



Functional Changes from V 5.53 to V 6.0

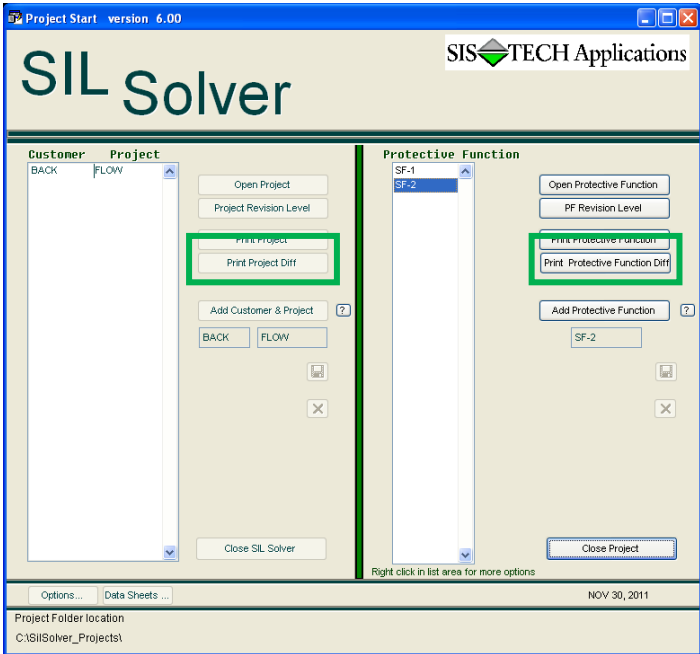
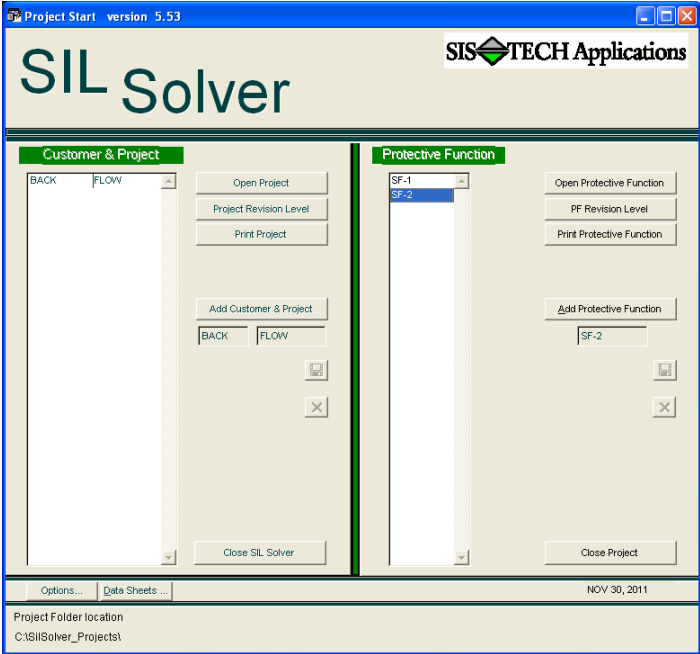
SIS  TECH Applications

General Changes:

- 1. Buttons on opening screens enhanced.
- 2. Explanatory text appears when you place your mouse over most buttons.
- 3. Added buttons to print a Difference Report at both Project level and Function level. This report highlights the differences between data used in an existing project and the latest SIL Solver® database. Both old and new data is provided along with any user created data sheets in the project.

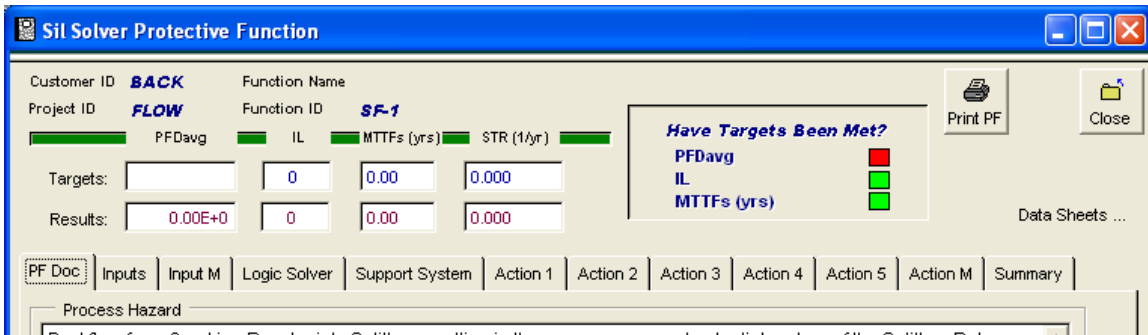
V 5.53

V 6.0

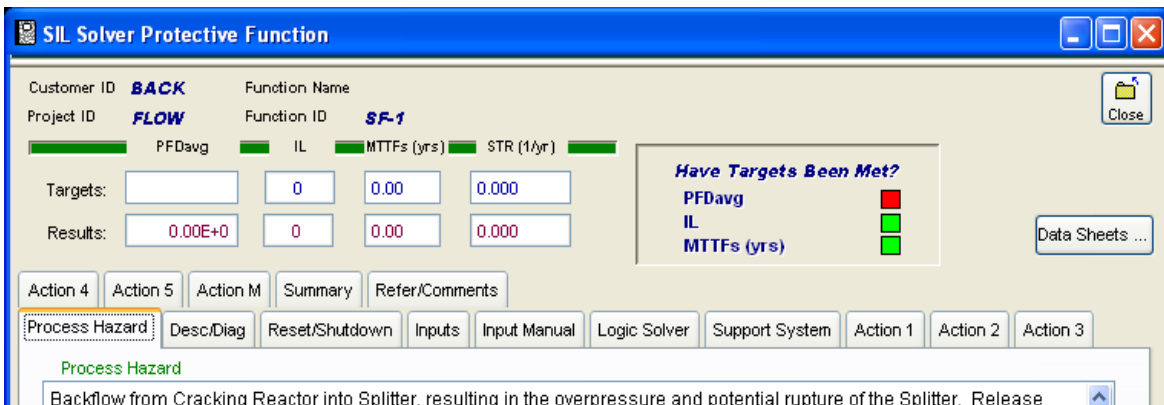


- The PF Doc tab was expanded to separate tabs: Process Hazard, Desc/Diag, and Refer/Comments. These expanded tabs separate the text into corresponding sections for documentation ease. The Process Hazard tab may be used to describe how the protective function that is designed to address the hazard. Desc/Diag may be used for the logic description of the protective function. Refer/Comments provides a space for notes. A new tab, Reset/Shutdown, was added to document the reset and manual shutdown information.

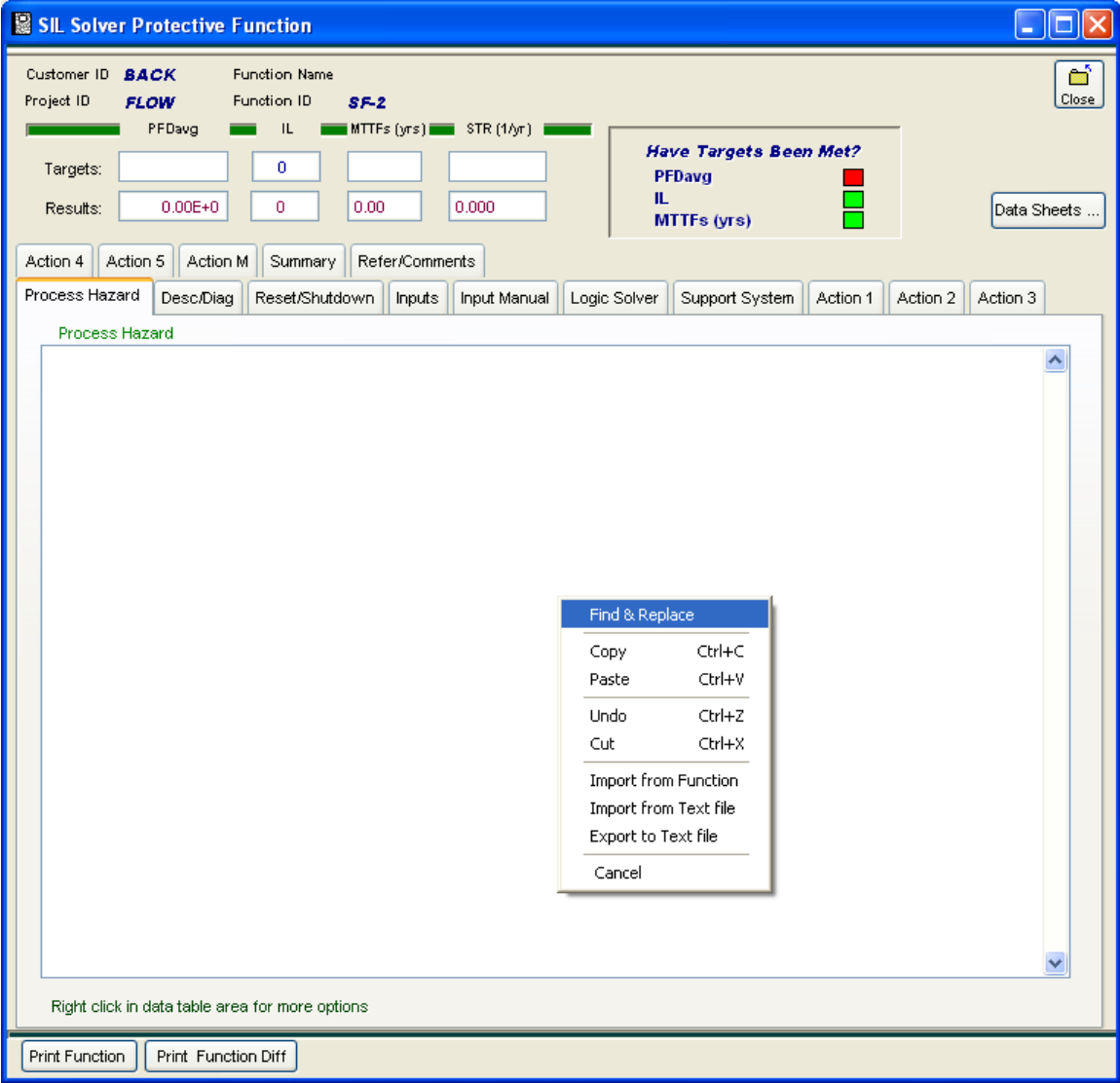
V 5.53



V 6.0



5. *Right click* Find & Replace option added to Process Hazard, Desc/Diag, Refer/Comments, and Reset/Shutdown tabs. This text editing feature is useful when copying similar functions that need tag names changes.



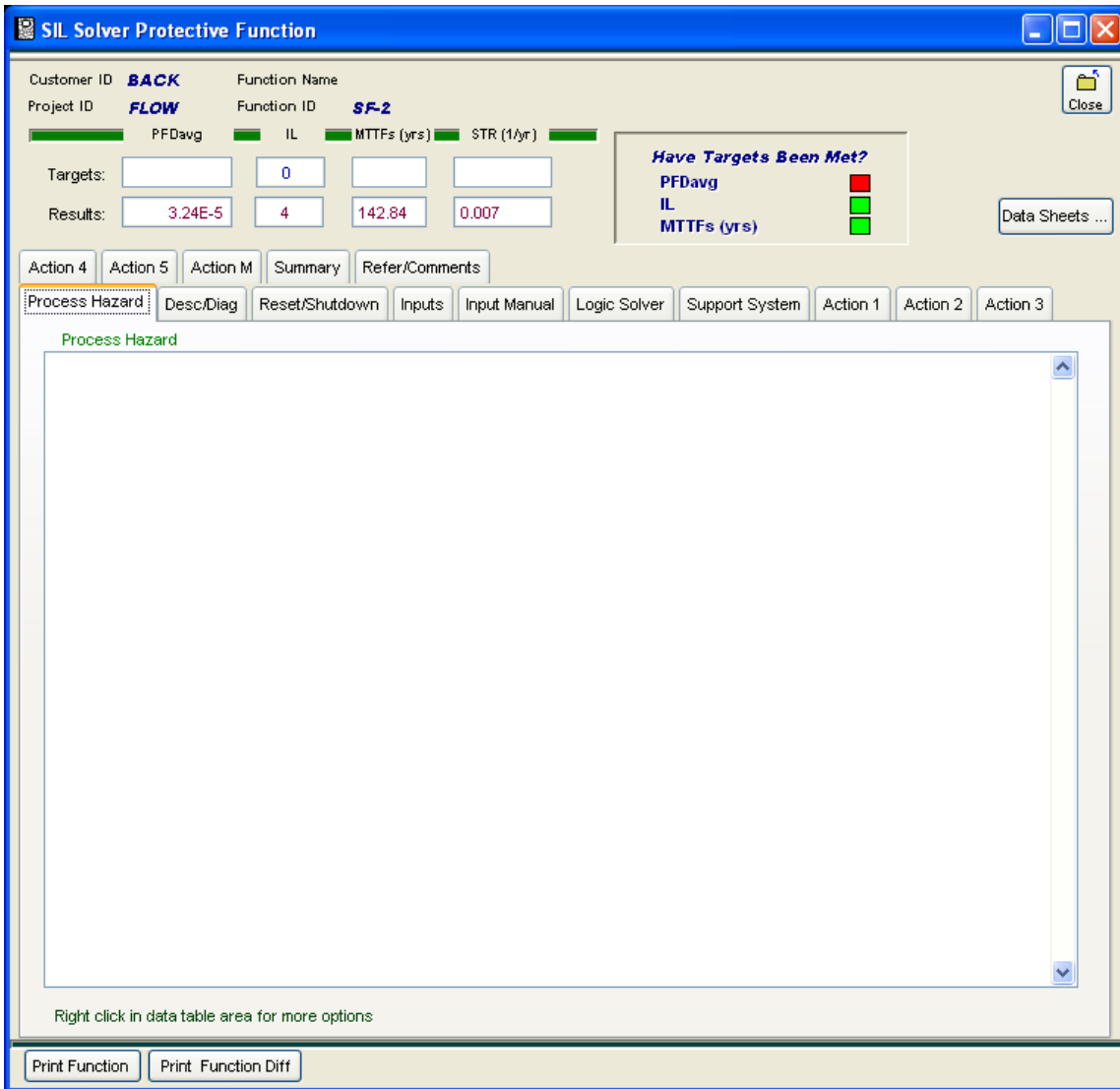
6. Process Hazard tab only *right click* menu expanded to include documentation options: Import from Function, Import from Text file, and Export to Text file.

Import from Function will import the documentation data from a previously created SIL Solver function. This function overwrites any existing data on the Process Hazard tab without changing any other protective function information.

Import from Text file will import any data in a text file. This function overwrites any existing data on the Process Hazard tab without changing any other protective function information.

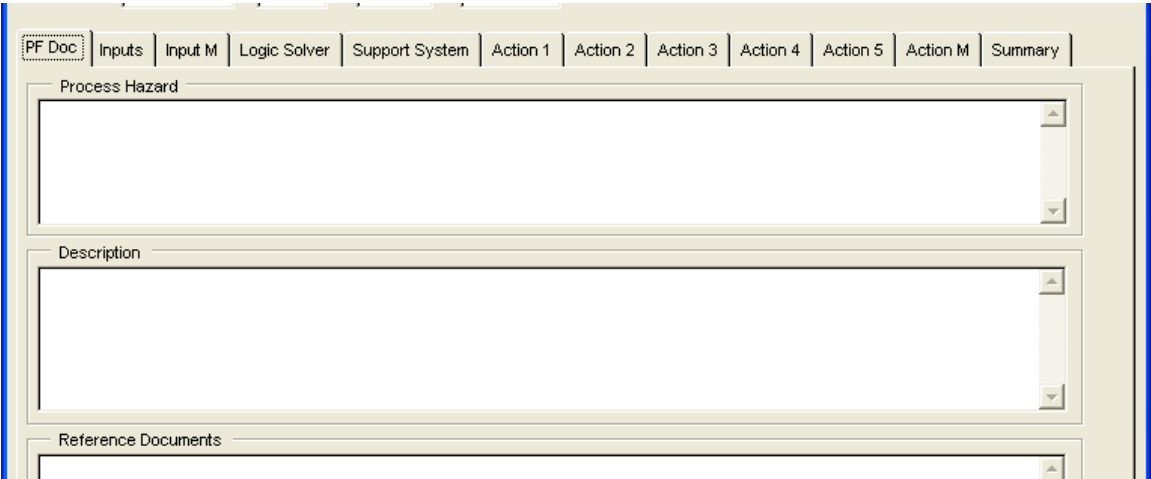
Export to Text file creates a text file containing all protective function process hazard text entered.

7. Process Hazard tab text entry window expanded for easier cut/copy/paste options.

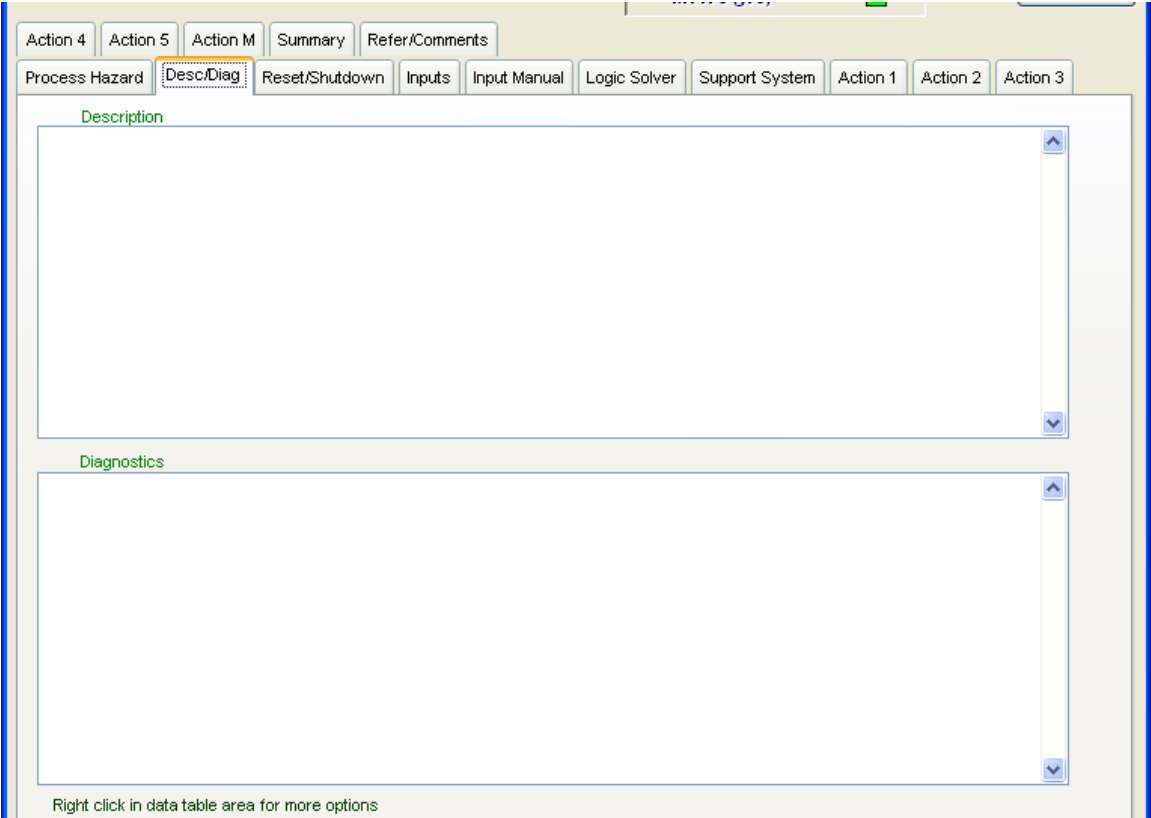


8. Description tab has a new text area for Diagnostics.

V 5.53

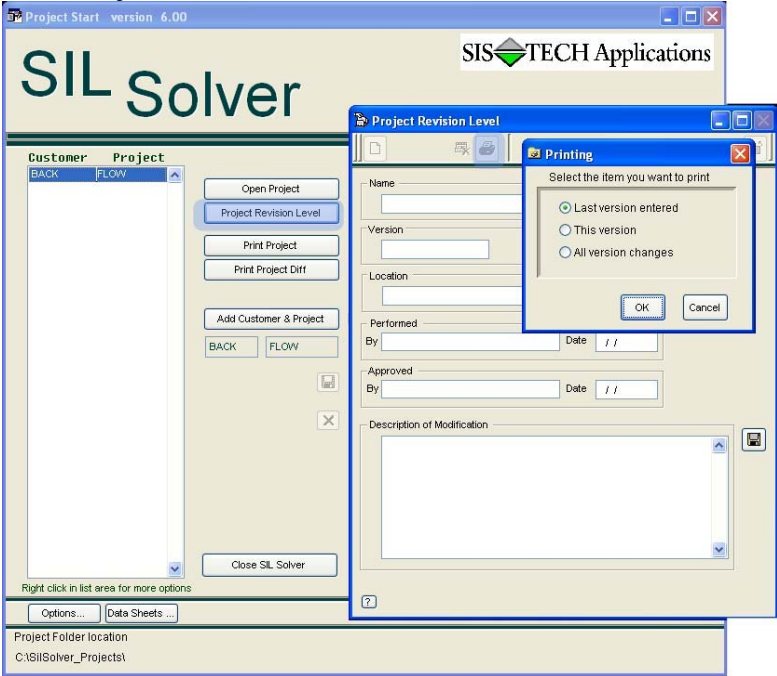


V 6.0

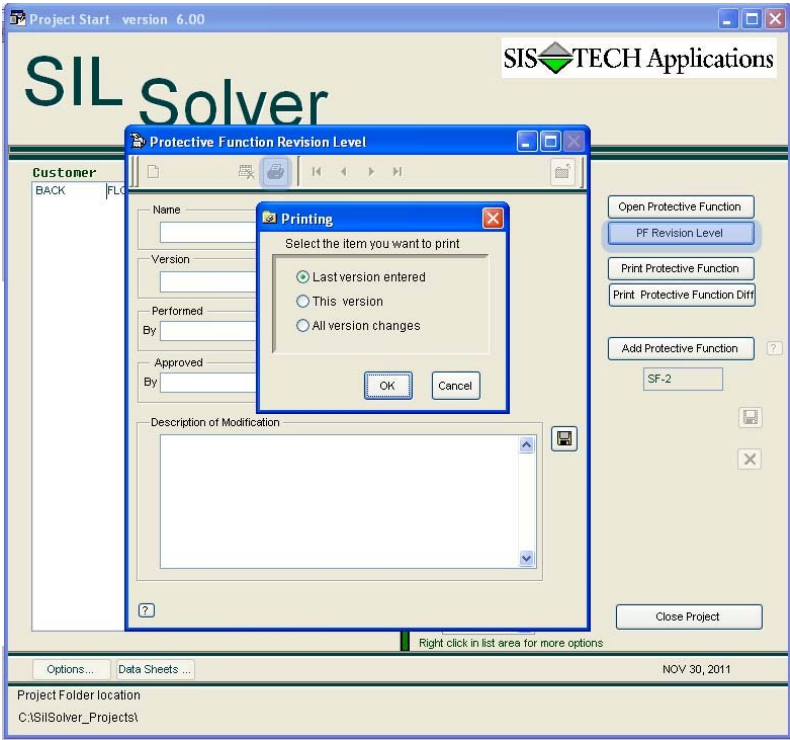


9. Added Version Level printing for Project, Protective Function, and Device.

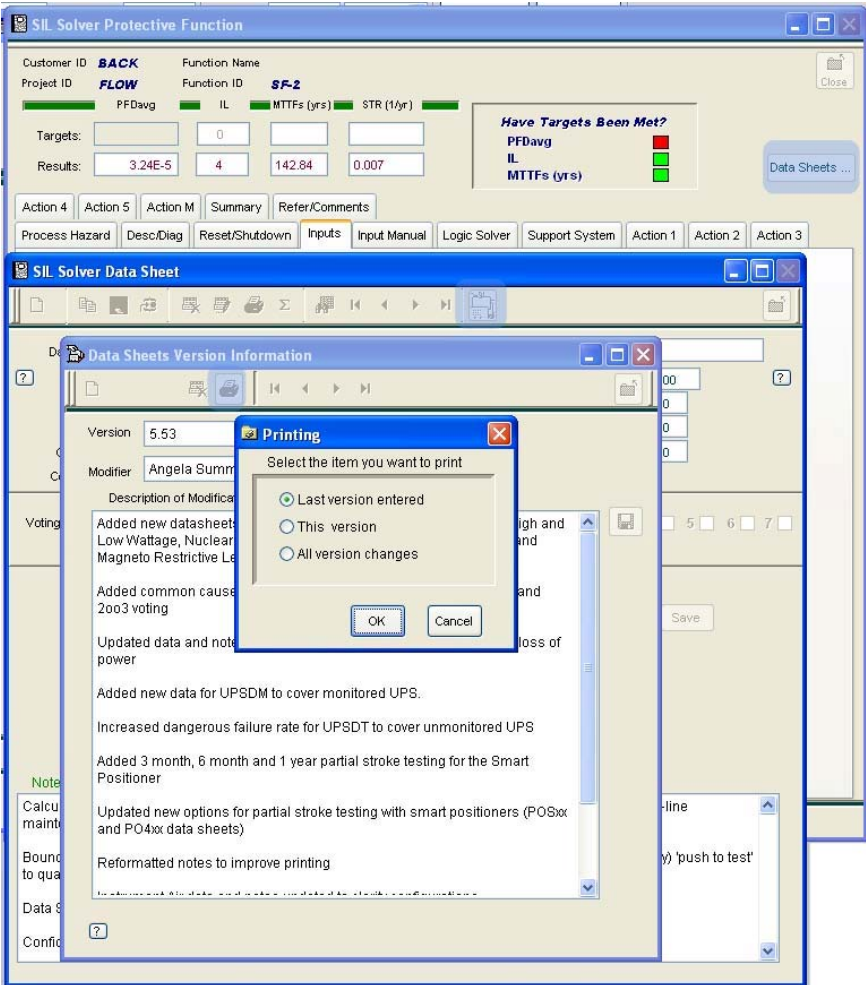
- Project Level



- Protective Function Level



- Device Sheet Level



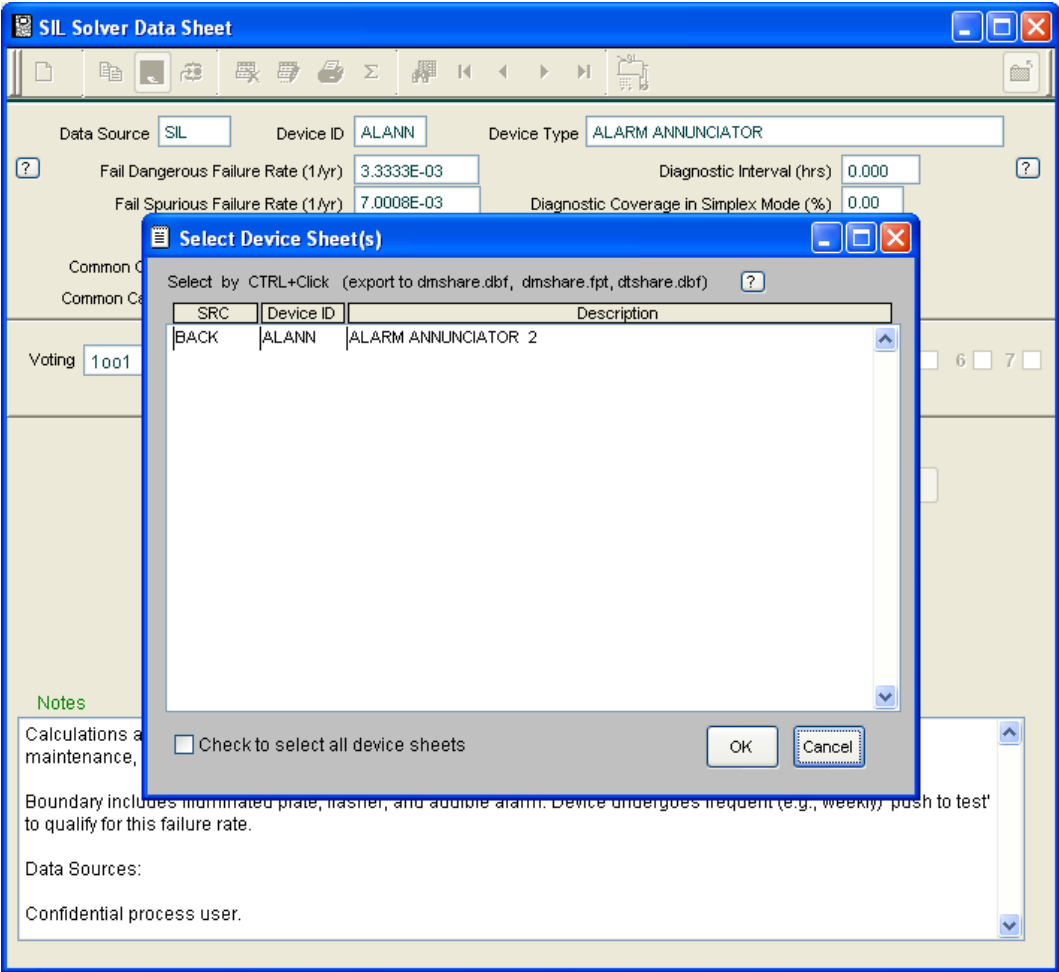
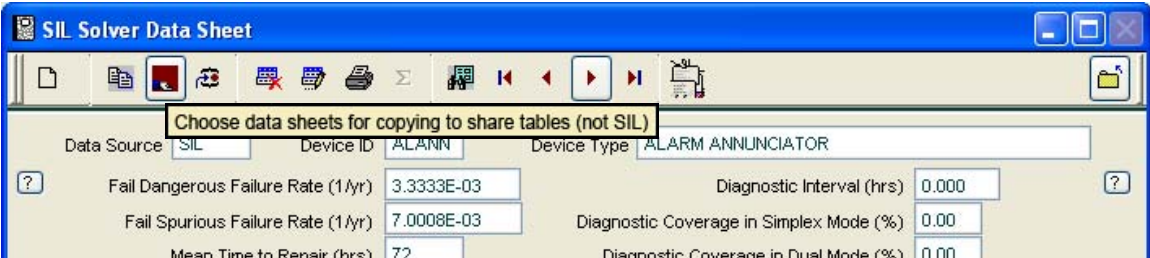
10. Copying an existing Device Sheet. This function will make creating user modified device sheets more efficient as it replicates data from an existing device sheet into a new device sheet where desired modifications can be made.

The screenshot shows the 'SIL Solver Data Sheet' application window. A 'Copy Device' dialog box is open, allowing the user to select a source device (SRC) and a target device ID. The dialog includes 'BACK', 'OK', and 'Cancel' buttons. In the background, the main application window displays various parameters for an 'ALARM ANNUNCIATOR' device, such as Diagnostic Interval (hrs) and Diagnostic Coverage percentages. Below these parameters is a table with columns: SRC, Device, Voting, TI (yrs), PFDavg, and STRate (1/yr). The table contains 10 rows of data for different TI values. A 'Notes' section at the bottom provides additional context about the calculations and data sources.

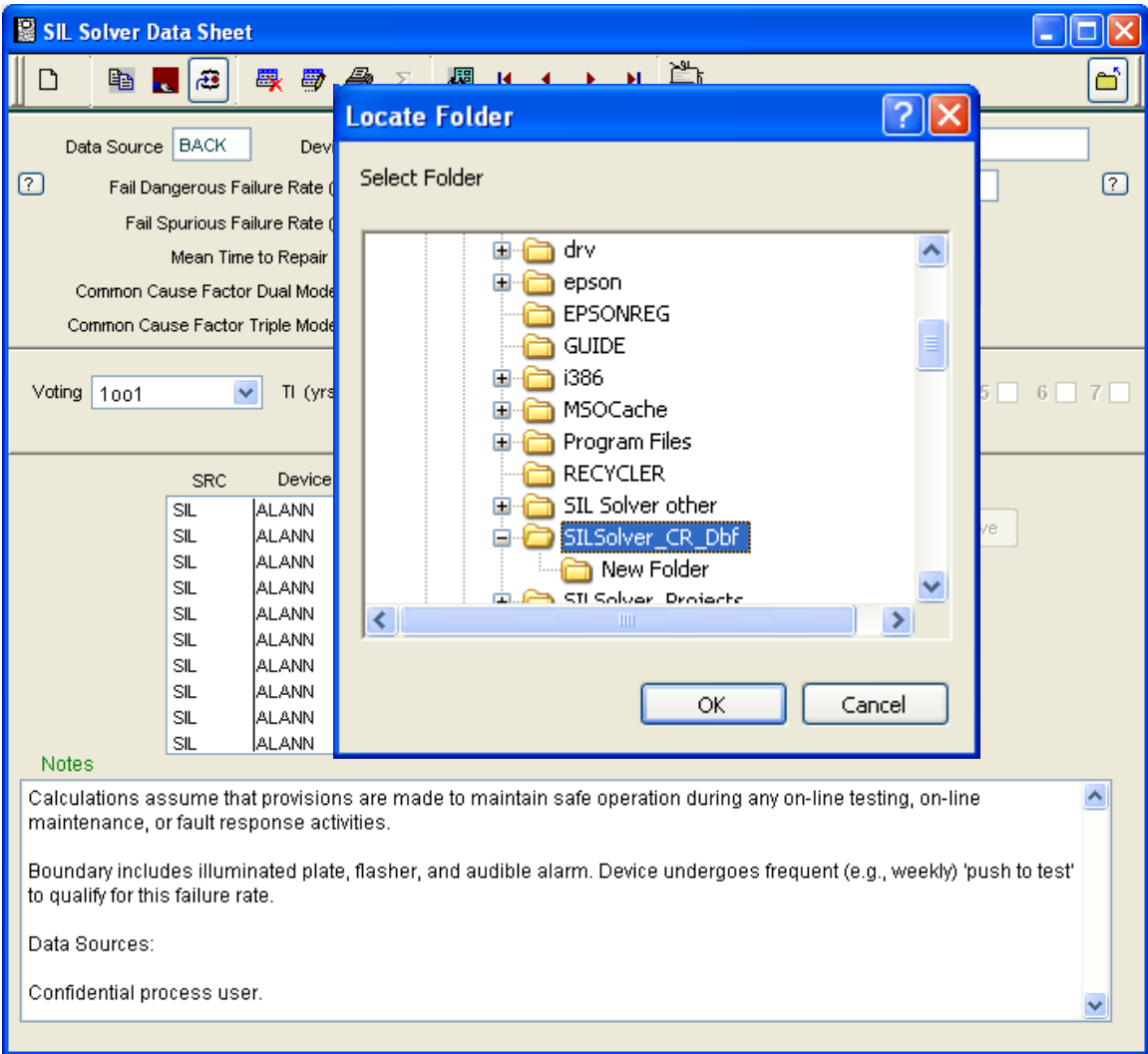
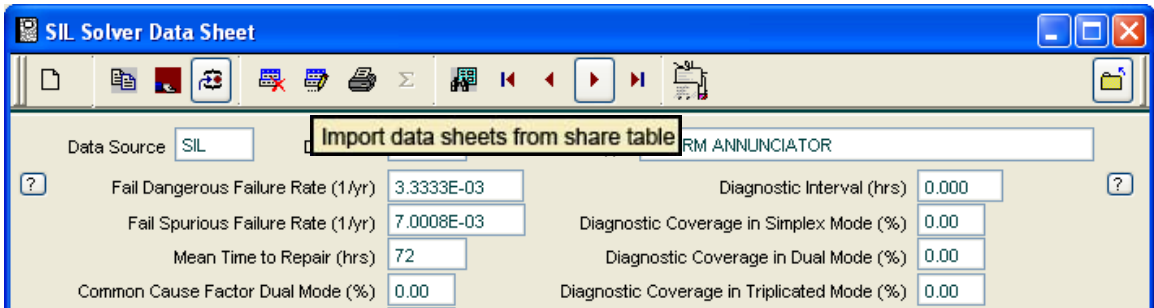
SRC	Device	Voting	TI (yrs)	PFDavg	STRate (1/yr)
SIL	ALANN	1oo1	0.003	3.2397E-5	7.0008E-3
SIL	ALANN	1oo1	0.019	5.9063E-5	7.0008E-3
SIL	ALANN	1oo1	0.083	1.6573E-4	7.0008E-3
SIL	ALANN	1oo1	0.250	4.4406E-4	7.0008E-3
SIL	ALANN	1oo1	0.500	8.6072E-4	7.0008E-3
SIL	ALANN	1oo1	1.000	1.6940E-3	7.0008E-3
SIL	ALANN	1oo1	1.500	2.5274E-3	7.0008E-3
SIL	ALANN	1oo1	2.000	3.3607E-3	7.0008E-3
SIL	ALANN	1oo1	3.000	5.0273E-3	7.0008E-3
SIL	ALANN	1oo1	4.000	6.6940E-3	7.0008E-3

Notes
 Calculations assume that provisions are made to maintain safe operation during any on-line testing, on-line maintenance, or fault response activities.
 Boundary includes illuminated plate, flasher, and audible alarm. Device undergoes frequent (e.g., weekly) 'push to test' to qualify for this failure rate.
 Data Sources:
 Confidential process user.

11. User created device sheets may now be Exported and Imported allowing multiple users to share custom device sheets.
- Export



- To Import



Data and Boundary Changes from V 5.53 to V 6.0

DEVICES

1. Deleted CSTOP, MCONT, and PSTOP. Replaced with CSTOPD, MCNTD, and PSTPD. STR and notes changed.
2. Added CSTPE, MCNTE, PSTPE, CSTPM, MCNTM, and PSTPM.
3. Deleted ISEL and ISMTL and replaced with SISOL.
4. Added EMSOV.
5. Added references to TAMPN.
6. Added 1.5-year and 2.5-year test interval to various devices.