



# Power\*Tools for Windows

## Enhancement List

### Version 10.0



The Leader in Electrical Engineering Software  
Chosen by the top 40 Electrical Engineering firms in the world.



## Power\*Tools for Windows Version 10.0 Enhancement List

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### *SKM Mobile App for Apple iOS and Google Android platforms*

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We are excited to announce an exciting new phone and tablet app that will help engineers be more productive and shorten the time to perform a power system study! The SKM Mobile App allows engineers to collect field data and upload to their MySKM account – to be later imported into the PTW desktop program in order to perform power analysis studies. Engineers can also view & edit PTW projects modeled on the desktop program on the mobile app. Engineers now have the entire power system and results in the palm of their hands!

Equipment settings, specifications, and study results - such as arc flash incident energies and PPE clothing can be accessed in seconds! Use a tablet to take advantage of the split screen mode!

Download it today on the Apple App Store or Google Play Store!



**There are 3 views in SKM Mobile app:**

**1. Online View**

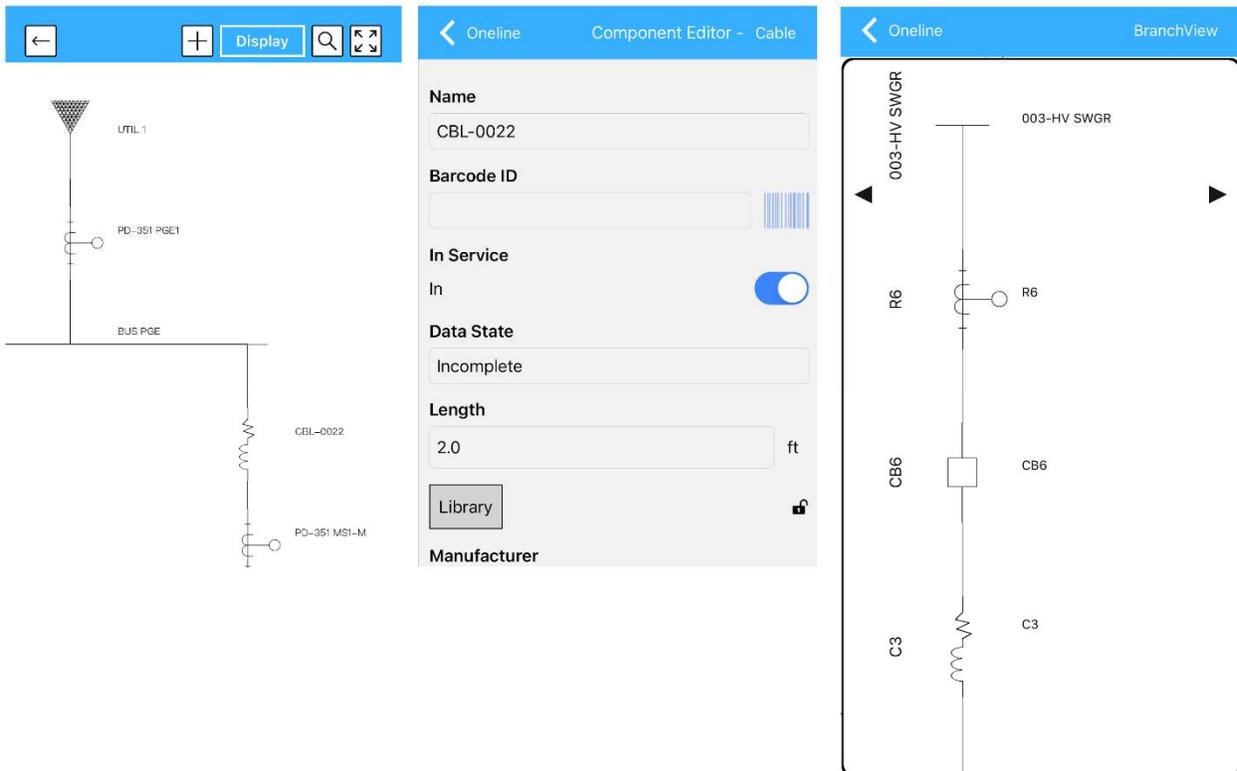
- Shows the entire power system graphically.
- Online layout is automatically drawn and fixed by the app and layout is continuously enhanced through updates.
- View Datablocks for each components by clicking on the “Display” button.
- Pan and zoom using finger gestures.
- Single tap on component to show the Component Editor.
- Double tap to show the Branch View.

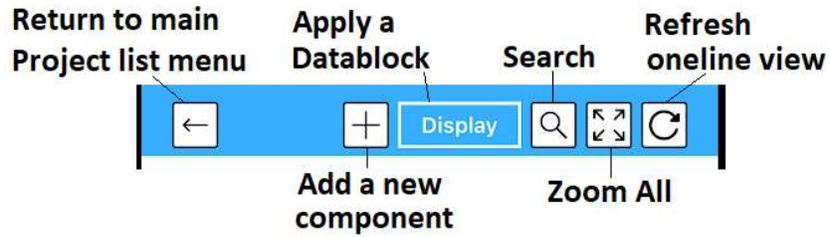
**2. Component Editor View**

- Shows component properties in detail.
- Some equipment has a library available for ease of data entry.
- Capture rich format media and store with the component.

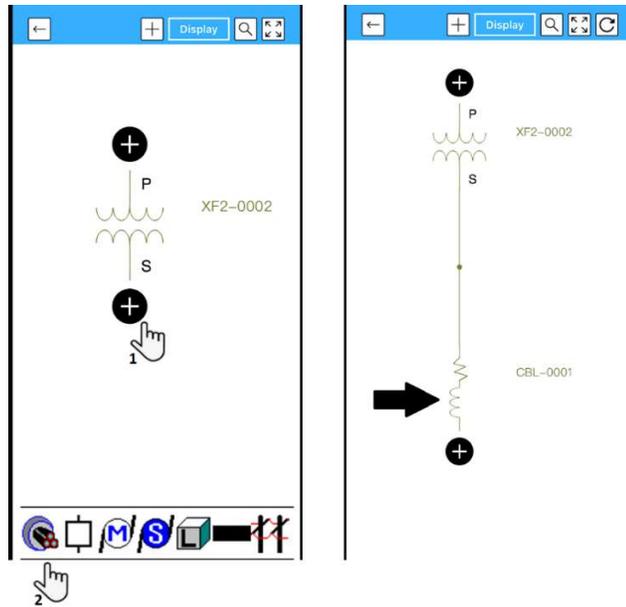
**3. Branch View**

- The Branch View provides a closer look at a smaller portion of the system – one branch at a time.
- Swiping left or right on the screen will show the next branch.
- Single click on any component will display the Component Editor.

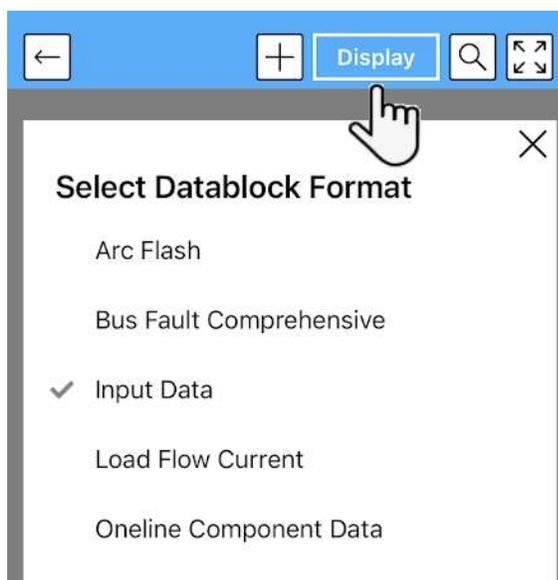




Clicking on the + button on an unconnected end of a component will bring up a carousel of components. Clicking on any components in the carousel will automatically connect it to the existing component.

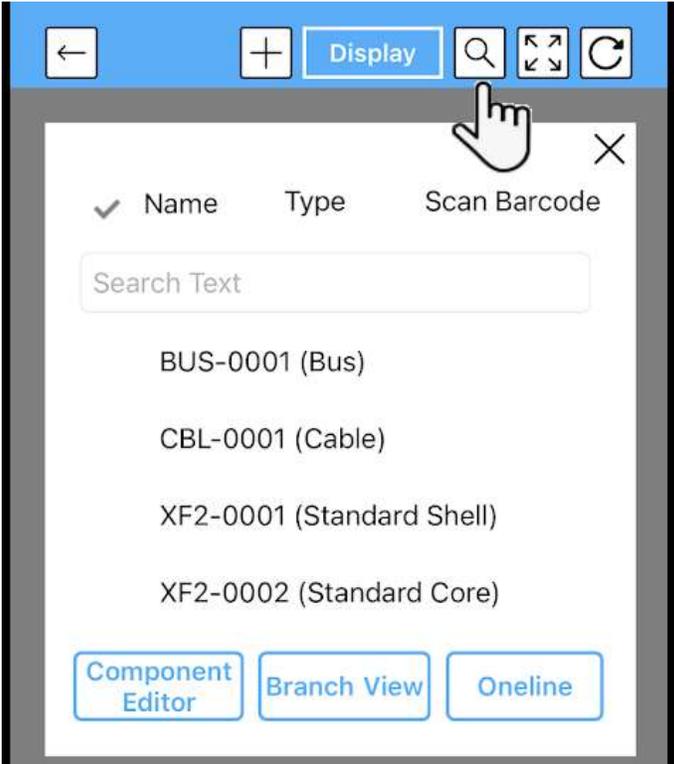


Select from a list of available Datablock formats. New formats are continuously added through app updates.



The Search feature allows searching by Name, Type, and Barcode. Once a component is selected, click on 1 of the 3 buttons (Component Editor, Branch View, Online) at the bottom to go directly to that component in that particular view.

When a physical equipment has a barcode sticker and the barcode is stored in the app, the user can scan the barcode using the device camera to instantly locate it on the online.



The "Media" button will allow capture rich content and save it with the component:

Online Component Editor - Cable

Name: CBL-0022

Barcode ID: [Barcode Icon]

In Service: In [Toggle On]

Data State: Incomplete

Length: 2.0 ft

Library [Lock Icon]

Manufacturer: Typical

Installation: [Empty Field]

Cond Desc: 4 Wire+Grnd

Conductor in Parallel / Phase: 2

Volts (L-L): 22000

Cable Size: 500 kcmil

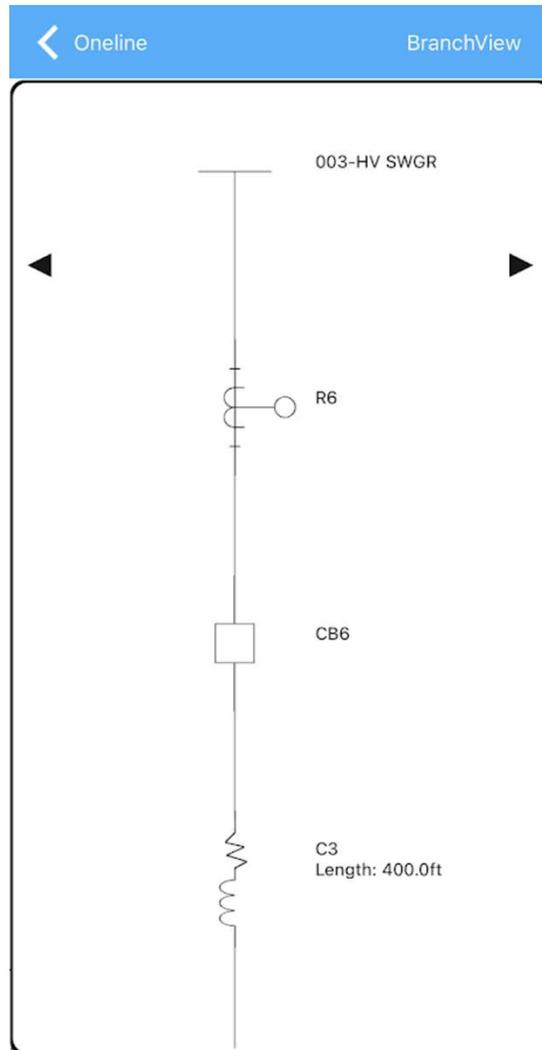
System Nominal Voltage: 21600

Buttons: Other, Exit, Media

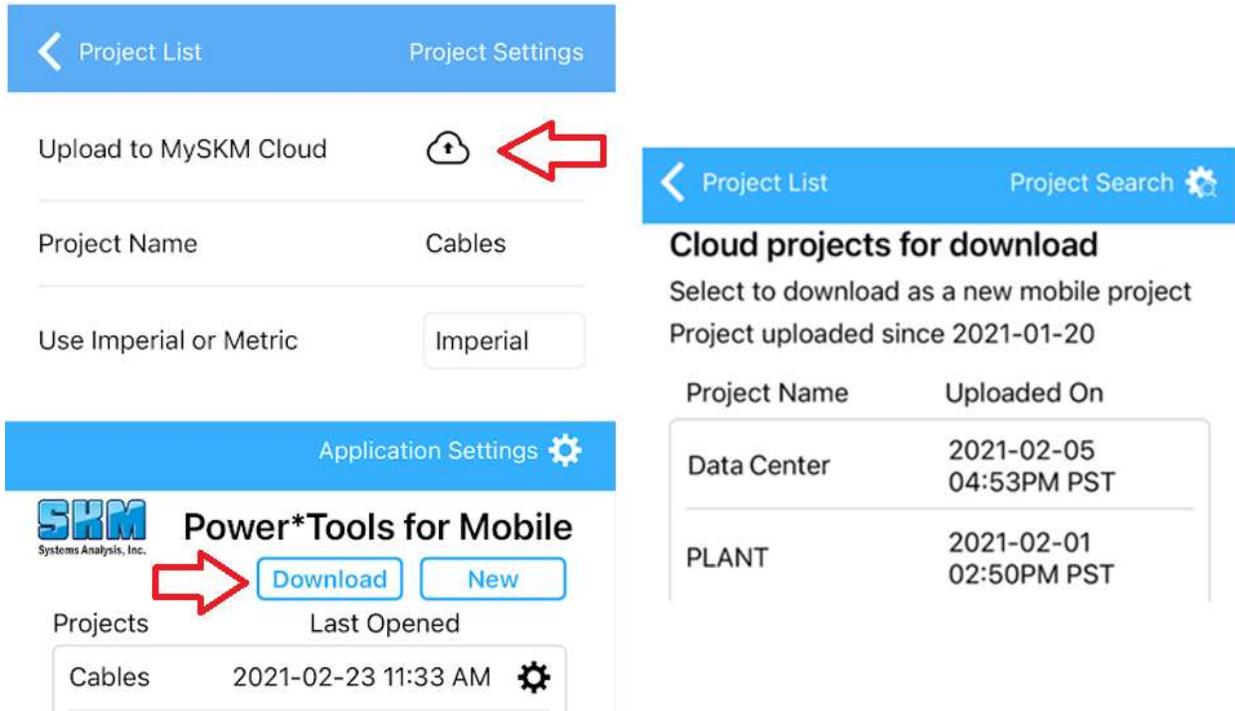
I would like to

- Take a Picture
- Record a Video
- Draw / Handwrite
- Record an Audio Note
- Attach Existing Pictures
- Attach Existing Videos
- Scan a QR code

The Branch View provides a closer look at a smaller portion of the system – one branch at a time. Swiping left or right on the screen will show the next branch. Single click on any component will display the Component Editor.



Start new projects directly on the mobile app or download a project from your MySKM Cloud account.



For full functionality, SKM Mobile App users will need:

- A MySKM Online User Profile.
- A licensed MySKM Mobile Cloud product/module for project storage and upload/download capabilities. Contact SKM for pricing.

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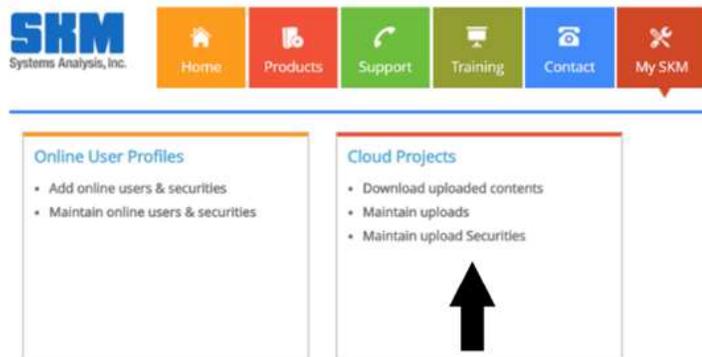
## MySKM Cloud

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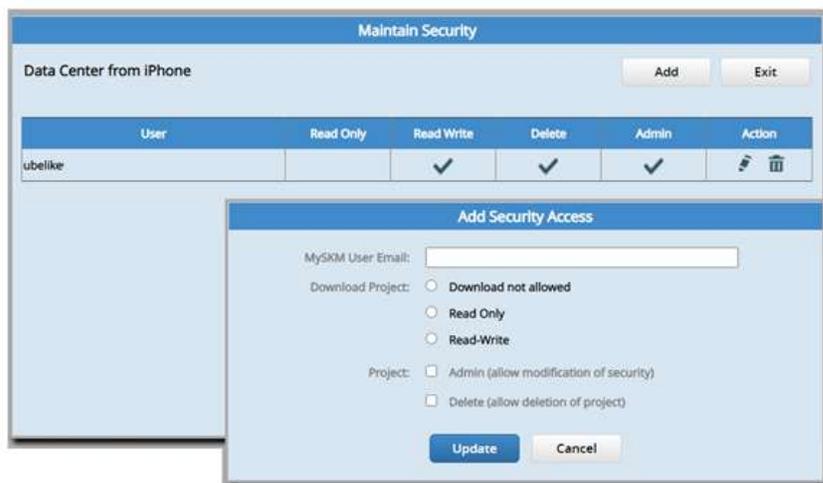
MySKM Cloud allows for project storage from Power\*Tools for Windows (Desktop) or SKM Mobile app. Projects can be downloaded or uploaded with a few clicks.

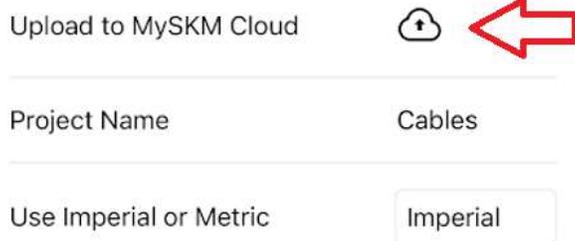
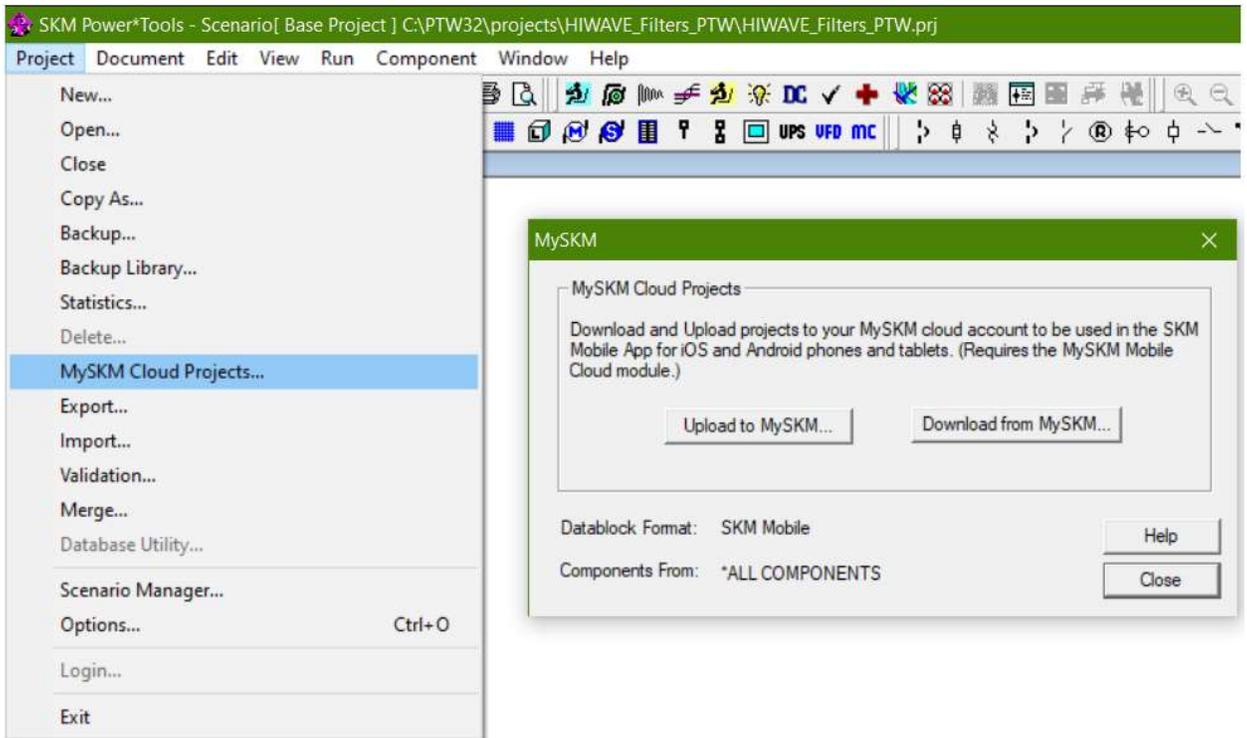
Each cloud project contains a “Maintain Security” interface to add users and control permissions.

Download the projects for importing into PTW, sharing with others, or archiving from anywhere in the world! A separate purchase & maintenance is required to take advantage of this feature.



### Manage Cloud Projects

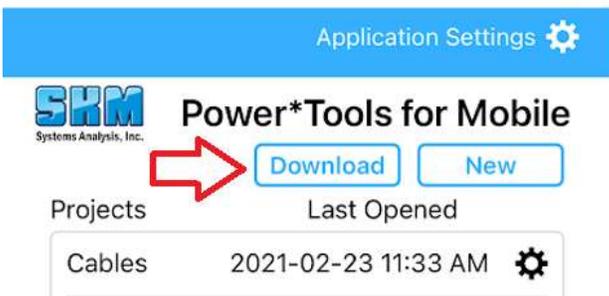




### Cloud projects for download

Select to download as a new mobile project  
Project uploaded since 2021-01-20

Project Name	Uploaded On
Data Center	2021-02-05 04:53PM PST
PLANT	2021-02-01 02:50PM PST



## Open Clear Curves with Multiple Bands

In the protective device library, new modeling segment "Open Clear Curves with Multiple Bands" to model multiple open-clearing curves in a single segment. The curves can be selected from the drop-down setting.

Band 1		MIN		Band 2	
Opening Current	Curve Time (s)	Clearing Current	Curve Time (s)	Opening Current	
1.030	1000.000	1.300	1000.000	1.030	
1.030	190.000	1.300	270.000	1.030	
1.500	93.000	2.300	93.000	1.900	
1.500	5.200	2.300	5.600	1.900	
2.300	2.200	3.500	2.200	3.000	
2.300	0.010	3.500	0.045	3.000	
180.000	0.010	4.000	0.028	180.000	
		5.000	0.025		
		180.000	0.025		

OCMB TM.TCC (OCMB TM.tcc.drw)

TCC Device List: TM-OCMB Library: GE-OCMB, SEDA, Spectra RMS, 15-150A

Device: Settings | Datablock | One-Line

Frame: 480V SEDA 100A 18kA

Trip: 100 Plug: 100

Segment List:

- Setting1: MIN
- Setting2: [ ]

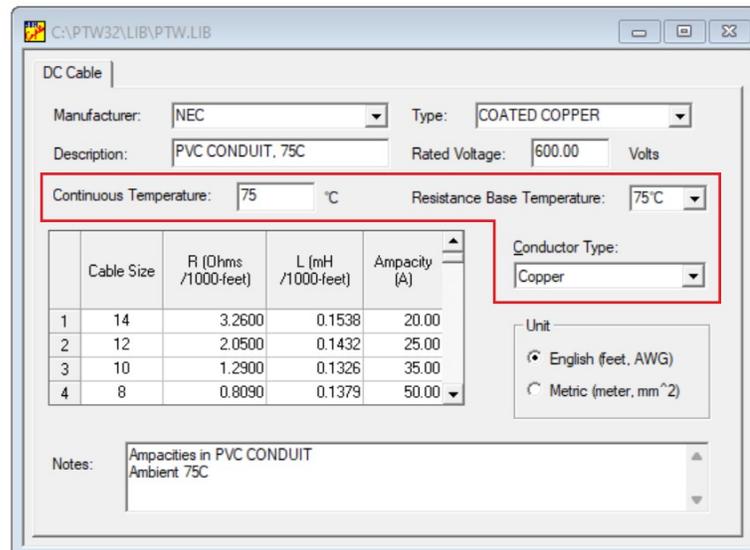
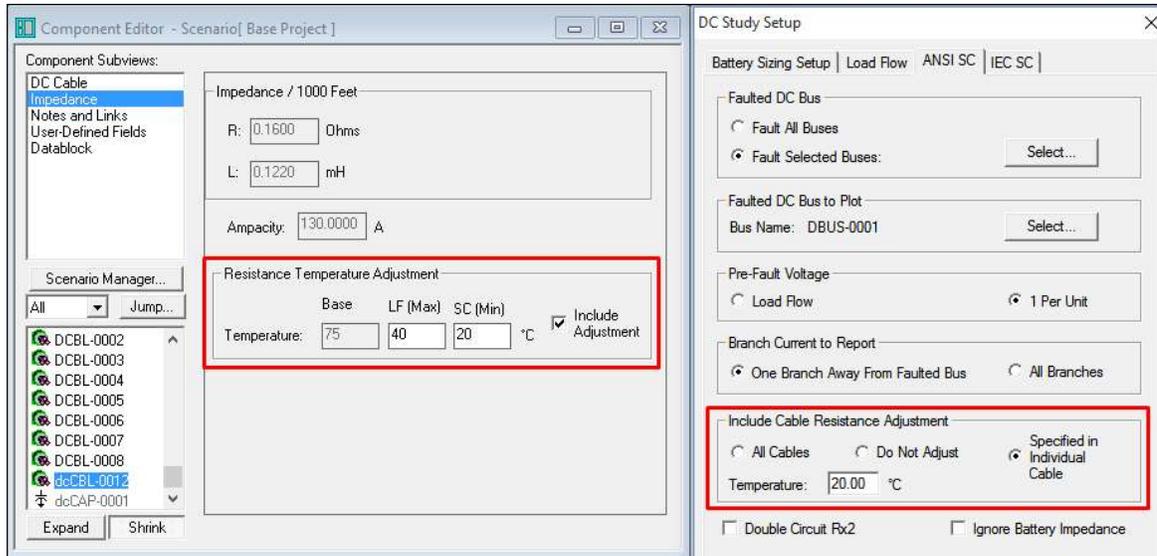
Library Notes:

- K215-165A, 5/96
- K215-166A, 5/96
- K215-167A, 2/94
- K215-168A, 5/96

OCMB TM.tcc Ref. Voltage: 480V Current in Amps x 1

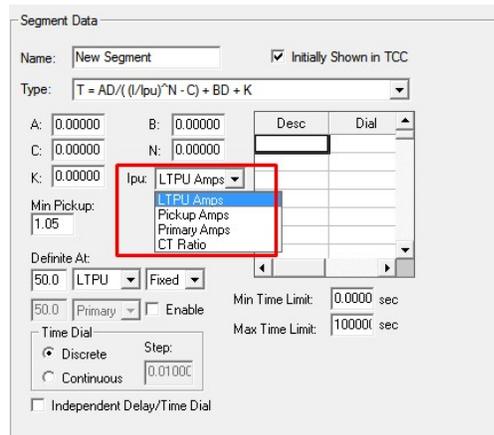
## DC Cable Resistance based on Temperature

For DC load flow and short circuit studies, new option to adjust the resistance for all DC cables using one temperature value or based on the temperature set on individual cables. New fields in the DC Cable Component Editor, DC Study Setup, and DC Cable Library model.



## Relay Pickup Options

Added “Primary Amps” and “CT Ratio” to Current Pickup options. (Relay equations in the protective device library.)



## Additional Enhancements

Added additional temperatures for cables (105C and 110C).

AC impedance in Ohms/1000 feet at 60 Hz (per conductor)								Resistance Base Temperature: 105°C	
	Cable Size	MCODE	Neutral Size	Parallel Permitted	R Pos	X Pos	R Zero		Rdc micro-ohms/ft
1	14		14	1	3.2781	0.0375	4.0037	20°C	3278.100
2	12		12	1	2.0659	0.0352	2.7488	25°C	2065.900
3	10		10	1	1.3000	0.0332	1.9053	30°C	1300.000
4	8		8	1	0.8172	0.0349	1.3288	40°C	817.200
5	6		6	1	0.5142	0.0358	0.9357	50°C	514.200
6	4		4	1	0.3231	0.0337	0.7321	55°C	323.100
7	3		3	1	0.2564	0.0326	0.6478	60°C	256.400
8	2		2	1	0.2055	0.0319	0.5721	65°C	205.500
9	1		1	1	0.1628	0.0323	0.4886	70°C	162.800
10	1/0		1/0	12	0.1304	0.0311	0.4405	75°C	130.270
11	2/0		2/0	12	0.1044	0.0303	0.2942	80°C	104.296
12	3/0		3/0	12	0.0836	0.0294	0.2628	85°C	83.433
13	4/0		4/0	12	0.0670	0.0288	0.2466	90°C	66.733
14	250		250	12	0.0574	0.0290	0.2206	105°C	57.114
								110°C	

Modified many existing protective device libraries to optimize synchronization with the new SKM Mobile App.

Arc Flash label Enhancements

Crystal Report Enhancements

Accuracy  
Simplicity  
Results  
Excellence

# Taking **Power Systems Analysis and Design** to New Heights

## *OTHER RESOURCES*

Website at [skm.com](http://skm.com)

- SKM Customer Portal
- Application Guides
- Power Systems Study Specification
- Frequently Asked Questions
- Tutorial Videos
- SKM Training Courses

SKM Help Desk at [support.skm.com](mailto:support.skm.com)



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