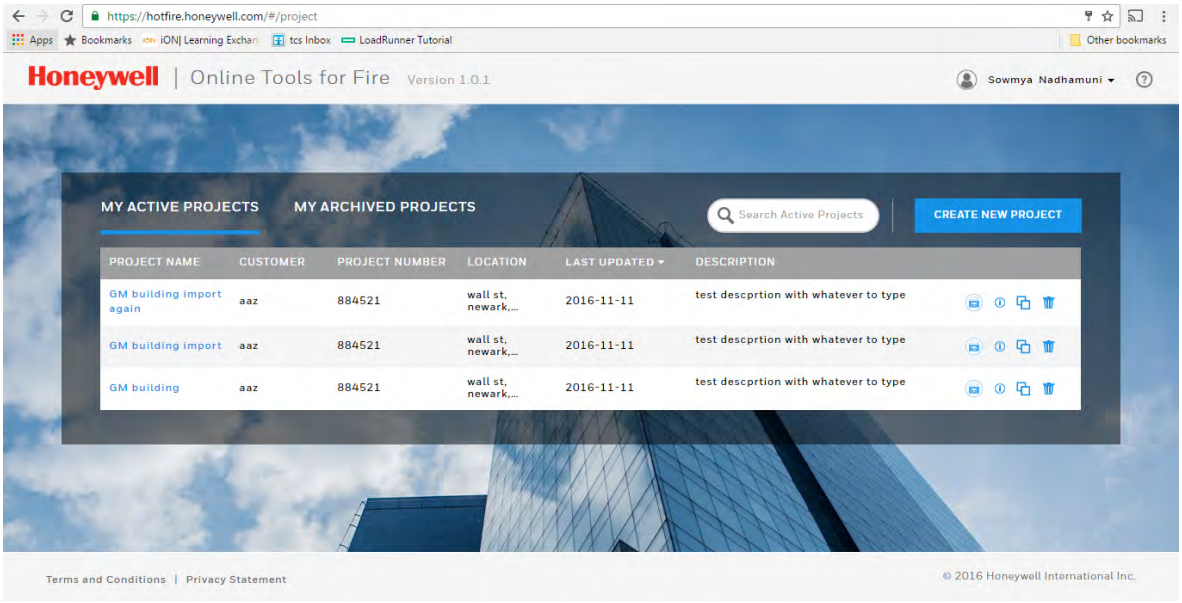
2.1 My Active Projects

After logging into the application, user navigates to the Projects home page where the list of Active projects are displayed. The header contains Honeywell logo followed by the Version number on the left and the User Name on the right.

There are two tabs displayed: "My Active Projects" tab and "My Archived Projects" tab. The Active projects are displayed by default under My Active projects tab. There is a Search box where the user can type and search for a specific project. Create New Project button is displayed after the Search box.

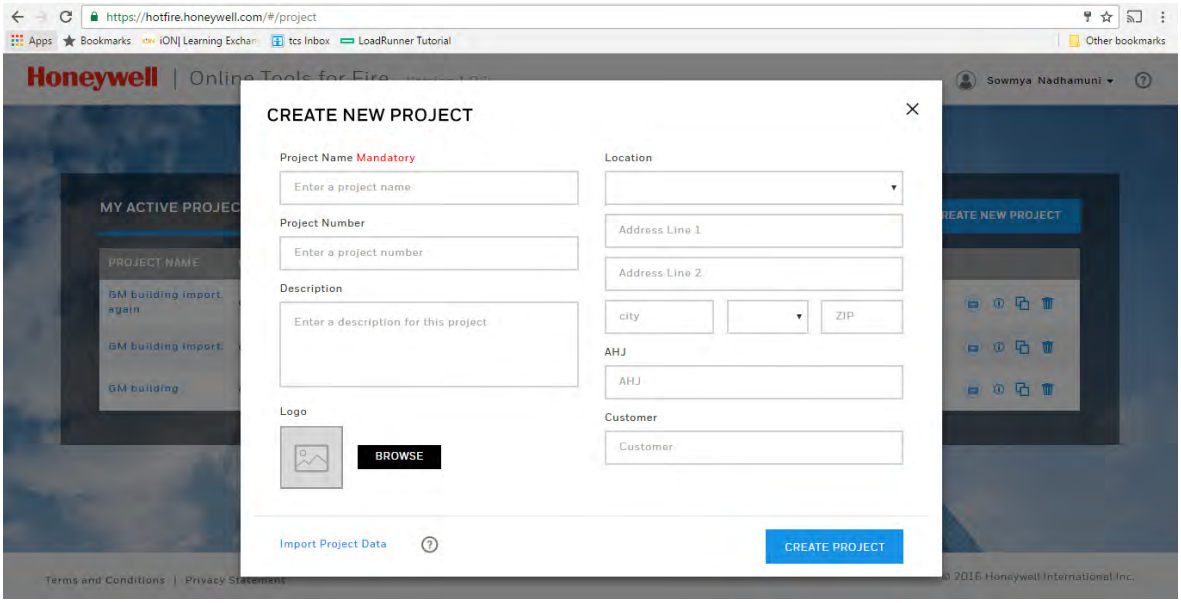
The projects table displays the Project Name, Customer, Project Number, Location, Last Updated and Description details.

Each project displays options to Archive, Edit, Copy and Delete on the right.

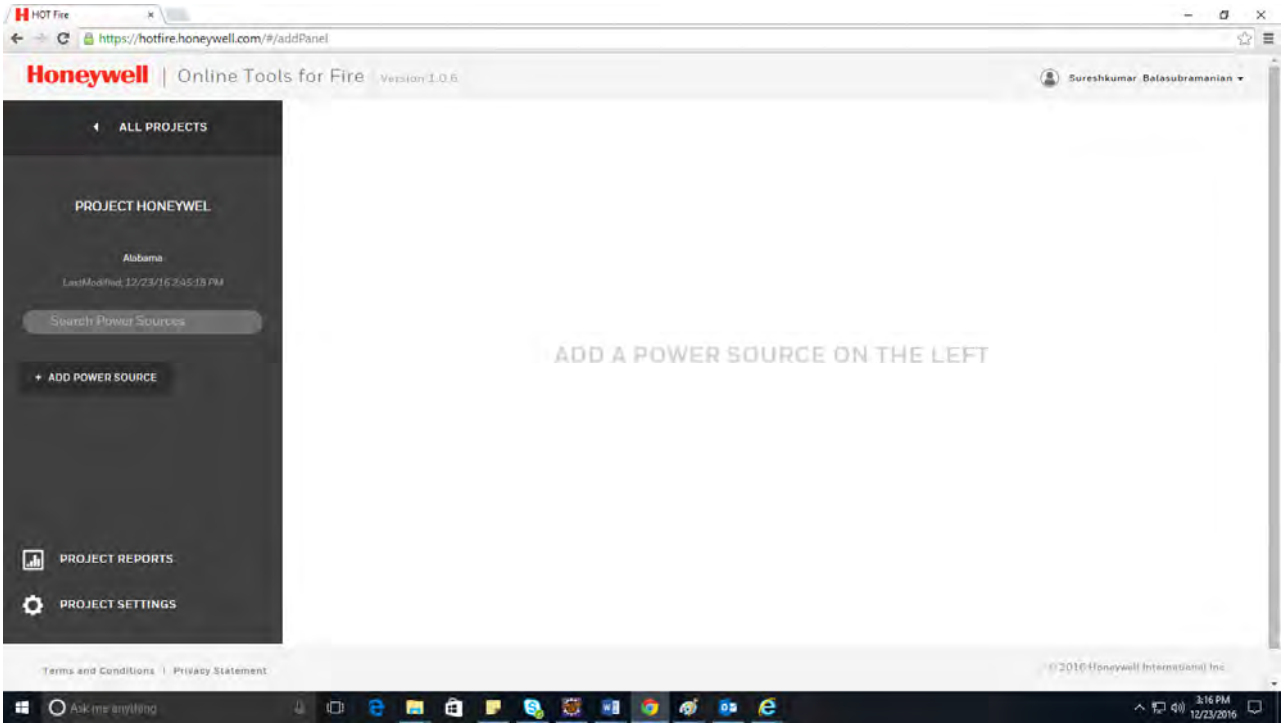


2.1.1 Create Active Project

Click on "Create New Project" button and Create New Project is displayed. User can enter the details of the project like ‘Project name’, which is mandatory, and other optional fields. Once all the information is entered click ‘Create Project’ button to start a new project. The application will then navigate to the ‘Project Details’ screen.

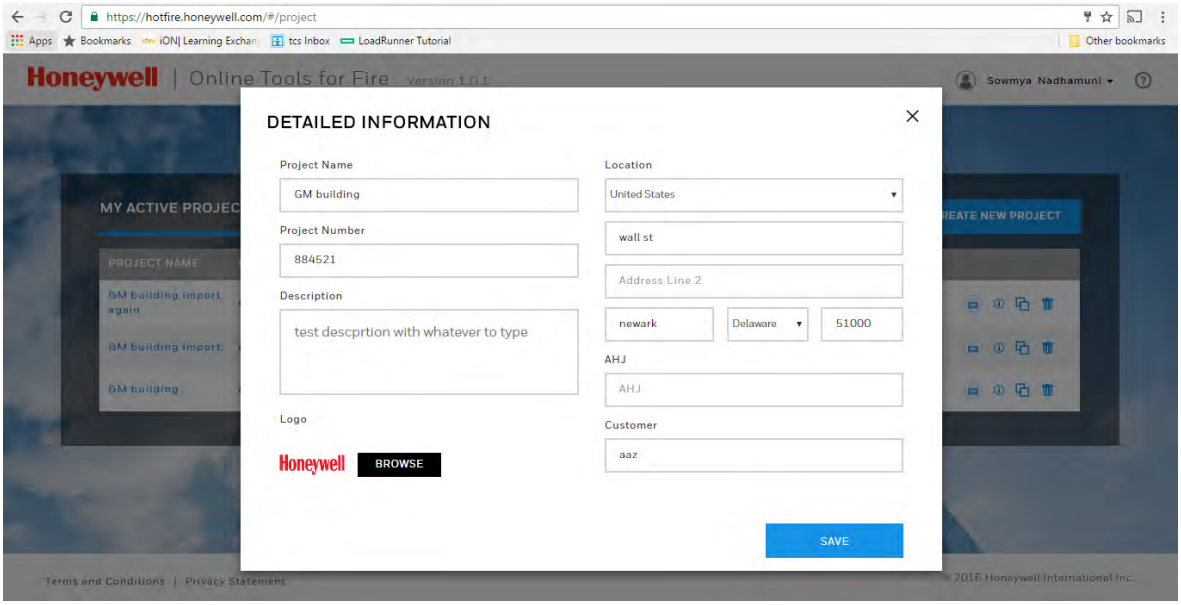


On entering the values and clicking on the ‘Create Project’ button, you will navigate to the screen below.



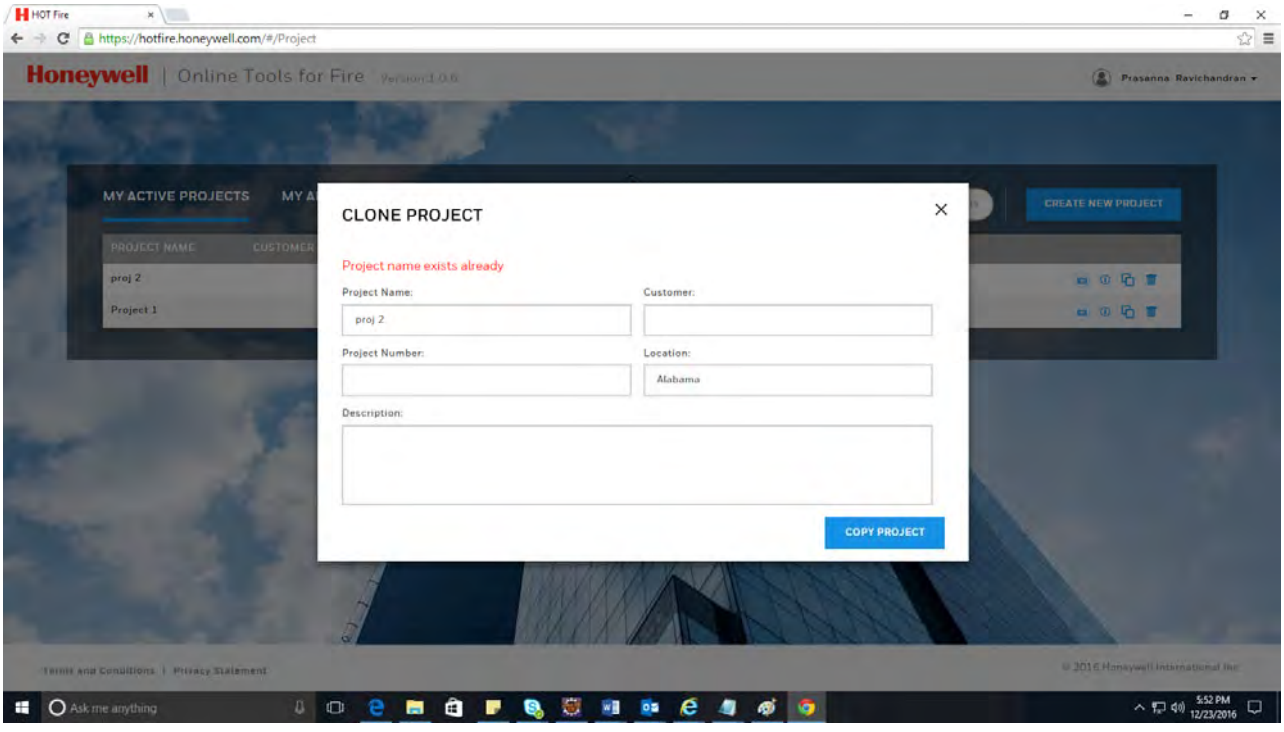
2.1.2 Edit Active Project

You can edit the project details using the ‘Detailed Project View” icon in the Projects home page and making the required changes, click the “Save” button to save the changes made to the project



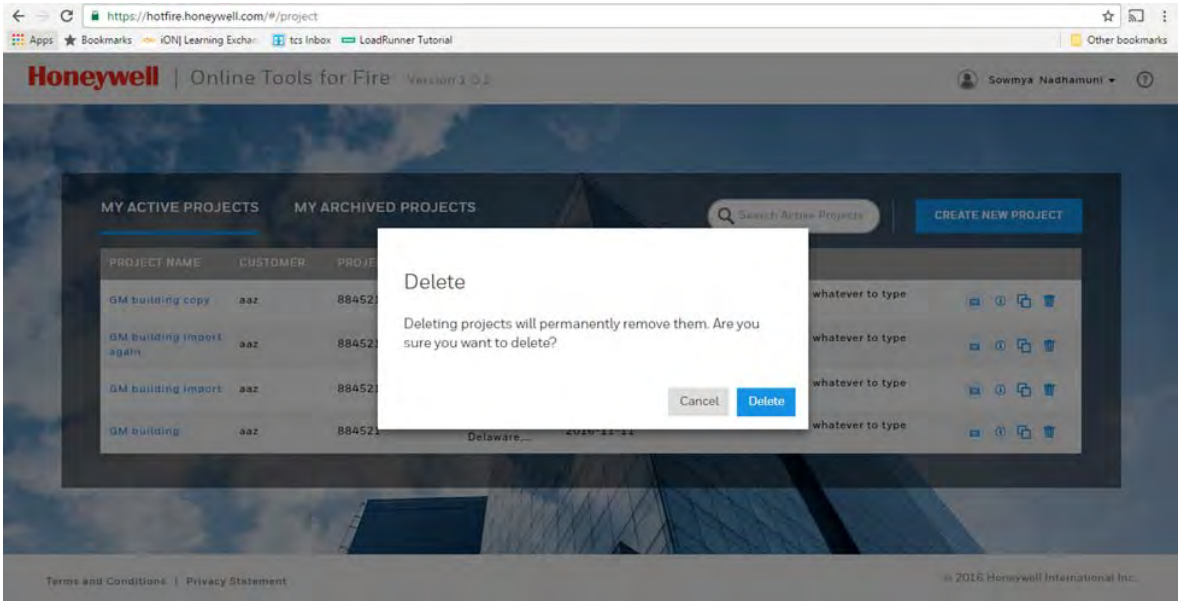
2.1.3 Copy Active Project

User can click on 'Copy' button to copy the project and save the changes made to the copied project



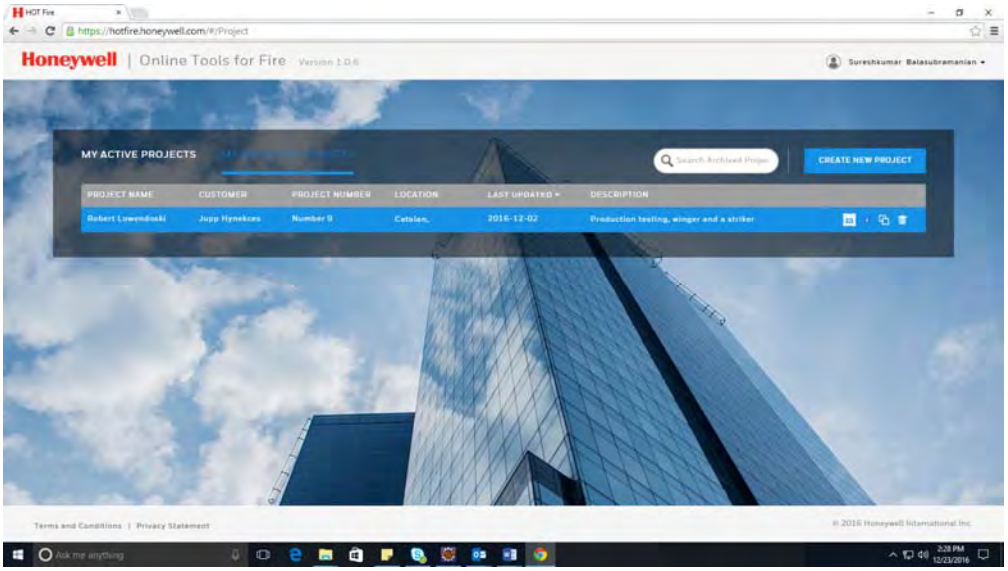
2.1.4 Delete Active Project

Click on 'Delete' icon for an Active project. An alert message is displayed for the user to confirm if the project can be deleted permanently or not.



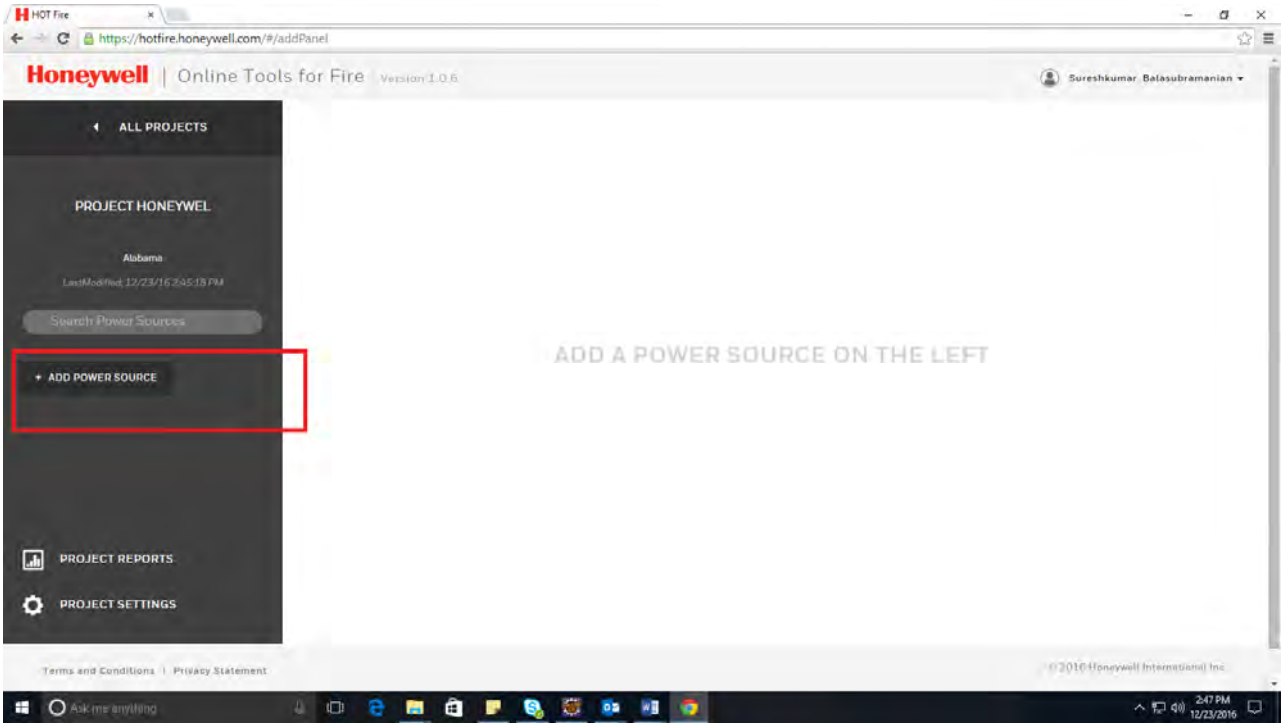
2.2 My Archived Projects

User can archive projects from the ‘My Active Projects’ section by clicking the ‘Move to Archive Projects’ icon against that project, so that they will be moved to “My Archived Projects” section for future reference.

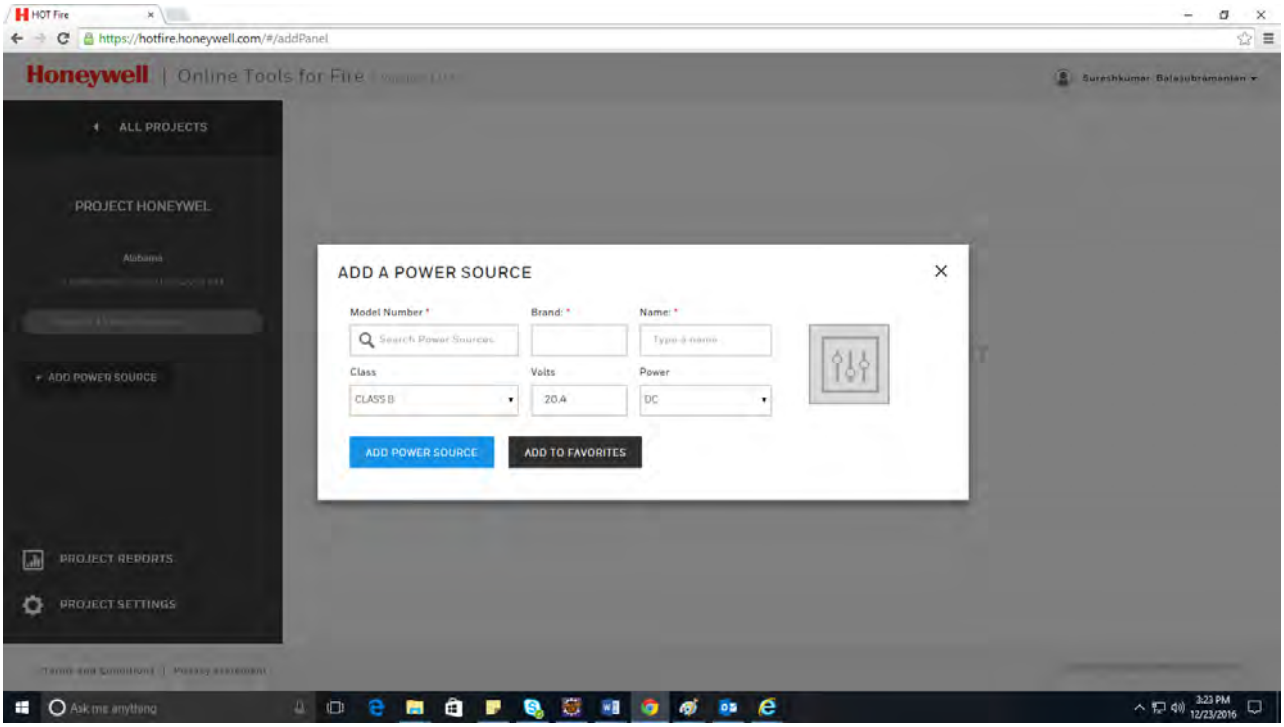


3. Adding a power source

You can add a power source in the newly created project, by clicking on the '+ ADD POWER SOURCE' button.



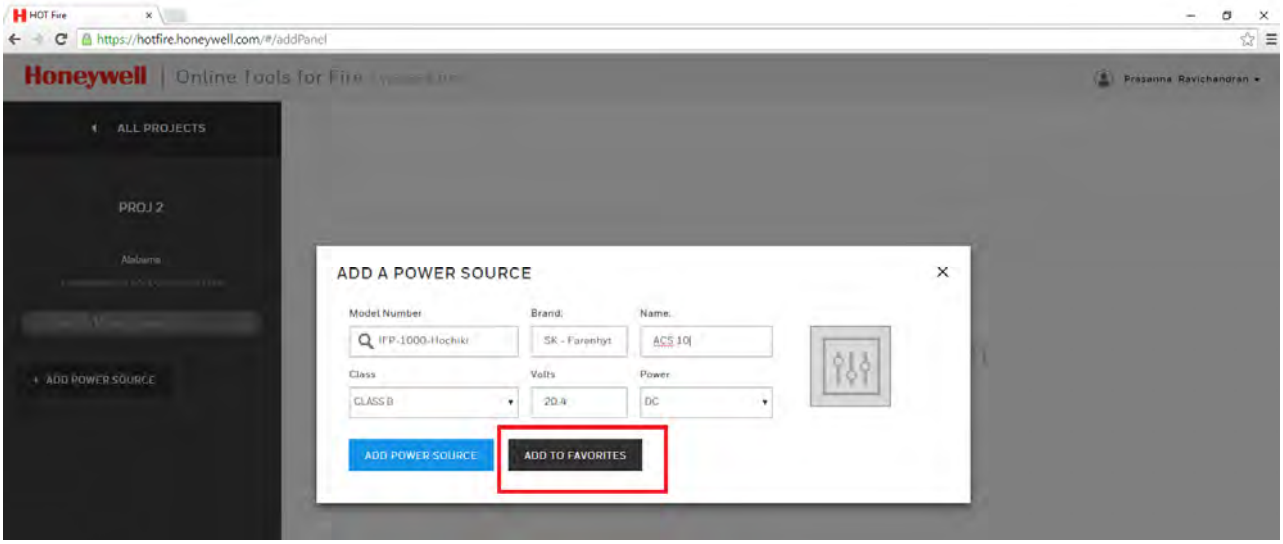
After clicking '+ Add Power Source', the 'Add a Power Source' dialog will be displayed.



On entering the mandatory details in it and clicking on the 'Add power source' button, it will be added to this project.

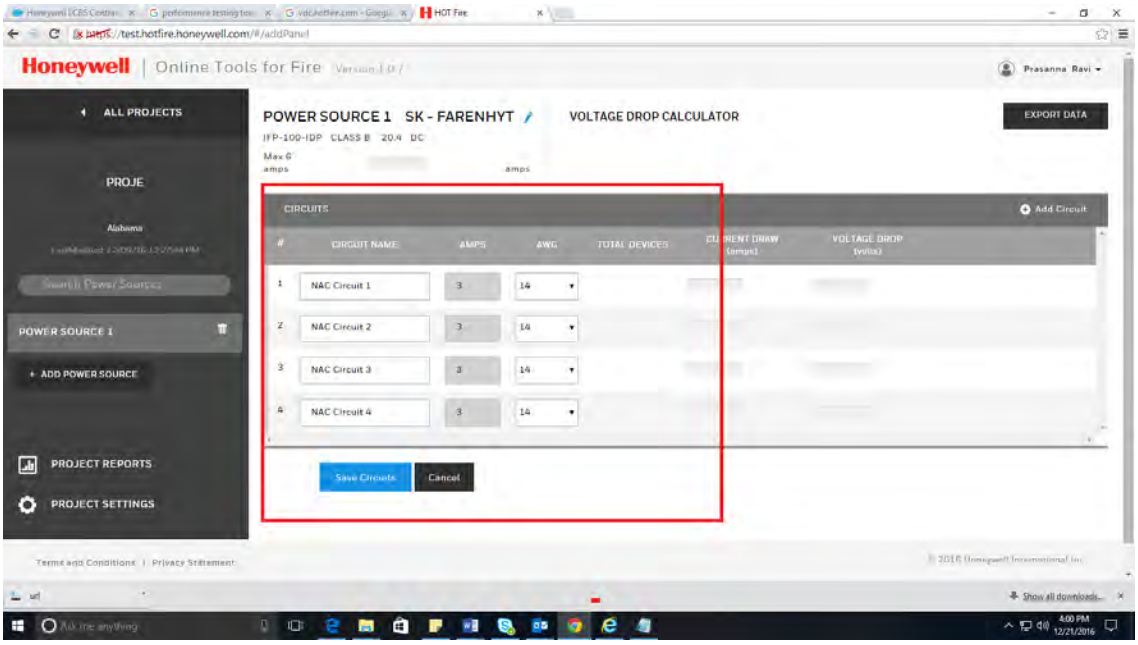
3.1 .Add to Favorites:

You can click the ‘Add to Favorites’ button so that the power source selected will be listed at the top of the list of devices in the future.

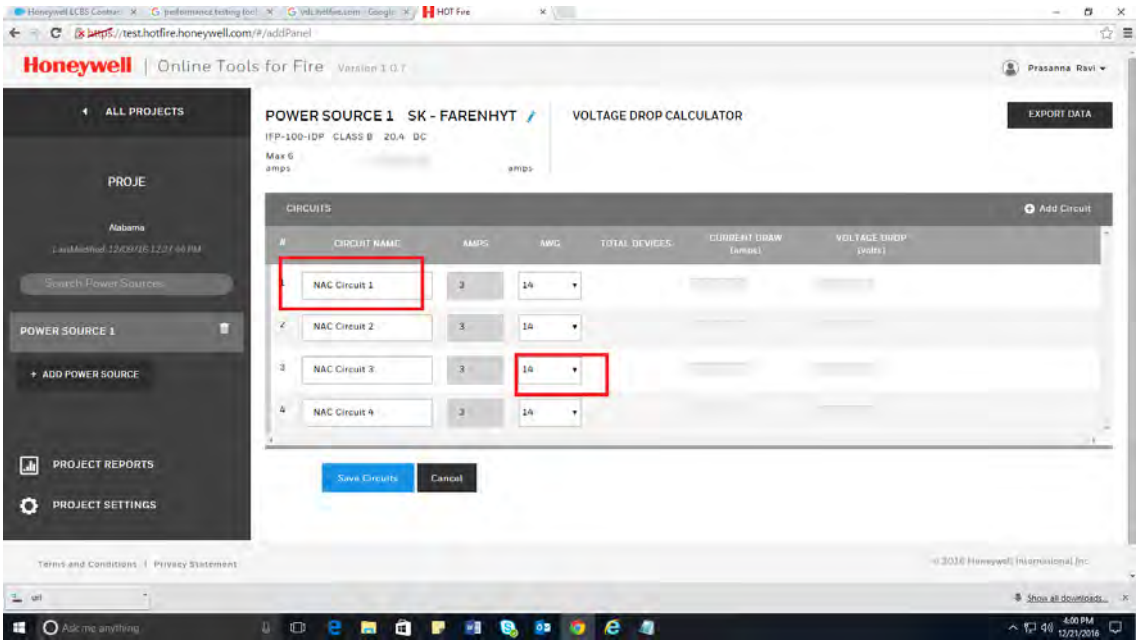


4. Circuits:

After adding a power source to the project, the list of Notification Appliances Circuits (NACs) will be pre-populated based on the power source specs.

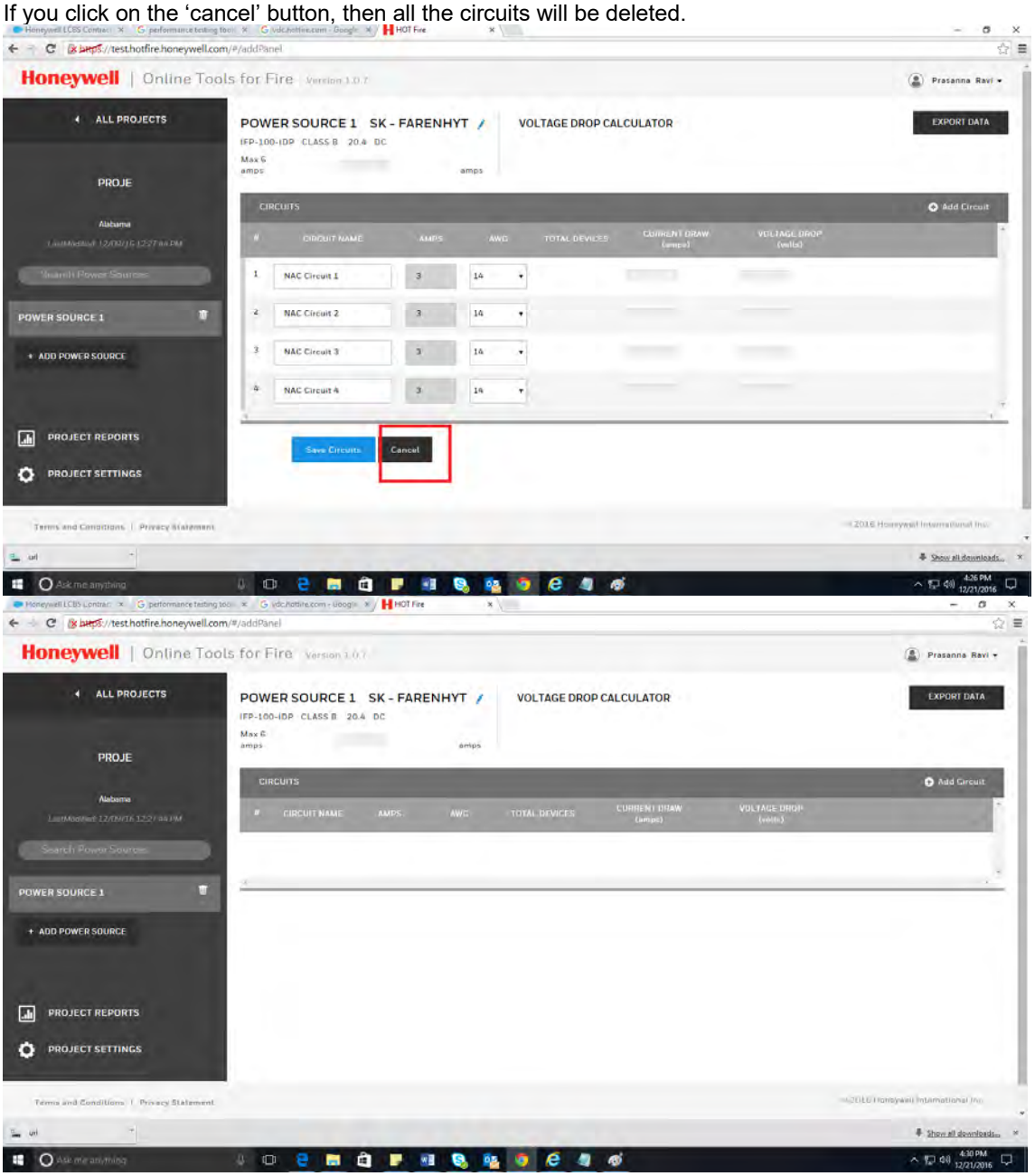


You can edit the names or AWG for each circuit at this point.



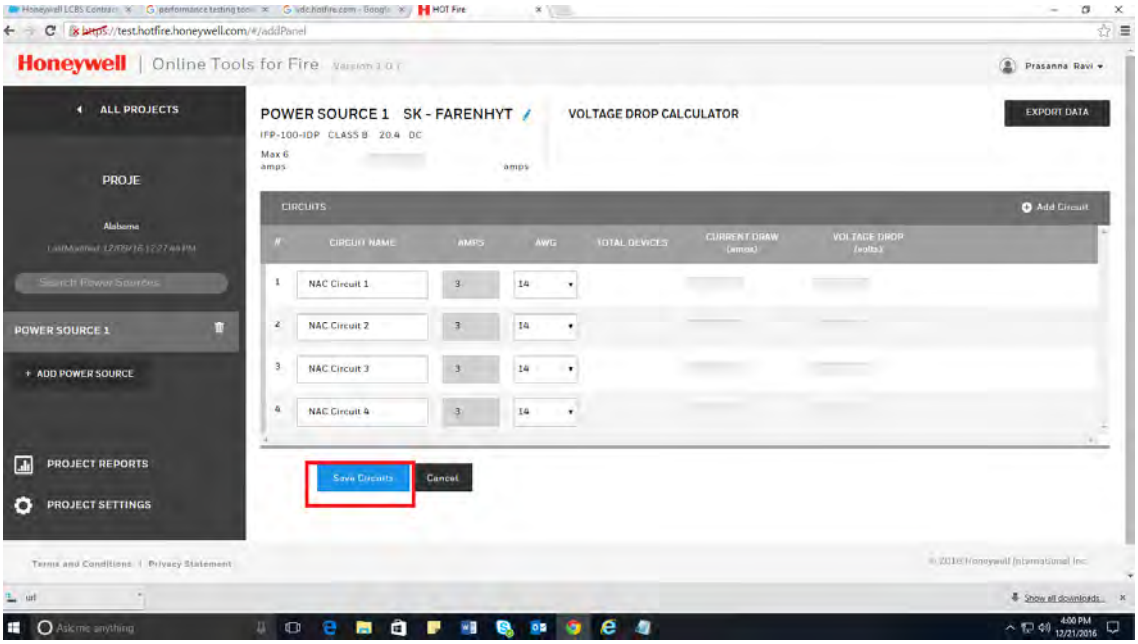
4.1 ‘Cancel’ button:

If you click on the ‘cancel’ button, then all the circuits will be deleted.

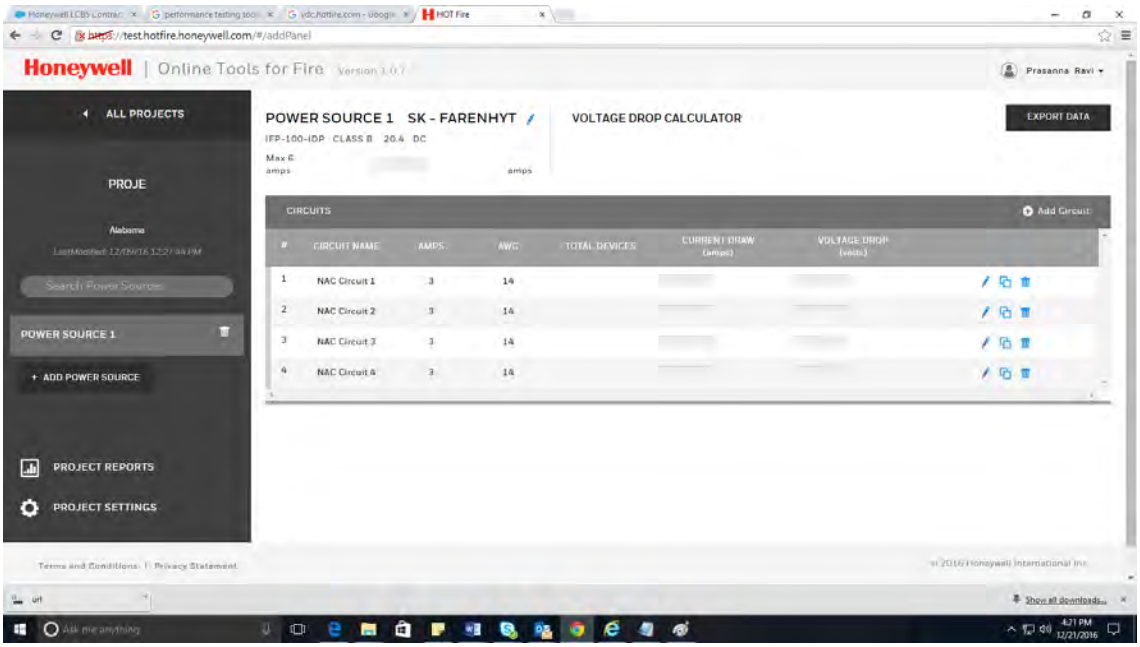


4.2 ‘Save Circuits’ button:

Then after making the necessary changes to the existing circuits, click the ‘Save Circuits’ button.

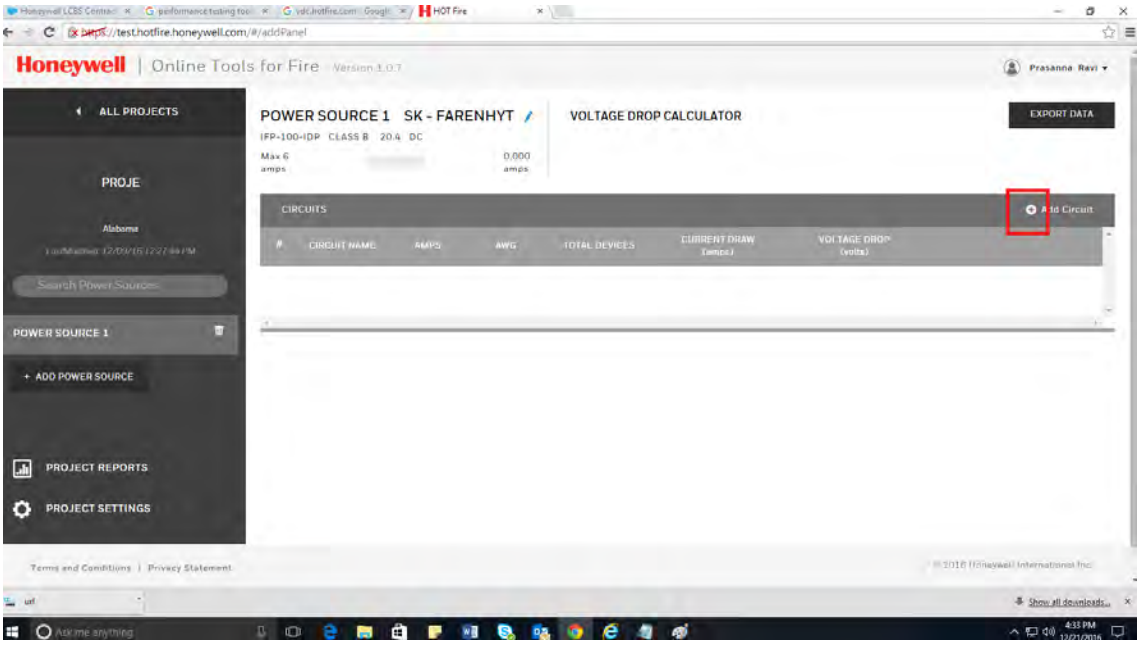


All the circuits’ related data will be saved and the ‘edit’, ‘copy’ and ‘delete’ icons will be show at right of each circuit row. The ‘Save circuit’ button and ‘Cancel’ button will disappear.

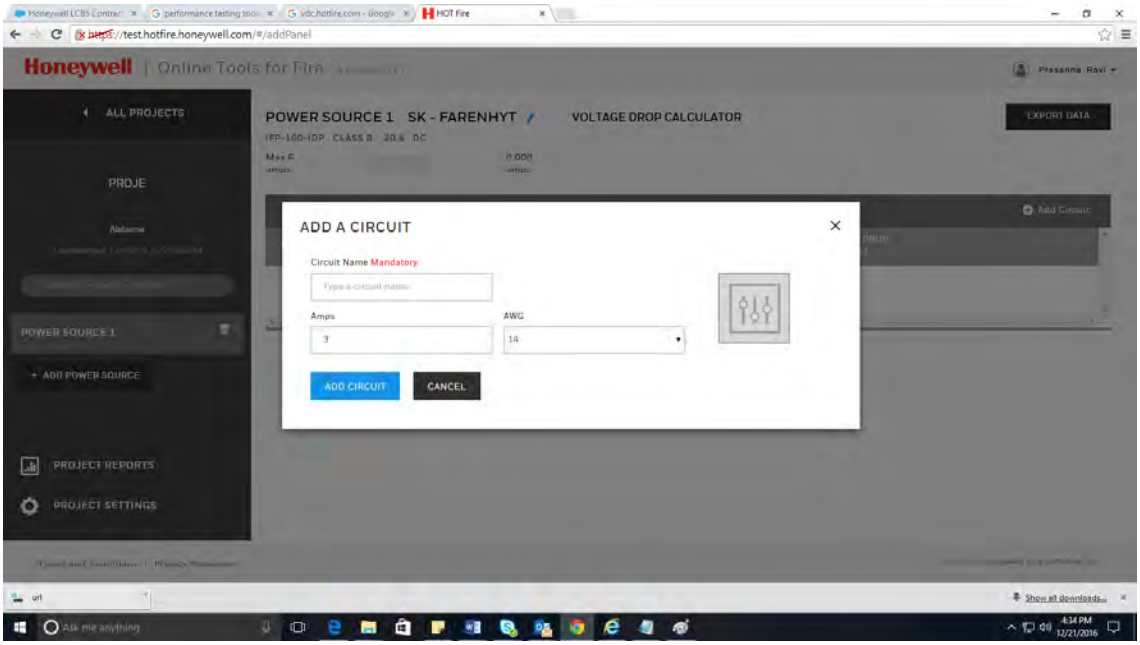


4.3 Adding a circuit manually:

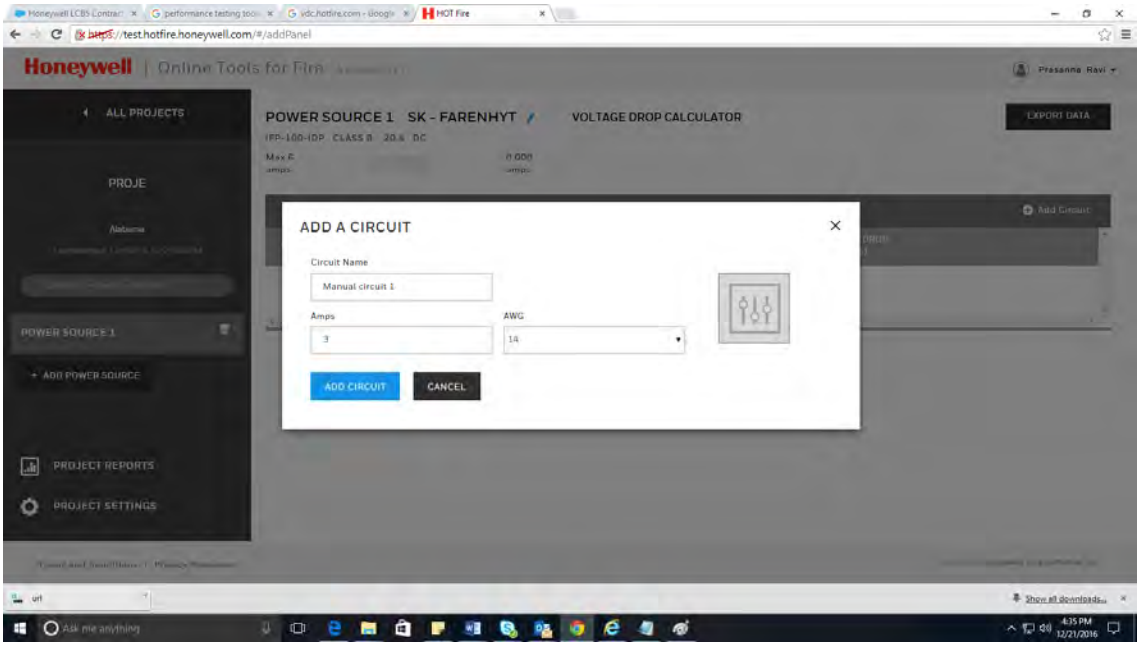
If you want to add a circuit, manually you can do that by clicking on the '+ Add Circuit' button at the top right corner of the circuits table.



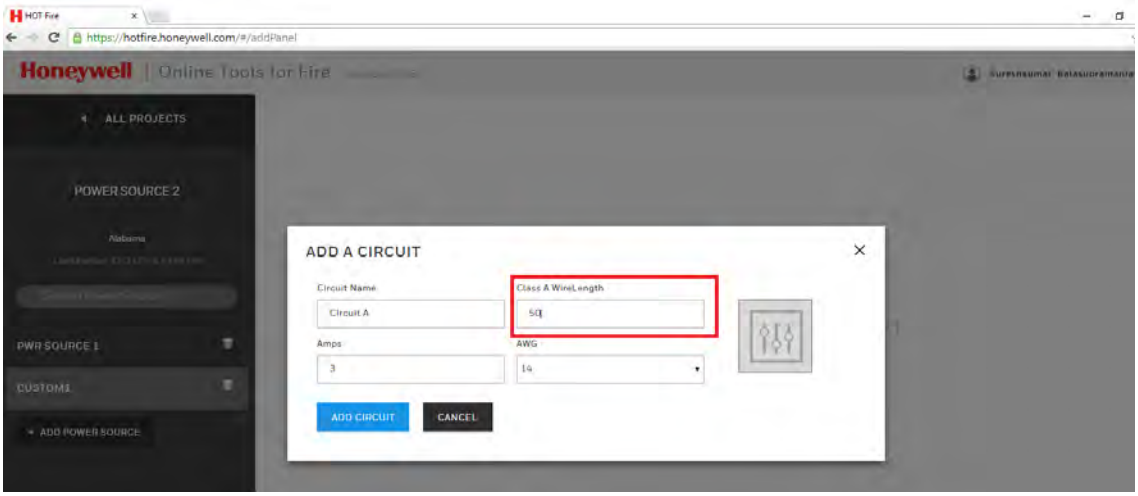
On clicking the '+ Add Circuit' symbol, the dialog below is displayed



User can then enter the ‘Circuit Name’:

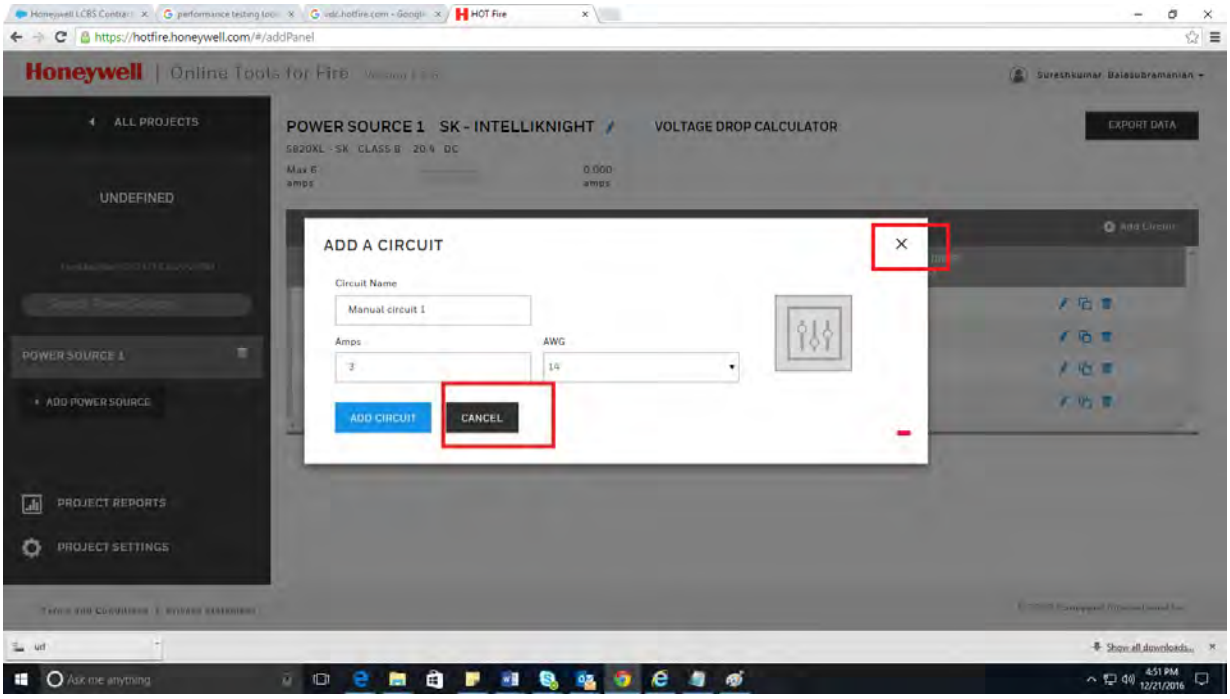


Note: If you add a ‘CLASS A’ type circuit, then you will see the ‘CLASS A wire length’ text field. Please see the below screenshot for details.

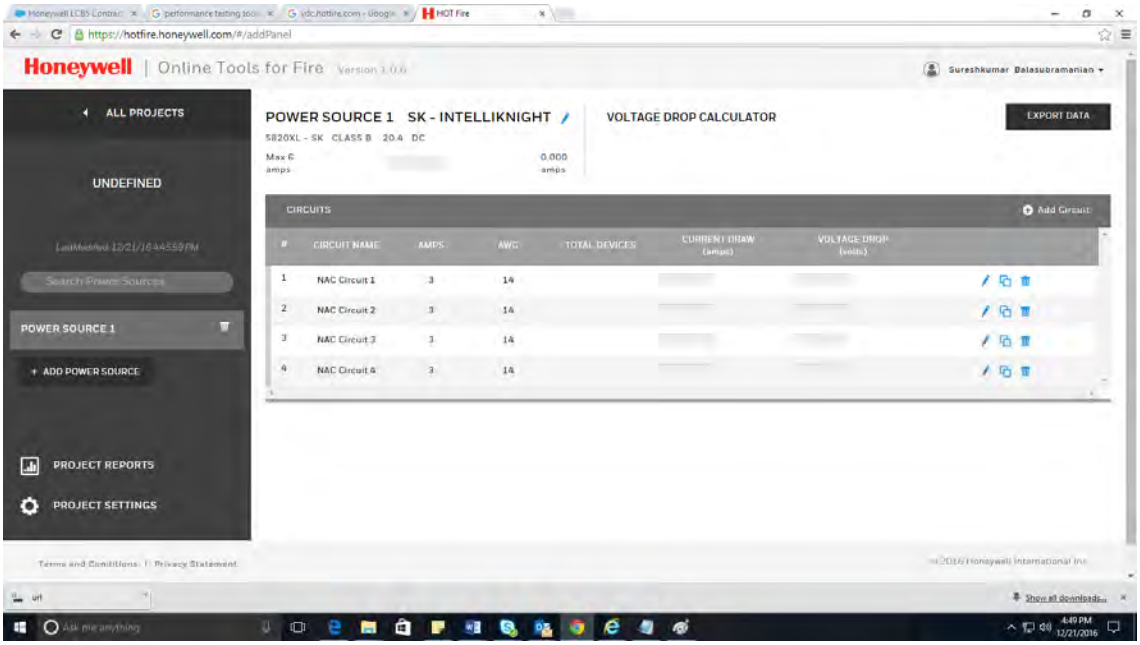


4.3.1 'Cancel' button or close (X) button:

If you click on the 'Cancel' button or close(X) button, then that dialog will be disappeared and the normal screen will be displayed.

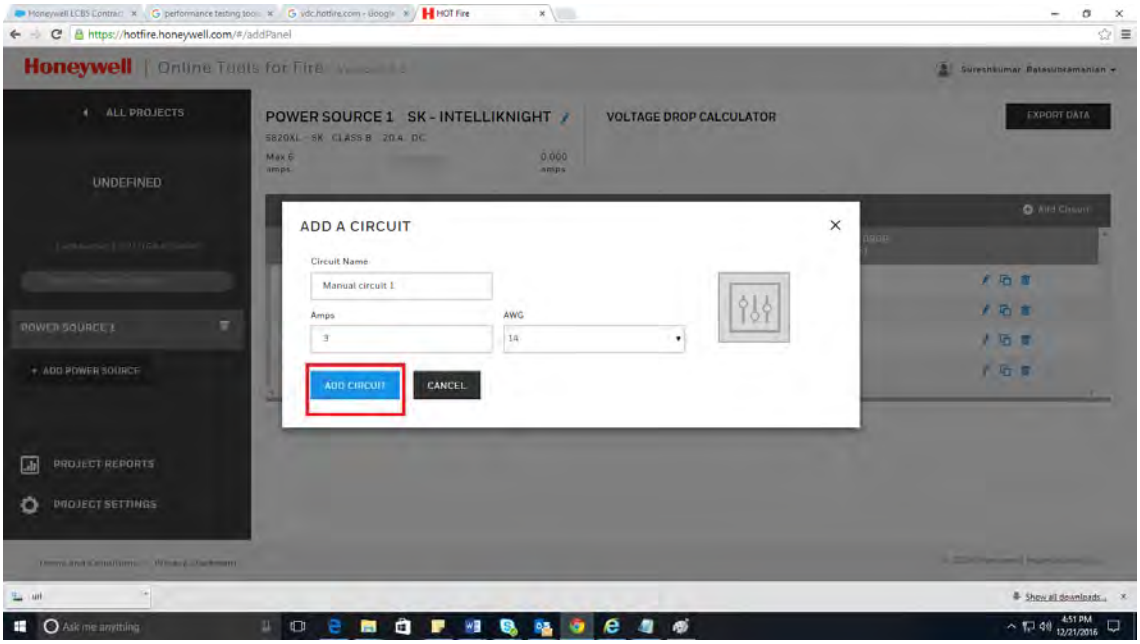


On clicking the 'Cancel' button.

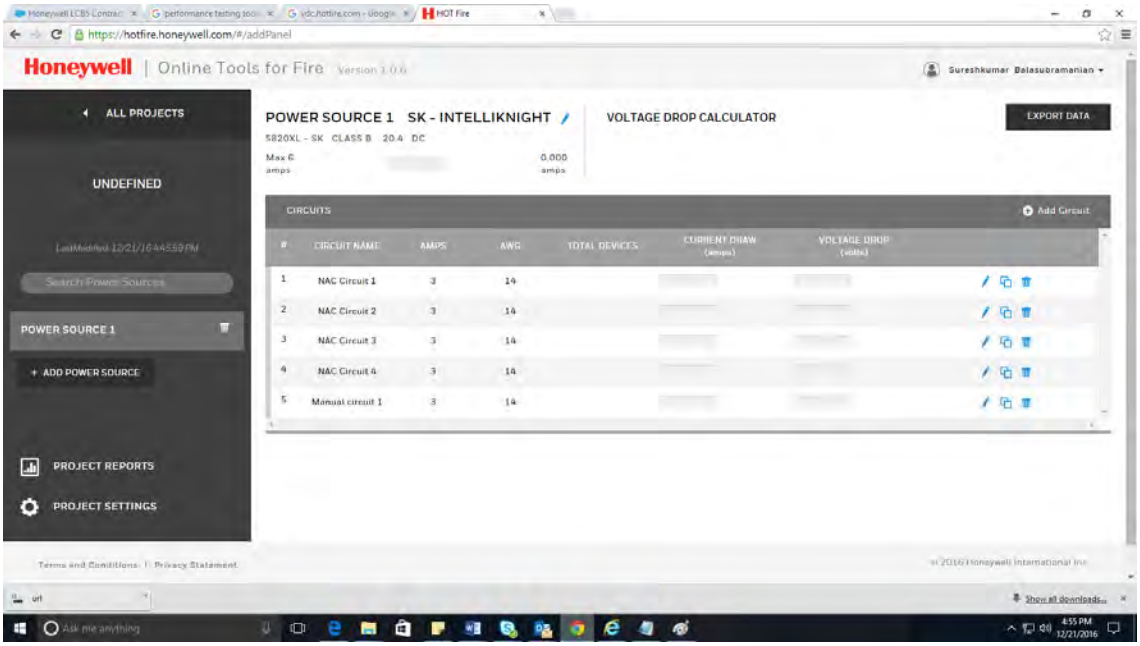


4.3.2 'Add Circuit' button:

If you click on the 'Add circuit' button, then the corresponding circuit has to be added to the circuits table in the last row.

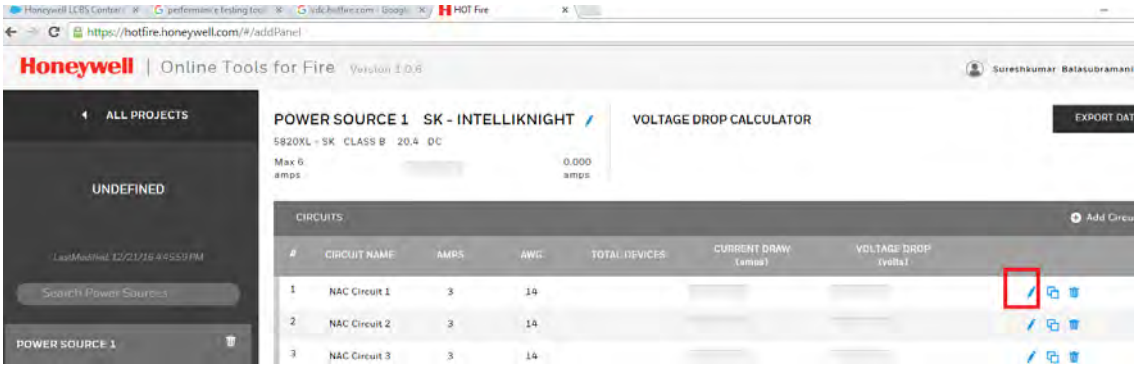


After clicking the 'Add circuit' button, the circuit will be added to the Circuits table.

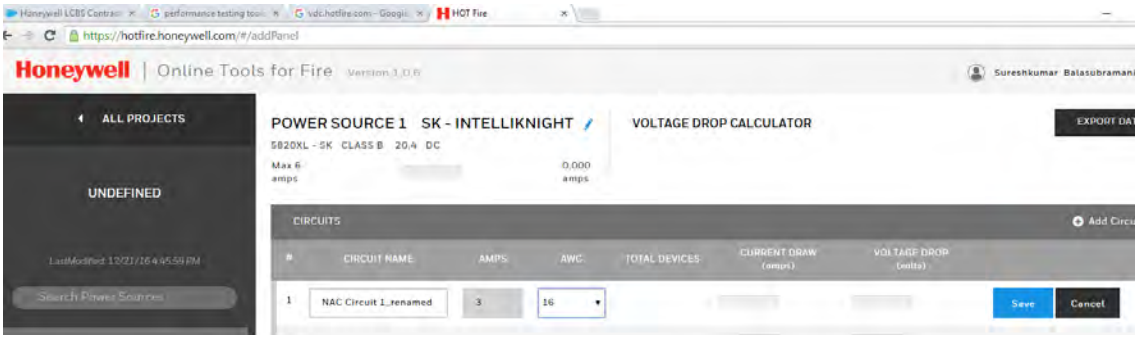


4.4 Editing an existing circuit values:

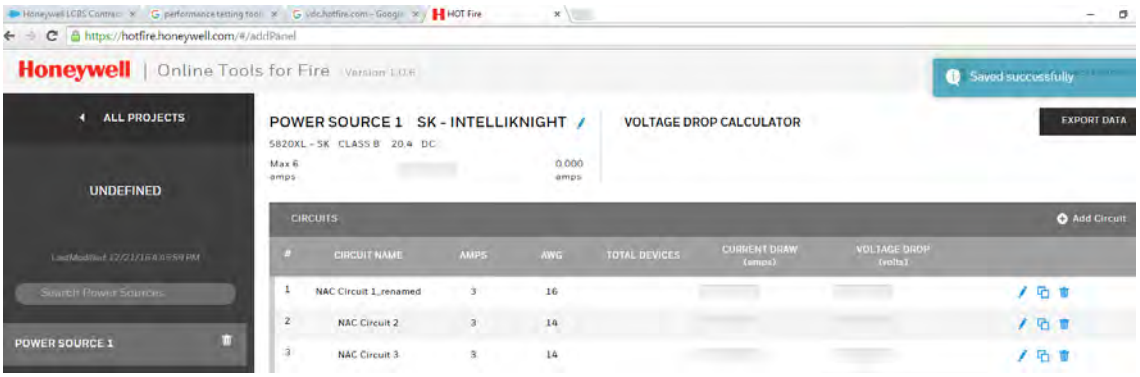
If you want to 'edit' a circuit, then you have to click on the 'Edit' icon at the end of the circuit row.



After renaming the ‘circuit name’ and ‘AWG’, you will click on the ‘Save’ button.



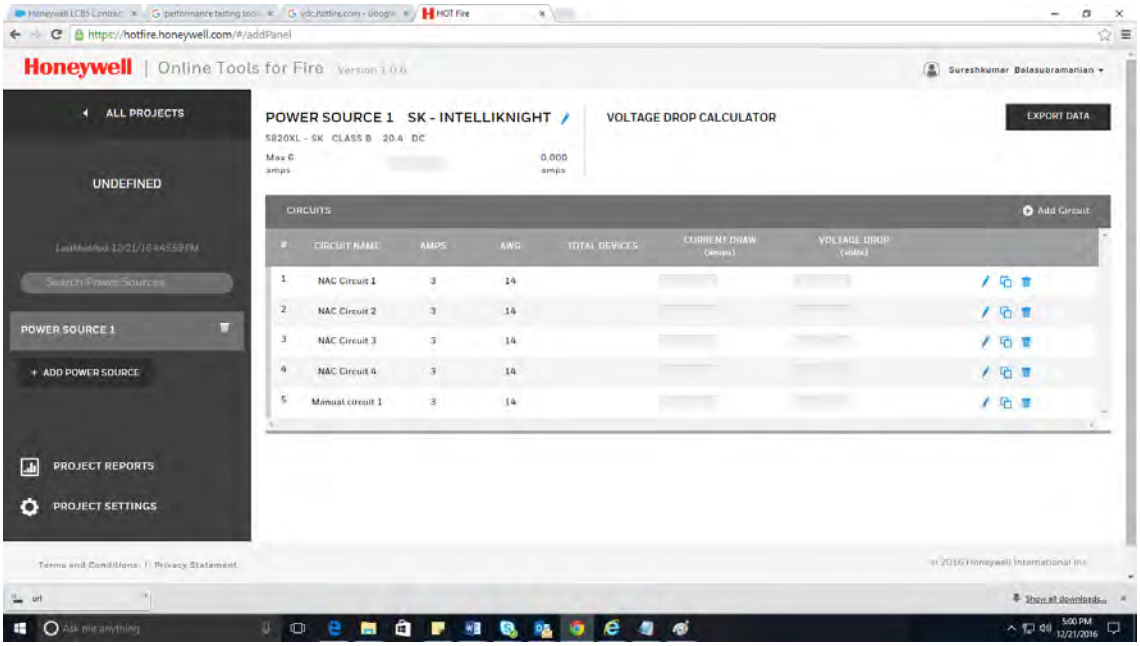
4.4.1 On clicking the Save button:



All the updated values should be saved.

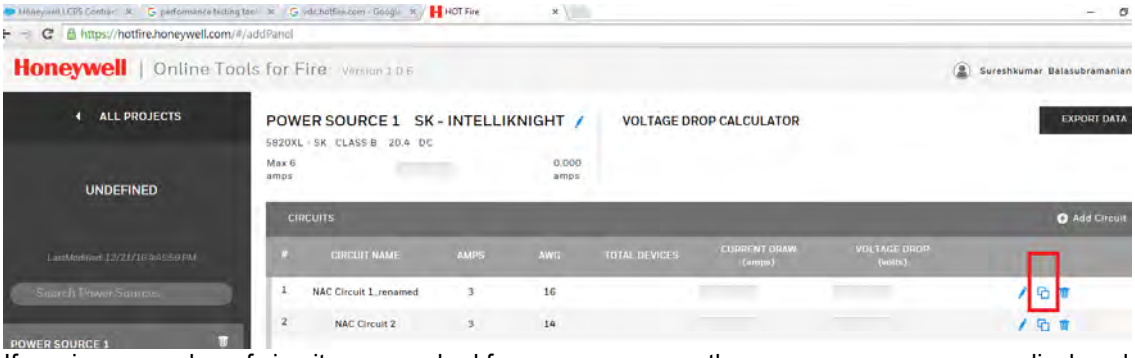
4.4.2 On clicking the ‘Cancel’ button:

After making changes and then if you don`t want those changes to be saved, click on the ‘cancel’ button.

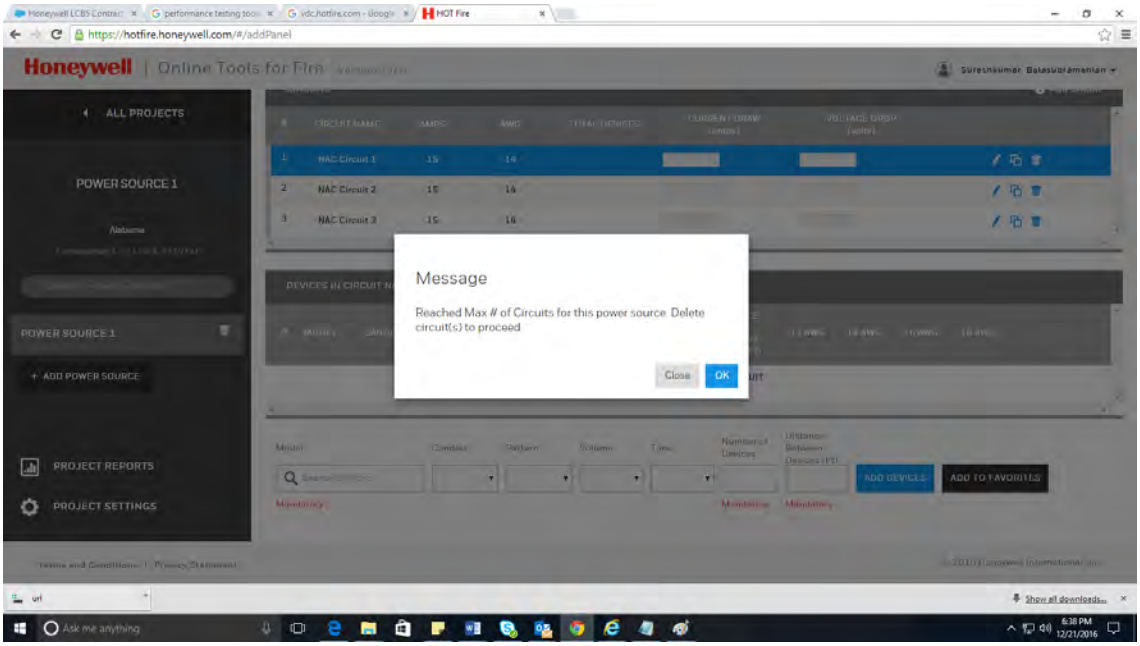


4.5 Copying an existing circuit values:

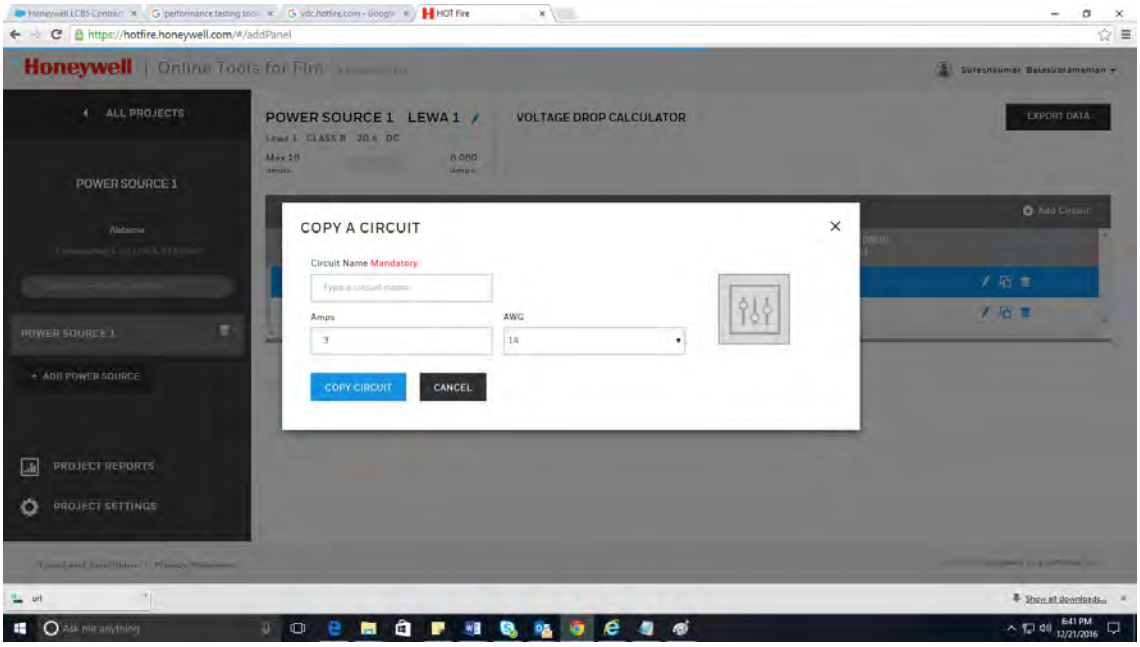
On clicking the ‘copy’ icon, a new copy of that circuit should get appended at the bottom of that table in the last row.



If maximum number of circuits are reached for a power source, then a message pops up as displayed below:

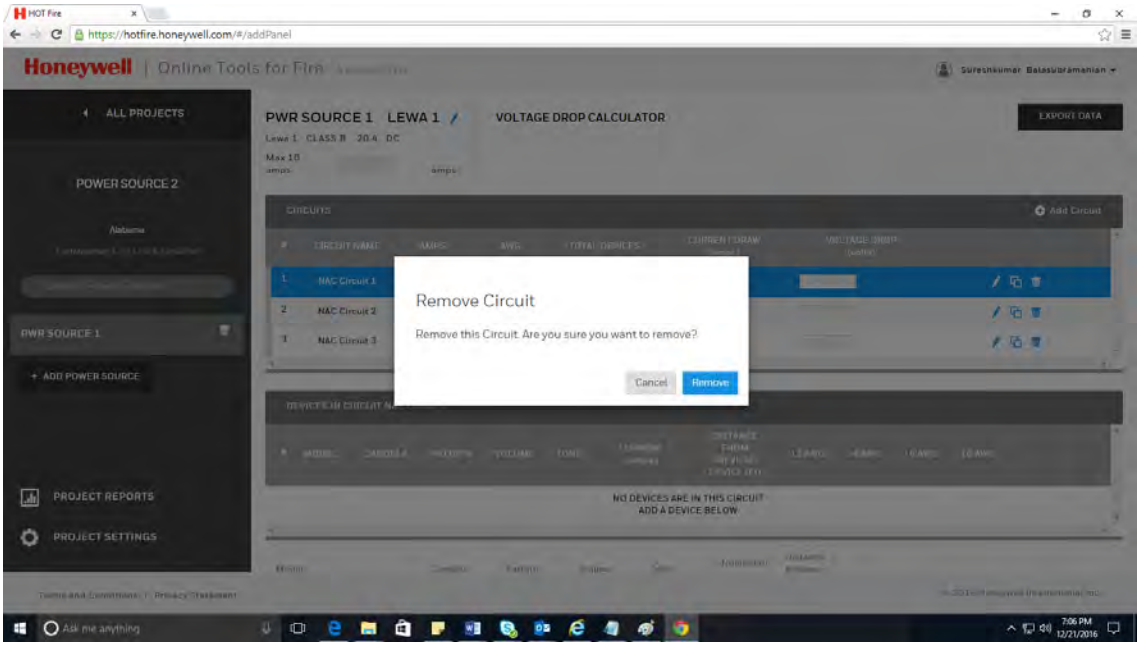


If there are circuits that can be added to that power source then the dialog below will be displayed:

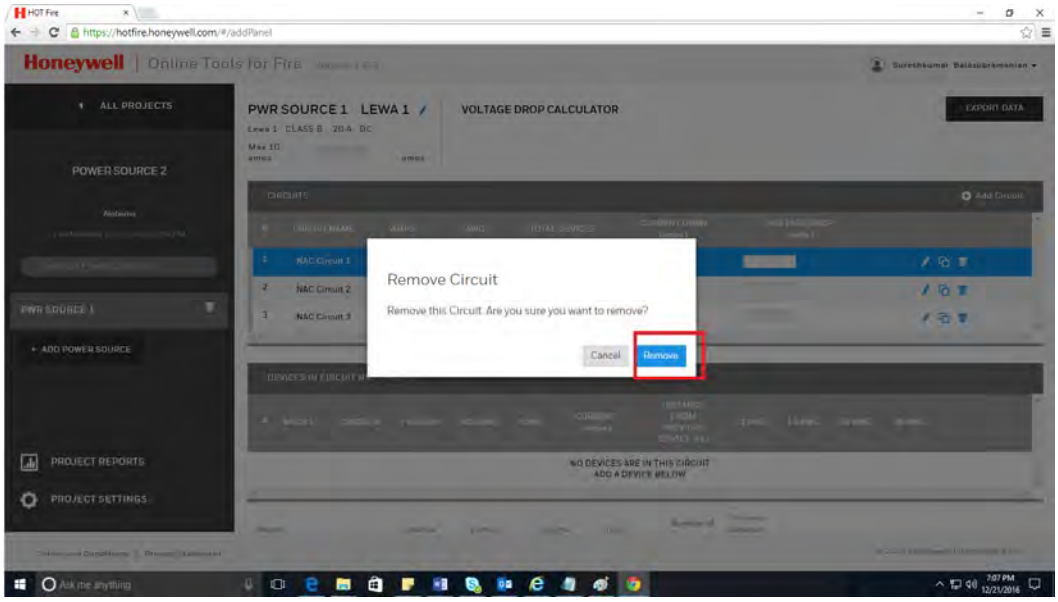


4.6 Deleting a Circuit:

On clicking the ‘Delete’ icon, at the end of the circuit row, a ‘Remove circuit’ dialog has to be displayed.



4.6.1 On clicking the ‘Remove’ button:

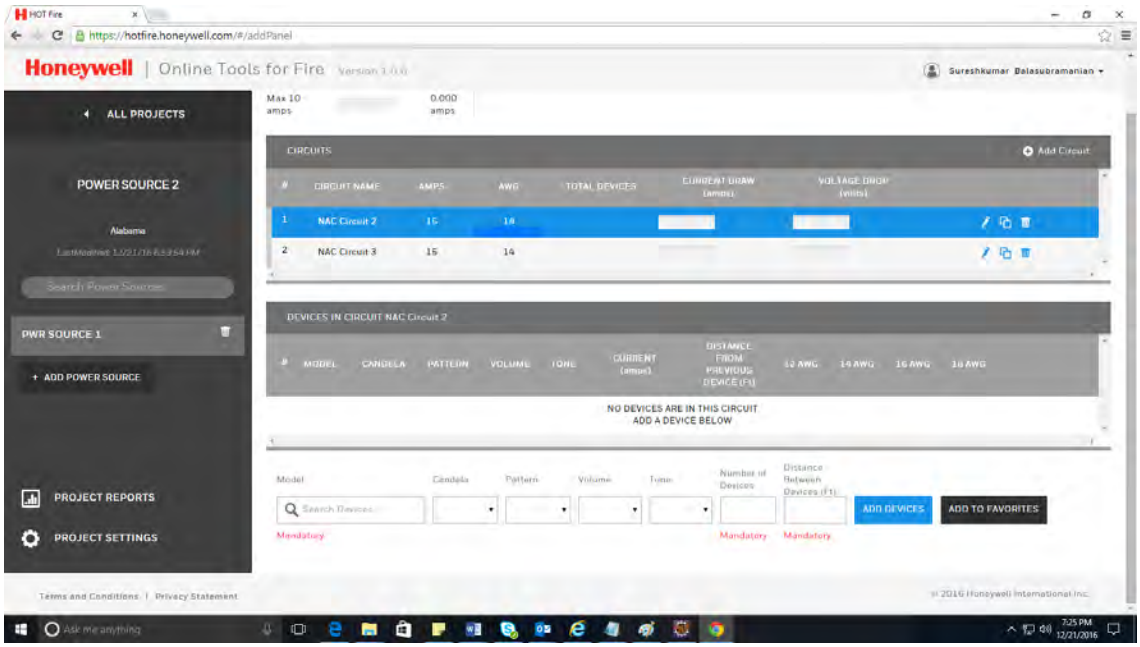


The dialog has to be closed and the corresponding circuit has to be removed.

4.7 On clicking clicking on any existing circuit row:

a) The row will be highlighted in blue.

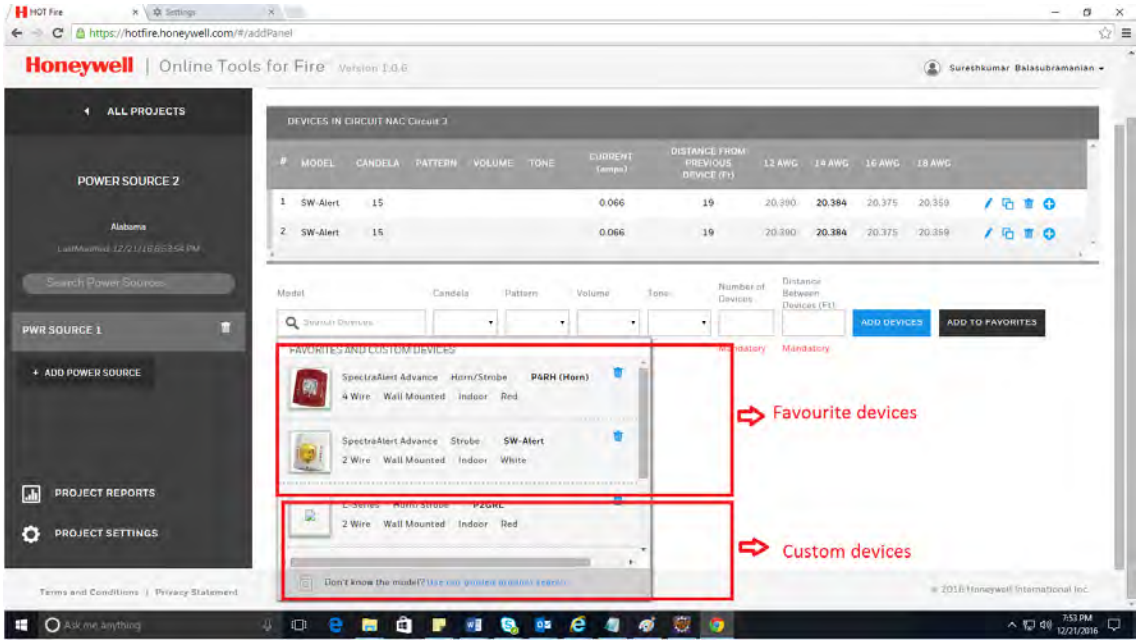
b) A group of fields has to be displayed at the bottom of the page which is the Devices table and the fields are: ‘Model’ text box(Mandatory), ‘Candela’ dropdown, ‘Pattern’ dropdown, ‘Volume’ dropdown, ‘Tone’ dropdown, ‘Number of Devices’ text field(Mandatory), ‘Distance between devices (Ft)’ text field(Mandatory), ‘Add devices’ button and ‘Add to Favorites’ button.



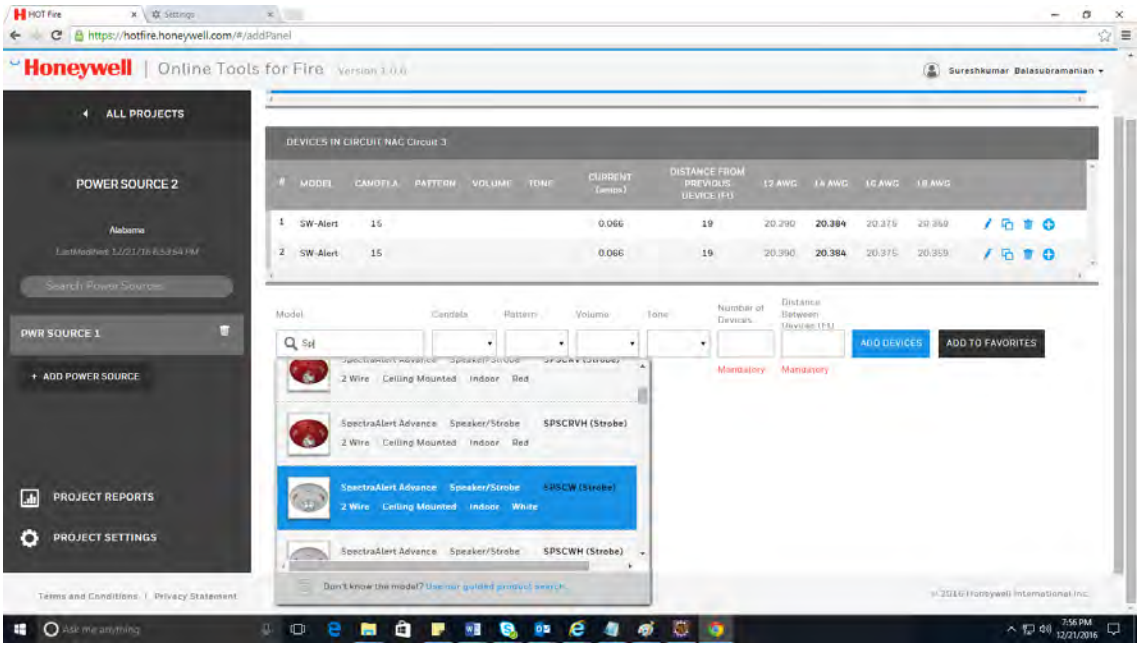
5. Devices

5.1 Adding a device to the circuit:

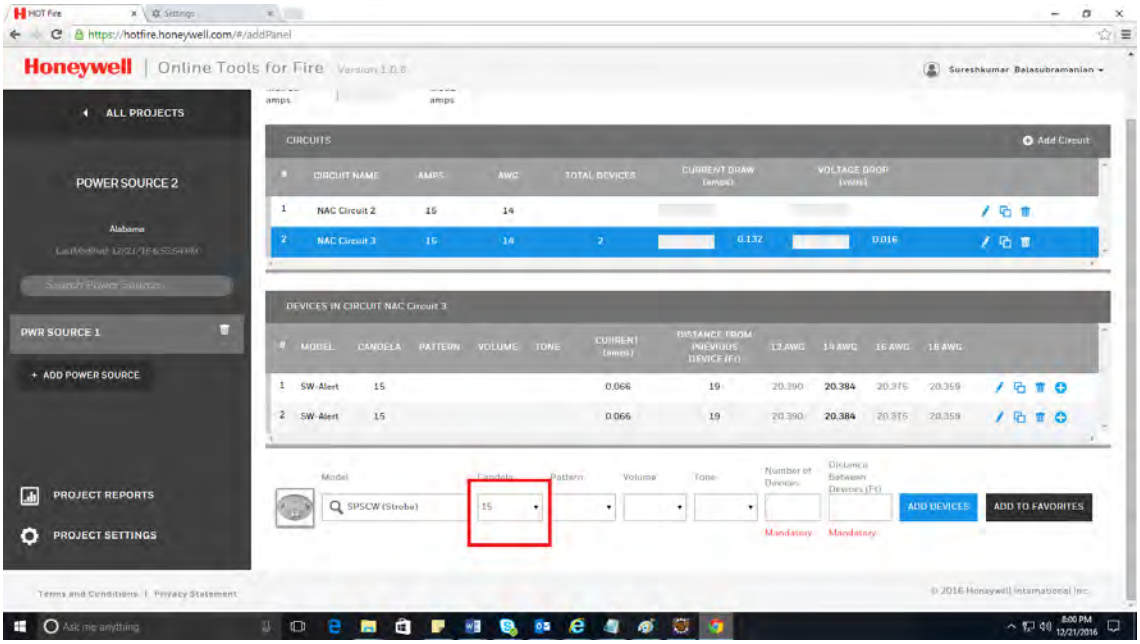
a) On clicking the ‘Model’ text box (Mandatory), a drop down with the list of devices is displayed. In the ‘Model’ dropdown, it has to first display the list of favorite’s devices first and then the custom devices.



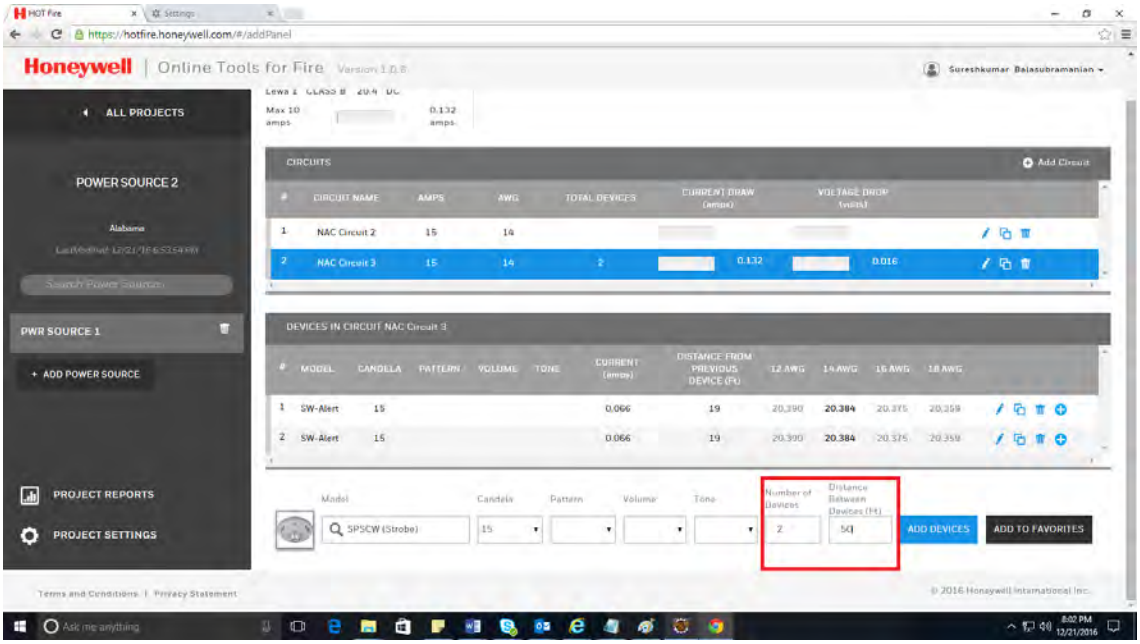
b) On entering any specific device name, it will display results as per the searched data and user can select any device by clicking it.



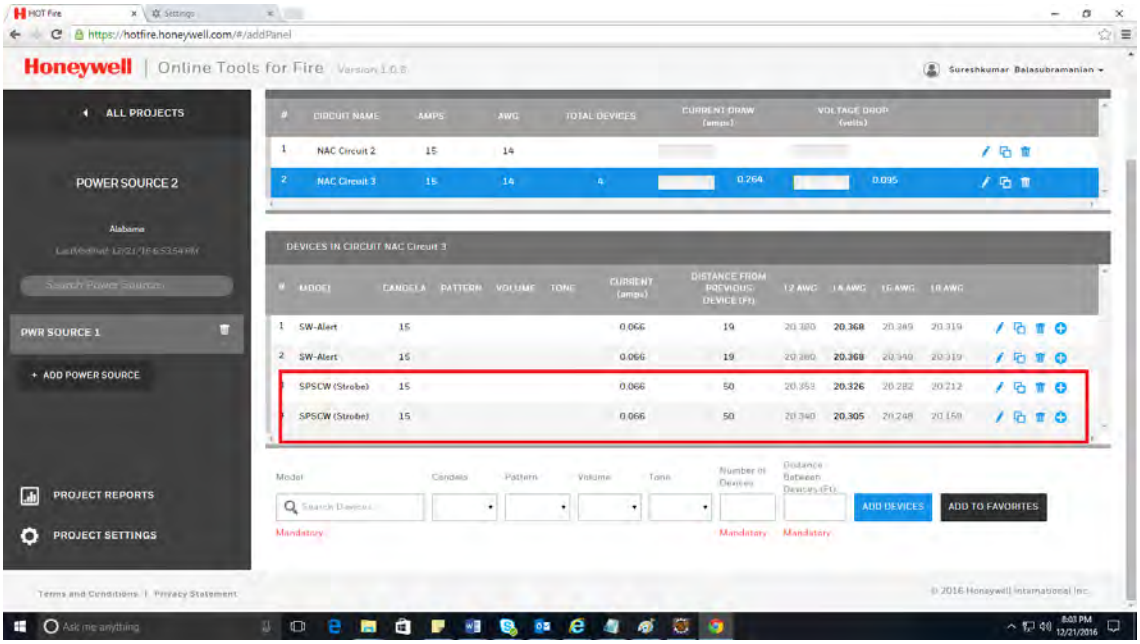
c) If any device has its specific ‘Candela’ or ‘Pattern’ or ‘Volume’ or ‘Tone’, then those data will be reflected in that corresponding device, once added.



d) You have to enter the corresponding 'Number of Devices' and 'Distance between Devices (FT)' mandatory fields.



e) On clicking the 'Add Devices' button, those devices will be added to the corresponding circuits at the bottom



5.1.1 Recalculation of device voltage values - Scenarios:

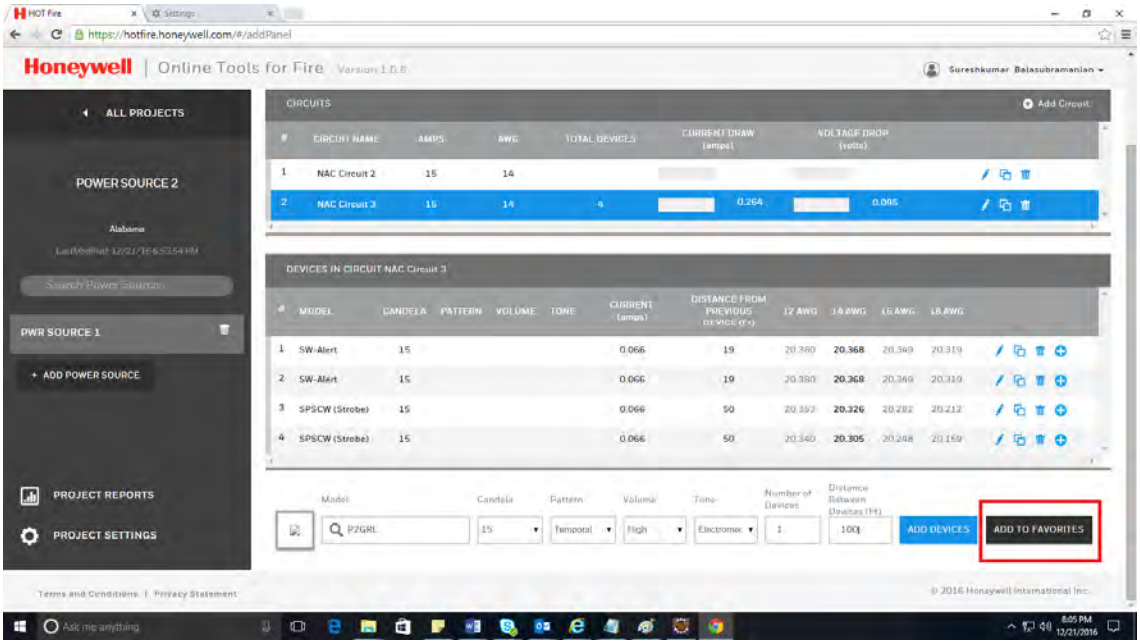
You can make any changes to existing parameters of devices and notice that the corresponding voltage values in the AWG columns of the device table are updated.

The Voltage values in the AWG column are recalculated in the following scenarios:

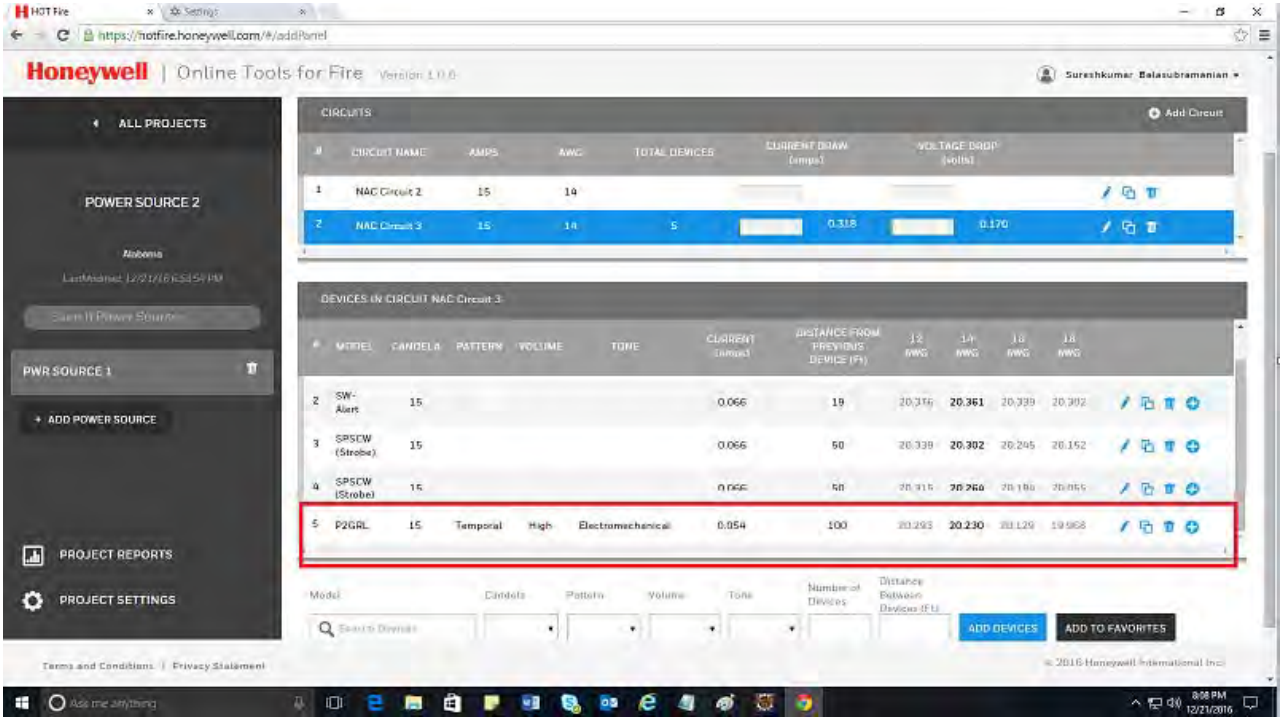
a) When the user edits any device value/values.
b) When the user copies a device.
c) When the user deletes a device.
d) When the user inserts a device.
e) When the user adds a new device to the circuit.

5.2 Adding a Device to Favorite list:

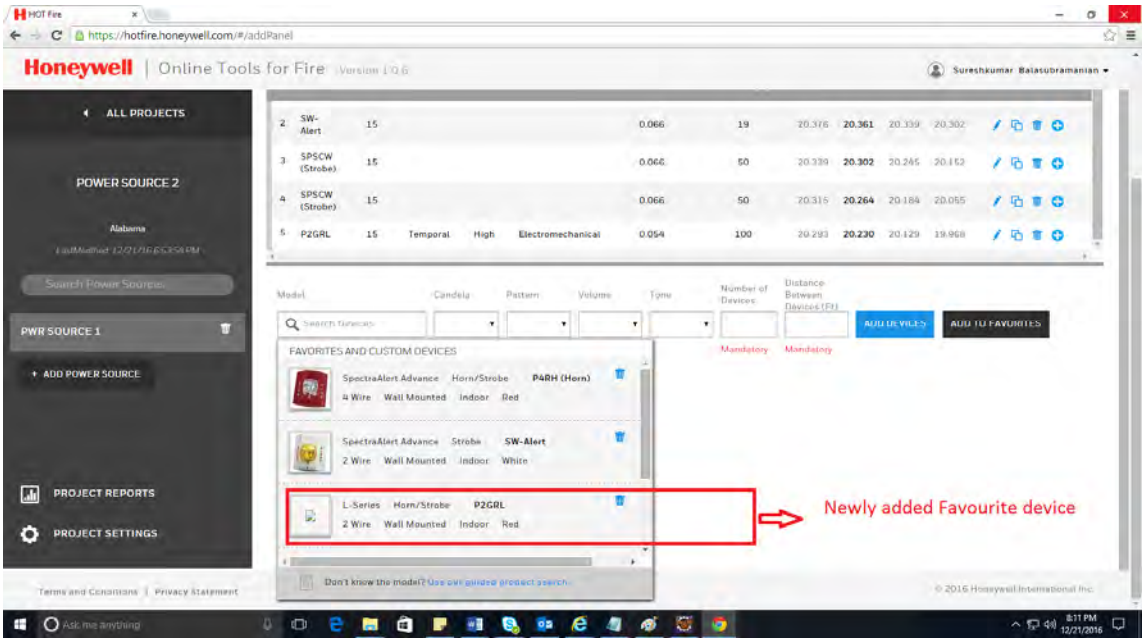
a) On selecting any other device and entering the mandatory fields and clicking on ‘Add to Favorites’ button, those should be added to the Favorites list which will be shown next time, when clicking ‘Model’ text field.



b) Corresponding device added to its circuit at the bottom:

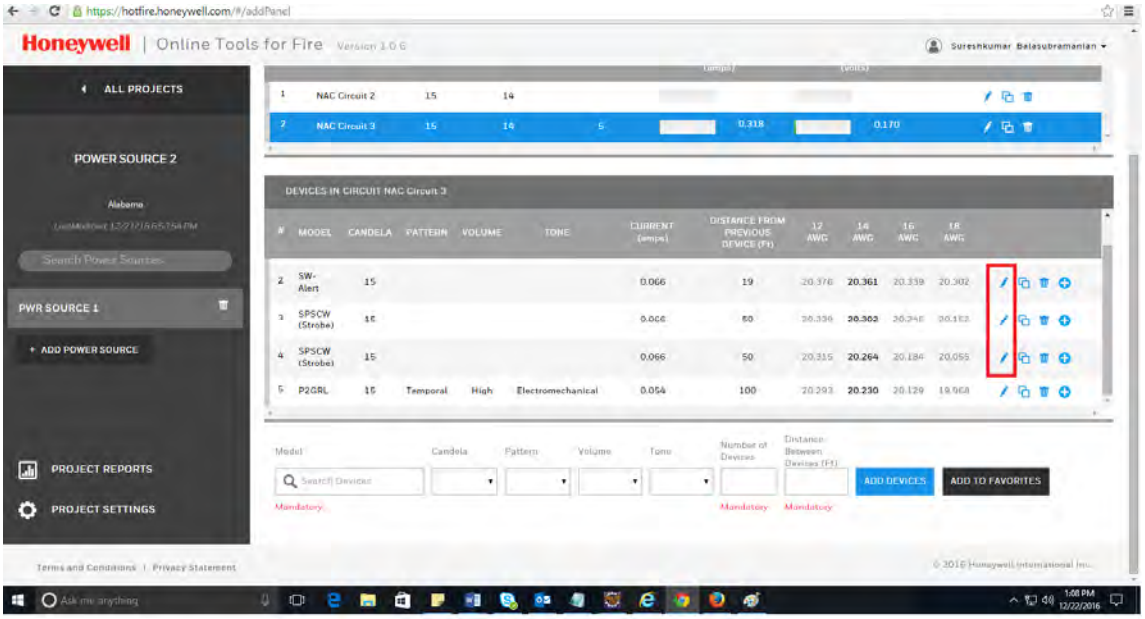


c) Added to the Favorite list also.

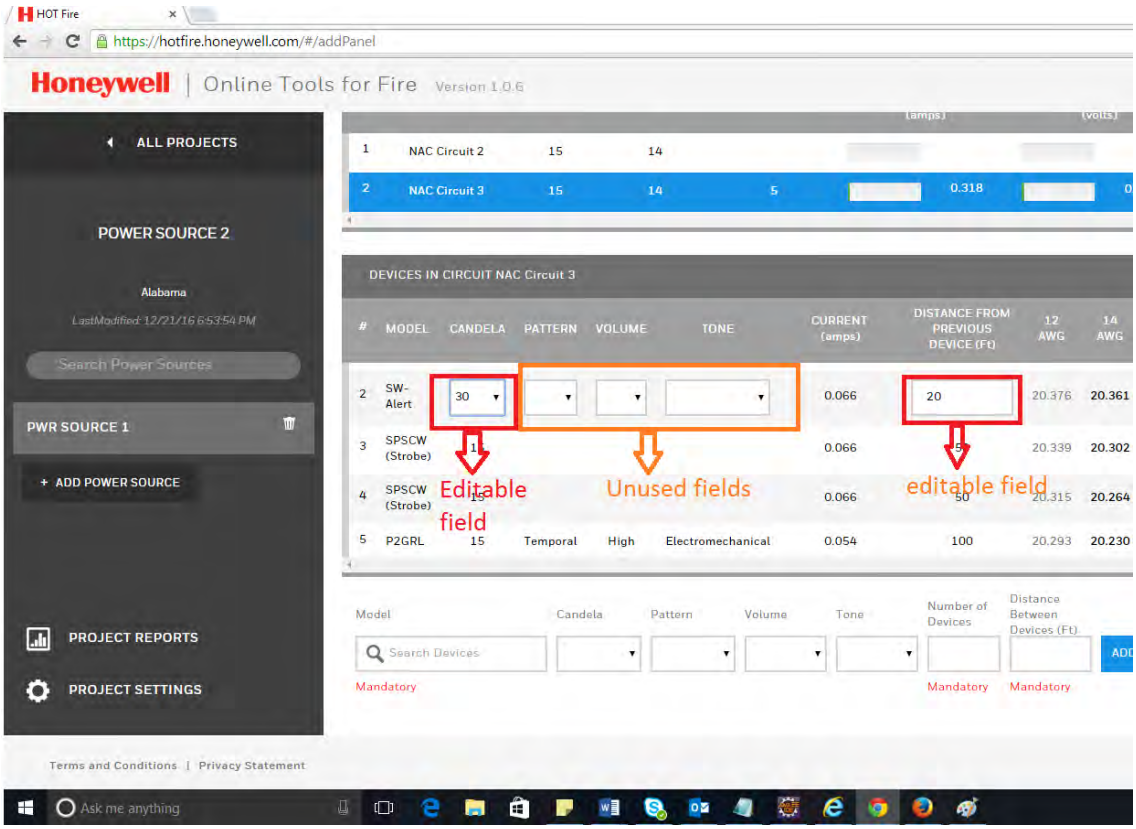


5.3 Editing a device details:

To edit an existing device click on the “Edit” icon at the right side of each row.

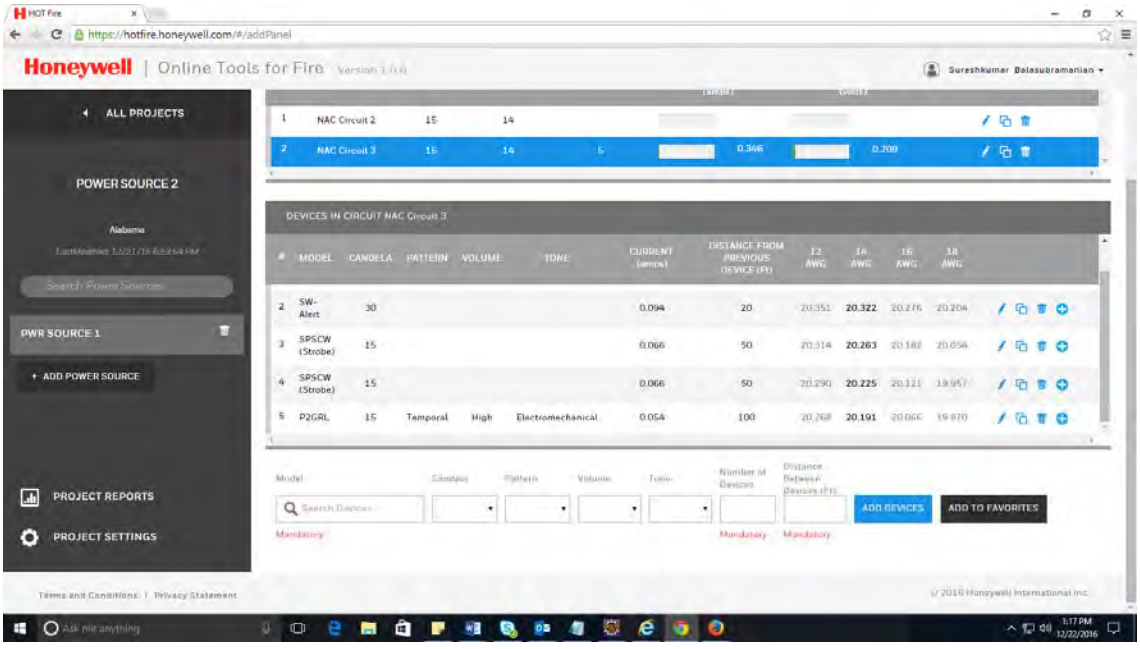


Clicking the ‘Edit’ button will change the following fields into editable ones: ‘Candela’ drop down, ‘Pattern’ drop down, ‘Volume’ dropdown field, ‘Tone’ dropdown field and ‘Distance from Previous Device (Ft)’ text box.



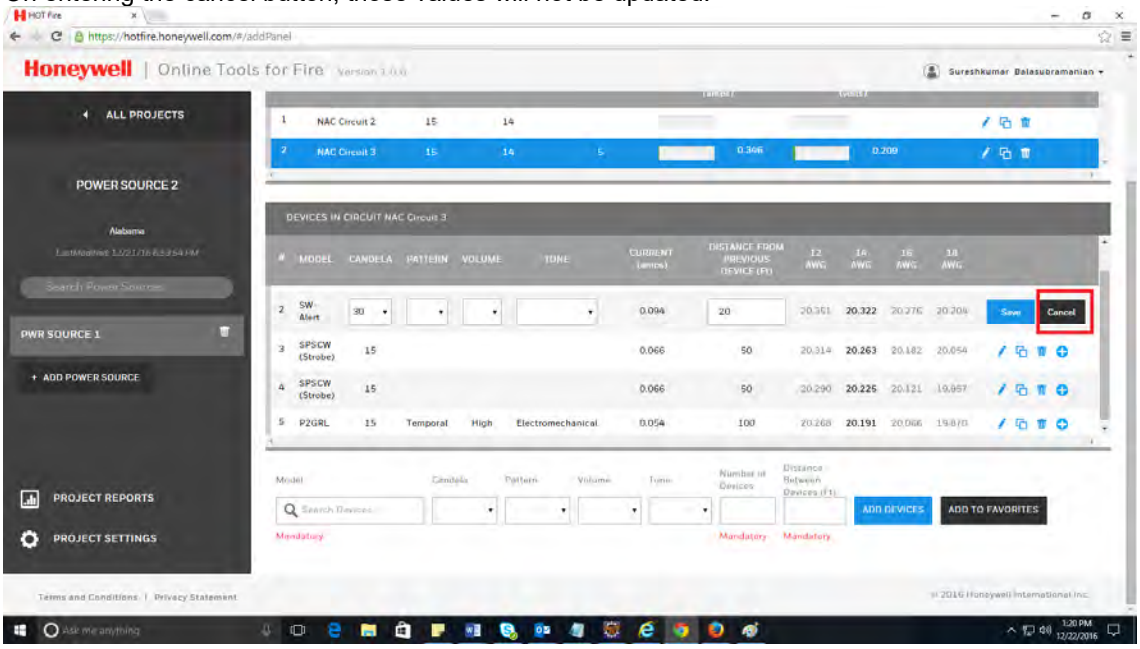
5.3.1 On clicking the Save button:

Those changed values will be saved.

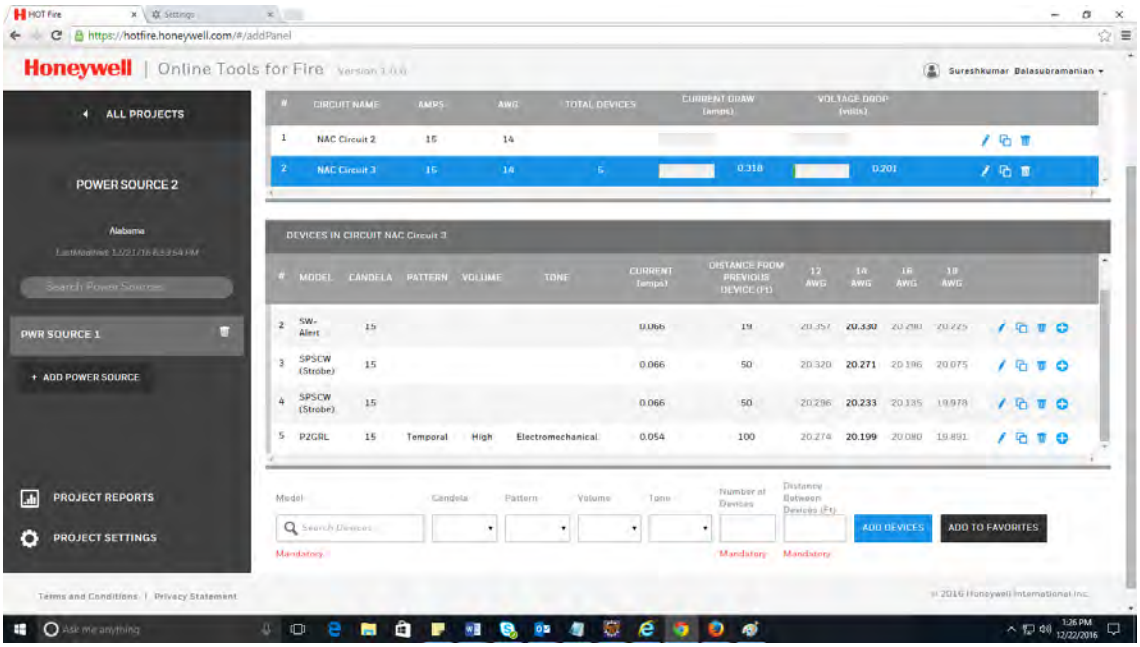


5.3.2 On clicking the ‘Cancel’ button:

On entering the cancel button, those values will not be updated.

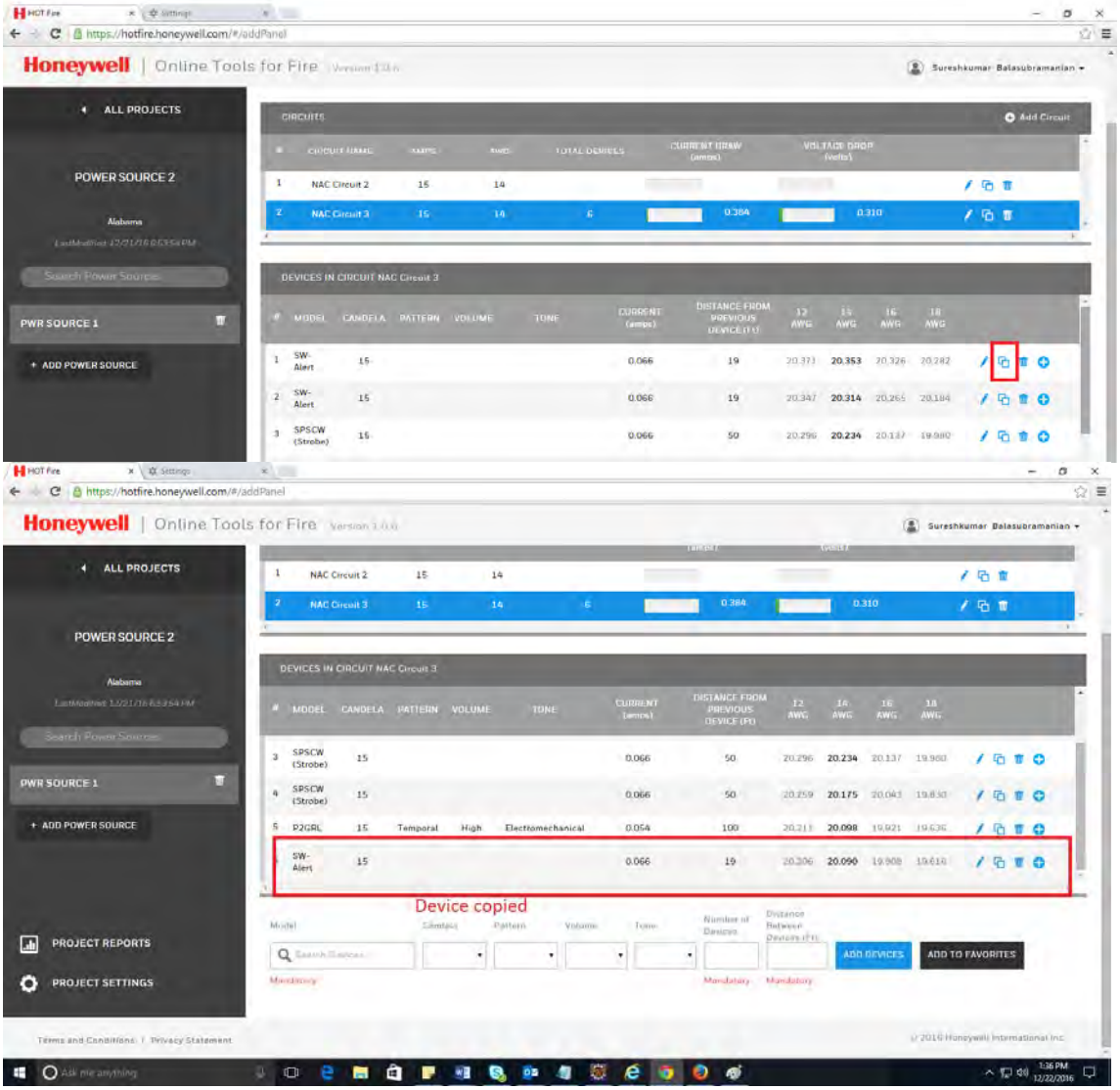


New entered values not saved due to cancel operation.



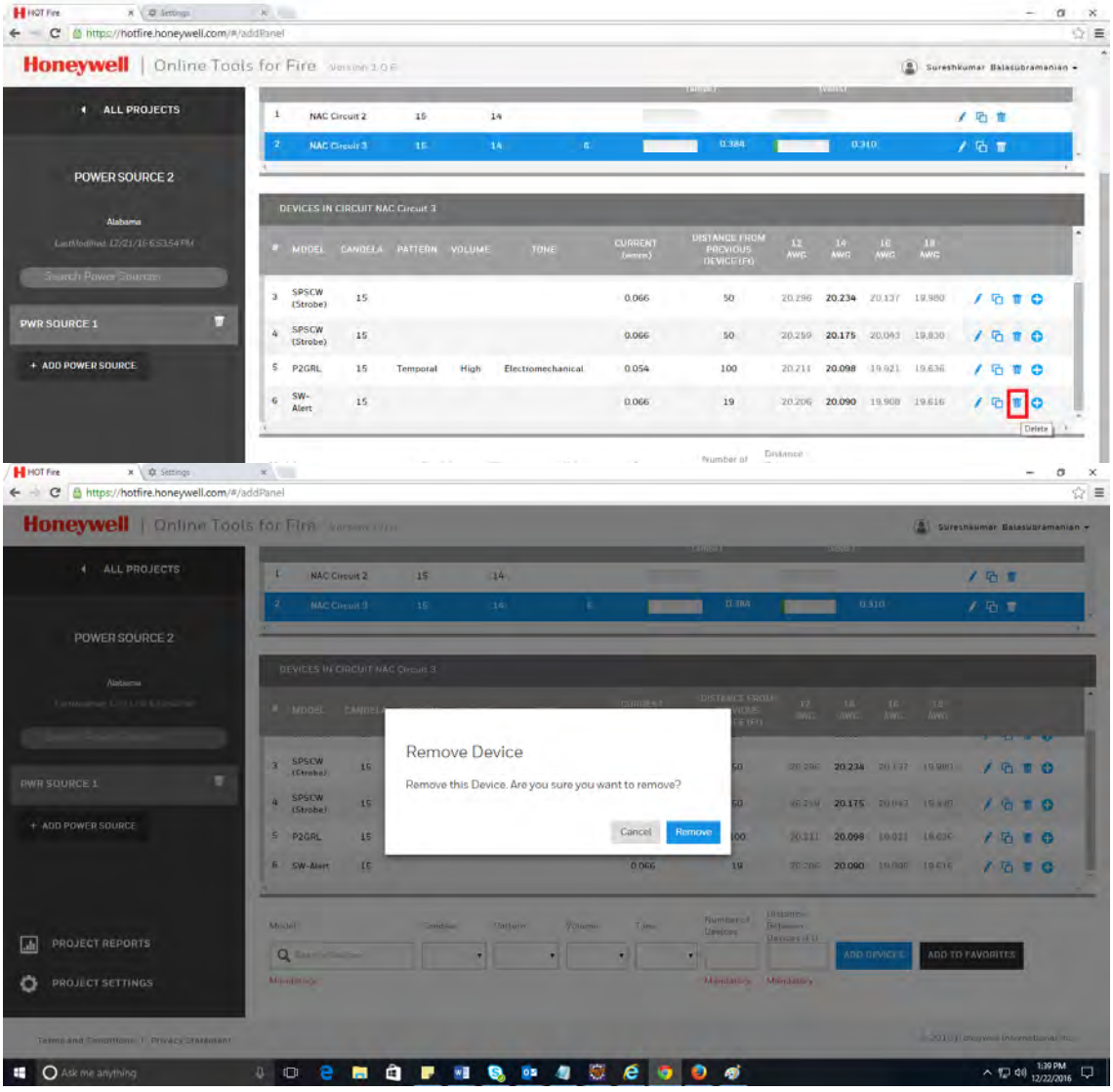
5.4 Copying a Device:

When clicking the ‘Copy’ icon for a row, that device will be copied in the last row of the device table. After copying a device all the values will be recalculated.



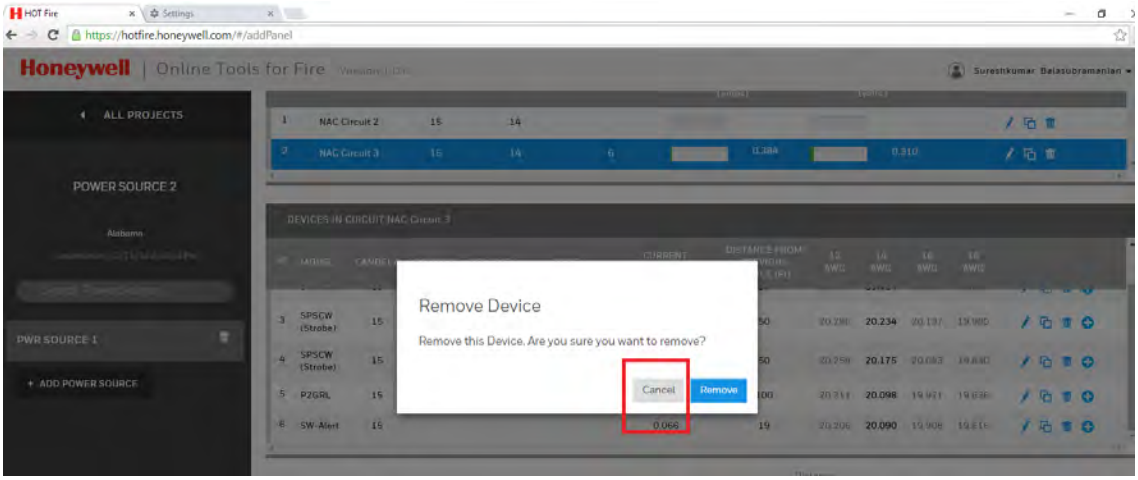
5.5 Deleting a Device from a NAC:

On clicking the ‘Delete’ icon in a row will bring up the ‘Remove Device’ dialog. After deleting a device all the values will be recalculated automatically.

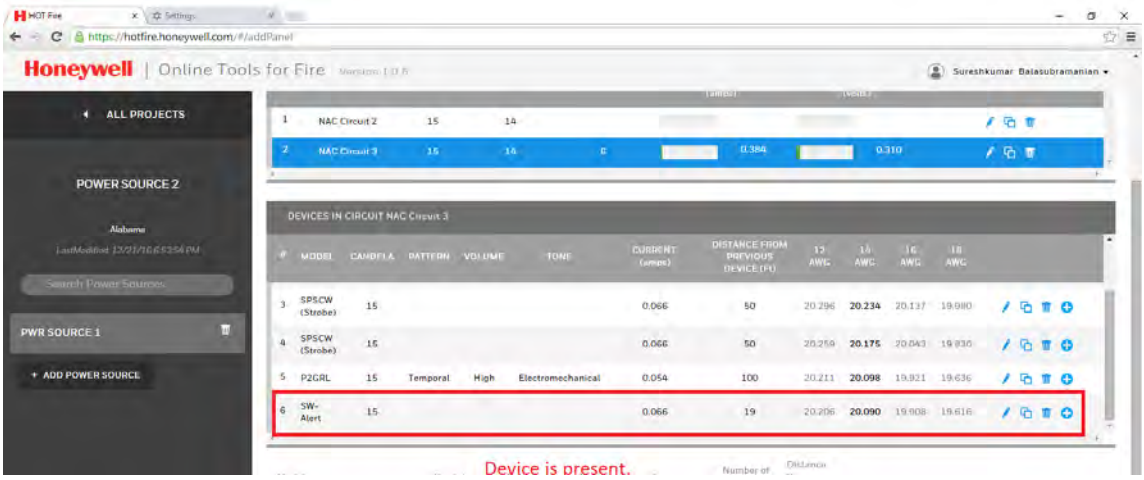


5.5.1 On clicking the ‘Cancel’ button in Remove Device dialog:

On clicking the ‘Cancel’ button in the ‘Remove Device’ dialog, the delete operation will be cancelled and that particular device should be present in the device table, even after the dialog is closed.

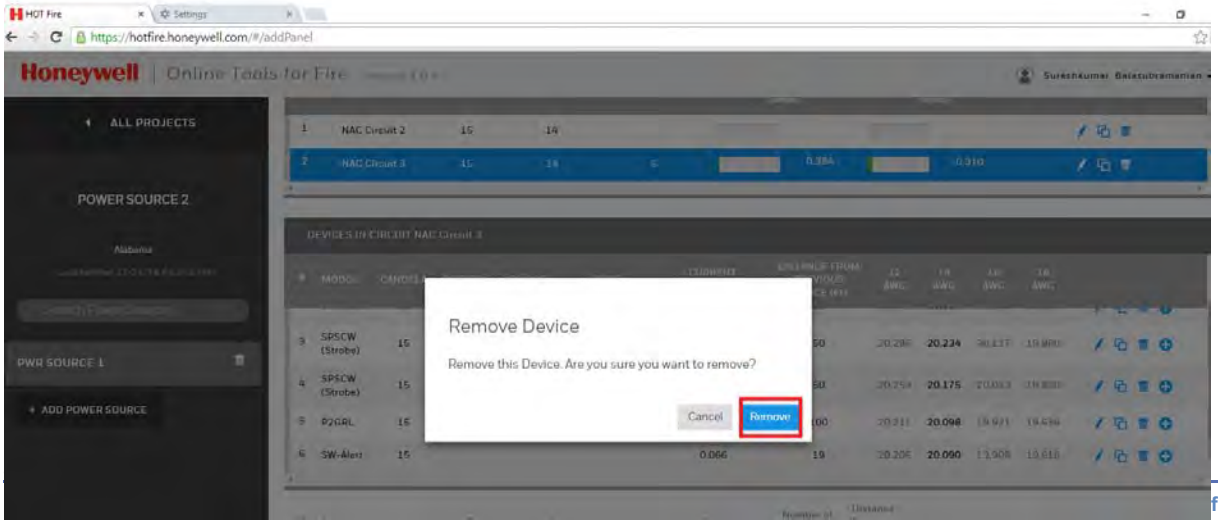


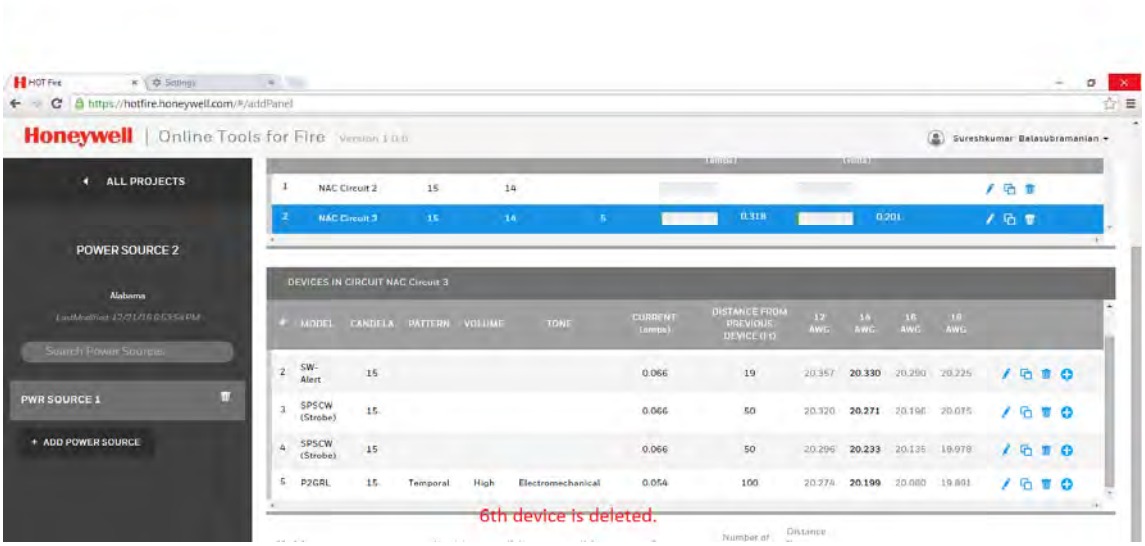
On clicking the Cancel button, the device will not be deleted and the ‘Remove Device’ dialog will close.



5.5.2 On clicking the ‘Remove’ button in the Remove device dialog:

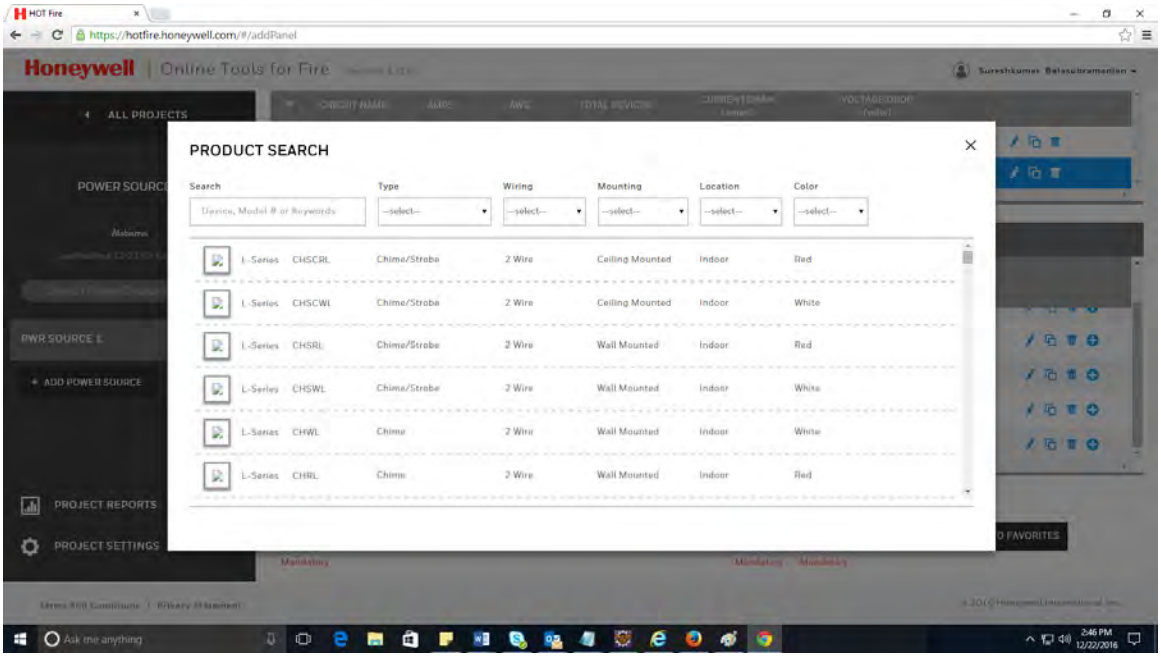
When clicking the ‘Remove’ button in the ‘Remove Device’ dialog, the dialog will close and that particular device will be deleted from the NAC.





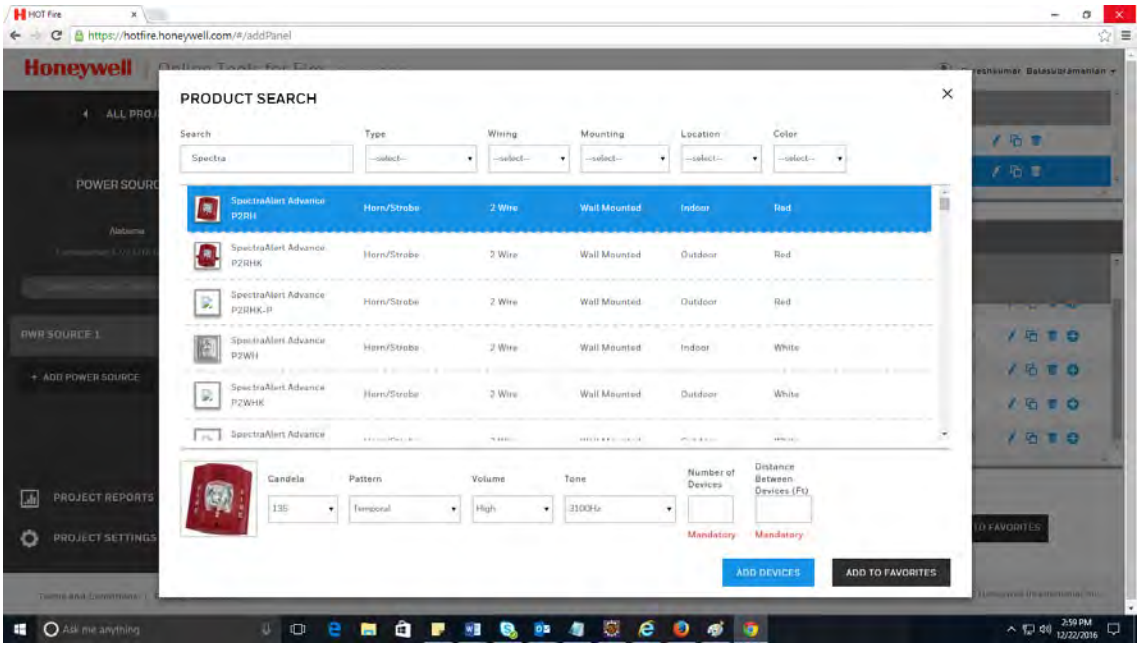
5.6 Inserting a device:

On clicking the ‘Insert’ icon at the end of a device row, it should display the ‘Product Search’ dialog which is shown below. After providing all details in the dialog and inserting device(s), all the values in the device table are recalculated.



5.7 Product Search Dialog

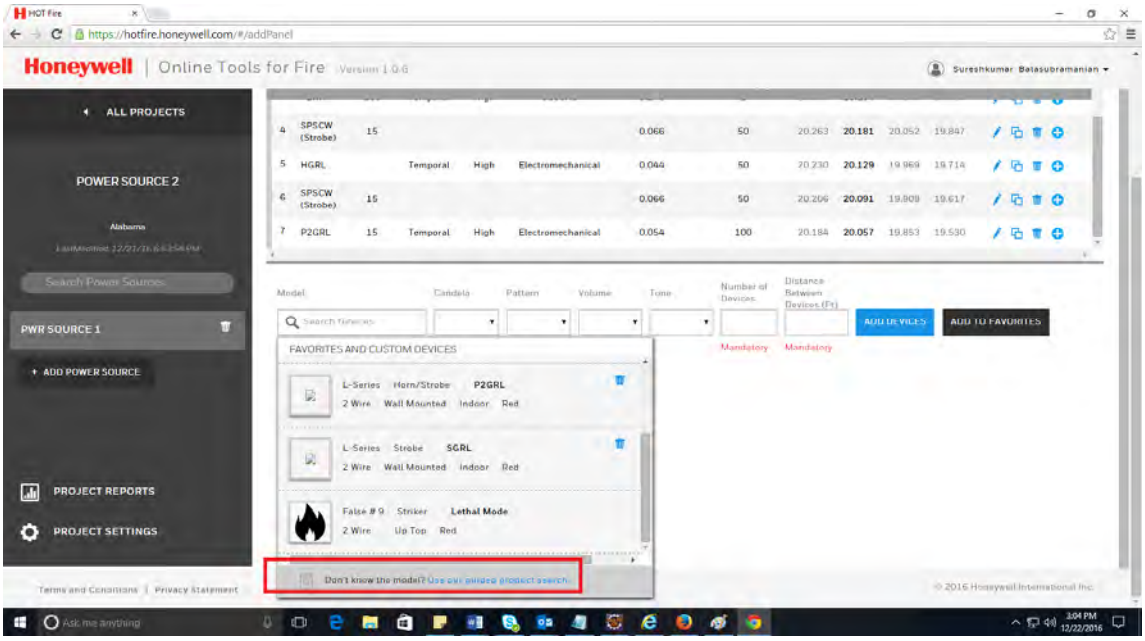
You can search for devices using this dialog by entering the device name in the Search bar shown below.



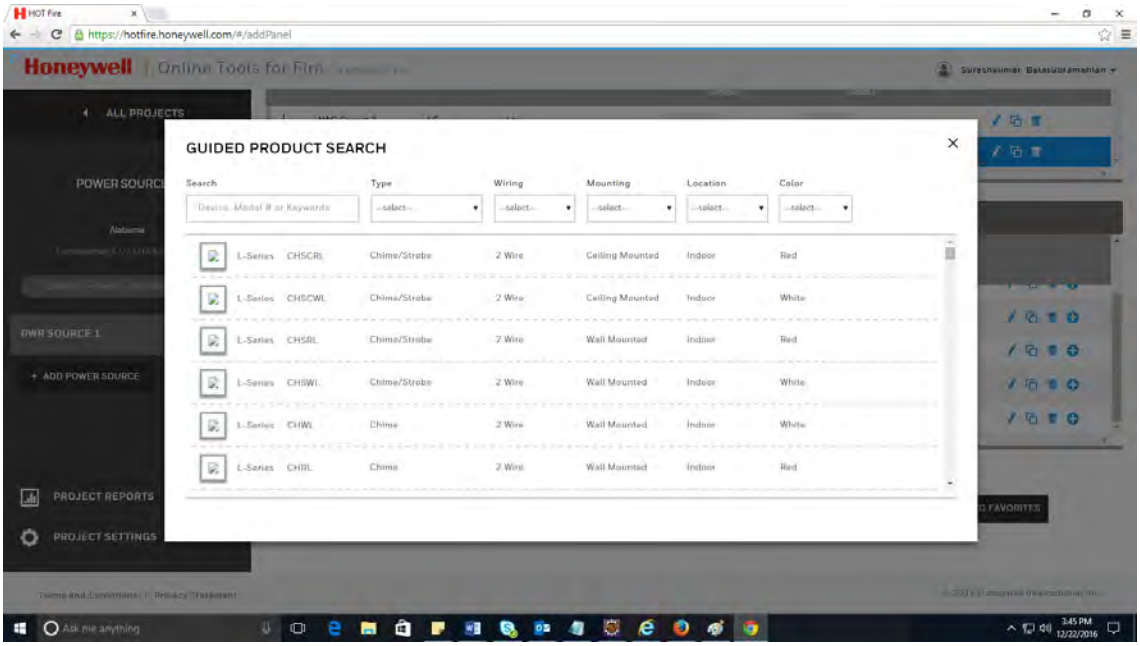
And then enter the mandatory fields and click on the ‘Add Devices’ button.

5.8 Guided Product search

For users who are not familiar with device models, the tool offers a ‘Guided Product Search’ option on clicking the ‘Use our guided product search’ link present at the bottom of the ‘Model’ field in Devices table (shown below).

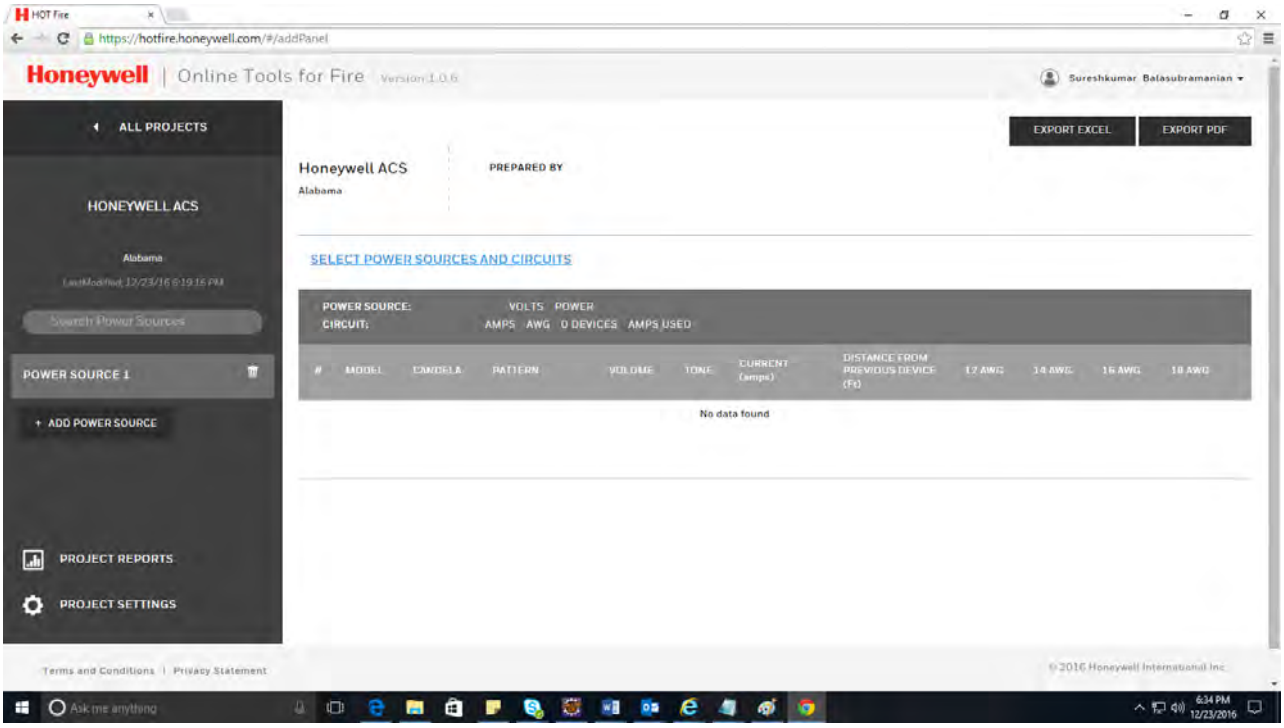


Clicking that link opens a new dialog named ‘Guided Product Search’.

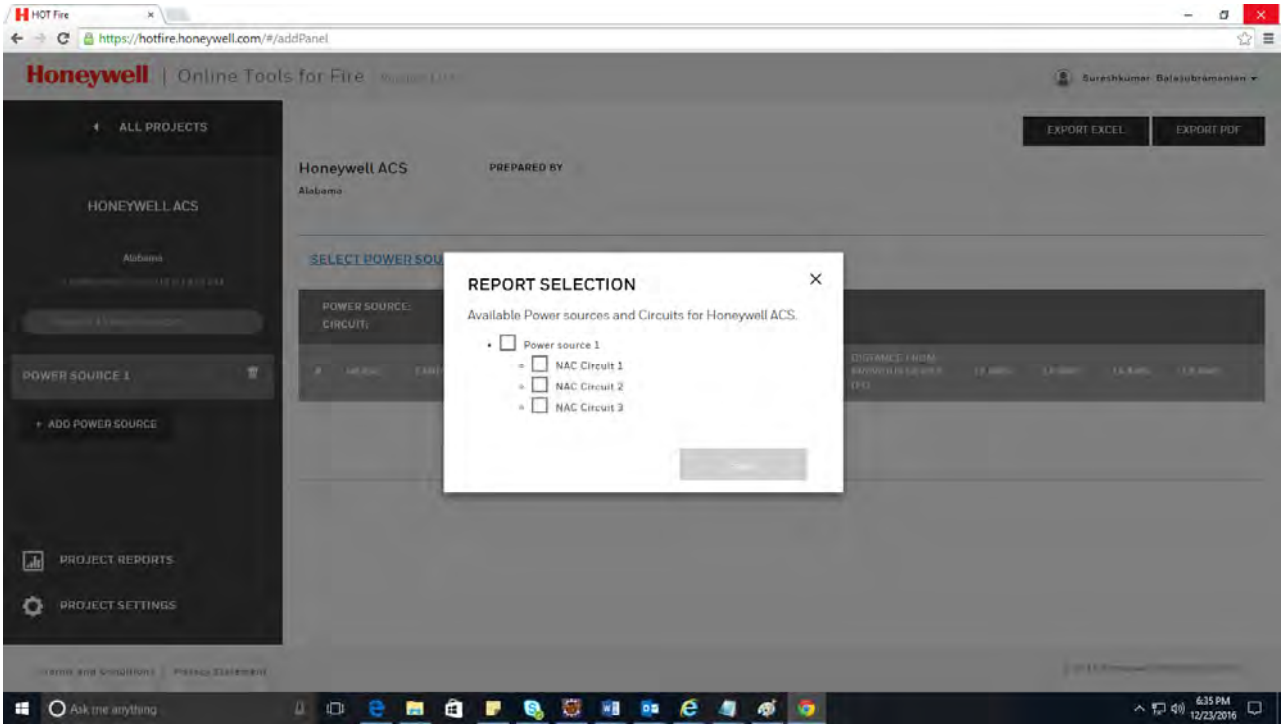


6. Reports

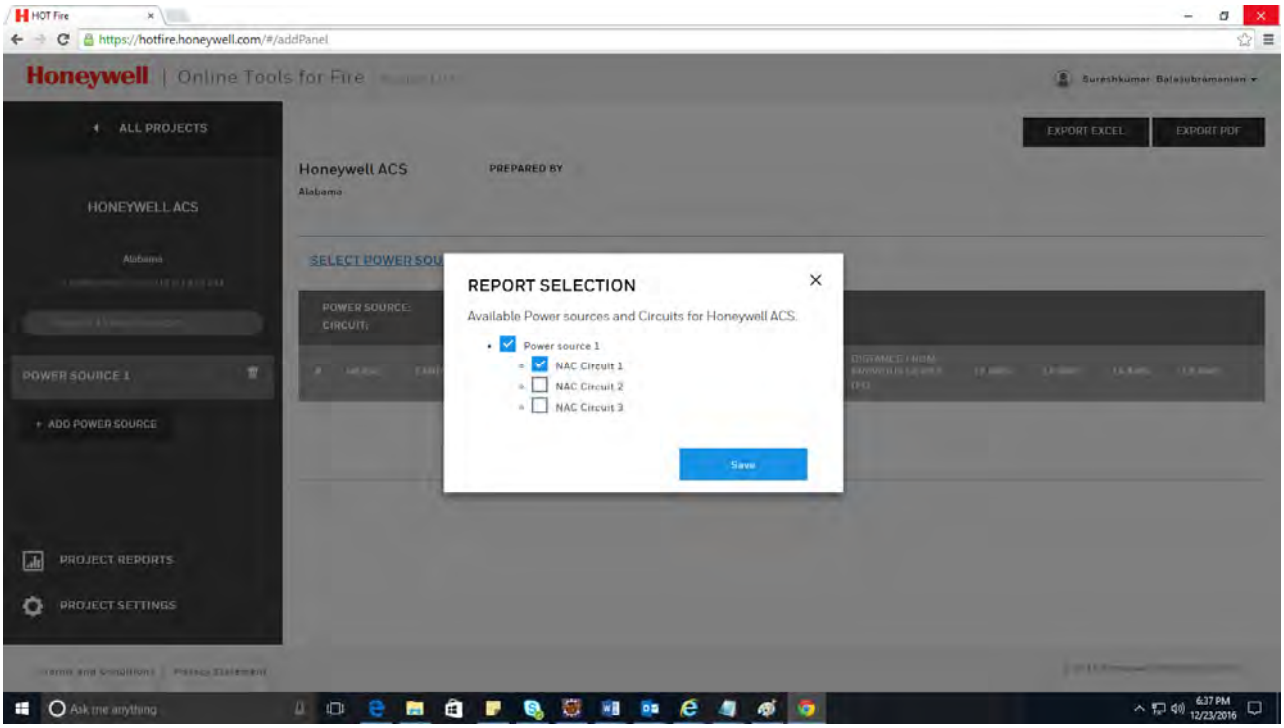
Clicking the ‘Project Reports’ link on left navigation to go to the screen below.



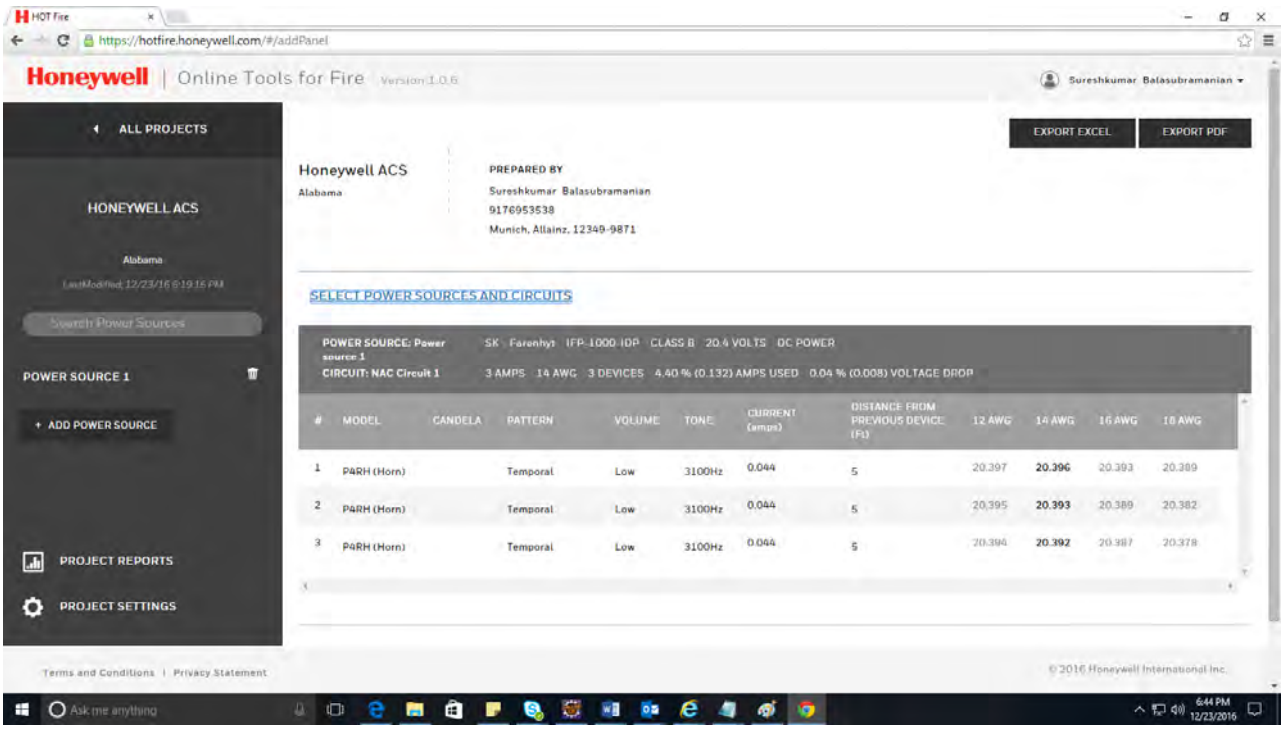
On clicking ‘Select Power Sources and Circuits’ link, a dialog “Report Selection” opens up and it will display the list of all power sources and corresponding circuits in a particular project.



Select the appropriate circuits for which you need the report and click on the ‘Save’ button. Then the respective power source, circuit details, devices and their current draw, voltage drop will be calculated and displayed in the Reports screen.

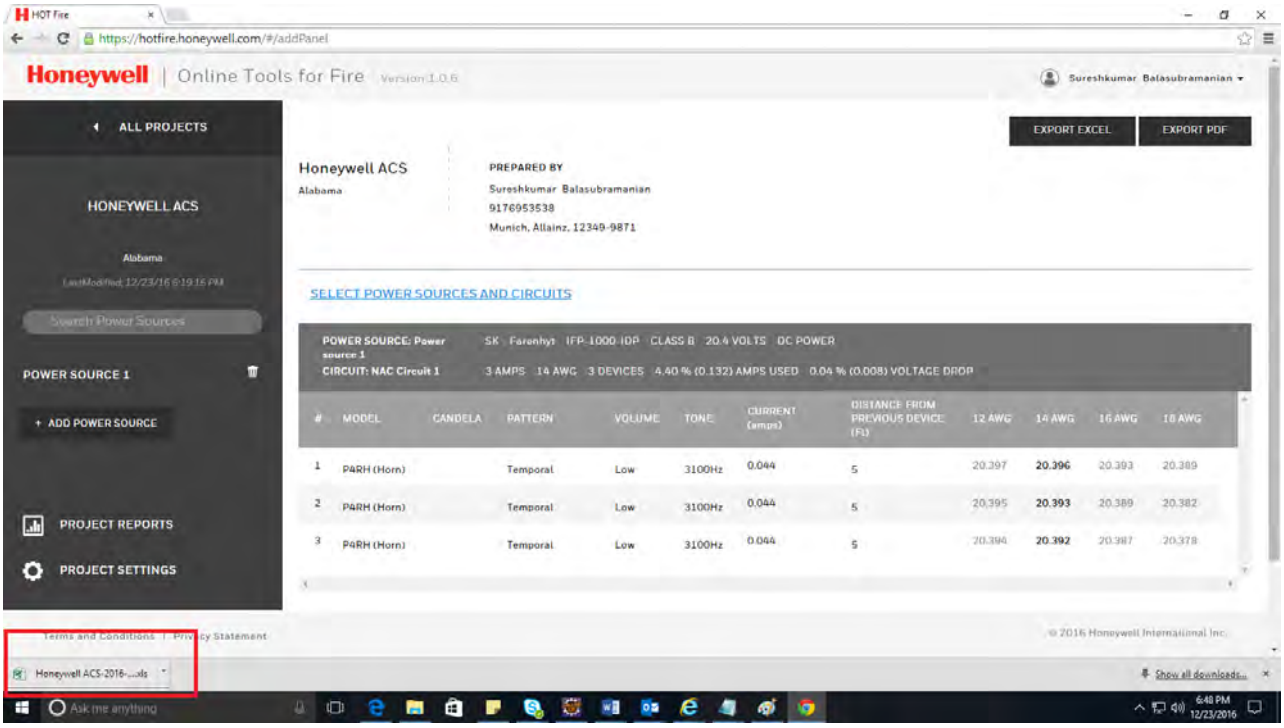


Report Selection results displayed in Reports Screen (see below)

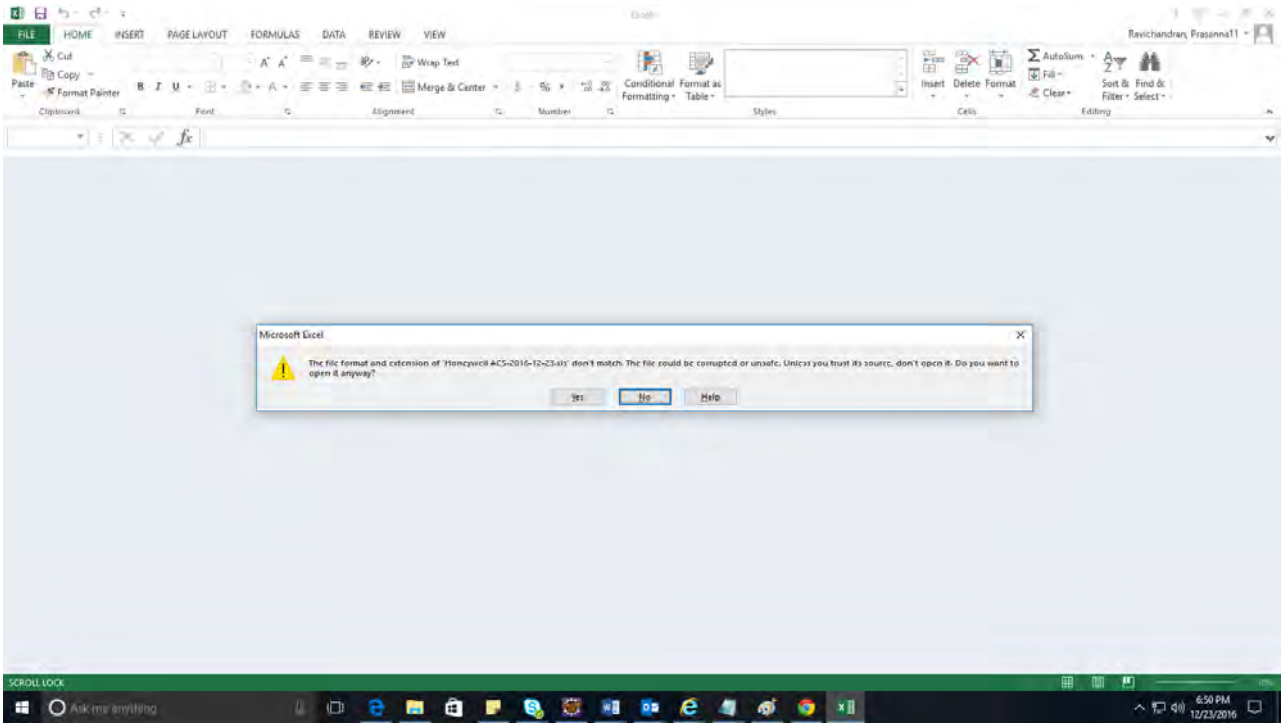


6.1 Exporting to Excel

If you click on the ‘Export Excel’ button, the report will be downloaded in an excel format.

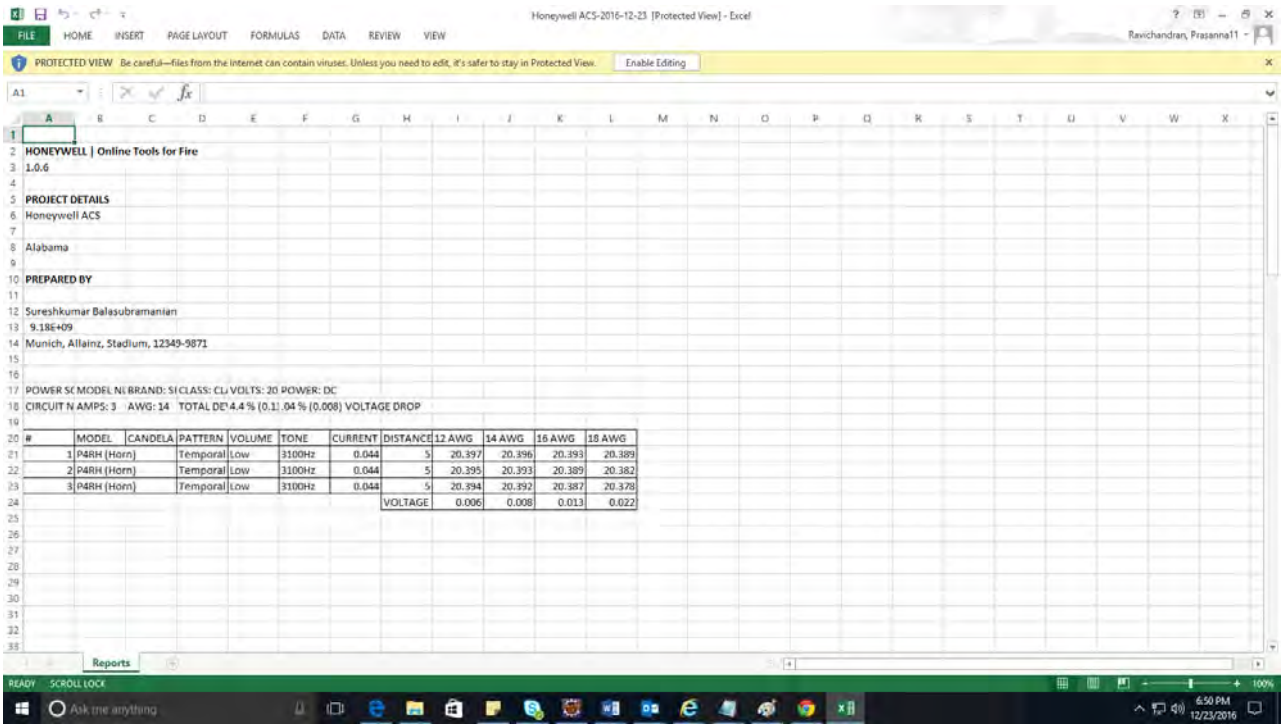


On opening the excel report, it will display a dialog as shown below. Click ‘Yes’.



The reports will then be opened in an excel file, which shows the selected circuit and device details and the voltage drop calculations.

NOTE: If you want to use this report to Copy/Paste data to CAD, please format the column widths so that CAD can display the informartion properly



HONEYWELL | Online Tools for Fire
1.0.6

PROJECT DETAILS
Honeywell ACS

Alabama

PREPARED BY

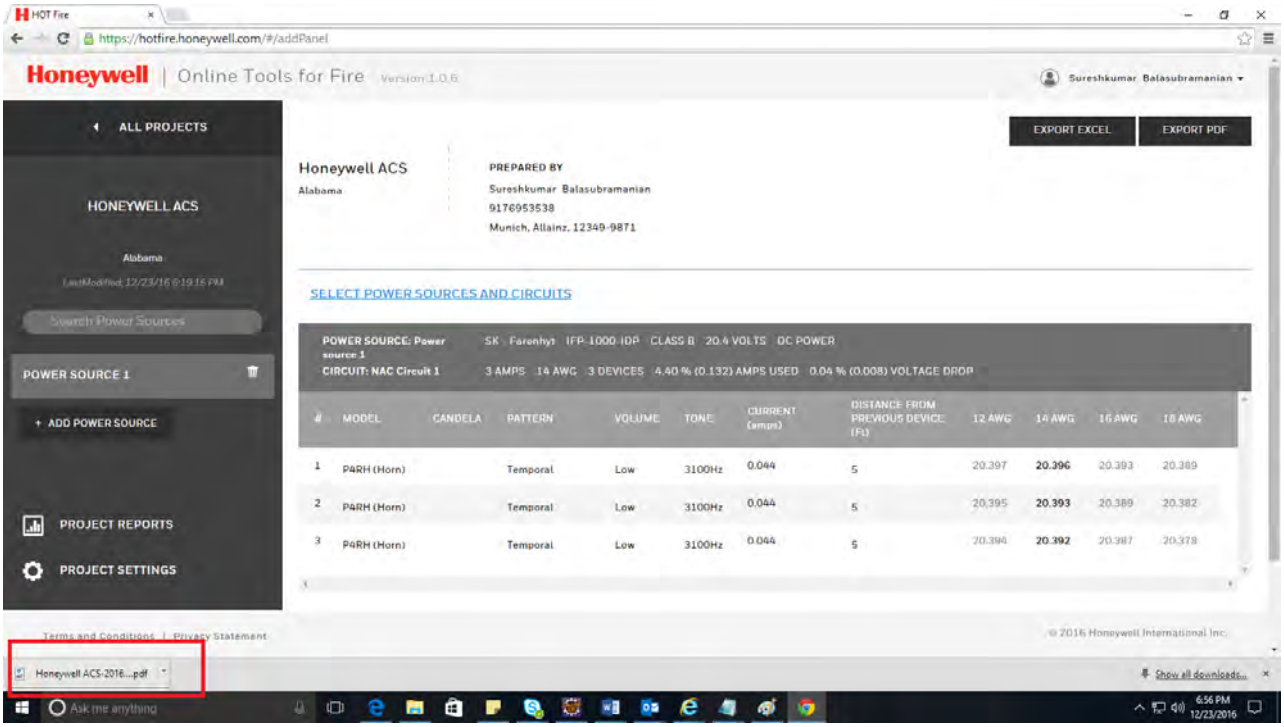
Sureshkumar Balasubramanian
9.18E+09
Munich, Allainz, Stadium, 12349-9871

POWER SC MODEL NU BRAND: SI CLASS: CL VOLTS: 20 POWER: DC
CIRCUIT N AMPS: 3 AWG: 14 TOTAL DE 4.4 % (0.1 .04 % (0.008) VOLTAGE DROP

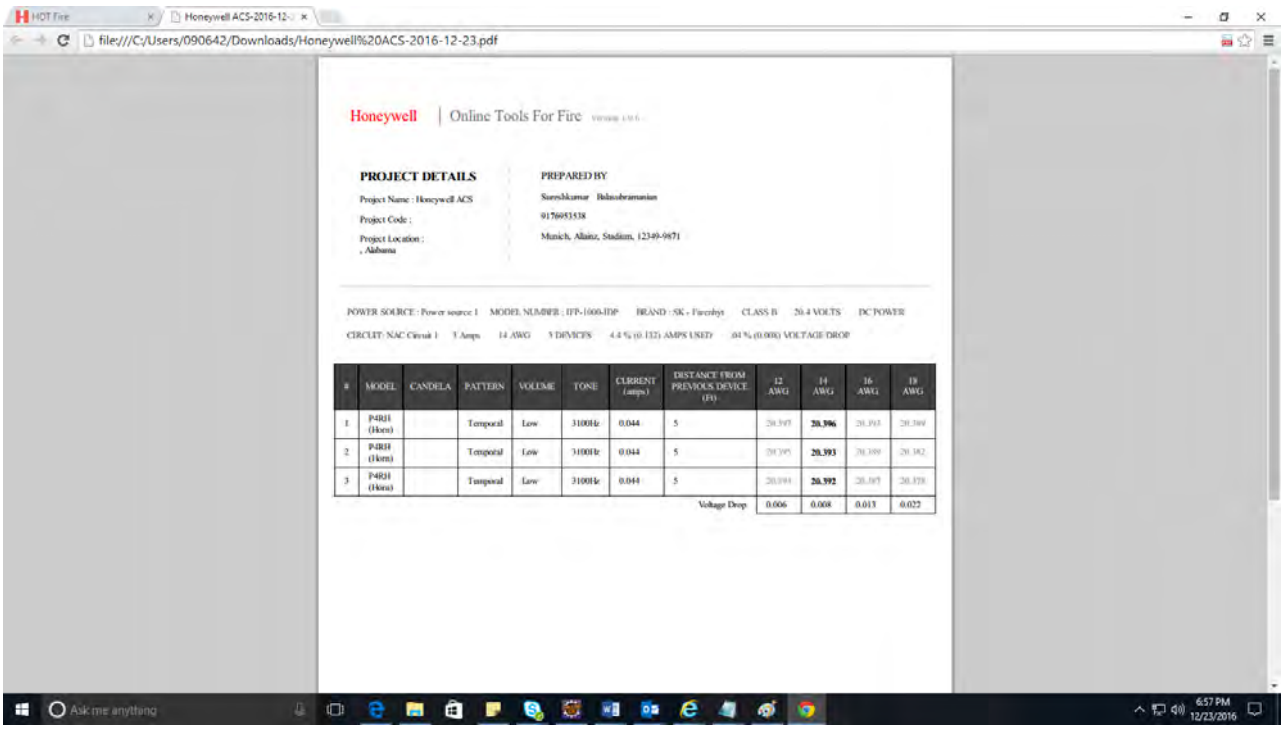
#	MODEL	CANDELA	PATTERN	VOLUME	TONE	CURRENT	DISTANCE	12 AWG	14 AWG	16 AWG	18 AWG
1	P4RH (Horn)		Temporal	Low	3100Hz	0.044	5	20.397	20.396	20.393	20.389
2	P4RH (Horn)		Temporal	Low	3100Hz	0.044	5	20.395	20.393	20.389	20.382
3	P4RH (Horn)		Temporal	Low	3100Hz	0.044	5	20.394	20.392	20.387	20.378
							VOLTAGE	0.006	0.008	0.013	0.022

6.2 Exporting to PDF

On clicking the ‘Export PDF’ button, the report will be exported in a PDF file and will be downloaded automatically.



On opening the PDF file, user will see the selected circuits, device details and other voltage drop related calculations.

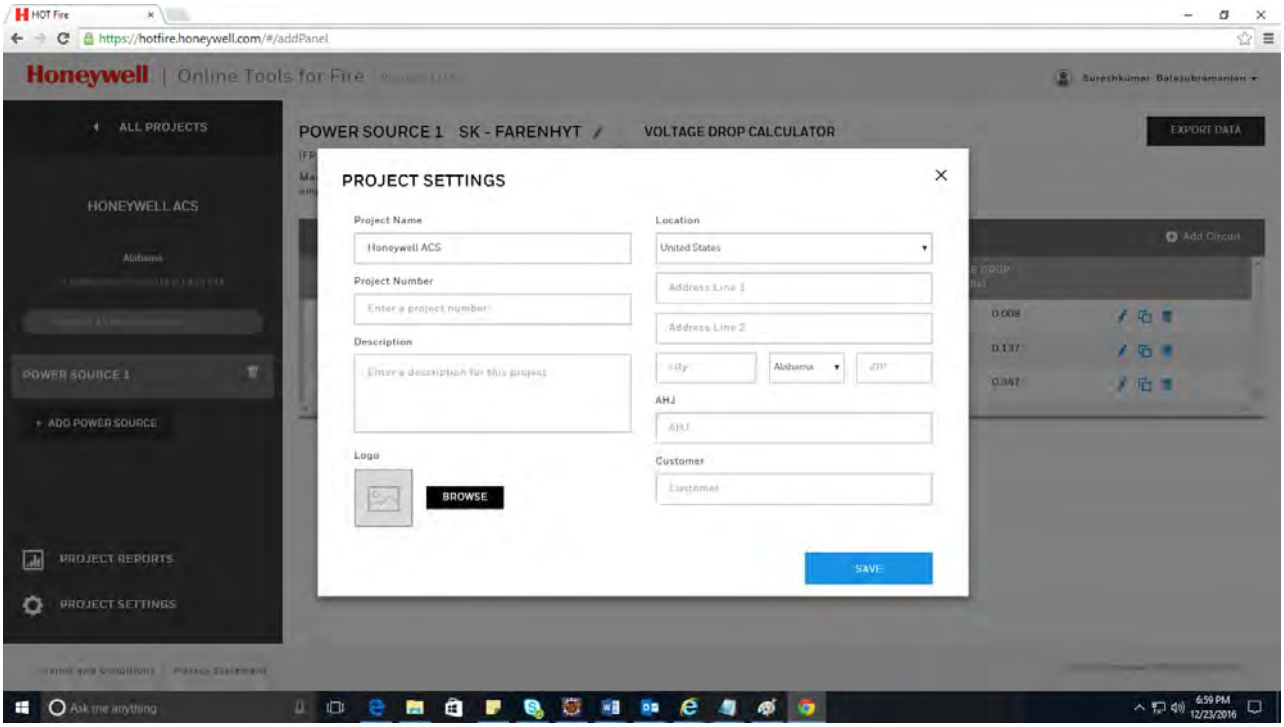


7. Other Functionalities

There are few other operations that can be performed in HOT Fire application. Please see those details below.

7.1 Project Settings

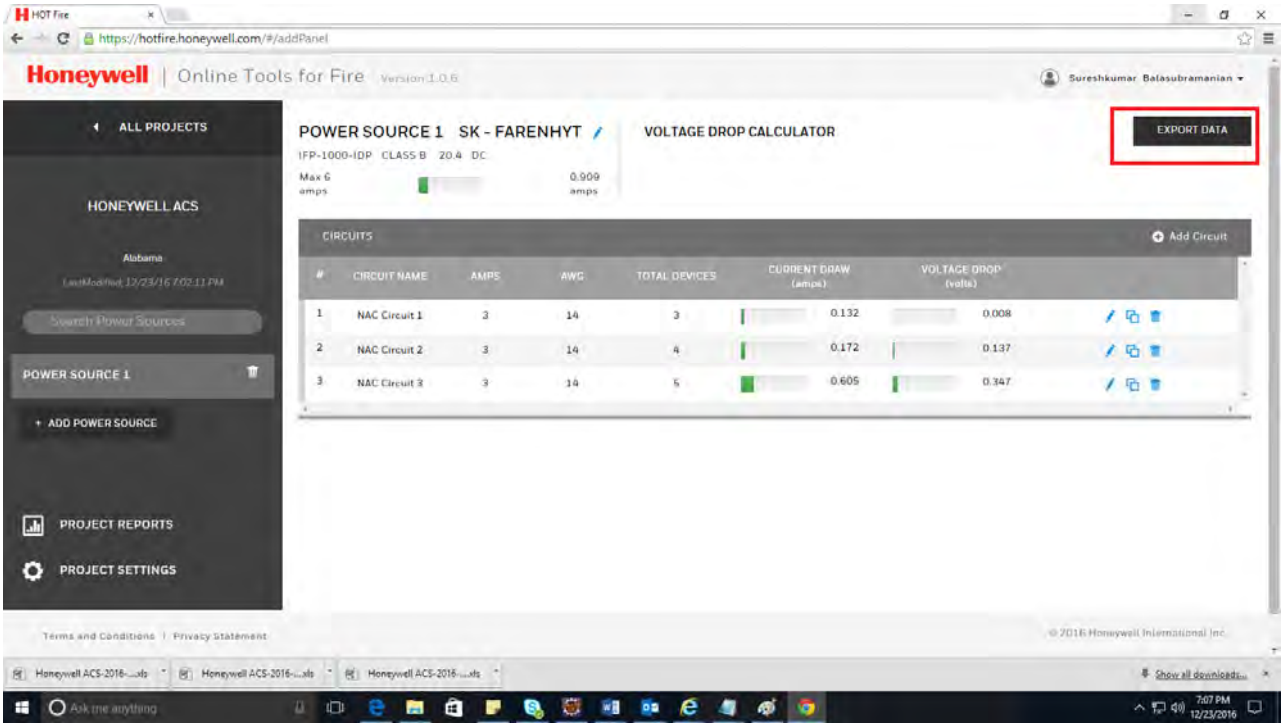
On selecting the ‘Project Settings’ link on left navigation, the ‘Project settings’ dialog displays the project details, given while creating the project.



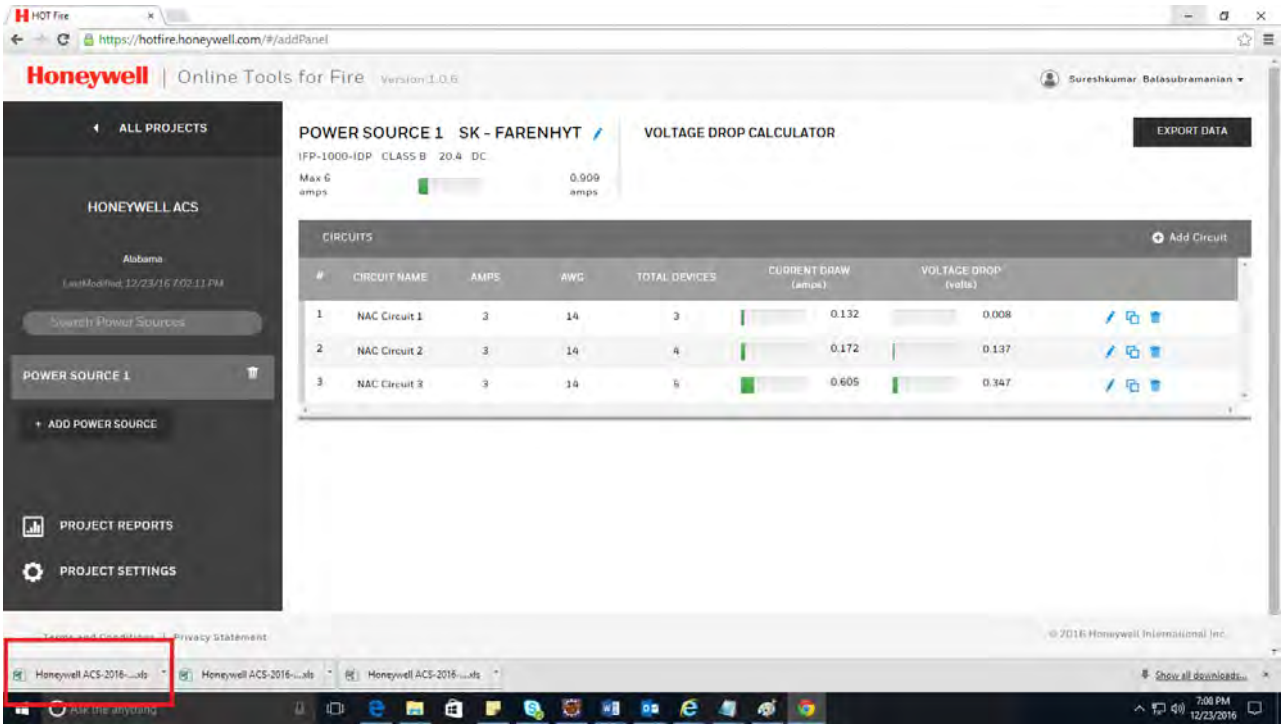
You can use this dialog to edit the parameters and save the changes.

7.2 Exporting a project

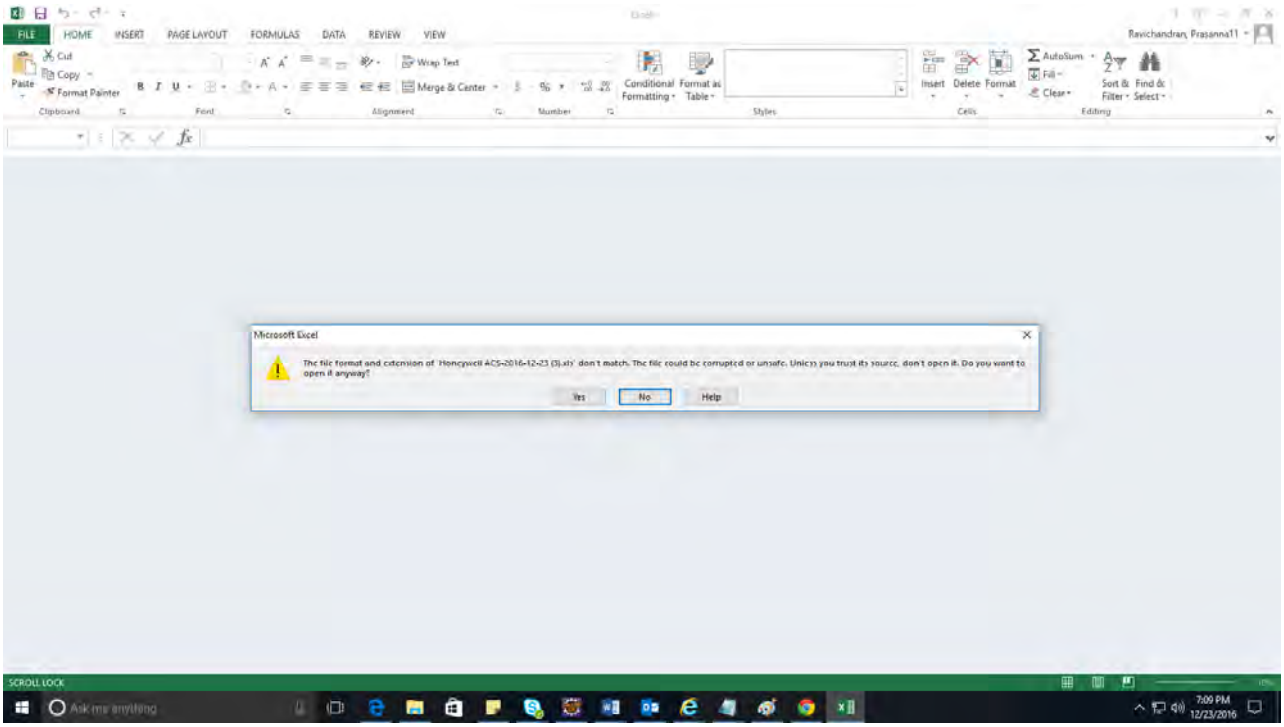
After creating a project and making changes in it, the corresponding project will be exported to an excel file, by clicking on the “Export Data” button, which is present at the top right corner.



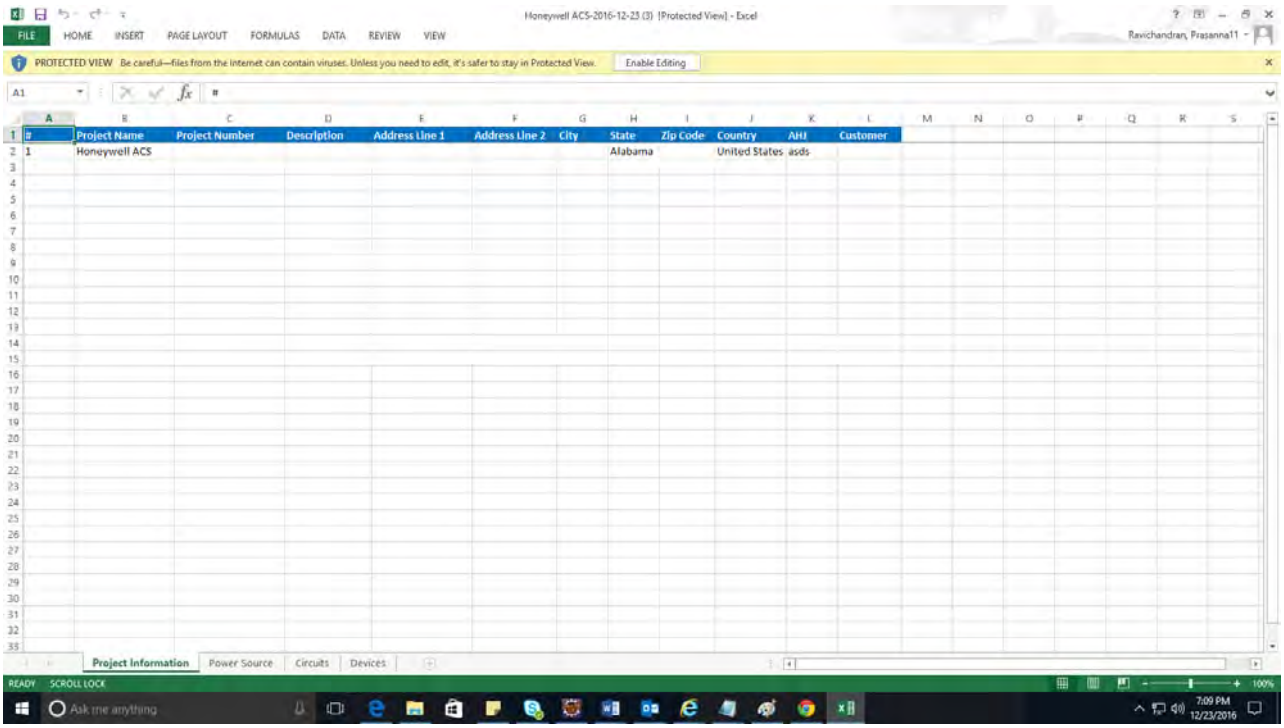
On clicking ‘Export Data’, the corresponding project details will be exported to an excel file and saved.



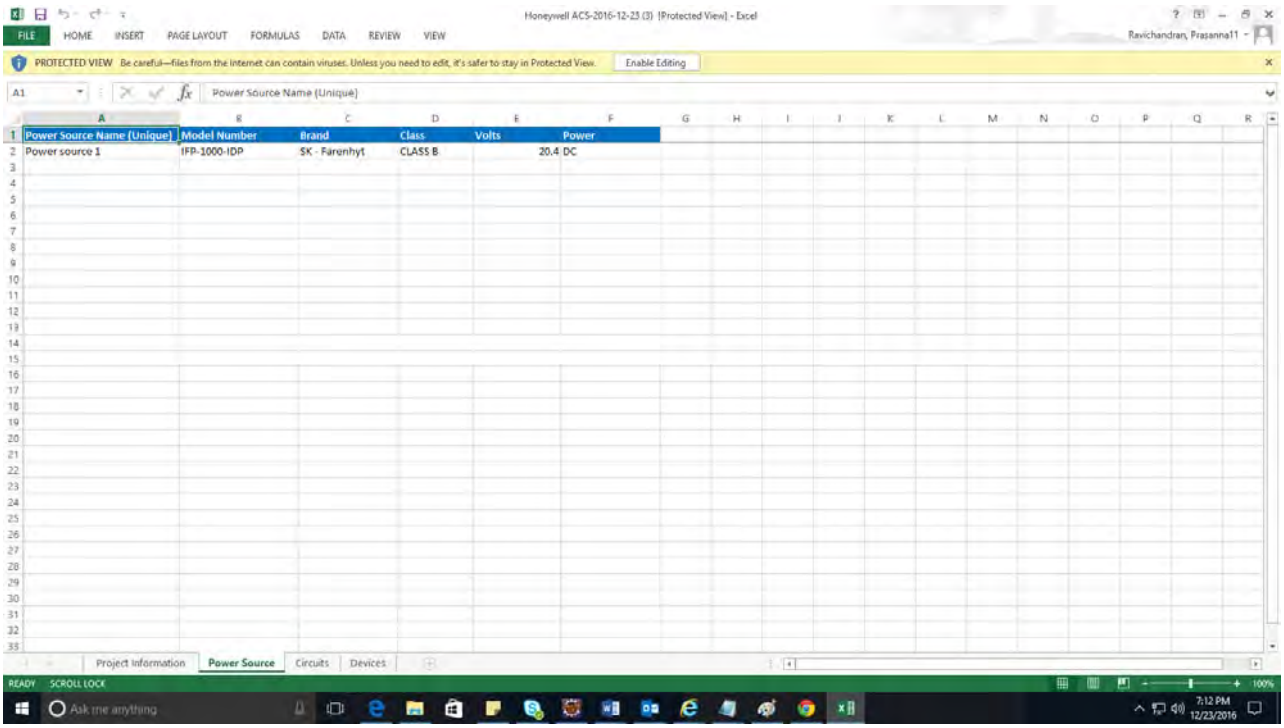
On opening that excel file, it will show a dialog, and click on ‘Yes’ button.



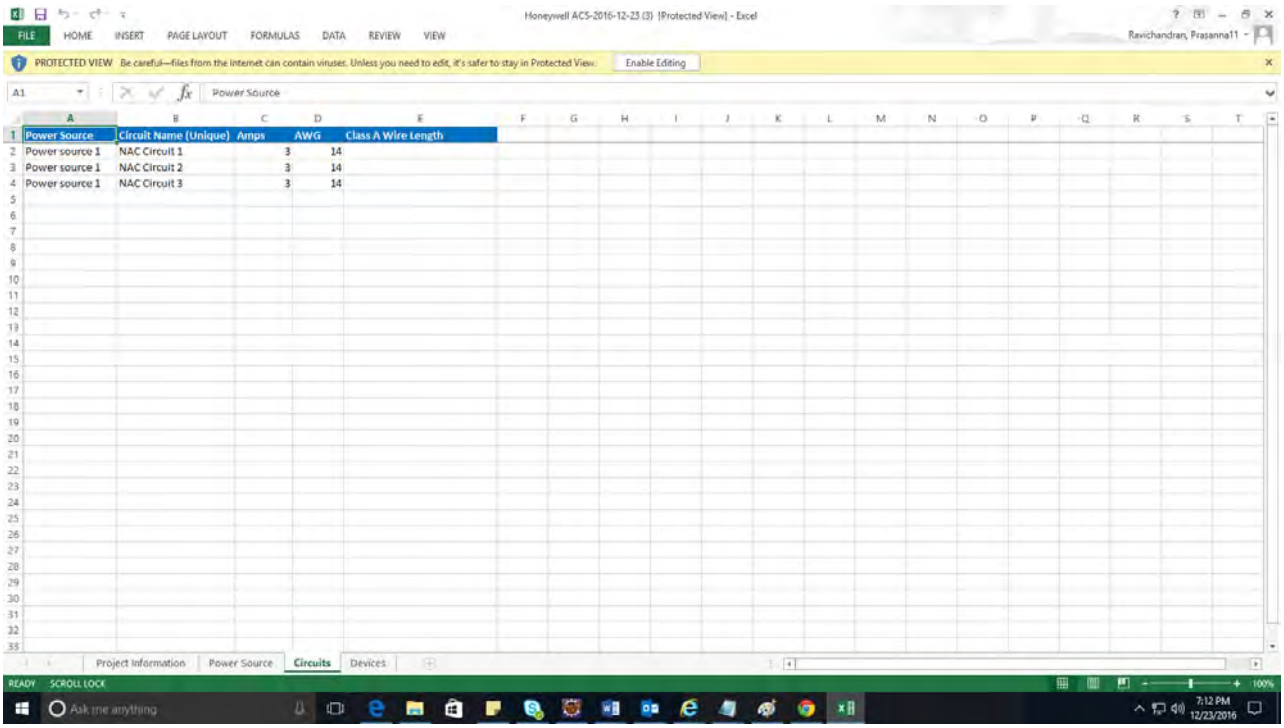
Then it will open a excel file with four tabs - ‘Project Information’, ‘Power Source’, ‘Circuits’ and ‘Devices’ containing details of the selected project



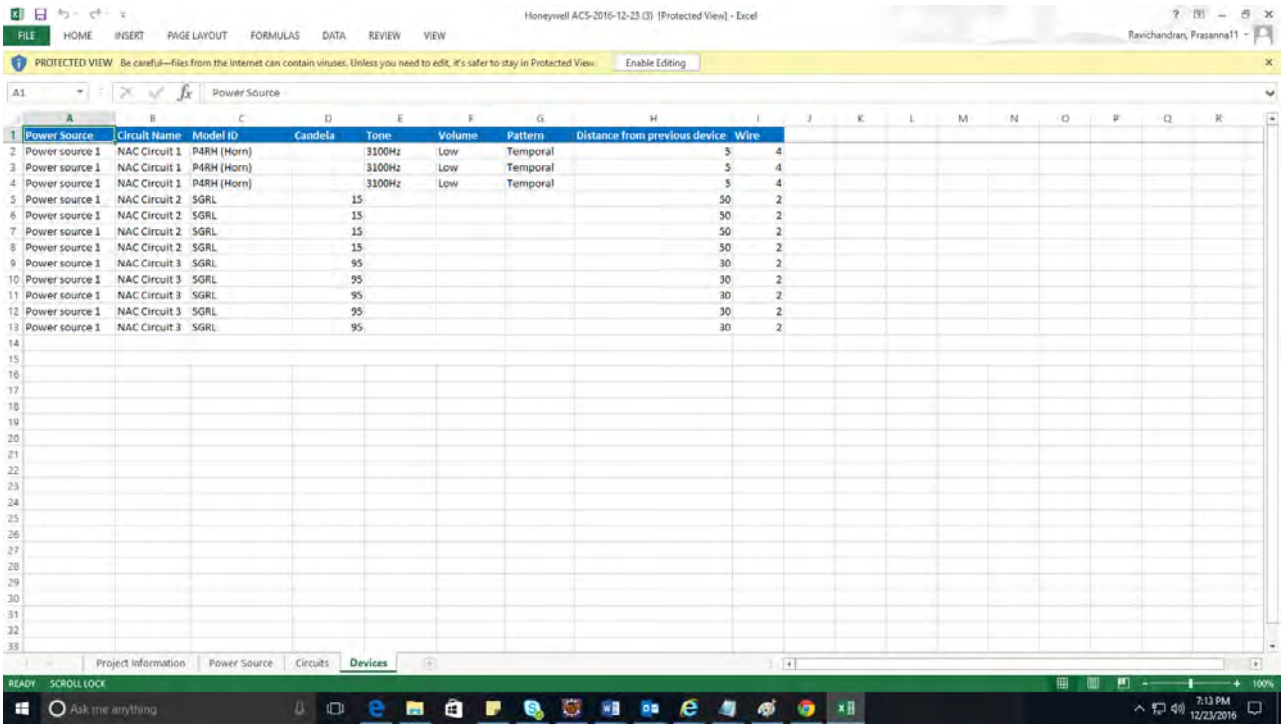
‘Power Source’ tab:



'Circuits' tab:



'Devices' tab:

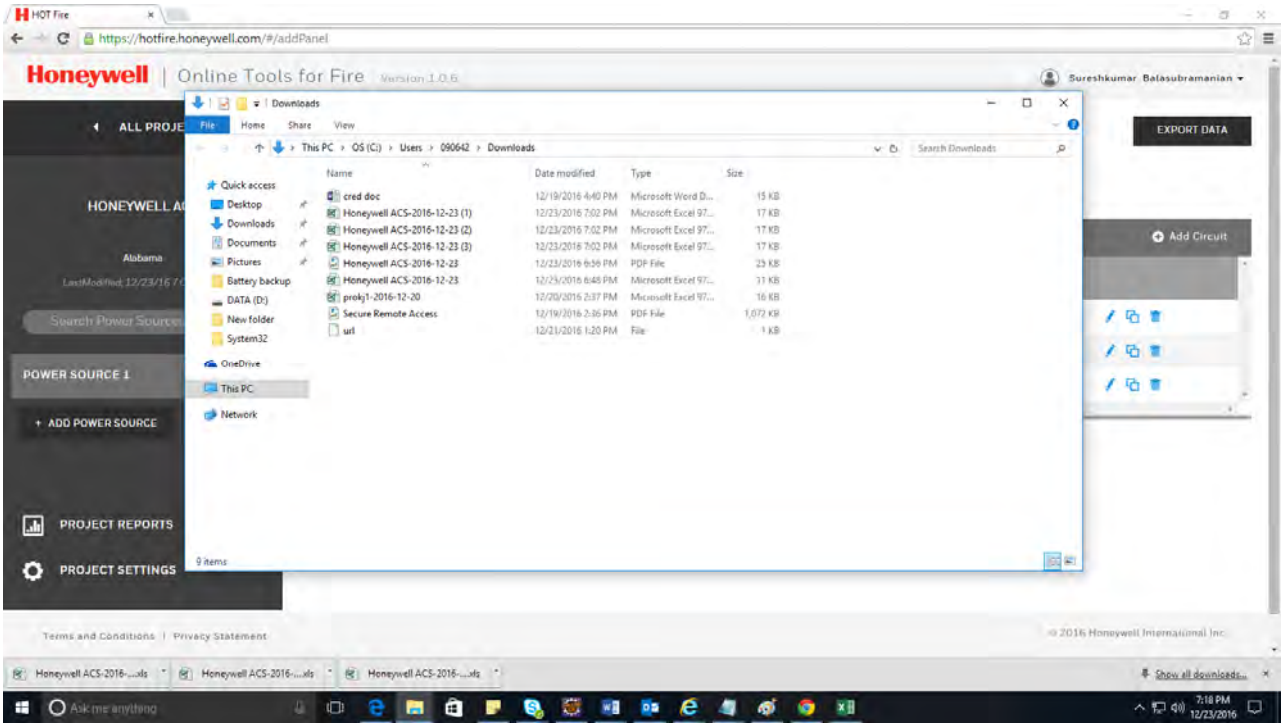


Power Source	Circuit Name	Model ID	Candela	Tone	Volume	Pattern	Distance from previous device	Wire
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2

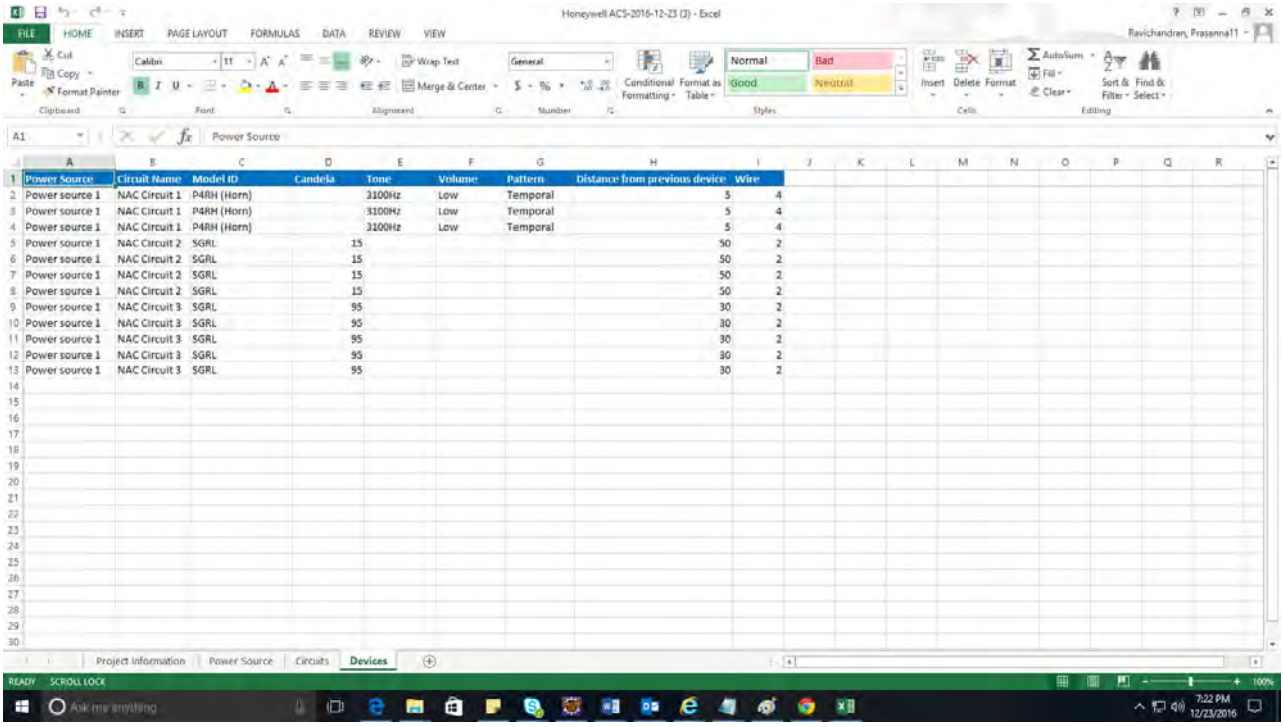
7.3 Importing a project

After opening and saving the exported project in Excel, you can edit the Excel document and re-import that project. Advance users can create project in Excel and import it to obtain the calculations and reports by following the Excel template.

Opening the exported excel file location: (Usually it is saved in Downloads)

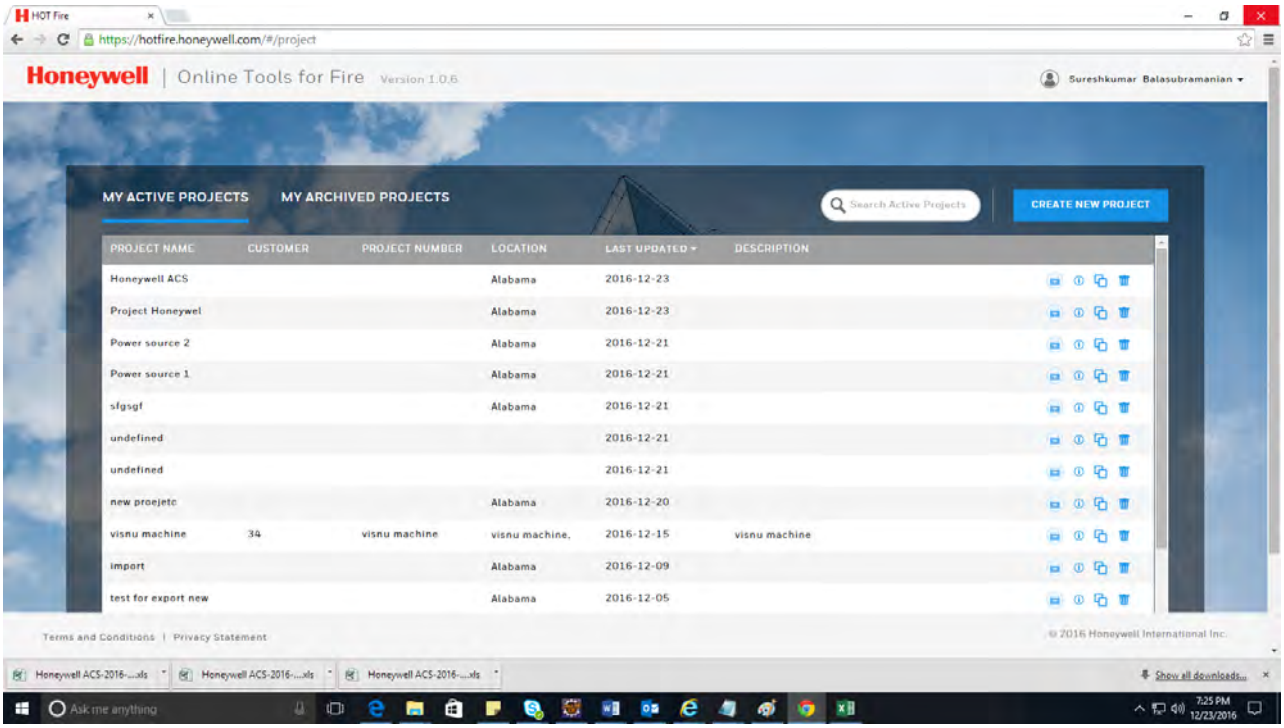


Saving it atleast once and closing it.

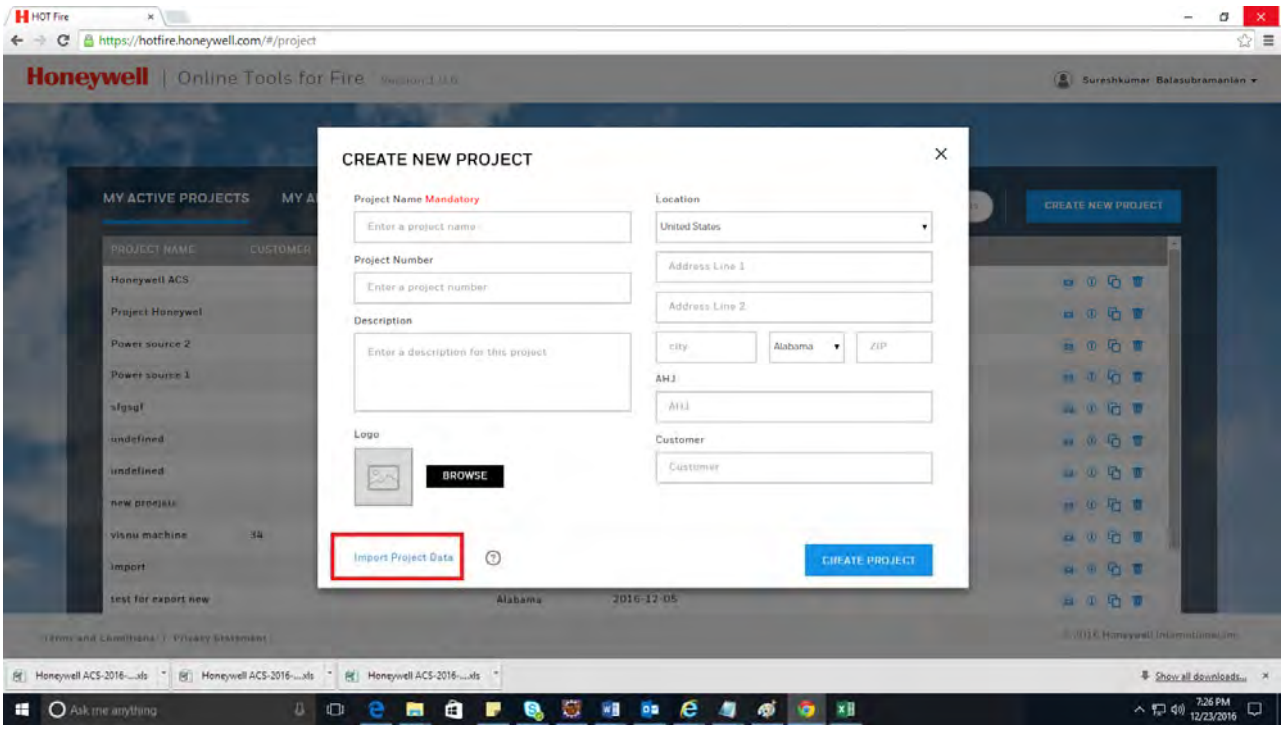


Power Source	Circuit Name	Model ID	Candela	Tone	Volume	Pattern	Distance from previous device	Wire
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 1	P4RH (Horn)		3100Hz	Low	Temporal	5	4
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 2	SGRL	15				50	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2
Power source 1	NAC Circuit 3	SGRL	95				30	2

Click on ‘Create New Project’



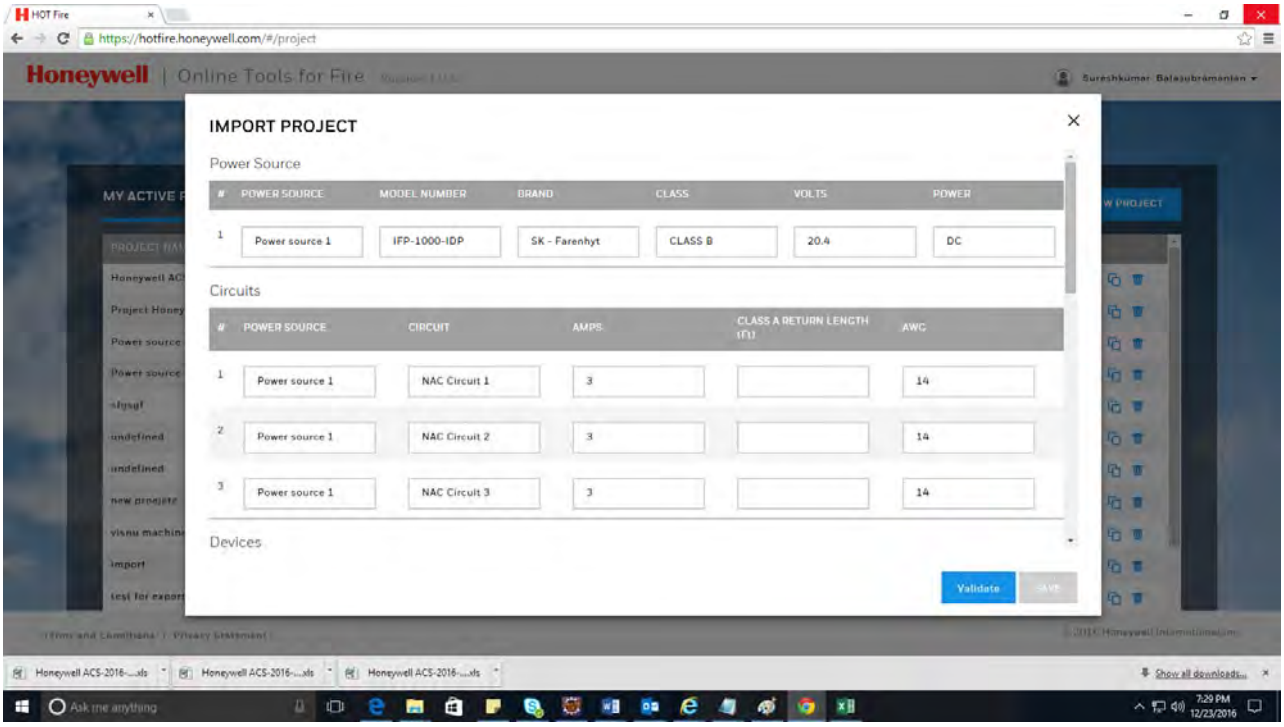
Then click on the ‘Import Project Data’ link as shown below

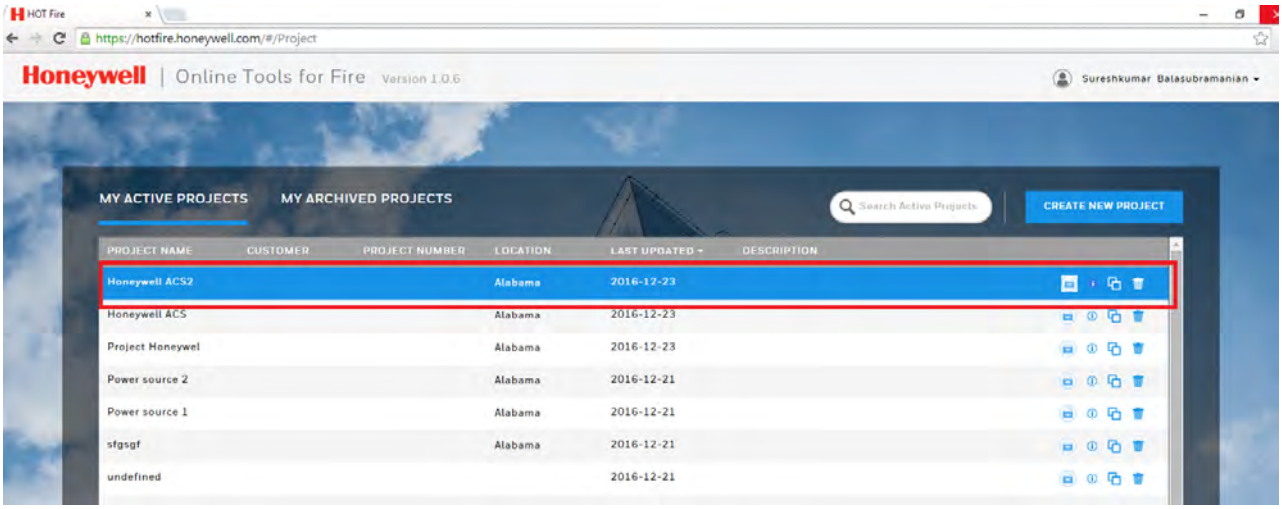


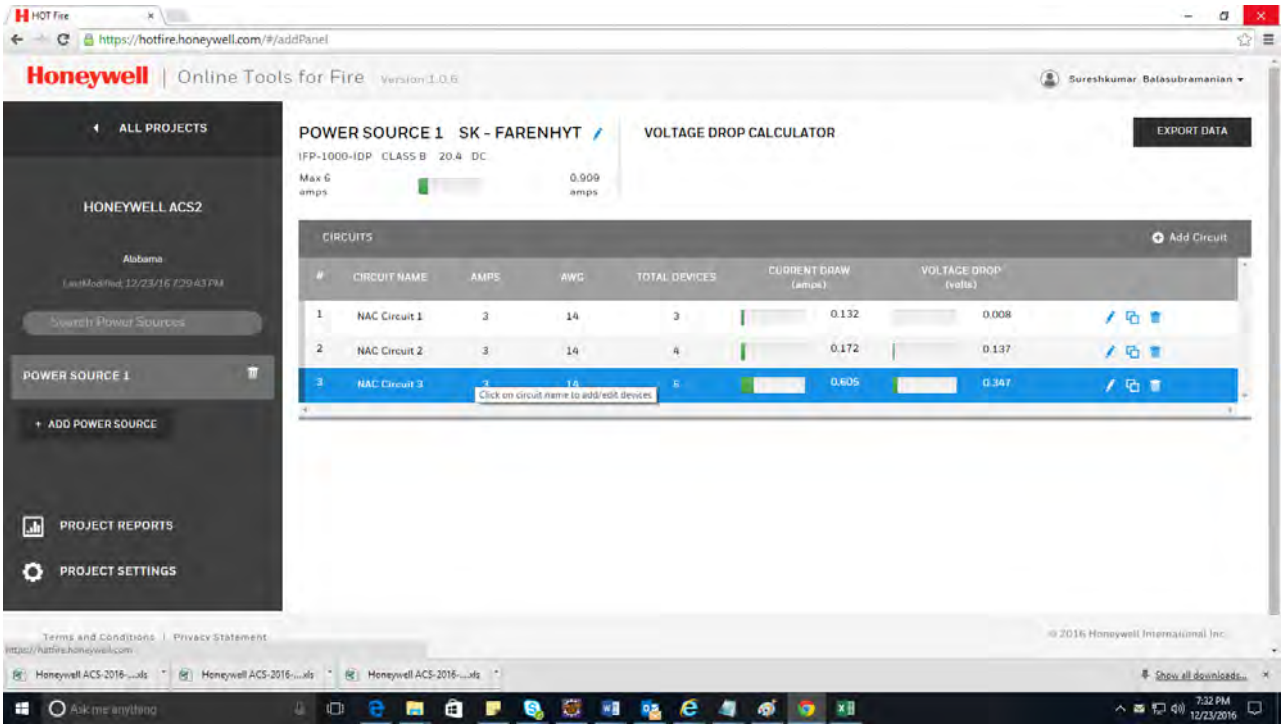
Then navigate to the corresponding “Downloads” folder, click on the saved project excel file and then click on ‘Open’ button in that dialog.

Note: If that project name already exists, then provide a different project name.

After clicking ‘Next’, the corresponding power source, circuits and the devices will be displayed in the ‘Import Project’ grid. Users can edit any details on this grid. Once ready, click on ‘Validate’ button and upon successful validation, click on the ‘Save’ button to complete importing the project.

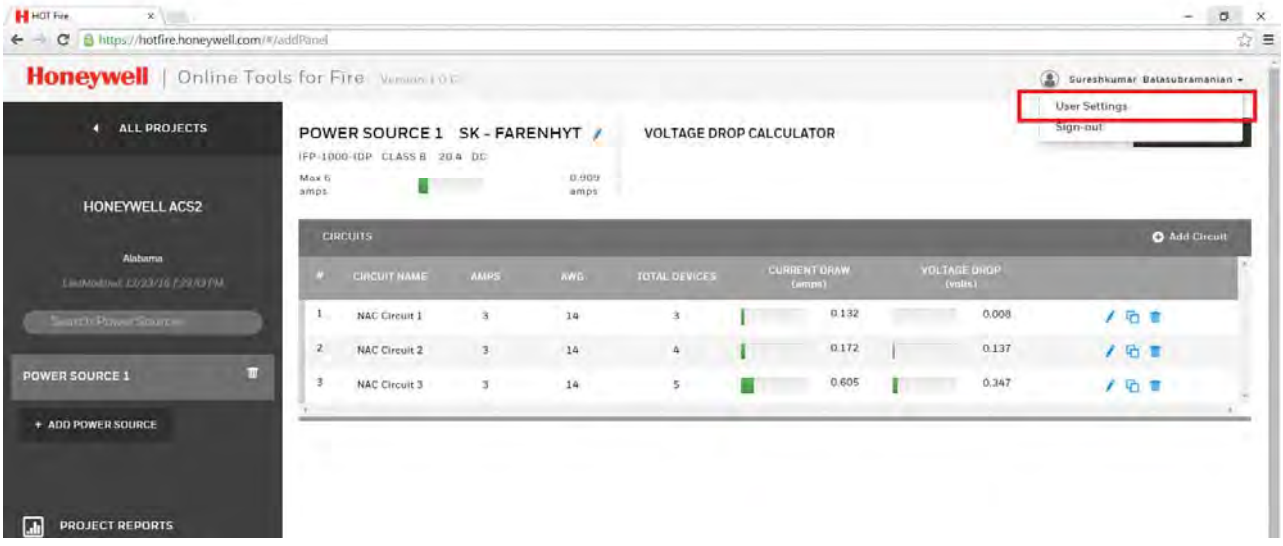






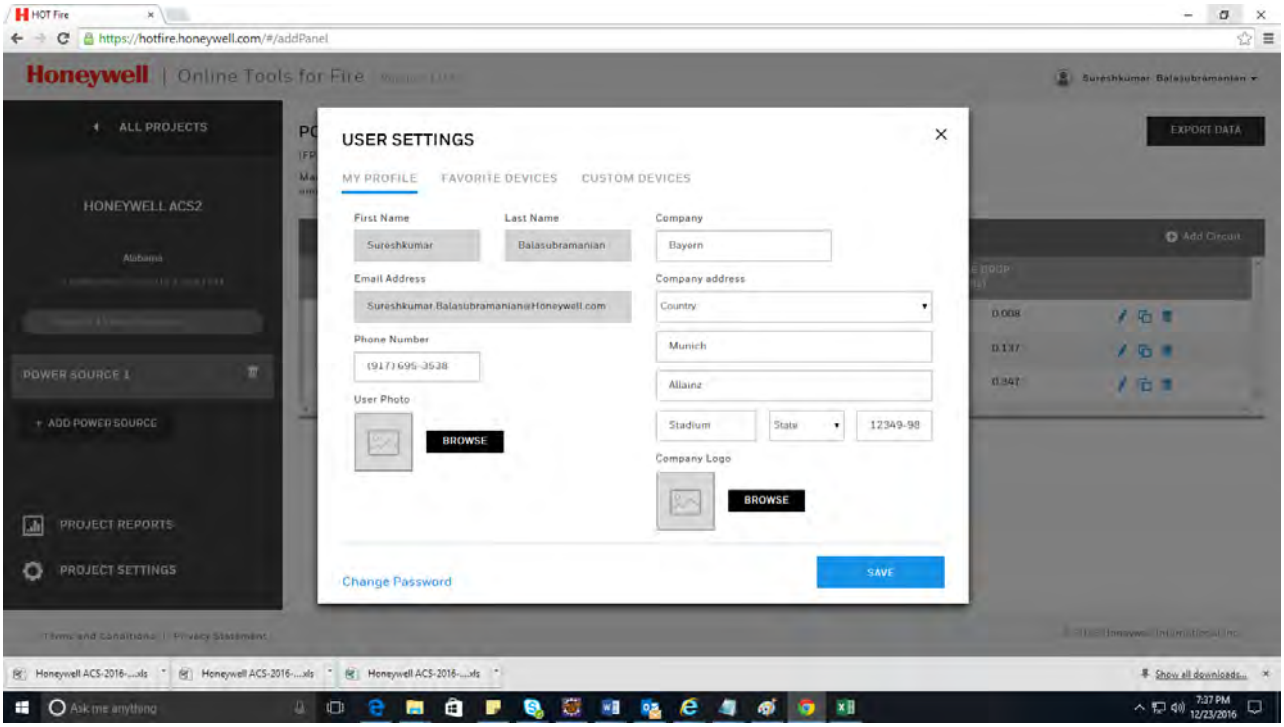
7.4 User settings:

User Settings is available below the User Name at the top right corner.



Clicking ‘User Settings’ will open the ‘User settings’ dialog, which will have three tabs - ‘My Profile’, ‘Favorite Devices’, ‘Custom Devices’.

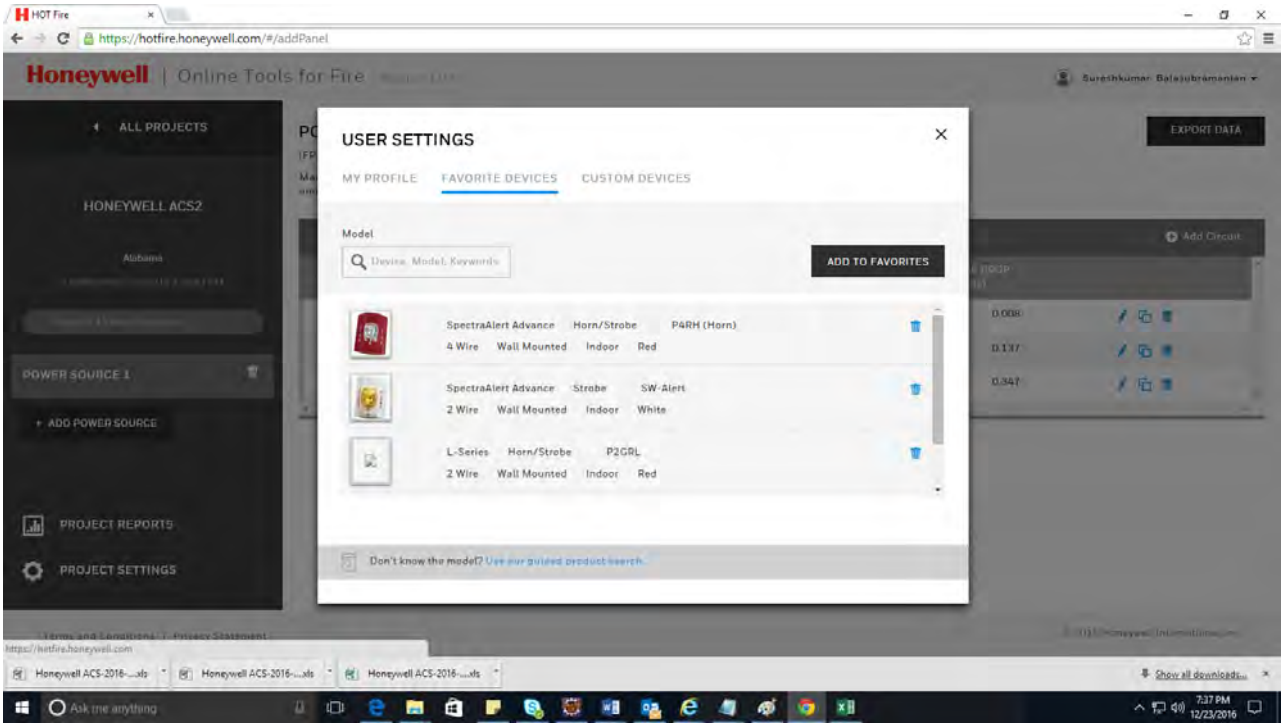
7.4.1 My Profile:



User is allowed to change any of their details and save the changes in this tab as shown above.

7.4.2 Favorite Devices:

On clicking the ‘Favorite Devices’ tab, you will see the list of favorite devices added by that user. Also, if you want to add any specific device as a favorite, you can search for it through the ‘Model’ search field and then click on the ‘Add to Favorites’ button.

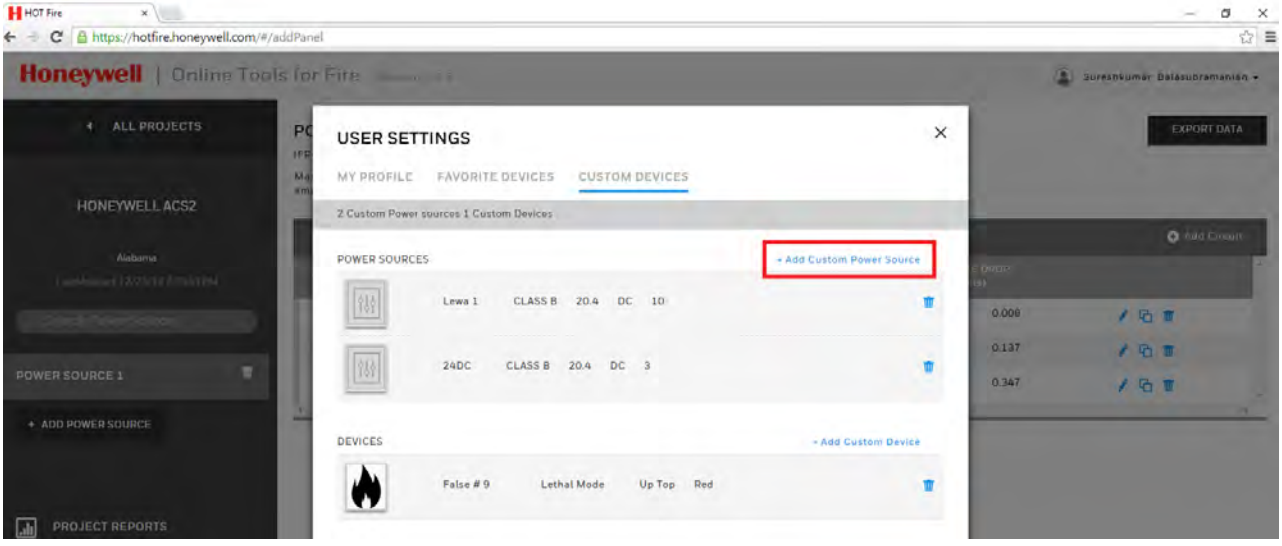


7.4.3 Custom Devices:

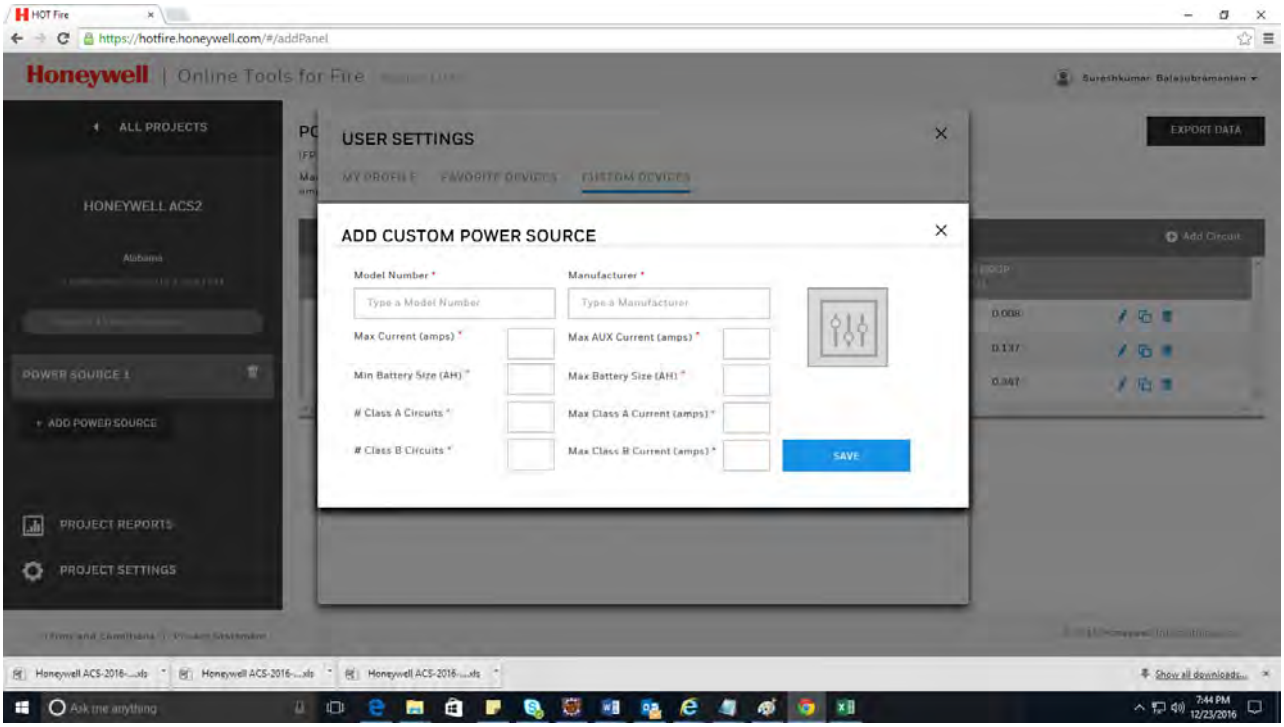
If you click on the ‘Custom Devices’ tab, you see the list of custom power sources and custom devices added by that user.

7.4.3.1 Adding Custom Power Source:

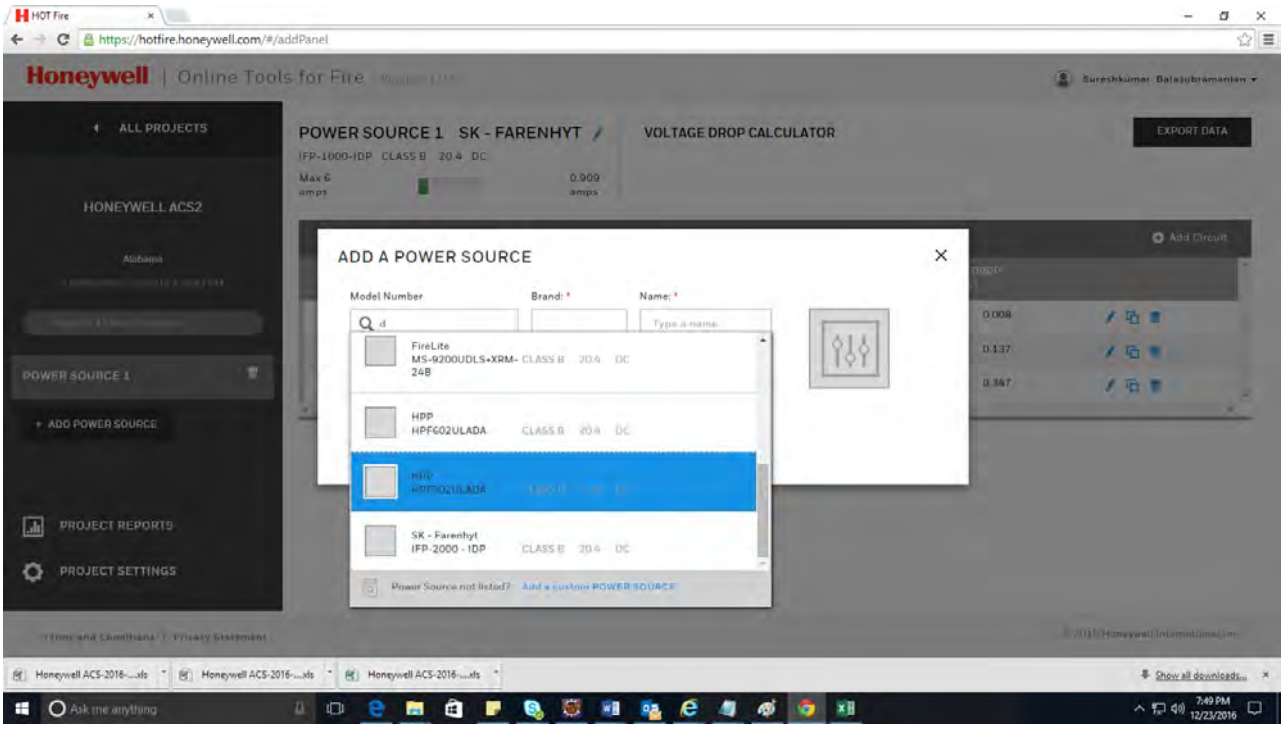
You can add a custom power source, by clicking on the ‘Adding Custom Power Source’ link in the ‘Custom Devices’ tab.



Clicking it will open the ‘Add Custom Power Source’ dialog

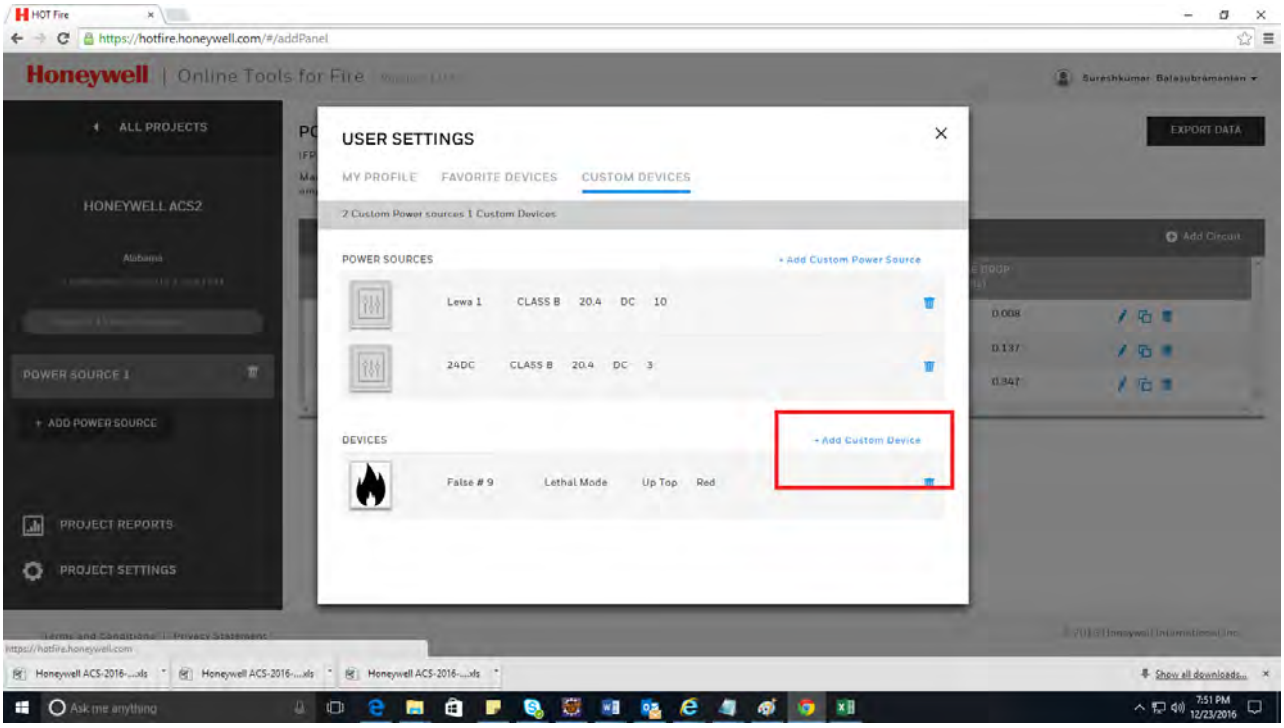


After entering the required details and saving it, the custom power source will be added to the custom power source list of that user. This added custom power source will also be displayed when clicking the 'Model Number' field in the 'Add a Power source' dialog, below the list of Favorite power sources as shown below

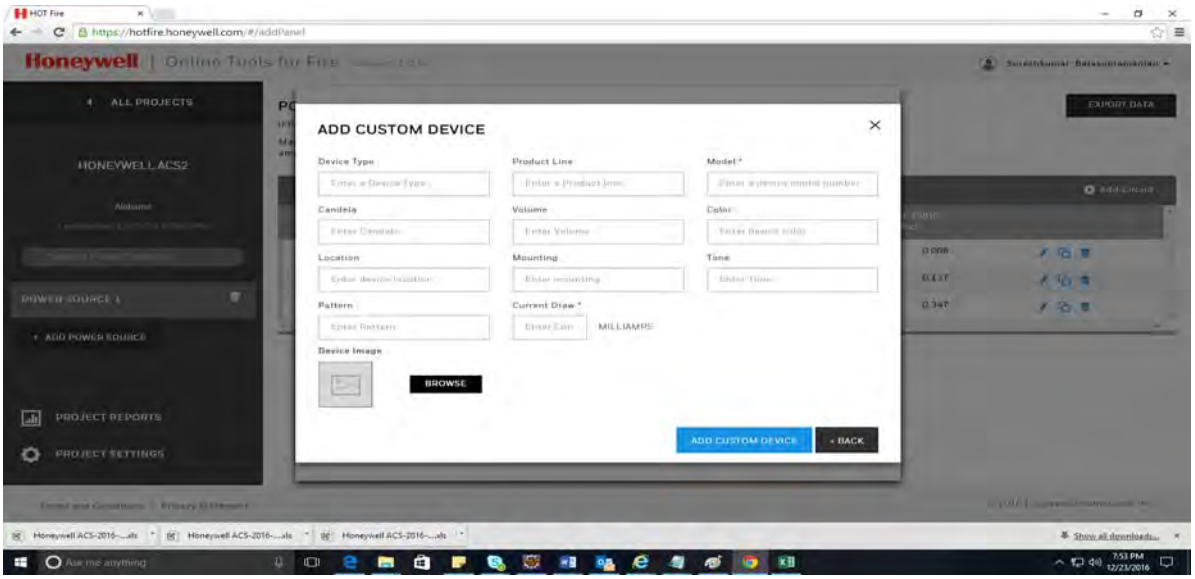


7.4.3.2 Adding Custom Device:

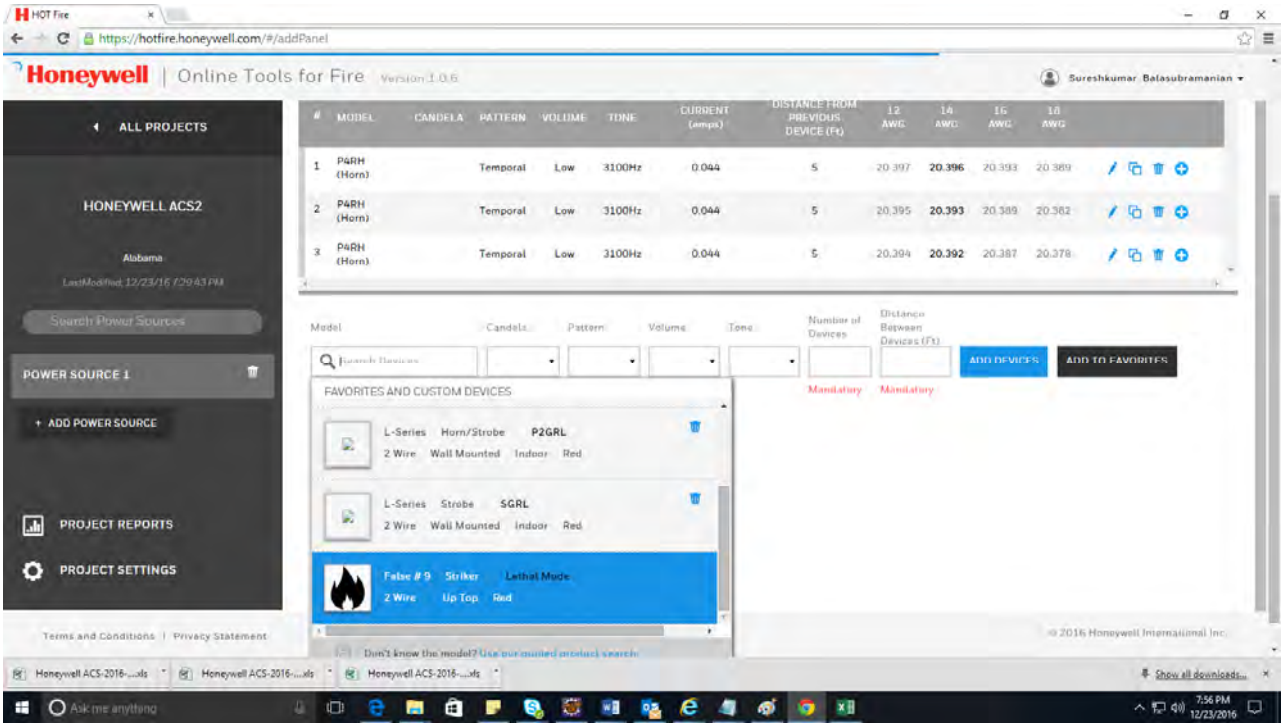
You can also add a custom device by clicking on the ‘Add Custom Device’ link in the ‘Custom Devices’ tab in the ‘User Settings’ dialog.



On clicking it, you will see the ‘Add Custom Device’ dialog as shown below.

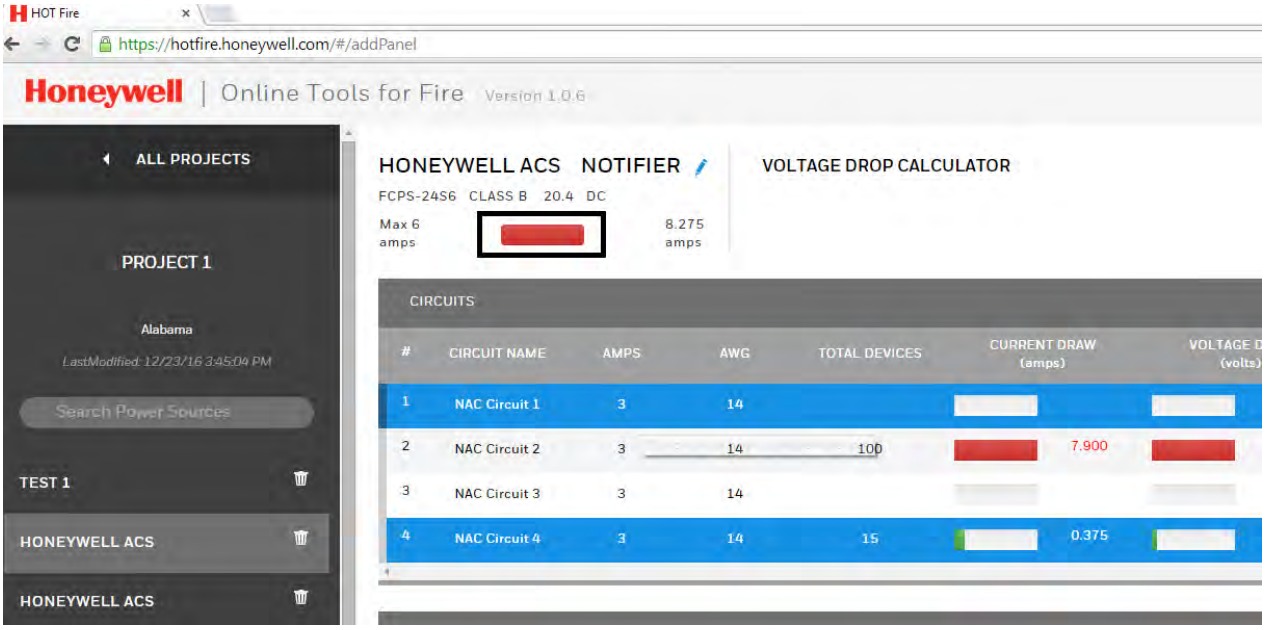


Entering all required information and saving it will create a custom device. This newly created custom device will be displayed below the list of Favorite devices when clicking the ‘Model’ field in the ‘Device’ table.

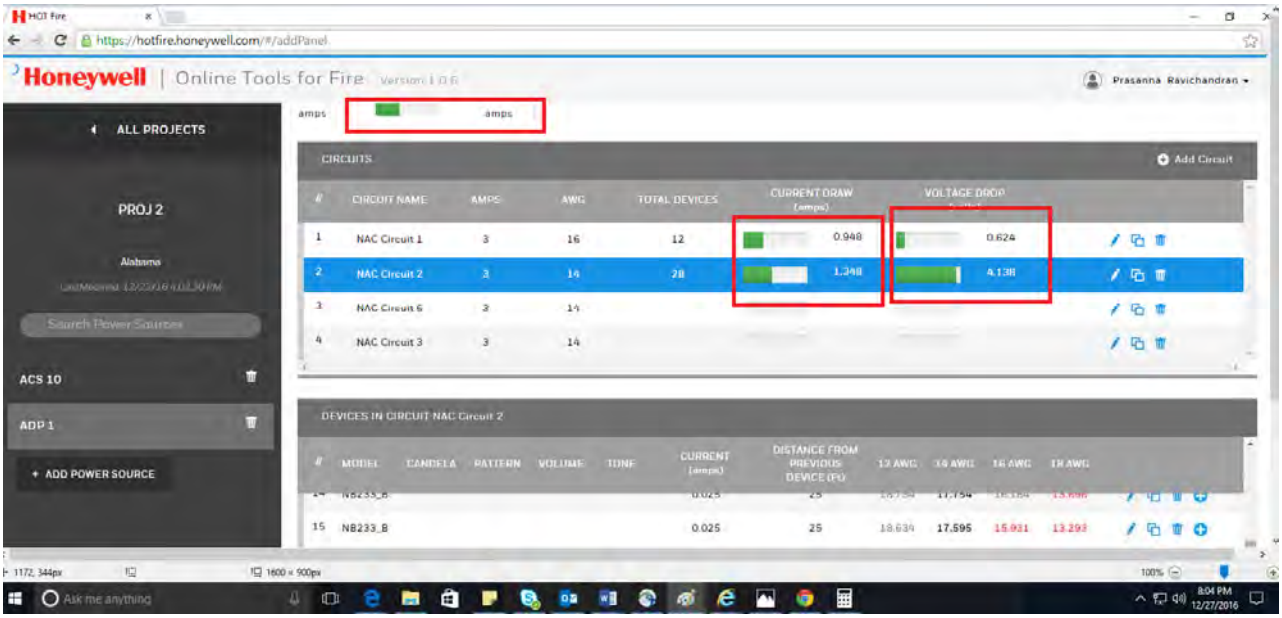


7.5 Progress Bar:

There is progress bar below the power source title. It shows the amount of the current drawn in that power source. It is calculated by the summation of the current drawn at all the circuits in that power source to the max current drawn for that power source. The Max current drawn for a power source will be taken from the library of the power source model selected. In case of Custom Power Source, the max current drawn will be entered by the user. The progress bar will be highlighted in red, if the current drawn at the power source exceeds the max current draw for that power source.



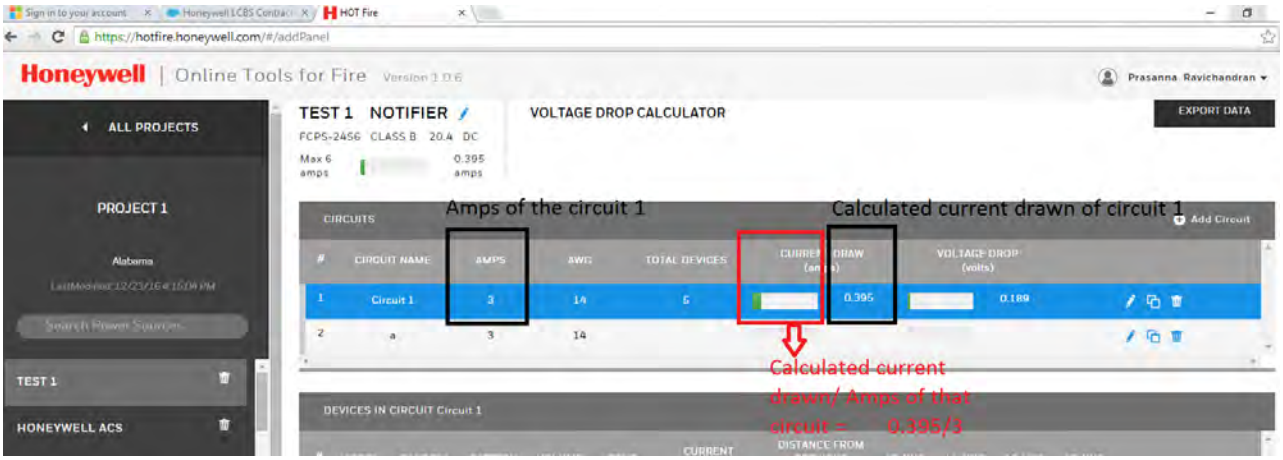
The progress bar will be displayed in green, if the current drawn at the power source is lesser than the max current draw for that power source



7.6 Current Draw:

The current draw is calculated by the summation of the current in all the devices. For example, in the above screenshot, the current draw is equal to 0.088 Amps, because of the summation of the current from the first device (0.044 Amps) and the current from the second device (0.044 Amps), so on summation of these two devices, Current draw is 0.088 Amps.

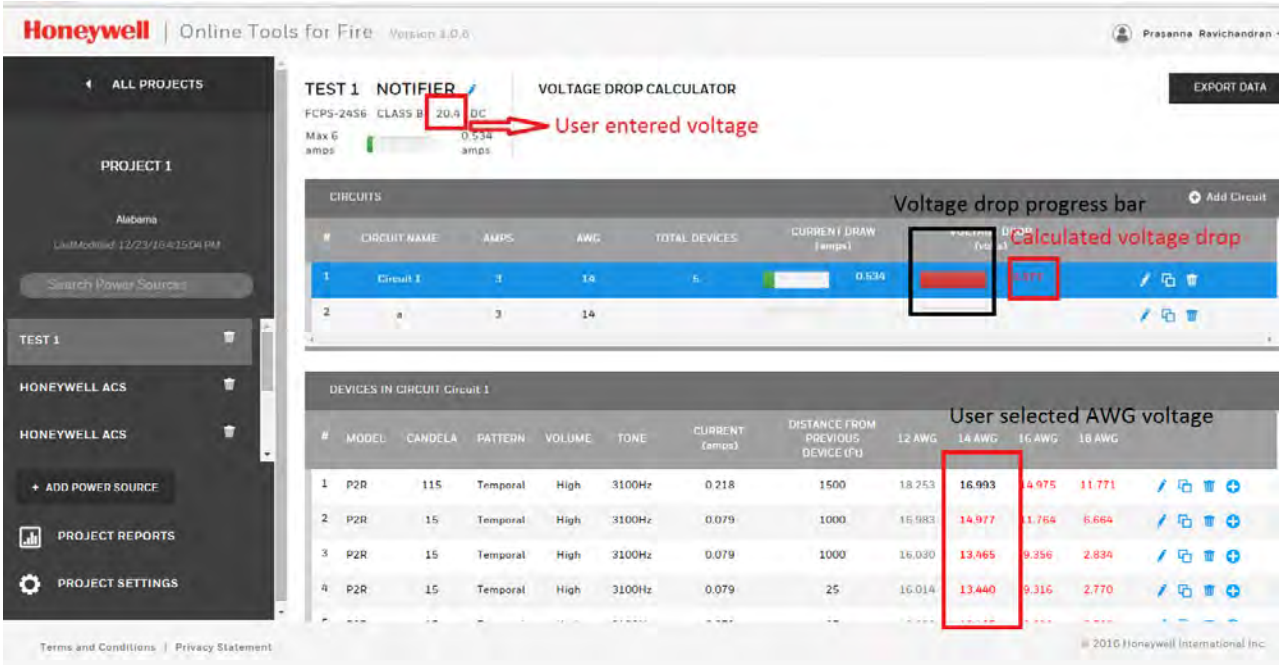
The progress bar near the current draw symbolizes the calculated current drawn to amps of the corresponding circuit. The Amps of the circuit will be entered manually, in case, if the circuit added manually through the 'Add circuit' button. Otherwise, the Amps of the circuit is taken from the library based on the power source selected.



7.7 Voltage Drop:

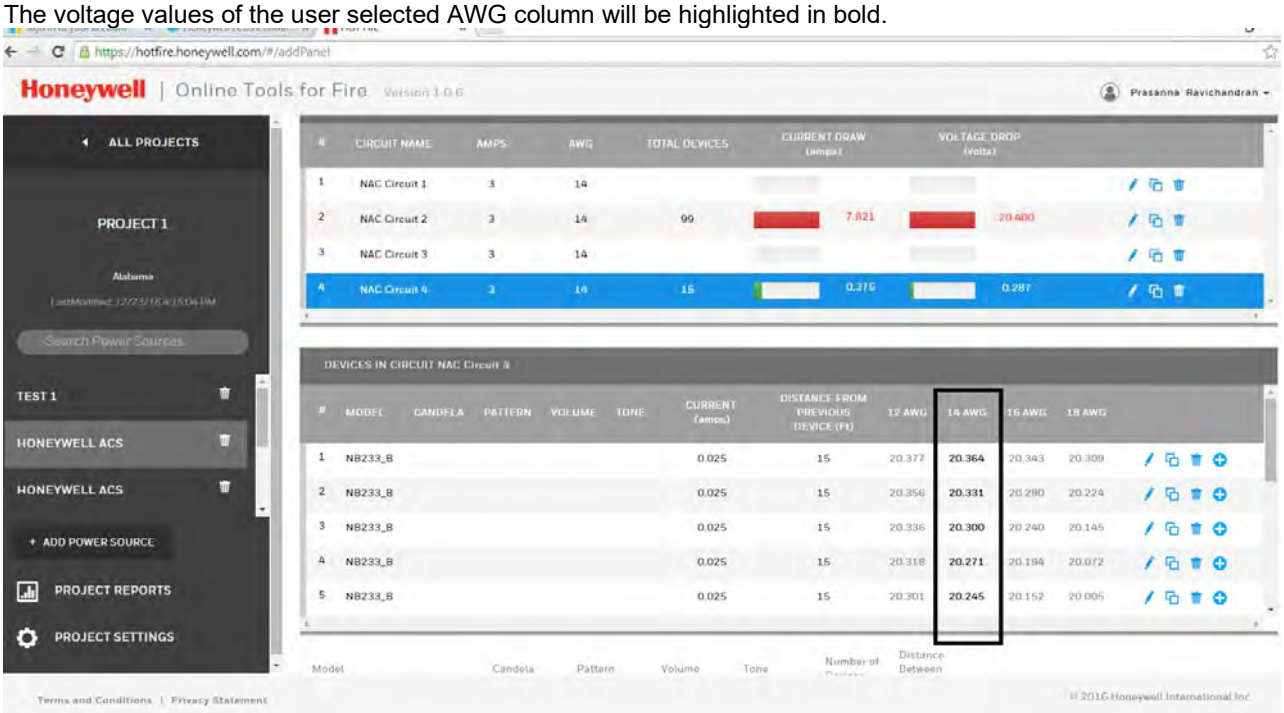
The voltage drop (volts) is calculated by computing the difference between the actual voltage entered and the minimum device voltage for the selected AWG.

For example, in the below screenshot, the voltage entered is 20.4 Volts. Here the AWG selected is 14. For that AWG, the first device has a voltage of 16.993 V. The difference, or voltage drop, is 20.4V-16.993V = 3.407V.

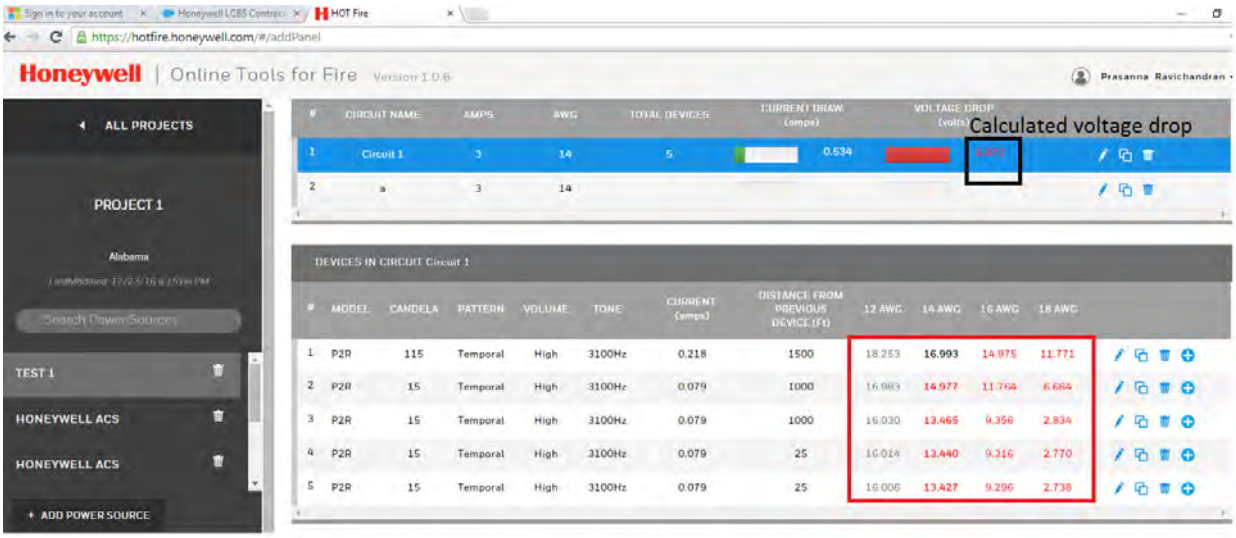


The progress bar near the voltage drop symbolizes the ratio of the calculated voltage drop of the circuit to the voltage limit of that circuit.

The voltage values of the user selected AWG column will be highlighted in bold.



The voltage values in the selected AWG column will be highlighted in red color if it goes below 16 V for starting voltages >16V and it is red for voltages below 8V for 12V appliactions.



7.8 Logging Out

Users can log out from the HOT Fire application by clicking on the ‘Sign-out’ button below the ‘User Name’ dropdown at the top right corner as shown below. Then the corresponding user will be logged out from the session.