
SCIENTIFIC NOTEBOOK # 581E

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0. INITIAL ENTRIES**Scientific Note Book:** # 581E**Issued to:** Jose M. Menchaca**Issue Date:** April 07, 2003**Project Title:** Development of Preclosure Safety Analysis Tool**Project Staff:** Asadul Chowdhury, Biswajit Dasgupta, Roland Benke, Al Lozano, D. Stead, R. Janetzke, Troy Maxwell, Jose M. Menchaca**Project Manager:** Asadul Chowdhury**Principal Investigator:** Biswajit Dasgupta ext. 6815

By agreement with the CNWRA QA, this notebook is to be printed at approximate semi-annual intervals. This computerized Scientific Notebook is intended to address the criteria of CNWRA QAP-001.

1. GENERAL

1.1 Objectives

The objective is to test the PCSA Tool Version 2.0 Menus, Sub-Menus, Forms, and Buttons for correctness of their execution. We will be testing to see if they correctly execute as intended. This activity fulfills the requirement of CNWRA of Technical Operating Procedure, TOP-18 (Section 5.6.1, Acceptance Test). The Acceptance Test is performed to ensure that the software meets the expectations in Software Requirement Description for PCSA Tool Version 2.0 (Revision 02).

1.2 Required Software

The acceptance testing of PCSA Tool Version 2.0 was conducted on a IBM compatible PC CNWRA computer Jar Jar. The operating system of the computer is Microsoft Windows NT Version 4.0 and a hard ware configuration of Pentium 3 microprocessor operating at 450 MHz, 128 Mbyte of RAM and .

2. ACCEPTANCE TEST PLAN

2.1 Acceptance Test Plan

Beginning with the Startup Menu that appears when the PCSA Tool program is first opened and continuing through the rest of the Menu options, click each button in every window and determine if it is executing as intended. For example, when the PCSA Tool is initially opened, the Startup Menu appears and if the "About PCSA" button is clicked by the user, the About PCSA Form should be displayed. The newly displayed form has a "Close" button at the bottom, and if the user were to click the "Close" button the window should close and return to the Startup menu. If this chain of events occurs then the process is acceptable, and the next button in the Startup Menu is checked.

2.2 SRD Requirements

The PCSA Tool was designed to meet the requirements set forth in the Software Requirement Description.

SOFTWARE REQUIREMENTS DESCRIPTION FOR THE PCSA TOOL Version 2.0	DOES THE TOOL HAVE THE REQUIREMENT?
<i>Software Function</i>	
Provide a capability for NRC staff to conduct an independent analysis and review of the DOE preclosure safety analysis of the proposed repository at Yucca Mountain, Nevada.	PCSA Tool provides a capability for NRC staff to conduct an independent analysis and review of the DOE preclosure safety analysis of the proposed repository at Yucca Mountain, Nevada
<i>Module Function</i>	

Project Tree Module (PTM):	The PTM allows the user to define the functional area by specific function, physical area of the facility or by process. This module is accessed through Proj. Tree menu in the main menu bar.
System Description Module (SDM):	The SDM allows the user to enter detailed information regarding the facility description, specific functions, operating sequence, human actions, waste characteristics etc. This feature is accessed through the Systems menu.
Hazard Analysis Module (HAM):	The HAM allows the user to analyze for natural and human-induced hazards and operational hazards. The natural and human-induced hazards is accessed from Ext. Events menu and operational hazards from the Int. Events menu in the main menu bar. There are several submenus under Int. Events menu which relate to corresponding operational hazard analysis options: FMEA, What-If, Energy Method and HRA.
Frequency Analysis Module (FAM):	The FAM allows the user to identify initiating events, and postulate event scenarios. This module is used to develop input data for event tree and fault tree analysis. The module also stores results from those analyses. The main menu for this module is Freq. Analysis. The submenus are Initiating Event, Event Tree, Fault Tree and Event Sequence.
Consequence Analysis Module (CAM):	The CAM allows the user to evaluate the radiological dose to members of the public and workers by deterministic and probabilistic calculations. This feature is invoked from Conseq. menu in the main menu bar. The submenu structures are: Conseq.=>Public Dose =>Standard RSAC Input, Conseq.=>Public Dose =>MELCOR, and Conseq.=>Worker Dose.
Safety Analysis Module (SAM):	The SAM allows the user to analyze the results obtained from the frequency analysis and consequence analysis to evaluate the compliance with Category 1 and Category 2 performance objectives. This module is accessed from Perform. => Project Results => Safety Assessment.

Risk Analysis Module (RAM):	The RAM allows the user to evaluate the total risk of the system. This module is accessed from Perform. => Project Results => Risk Assessment.
Structures, Systems and Components Important to Safety Module (SSCISM:)	The SSCISM is accessed using the SSCIS button which is shown in the Results Table form. The Results Table form is accessed from the main menu in Perform. => Project Results => Safety Assessment.
Mathematical Models	
System Analysis Program for Hands-on Integrated Reliability Evaluation (SAPHIRE)	The SAPHIRE code can be run from the Saphire Menu of the PCSA Tool program. It does event sequence analysis and quantitative frequency evaluation using the event tree and fault tree models.
Radiological Safety Analysis Computer Program (RSAC)	The RSAC code is accessed using the following main menu command sequence: Conseq. => Public Dose => RSAC and then choosing Standard RSAC Input, Advanced RSAC Input or Show Output. RSAC will calculate the radiological dose to a member of the public given a certain type of radioactive release. Deterministic or probabilistic consequence analysis is performed in RSAC.
MELCOR A computer code for analyzing sever Accidents	The MELCOR code is accessed using the following main menu command sequence: Conseq. => Public Dose => MELCOR and then choosing either Input or Output. The MELCOR code will estimate the building discharge fractions for "Vapors and Noble Gases", "Co-60 Crud", and "Particulates".
Computational Approach	
Store data in a database	Data is stored in either the read-only failure rate database or the project database. The read-only failure rate database contains failure rates of electrical and mechanical components along with the citations for source of data. The project database is used for storing data that is or has been analyzed and will be viewed later.

Perform model analysis	Model analysis is performed in the RSAC, MELCOR, and SAPHIRE codes.
<i>Data Flow and User Interface</i>	
The graphical user interface that is created will connect to Microsoft Access databases and computer codes, SAPHIRE, RSAC, and MELCOR.	The graphical user interface connects to MS Access and the three computer codes.
The graphical user interface will have a menu bar at the top of the window and each menu will have options which will have forms and other suboptions to be able to create tables and data.	PCSA Tool has a menu bar at the top of the window and each menu button has options and most have suboptions that lead to forms and tables where data can be entered or viewed.
Read-only failure rate database viewed through the user interface	The read-only database contains the component failure rate obtained from actuarial data and literature citation of the data source. The fixed database can only be modified by the code developers. The tool does not provide any form or table for the user to modify data in the database. In addition, tool has database for failure mode checklist, human error, and performance shaping factor.
Project database provides tables for entering, viewing, sorting and filtering data.	Analysis data is stored in this database and used when viewing data.
Graphical user interface generates input data for model analysis, stores output data, displays graphical results and generates reports.	The graphical user interface inputs data for model analysis, stores output data, displays graphical results, and generates reports.
<i>Hardware and Software Requirements</i>	
PCSA Tool operates on an IBM compatible personal computer with Windows NT 4.0	PCSA Tool works on an IBM compatible personal computer with Windows NT 4.0.
Visual Basic 6.0	Visual Basic 6.0 is being used in the graphical user interface development of the PCSA Tool.
Microsoft Access 97 SR-2	Microsoft Access 97 SR-2 is being used in the database development of the PCSA Tool.
SAPHIRE Version 6.70	SAPHIRE Version 6.70 is being used in the PCSA Tool program and can be executed from the Saphire Menu in the Tool.

RSAC Version 5.2	RSAC Version 5.2 is being used in the PCSA Tool program and can be executed from the Consequences Menu in the Tool.
MELCOR Version 1.8.5	MELCOR Version 1.8.5 is being used in the PCSA Tool program and can be executed from the Consequences Menu in the Tool.
InstallShield Professional-Windows Installer Edition, Version 2.03	InstallShield Professional-Windows Installer Edition 2.03 is being used to generate the installation for the PCSA Tool.
Crystal Reports 8.5, Developer Edition	Crystal Reports 8.5, Developer Edition is not currently being used in the Tool, but will be used as the Tool is further developed.
Component Chart 7.0	Component Chart 7.0 is not currently being used in the Tool.
Utility suite of codes	Utility suite of codes are PCSA_LHS, PCSA_LHSINP, PCSA_PROB, PCSA_RSACRD, PCSA_COMBAN, PCSA_IETCCDF, and PCSA_RISKCCDF. These codes are developed using Lahey Fortran LF90. These codes are executed during probabilistic consequence analysis and risk analysis.
Lahey LF90 Fortran Compiler	Lahey LF90 Fortran Compiler is used in the development of the PCSA Tool.
Graphics Requirements	
Graphical display model will display the deterministic and probabilistic dose calculation results.	Graphical results are displayed for both deterministic and probabilistic results.
Fault Tree and Event Tree models are graphically displayed using features of the SAPHIRE code.	Fault Tree and Event Tree models are developed graphically using the SAPHIRE code.
Pre- and Post-Processor	
Input and output data and display results from acquired software packages, particularly when using RSAC and MELCOR codes.	Input and output data from the software packages can be displayed.

3. RESULTS OF INITIAL TEST

3.1 Results of the Initial Acceptance Test

3.1.1 Comments generated while conducting tests.

General Comments Concerning PCSA tool

1. No Windows Taskbar button appears while PCSA tool is up and running.
2. No shortcut icon appears when using "<ALT> TAB" control for switching between programs.

Numbers 1 and 2 appear to be an intermittent problem. First time opening PCSA tool on Thursday 03/27/03 a button for it appears on the Task Bar and an icon appears for it on the <ALT> Tab menu.

Once again there is no Windows Taskbar button or "<ALT> TAB" control icon for PCSA when PCSA is up and running. This may be related to selecting "New" from the "File" option of the main PCSA menu. CONFIRMED. From the main menu, when you say "File" -> "New", and return to the intro page, you lose both the Task Bar Button and <ALT> TAB icon irrespective of whether you save your current work or not.

Though not a malfunction, when the Reset button is activated after clicking on a letter level and three numerical level, the cumulative level window fails to reset to a blank if any non "1's" were in the levels.

As an example, if l.1.1.1 is entered (l representing any letter) and then reset, the window clears properly. But if l.1.2.3 is entered, the cumulative level window resets to ".1.1" since there were two non-"1's" in the level designation. If l.2.1.1 is entered, only .1 will appear in the cumulative level window will appear since there was only one non-"1" in the group.

I don't know what I typed, but some combination caused me the following two dialog boxes to appear after replacing the "*.mdb" with "trial03". I was trying to see if PCSA Tool would automatically append an extension of mdb to the end of trial03. It appears that it did but some unintended keystroke launched the ERROR: dialog boxes and placed the trial03.mdb file in the trial03 subdirectory and not in the Projects subdirectory as expected.

"ERROR: frmStartUp.cmdOpen_click"

Error 3044: 'C:\Program Files\PCSAT Tool\Projects\trial03\Workdir\Working.mdb' is not a valid path. Make sure that the path name is spelled correctly and that you are connected to the server on which the file resides.

Source=DAQ.Workspace

"ERROR: in gGetFreqCategoryLimits()"

Error 3044: 'C:\Program Files\PCSAT Tool\Projects\trial03\Workdir\Working.mdb' is not a valid path. Make sure that the path name is spelled correctly and that you are connected to the server on which the file resides.

Source=DAO.Workspace

I have received clarification from David Stead on the above problem. Earlier, while testing, I had already entered "trial03" as a project name. At that time PCSA tool created a "trial03" subfolder. When I entered "trial03" subsequently, the "Create A New Project" dialog box moved to the previously created trial03 subfolder instead of trying to create a new trial03 project. Pressing "Open" caused PCSA tool to attempt to open trial03 from within the trial03 subfolder and that generated the ERRORS noted above.

An updated version supplied by D. Stead on 04/03/03 addresses this problem. When a pre-existing project name is typed into the "File name:" window of the "Create A New Project" dialog box, the user is indeed redirected to the subfolder with that name. When the "Open" button is clicked (or the <ENTER> key is pushed), the following ERROR dialog box appears.

ERROR: Invalid project file location -
Project file MUST be in the 'Projects' folder.
Project may already exist.
Please try again; be sure not to change folder (directory).
[OK]

PCSA Tool is unaffected by the minimize all button activated from the Task Bar. This is not necessarily an error, just an observation.

It is unclear how to proceed in creating a project. There are no clear directions on how one should proceed, not in the Software Requirements Document (SRD) or in the PCSA Tool Development - Progress Report.

When typing in the Description box in the "Functional Area Descriptions" dialog box a user can be confused because pressing the <ENTER> key appears to clear the line. What has actually happened is that the first line of text has scrolled off the top. Since there is a 40 character maximum it is possible to cause the <ENTER> key to act as a <TAB> and proceed to the next window or be accepted as an OK if all the entries are filled.

In the Project Tree box some of the entries can be edited from the box itself and some go immediately to a "Functional Area Descriptions" dialog box for editing. This should be locked out since the editing does not take effect.

In the "Functional Area Descriptions" dialog box, when OK is pressed after typing in all the information, the return to the Project Tree window reverts back to the Functional ID being closed. It seems like it would be easier on the user to leave it in the state last seen before editing. This would make it easy to go down the line adding information.

"Define Levels" dialog box <TAB> order is

1st Level

2nd Level

3rd Level

4th Level

Top Of Tree

[DONE]

In 1st Level Sub-Menu "Open Project", Form "PCSA Tool - Do you wish to save your work?", I can not generate the form "You can only save to a new file or the one that you originally opened."

The above Form in question occurs when you click on a name other than the one that was originally opened.

In the "Project Tree" Form the entries in the tree structure are "editable" yet the edits do not take effect. Is there a way to disable edits while in the tree structure. The entries are made "editable" with a single click to the entry irrespective of what level of the tree you are on.

When inside the PCSA Tool, clicking on Open Project returns you to the Startup Menu and not to an "Open Project" dialog box. This occurs after clicking "No" and "Yes" respectively to the following dialog inquiries "Do you wish to save your work?" and "If you have not saved, your work will be destroyed. Continue?"

Is there a reason for going back to the Startup Menu and not to an "Open Project" dialog box?

So far I am unable to generate the "PCSA Tool - The functional area is in use. This entry cannot be deleted." form. ~~What is needed to generate this form.~~ This occurs when the database for that functional area has data in its database.

~~There appear to be additional "non-printable" characters in the title bar of the "Additional Record" form which is launched by clicking on an item in the "Generic List of Events" table from the "External Events" menu. Note: This is my own entry.~~

Under certain conditions ~~that I am not currently able to reproduce~~, I seem to recall seeing the "Event Name" form with the "Show Report" greyed out. This occurs only when the operator clicks on the following text boxes with the mouse:

"Definition:"

"Required Condition:"

"Potential exists for the event to be applicable to the site".

"Rate of process high enough to affect the facility during preclosure period".

"Consequence of process significantly high to affect the facility during the preclosure period".

If any other box is clicked with the mouse or if just the TAB is used to sequence through the text boxes, the "Show Report" remains active, that is, it is not "greyed".

The "Event Frequency" entry box which expects a numeric entry does accept alpha characters and when OK is clicked, the text will remain in the number window. Example if the operator types "None" into the "Event Frequency" window, "None" will appear in the

Tab Order for "Event Name" form:

Definition:

Required Condition:

No of Yes/No radio button set for "Potential exists for the event to be applicable to the site".

Text box for "Potential exists for the event to be applicable to the site".

No of Yes/No radio button set for "Rate of process high enough to affect the facility during preclosure period".

Text box for "Rate of process high enough to affect the facility during preclosure period".

No of Yes/No radio button set for "Consequence of process significantly high to affect the facility during the preclosure period".

Text box for "Consequence of process significantly high to affect the facility during the preclosure period".

"Event Frequency (per yr)" numeric entry box.

"Justification for Frequency" text box.

"Additional Discussion" text box

"DOE References" text box

"NRC Review Report File Name:" text box

"View Report File" button

"OK" button

"Apply" button

"Cancel" button

"Show Report" button (if not greyed out)

"Ext. Hazard ID" prefix text box

"Ext. Hazard ID" suffix text box

All of above has been sent to A. Lozano and D. Stead.

April 21, 2003

I would recommend that in the User's Guide, instructing the operator to leave the "NRC Review Report File Name: " text box blank if there is no report. Any text that is entered into the box is assumed to be the file name and will generate an error if it is not found.

I generated an Error when using the "Add Event" Function of the "Naturally Occurring and Human-Induced Events" form. To see if it works, I typed in

Marty's Event

and got an error dialog box as shown below:

ERROR: in cmdApply(), frmEditEvents -

Error 3075: Syntax error (missing operator) in query expression '[Generic List of Events] = 'Marty's

Event';'.

Source=DAO.Database

I am assuming this was generated because I used an apostrophe.

April 22, 2003

When I start typing in any of the text boxes of the System Description form, the "Show Report" goes to gray. It is blackened when "Apply" is clicked

The "Edit Record" button in the "What If form" appears to have a Times Roman font while all others appear to be in Arial.

All above this mark has been emailed to Dave Stead and Albert Lozano.

April 23, 2003

There are restrictions when using the FMEA Form for adding a record, in particular, before a record is accepted it must contain at a minimum:

- a component description
- a failure mode
- a rationale for selecting Yes or No in the 'Severe Events' field

These same restrictions are bypassed when entering a record using the "FMEA Table" form.

This may hold for similar Form/Table entries (What If/Energy Method/HRA)

April 24, 2003

When Adding a record in the HRA form (under "Int. Events") hitting apply generates this error:

ERROR: in cmdApplly(), frmEditTables

ERROR 3315: Field 'HumanReliabilityAnalysis.Effect of Failure' can't be a zero-length string.

Source=DAO.Recodset

I cannot pass the Table form of HRA at this point.

This error also occurs when using the Copy Record command.

An unusual error occurs if you delete all the records in a table form and then try to add a record.

The following error message appears:

ERROR: in Form_load(), frmEditTables

Error 13: Type mismatch

Source=PCSA Tool

[OK]

After clicking OK, the Adding a record does appear and it runs normally.

Also note that when you click all the items in a table, there will be a single blank row as opposed to having no lines as is the case if you start with a blank table.

The above only applies to the FMEA, What If, and HRA tables. This is not a problem with the Energy Method

Under certain conditions ~~that I have not been able to reproduce~~, after deleting a record and proceeding to the Show Report form, the deleted item is still showing up in the report. Not until the report is closed and reopened will the item be deleted from the show report form. The condition seems to be related to when Error 3315, discussed above, is generated.

April 25, 2003

Maybe I don't understand the Event Tree form yet, but while working on it, the first buttons I tried to click on were the Add Subseq. Event, Edit Subseq. Event and Delete Subseq. Event buttons, which are the first buttons that you see when scanning top to bottom and left to right. At first they are inactive which would seem to indicate that they should be "gray" to indicate their non-usability.

Clicking on Add Scenario in the Event Tree Form generated the following ERROR: in cmdAddScenario_Click(), frmEventScenario

Error 3426: This action was cancelled by an associated object.

Source=DAO.Generic Object

This does not always happen, but some sequence that I went through caused this to be a repeatable problem. It seems to be related to when I tried to add a scenario with an empty Initiating Event Table.

The following is not a logical sequence but could possibly happen to a novice (such as myself) who is unfamiliar with the PCSA Tool operation. I went to the Event Tree Form to exercise the buttons and when I clicked on Add Scenario I got the following dialog box:

ERROR: Initiating Event ID is missing
Select an Initiating Event ID or click 'Cancel'.

[OK]

The problem is that there are no instructions informing the operator that there must be entries in the Initiating Event Table before the Event Tree options can be used. In other words the Event Tree option cannot be used to add scenarios until the Initiating Event Table is filled in.

Top Event Name has a character limit of 15 characters, with no indication to the user what that limit is. If the limit is exceeded, the following Error Dialog box is generated.

ERROR: in cmdAddRecord(), frmFaultTree

Error 524: The field is too small to accept the amount of data you attempted to add. Try inserting or pasting less data.

Source=PCSATool

[OK]

April 29, 2003

The "Save Results" may need a browse button to avoid errors like the one I got from trying to type in the full name.

ERROR: in cmdSave_Click(), frmRSAC_Output

Error 76: Path not found

Source=PCSATool

[OK]

The file pcsastat.out file ended up in C:\Program Files\PCSATool\Tools

April 30, 2003

After an RSAC run, I clicked on "View Stored Data" in the "RSAC Output" form and even after clicking on an existing file such as pcsastat.out in a known directory, I still get the following dialog box:

PCSATool

No file selected

[OK]

There seems to be a definite error in this function.

May 1, 2003

When an "Edit RSAC Input" form is launched, the numerical text box has a multi-line default. Consequently, if you hit an <ENTER> expecting the form to accept your entry, the number entered seemingly disappears when in actuality it has just scrolled one line out of view.

In the "Input Data" area of the "Worker Dose" form, after a calculation is made, clicking on the "BWR" radio button for fuel type clears the entire "Dose Results" area and the "Air Conc." and "Inhalation" columns of the "Intermediate Results" area. After doing a calculation for BWR Fuel Type, clicking on the PWR button does not clear the tables as clicking on BWR did. This seems to be inconsistency.

In the "Intermediate Results" area of the "Worker Dose" form, the "Defaults" button is initially greyed. When you click on the first numerical entry text box to edit an entry, the button remains greyed. It is not until you click on the second numerical entry text box that it changes to a functioning button. Even if you merely click the numerical entry text boxes without making changes the "Defaults" button becomes active on the second entry box clicked. In my opinion, the button should become active on the first entry made.

In the "Input Data" area of the "Worker Dose" form, after a calculation is made, clicking on the "BWR" radio button for fuel type clears the entire "Dose Results" area and the "Air Conc." and "Inhalation" columns of the "Intermediate Results" area. After doing a calculation for BWR Fuel

Type, clicking on the PWR button does not clear the tables as clicking on BWR did. This seems to be an inconsistency.

May 5, 2003

From the "Results Table" ("Perform.=> Current Level Results") an error is generated after selecting one of the Performance Assessment categories, 1, 2 or BCFL. Once the results table displays the results of the search clicking the "Show Report" button generates the error message below.

ERROR: Unable to display Result Search Project
Error -2147217904: No value given for one or more required parameters.
Source=Microsoft JET Database Engine.

This same error does not occur when the "Results Table" is first brought up and all three categories are being displayed.

This is probably not an error since it is an illogical sequence. This entry is for documentation purposes.

Clicking "OK" in the "Add new Software System" form when all fields are blank will generate the following error:

ERROR: in cmdOkay_click(), frmAddSoftwareSystem
Error 3315: Field 'SoftwareSystem.SystemID' can't be a zero length string.
Source=DAO.Recordset
[OK]

May 6, 2003

I'm not sure if this is an error or not. When you click on any of the text boxes next to a letter ID or Number ID in the lower three windows of the "Search Results for:" form (Failure Rate => Taxonomy => view Taxonomy), the Letter/Number ID disappears.

P C S A T o o l V e r s i o n 2 . 0 . 0 3 / 2 6 / 2 0 0 3 A c c e p t a n c e T e s t

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
Startup	About PCSA			About PCSA	Close							OK, Closes the About PCSA window and goes back to Startup Menu (jmm)
	Disclaimer			Disclaimer	Close							OK, Closes the Disclaimer window and goes back to Startup Menu (jmm)
	Open project			Open An Existing Project	Open							OK, Opens the chosen file in PCSA Tool (jmm)
					Cancel	PCSA Tool - No file selected	OK					OK, Closes window and goes back to Startup Menu (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
	Create project			Create A New Project	Open	PCSA Tool - The file already exists, Enter another name (This occurs when the full file name is given including the .mdb extension)	OK					OK, returns to Startup Menu (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
						ERROR: Invalid project file location - Project file MUST be in the 'Projects' folder. Project may already exist. Please try again; be sure not to change folder (directory). (This dialog box appears when a file name is given that matches a subfolder name)	OK					OK, returns to Startup Menu (jmm)
						Create Levels for Functional Area	Apply					OK, Creates the new functional level that has been selected (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Reset					OK, Resets the choices to 1 in the number columns, but leaves a “.1.1” in the “composite” window (jmm)
							Delete					OK, Deletes the highlighted functional area (jmm)
							View Tree	Creation Tree View	Done			OK, Shows the new functional tree, then returns to be able to create more levels (jmm)
							Done					OK, Opens the new file and functional areas in PCSA Tool (jmm)
							Cancel	PCSA Tool - This action will destroy your tree. Do you want to continue?	Yes			OK, Closes both windows and goes back to Startup Menu (jmm)
									No			OK, Closes window and goes back to create more functional areas (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Cancel	PCSA Tool - No file selected	OK					OK, Closes window and goes back to Startup Menu (jmm)
	Exit											OK, Closes PCSA Tool (jmm)
File	New Project			PCSA Tool - Do you wish to save your work?	Yes	Save As	Save	PCSA Tool - The file that you have selected already exists. Do you want to overwrite it?	Yes			OK, Saves file and opens Startup Menu (jmm)
									No			OK, Closes PCSA Tool window and goes back to Save As window (jmm)
								ERROR: Cannot save database file- You can only save to a new file or the one that you originally opened	OK			OK, Closes window and goes back to Save As window (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					No	PCSA Tool - If you have not saved, your work will be destroyed. Continue?	Cancel					OK, Closes the window and goes back to the Startup Menu (jmm)
							Yes					OK, Closes window and goes to startup menu (jmm)
							No					OK, Closes window and goes back to PCSA Tool (jmm)
	Open Project			PCSA Tool - Do you wish to save your work?	Yes	Save As	Save	ERROR: Cannot save database file - You can only save to a new file or the one that you originally opened	OK	Save As	(See buttons in Button Level 2, to left)	OK, Saves and goes to startup menu (jmm) The ERROR only occurs when you click on a pre-existing name other than the one opened, not with a new name. (jmm)
								The file that you have selected already exists. Do you want to overwrite it?	Yes			OK, Saves and goes back to Startup Menu (jmm)
									No			OK, Closes window and goes back to Save As Menu (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					OK, Closes window and goes back to Startup Menu (jmm)
					No	PCSA Tool - If not saved, your work will be destroyed. Continue?	Yes					OK, Closes window and goes back to Startup Menu (jmm)
							No					OK, Closes window and goes back to PCSA Tool (jmm)
	Save											OK (jmm)
	Save As			Save As	Save	ERROR: Cannot save database - You can only save to a new file or the one that you originally opened	OK	Save As				OK, Closes window and goes back to Save As Menu (jmm)
						PCSA Tool - The file that you have selected already exists. Do you want to overwrite it?	Yes					OK, appears to have saved and still in PCSA Tool main page (jmm)
							No	Save As				OK, Closes window and goes back to Save As Menu (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Cancel							OK, Closes window and goes back to PCSA Tool main page (jmm)
	Exit			PCSA Tool - Do you want to save?	Yes							OK, Appears to have saved, then the program closed (jmm)
					No							OK, Doesn't appear to save, then the program closed (jmm)
Project_Tree				Project Tree	Define Levels	Define Levels	Done					OK, Closes Define Levels window and goes back to Project Tree window (jmm)
					Show Report	Project Tree Report	Print	Print	OK			OK, Report printed properly
									Cancel			OK, Closed Print window and went back to Report
							Export	Export	Save			OK, exports in selected file format, returns to Project Tree Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Add Level	Edit Levels for Functional Area			Cancel			OK, Closes window and goes back to Report (jmm)
							Apply					OK, Adds the selected level (jmm)
							Reset					OK, Clears your level selections (jmm)
							Delete					OK, Deletes the selected level (jmm)
								PCSA Tool - This entry cannot be deleted because it is in the database (generated if a previously saved tree entry is the delete target)	OK			OK. Returns to the "Edit Levels for Functional Area" Form(jmm)
							Done					OK, Saves the new levels, closes the window and returns to Project Tree window (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel	PCSA Tool - This action will destroy your List. Do you wish to continue?	Yes			OK, Closes the window and returns to Project Tree window (jmm)
									No			OK, Closes window and goes back to Edit Levels window (jmm)
					Edit Selection	PCSA Tool - No selection has been made	OK					OK, Closes window and returns to Project Tree window (jmm)
						Functional Area Descriptions	OK					OK, Saves changes and returns to Project Tree window (jmm)
							Cancel	PCSA Tool - Any changes to the functional area descriptions will not be applied	OK			OK, Changes were not saved and then returned to Project Tree window (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Done	PCSA Tool - You have not selected a functional area. Do you wish to exit anyway?	Yes					OK, Closes window and goes to PCSA Tool Main page (jmm)
							No					OK, Closes window and returns to Project Tree window (jmm)
												OK, If a “bottom level” is selected then the Project Tree window closes and goes to PCSA Tool main page (jmm)
					Delete Selection	PCSA Tool - The functional area is in use. This entry cannot be deleted.	OK					OK, Closes window and returns to Project Tree window (???)
						PCSA Tool - You have not selected a functional area. There is nothing to delete.	OK					OK, Closes window and returns to Project Tree window (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
												OK, Deletes the functional level if it is not in use (jmm)
External Events	Generic List			Naturally Occuring and Human-Induced Events	(Double clicking on an item in “Generic List of Events” list)	“Event name”						Text boxes to be filled in, three radio buttons available for clicking (Yes/No), and one numeric entry box with the expectation that a number will be entered in. (jmm)
							OK					OK. Returns to the “Naturally Occuring and Human-Induced Events” form (jmm)
								ERROR? Non-numeric ‘Frequency’ is not a number. Do you wish to change this entry?	Yes			OK. Returns to the Event Frequency text box. (Jmm)
									No			OK. Returns to the “Naturally Occuring and Human-Induced Events” with the Event Frequency filled in as 0.0E+00 or the any text that may have been typed. (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
										ERROR: in cmdApplyCancell(), frmExtEventAnalysis - Error 13: Type mismatch Source=PC SA Tool	OK	OK Returns to the "Event Name" form (jmm)
							Apply					OK. Accepts entries and turns number in numeric window to floating point (jmm)
							Cancel					OK. Returns to the "Naturally Occuring and Human-Induced Events" with no changes to the table.
							Show Report					OK, Report printed properly

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							View Report File	PCSA Tool - ERROR in cmdViewRpt File_Click(): Unable to open C:\Program Files\PCSAT Tool\Documents\NRCs..rpt Error #76, Path not found. (If any text exists in the "NC Review Report File Name: " text window, PCSA Tools assumes that this is the file name.	OK			Error occurred when trying to access the NRCs.rpt in the "NRC Review Report File Name:" text box. This occurs in the "Avalanche" form.
					(Double clicking on an item in any other list)	PCSA Tool - You must double-click on the Generic Event Name to edit the data.	OK					OK. Returns to the "Naturally Occuring and Human-Induced Events" form. (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Only Applicable (Displays Generic List of Events, Ext Hazard ID, and Event Frequency if Event Frequency >=1.0E-6.)	Naturally Occuring and Human-Induced Events (only events applicable to site)	Show All					OK, Returns to External Events main page. (jmm)
							Close					
					AddEvent	Add Record	Apply					OK. Advance to the "Event name" form for additional information or generates an error message if certain characters are part of name ('(jmm)
							Cancel					OK. returns to previous form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Delete Record	Are you sure you want to delete [Event Name]?	Yes					OK. Deletes record, returns to "Naturally Occuring and Human-Induced Events" form
							No					returns to "Naturally Occuring and Human-Induced Events" form
					Show Report	External Events Report	Print	Print	OK			OK, Prints report, closes Pring window and goes back to form (jmm)
									Cancel			OK, Returns to form without printing. (Jmm)
							Export	Export	Save			Exports file in selected file format and returns to form (jmm)
									Cancel			OK (jmm)
					Export							OK, returns to PCSA main screen (jmm)
System	Sysdesc			System Description	Apply							OK, Saves new information on specific system (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Show Report	System Description Report	Print	Print	OK			OK, Prints report, closes Print window, and goes back to report (jmm)
									Cancel			OK, Closes Print window and goes back to report (jmm)
							Export	Export	Save			OK, saves selected file format, returns to Project Report Window (jmm)
									Cancel			OK, Closes the Export window and goes back to the report (jmm)
					OK							OK, Saves the new information, closes the window and goes back to the PCSA Tool main page (jmm)
					Cancel							OK, Doesn't save the new information, closes the window and goes back to the PCSA Tool main page (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
Int. Hazard Analysis	FMEA	Form		FMEA Form	Add Record	FMEA Form	Update Record	PCSA Tool - You must enter a Component Description, or click Cancel.	OK	FMEA Form		OK, returns to FMEA form (jmm)
								PCSA Tool - You must enter the Failure Mode, or click Cancel.	OK	FMEA Form		OK, returns to FMEA form (jmm)
								PCSA Tool - You must enter your rationale for selecting Yes or No in the 'Justification' field in the Remarks box or click Cancel	OK			OK, returns to FMEA form (jmm)
							Cancel					OK, returns to FMEA form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					OK, deletes record, returns to FMEA form (jmm)
							No					OK, returns to FMEA form (jmm)
					Edit Record	FMEA Form	Update Record					OK, updates record, returns to FMEA form (jmm)
							Cancel					OK, returns to FMEA form (jmm)
					Show Report	FMEA Report	Print	Print	OK			OK, prints, returns to FMEA Report (jmm)
									Cancel			OK, returns to FMEA Report (jmm)
							Export	Export	Save			OK, exports as selected file format, returns to FMEA Report (jmm)
									Cancel			OK, returns to FMEA Report (jmm)t
					FMEA Table	FMEA Table						Displays FMEA Table (See below for Table buttons) (jmm)
					Close							OK (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
		Table		FMEA Table	FMEA Form	FMEA Form						Displays FMEA form (See above for Form buttons) (jmm)
					Add Record	Adding a Record, FMEA Table, Project	Apply					OK, adds record, returns to FMEA Table (jmm)
							Cancel					Returns to FMEA Table (jmm)
					Edit Record	Editing FMEA Table	Apply					OK, applies edits to FMEA Table (jmm)
							Cancel					OK, returns to FMEA Table (jmm)
						Error: Invalid cell selected (This cell cannot be edited, or multiple cells selected)	OK					OK, returns to FMEA Table (jmm)
					Copy Record	Copying a Record, FMEA Table	Apply					OK, copies selected record, returns to FMEA Table (jmm)
							Cancel					OK, returns to FMEA Table (jmm)

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Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
						Editing Severe Events list	Apply	ERROR: No data entered - Invalid Entry!	OK			OK, returns to Editing Severe Events List for “FMEA” form (jmm)
												OK, applies changes, returns to Severe Events List (jmm)
							Cancel					Returns to Severe Events List (jmm)
					Show Report	FMEA Report	Print	Print	OK			Prints report, returns to FMEA Report (jmm)
									Cancel			Returns to FMEA Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to FMEA Report (jmm)
									Cancel			Returns to FMEA Report (jmm)
												Returns to main PCSA screen (jmm)
					Close							

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
	What If	Form		What If Form	Add Record	What If Form	Update	You must enter the 'What If' text or click 'Cancel'	OK			Returns to What If form (jmm)
							Update	You must enter your rationale for selecting Yes or No in the 'Severe Events' field in the 'Justificatoin' box or click 'Cancel'	OK			Returns to What If form (jmm)
							Cancel					Returns to What If form (jmm)
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					Deletes record, returns to What If form (jmm)
							No					Returns to What If form (jmm)
					Show Report	What If Analysis Report	Print	Print	OK			Prints What If Analysis Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments	
	1 st Level	2 nd Level	3 rd Level										
									Cancel			Returns to What If Analysis Report (jmm)	
							Export	Export	Save			Exports file in selected format, returns to What If Analysis Report (jmm)	
									Cancel			Returns to What If Analysis Report (jmm)	
							What If Table	What If Table	(See below for Table buttons)				Displays What If Table (jmm)
							Close						Returns to main PCSA screen (jmm)
							Table		What If Table	What If Form	What If Form	(See above for Form buttons)	
				Add Record	Adding a Record, What If Table	Apply							Adds record to What If Table (jmm)
						Cancel							Returns to What If Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Edit Record	Error! Invalid Cell Selected: Editing is not allowed in this cell, or multiple cells selected!	OK					Returns to What If Table (jmm)
						Editing What If Table	Apply					Applies Edits, returns to What If Table (jmm)
							Cancel					Returns to What If Table (jmm)
					Copy Record	Copying Record, What If Table	Apply					Copies selected record, returns to What If Table (jmm)
							Cancel					Returns to What If Table (jmm)
					Delete Record	Deleting Record	Are you sure you want to delete?	Yes				Deletes selected record, returns to What If Table (jmm)
								No				Returns to What If Table (jmm)
					Show Report	What If Analysis Report	Print	Print	OK			Prints report, returns to What If Analysis Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments							
	1 st Level	2 nd Level	3 rd Level																
									Cancel			Returns to What If Analysis Report (jmm)							
							Export	Export	Save			Exports file in selected format, returns to What If Analysis Report (jmm)							
									Cancel			Returns to What If Analysis Report (jmm)							
							Close						Returns to main PCSA screen (jmm)						
		Severe Events List		Severe Events List	Edit Record	Error! Invalid Cell Selected: Editing is not allowed in this cell, or multiple cells selected!	OK		OK			Returns to Severe Events List (jmm)							
													Editing Severe Events List	Apply	ERROR: No data entered - Invalid Entry!	OK			OK, returns to Editing Severe Events List for “What If” form (jmm)
																			Applies edits, returns to Severe Events List (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					Returns to Severe Events List (jmm)
					Show Report	PCSA What If Analysis Report	Print	Print	OK			Prints reports, returns to What If Analysis Report (jmm)
									Cancel			Returns to What If Analysis Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to What If Analysis Report (jmm)
									Cancel			Returns to What If Analysis Report (jmm)
					Close							Returns to Severe Events List (jmm)
	Energy Analysis	Form		Energy Analysis Form	Previous							Toggles through Event Categories (jmm)
					Next							Toggles through Event Categories (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Add record	Energy Analysis Form	Update Record	PCSA Tool: You must enter an EVENT NAME or click 'Cancel'	OK			Returns to Energy Analysis Form (jmm)
								PCSA Tool: You must enter the Cause of EVENT or click 'Cancel'	OK			Returns to Energy Analysis Form (jmm)
								PCSA Tool: You must enter your rationale for selecting Yes or No in the 'Severe Events' field in the 'Justification' box or click "Cancel"	OK			Returns to Energy Analysis Form (jmm)
							Cancel					Returns to Energy Analysis Form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					OK, Deletes item and return to Energy Analysis Report (jmm)
							No					OK, Returns to Energy Analysis Report (jmm)
					Show Report	Energy Analysis Report	Print	Print	OK			Prints PCSA Energy Analysis Report (jmm)
									Cancel			Returns to PCSA Energy Analysis Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to PCSA Energy Analysis Report (jmm)
									Cancel			Returns to PCSA Energy Analysis Report (jmm)
					Energy Anal. Table	Energy Analysis Table	(See below for Table buttons)					Displays Energy Analysis Table (jmm)
					Close							Returns to PCSA main screen (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments	
	1 st Level	2 nd Level	3 rd Level										
		Table			Previous							Toggles through Event Category (jmm)	
					Next							Toggles through Event Category (jmm)	
					Energy Anal. Form	Energy Analysis Form	(See above for Form buttons)					Displays Energy Analysis Form (jmm)	
					Add Record	Energy Analysis Form	Update Record					Adds record, returns to Energy Analysis Table (jmm)	
							Cancel					Returns to Energy Analysis Table (jmm)	
					Edit Record	Error! Invalid cell selected: Editing is not allowed in this cell or multiple cells selected!	OK					Returns to Energy Analysis Table (jmm)	
							Editing Energy Analysis Table	Apply					Applies edits, returns to Energy Analysis Table (jmm)
								Cancel					Returns to Energy Analysis Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Copy Record	Copying a record, Energy Analysis Table	Apply					Copies selected record, returns to Energy Analysis Table (jmm)
							Cancel					Returns to Energy Analysis Table (jmm)
					Delete Record	Are you sure you want to delete?	Yes					Deletes selected record, returns to Energy Analysis Table (jmm)
							No					Returns to Energy Analysis Table (jmm)
					Show Report	Energy Analysis Report	Print	Print	OK			Prints PCSA Energy Analysis Report, returns to Energy Analysis Table (jmm)
									Cancel			Returns to Energy Analysis Table (jmm)
							Export	Export	Save			Exports file in selected format, returns to Energy Analysis Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
		Severe Events List		Severe Events List	Close							Closes Energy Analysis Table, returns to main PCSA screen (jmm)
					Edit Record	Error! Invalid cell selected: editing is not allowed in this cell or multiple cells selected	OK					Returns to the Severe Events List (jmm)
						The only field that can be changed is 'Remarks'.	OK					Returns to the Severe Events List (jmm)
						Editing Severe Events List for 'Energy Analysis' Project	Apply					Applies edits, returns to the Severe Events List (jmm)
							Cancel					Returns to the Severe Events List (jmm)
					Show Report	Energy Analysis Report	Print	Print	OK			Prints report, returns to the Severe Events Report (jmm)
									Cancel			Returns to the Severe Events Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			Exports file in selected format, returns to the Severe Events Report (jmm)
									Cancel			Returns to the Severe Events Report (jmm)
					Close							Returns to the main PCSA screen (jmm)
	HRA	Form		HRA Form	Add Record	HRA Form	Update Record	PCSA Tool - You must enter a Human Action, or click Cancel.	OK	HRA Form		OK, returns to HRA form (jmm)
								PCSA Tool - You must enter the Human Failure Event, or click Cancel.	OK	HRA Form		OK, returns to HRA form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
								PCSA Tool - You must enter your rationale for selecting Yes or No in the 'Justification' field in the Remarks box or click Cancel	OK			OK, returns to HRA form (jmm)
							Cancel					OK, returns to HRA form (jmm)
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					OK, deletes record, returns to HRA form (jmm)
							No					OK, returns to HRA form (jmm)
					Edit Record	HRA Form	Update Record					OK, updates record, returns to HRA form (jmm)
							Cancel					OK, returns to HRA form (jmm)
					Show Report	HRA Report	Print	Print	OK			OK, prints, returns to HRA Report (jmm)
									Cancel			OK, returns to HRA Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			OK, exports as selected file format, returns to HRA Report (jmm)
									Cancel			OK, returns to HRA Repor (jmm)t
					HRA Table	HRA Table						Displays HRA Table (See below for Table buttons) (jmm)
					Close							OK (jmm)
		Table		HRA Table	HRA Form	HRA Form						Displays HRA form (See above for Form buttons) (jmm)
					Add Record	Adding a Record, HRA Table, Project	Apply					NOT OK, generates ERROR 3315
							Cancel					Returns to HRA Table (jmm)
					Edit Record	Editing HRA Table	Apply					OK, applies edits to HRA Table (jmm)
							Cancel					OK, returns to HRA Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
						Error: Invalid cell selected (This cell cannot be edited, or multiple cells selected)	OK					OK, returns to HRA Table (jmm)
					Copy Record	Copying a Record, HRA Table	Apply					NOT OK, generates ERROR 3315
							Cancel					OK, returns to HRA Table (jmm)
					Delete Record	Deleting Record: Are you sure you want to delete?	Yes					Deletes record, returns to HRA Table (jmm)
							No					OK, returns to HRA Table (jmm)
					Show Report	HRA Report	Print	Print	OK			Prints report, returns to HRA Report (jmm)
									Cancel			Returns to HRA report (jmm)
							Export	Export	Save			Exports file in selected format, returns to HRA Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
									Cancel			Returns to HRA Report (jmm)
					Close							OK (jmm)
		Severe Events List		Severe Events List	Edit Record	This field cannot be changed: The only field that can be edited is 'Remarks HRA Table'.	OK					OK, returns to Severe Events List (jmm)
												OK, returns to Editing Severe Events List for "HRA" form (jmm)
					Apply	Generates an "Adding a Record" form instead of "Editing Severe Events list " form	ERROR: No data entered - Invalid Entry!	OK				OK, applies changes, returns to Severe Events List (jmm)
												Returns to Severe Events List (jmm)
					Cancel							Prints report, returns to HRA Report (jmm)
												Returns to HRA Report (jmm)
					Show Report	HRA Report	Print	Print	OK			
									Cancel			

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			Exports file in selected format, returns to HRA Report (jmm)
									Cancel			Returns to HRA Report (jmm)
					Close							Returns to main PCSA screen (jmm)
	Severe Events (All)			Severe Events List for Project: Project Name	Show Report	Sever Events Report	Print	Print	OK			Prints report, returns to Severe Events Report (jmm)
									Cancel			Returns to Severe Events Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to HRA Report (jmm)
									Cancel			Returns to HRA Report (jmm)
					Close							Returns to main PCSA Screen (jmm)
Freq. Analysis	Initiating Event	Form		Initiating Event Form	Add Record	Initiating Event Form	Freq. Calculator	Frequency Calculation	Reset			OK. Clears all numeric windows (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
									Calculate			OK. Calculates the frequency and enters data into Frequency text box of Initiating Event Form (jmm)
									Close			OK. Closes Frequency Calculation Form and returns to Initiating Event Form (jmm)
					Add Record	Initiating Event Form	Update Record		OK			OK Returns to Initiating Event form (jmm)
									PCSA Tool - You must enter the Event Description, or click Cancel			
									PCSA Tool - You must enter the Event ID, or click Cancel			OK Returns to Initiating Event form (jmm)
									Entry Error - Frequency must be a numeric value.			OK Returns to Initiating Event form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					OK. Returns to Initiating Event Form (jmm)
					Delete Record	PCSA Tool - Are you sure that you want to delete record?	Yes					Deletes record, returns to Initiating Event Form (jmm)
							No					Returns to Initiating Event Form (jmm)
					Edit Record	Initiating Event Form	Update Record					Updates record, returns to Initiating Event Form (jmm)
							Cancel					Returns to Initiating Event Form (jmm)
					Show Report	Initiating Event Report	Print	Print	OK			Prints PCSA Initiating Events Reports, returns to Initiating Event Report (jmm)
									Cancel			Returns to Initiating Event Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to Initiating Event Report (jmm)
									Cancel			Returns to Initiating Event Report (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments	
	1 st Level	2 nd Level	3 rd Level										
					Init Event Table	Initiating Event Table	(See below for Table buttons)					Displays Initiating Events Table (jmm)	
					Close							Returns to PCSA main screen (jmm)	
		Table		Initiating Event Table	Init Event Form	Initiating Event Form						Displays Initiating Events Form (jmm)	
					Add Record	Adding a Record, Initiating Events Table	Apply					Adds record, returns to Initiating Events Table (jmm)	
							Cancel					Returns to Initiating Events Table (jmm)	
					Edit Record	Error! Invalid cell selected: Editing is not allowed in this cell or multiple cells selected	OK					returns to Initiating Events Table (jmm)	
							Editing Initiating Events Table	Apply					Applies edits, returns to Initiating Events Table (jmm)
								Cancel					Returns to Initiating Events Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Copy Record	Enter new ID for copied Record	OK	ERROR: Invalid ID length - The ID must be between 1 and 15 characters long! Copy operation cancelled.	OK			Returns to “Enter new ID for copied Record” form (jmm)
								Copying a Record, Initiating Events Table	Apply			Copies record, returns to Initiating Events Table (jmm)
									Cancel			Returns to Initiating Events Table (jmm)
					Delete Record	Are you sure you want to delete?	Yes				Deletes record, returns to Initiating Events Table (jmm)	
							No				Returns to Initiating Events Table (jmm)	
					Show Report	PCSA Initiating Event Report	Print	Print	OK			Prints report, returns to Initiating Events Report (jmm)
				Cancel							Returns to Initiating Events Report (jmm)	

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			Exports file in selected format, returns to Initiating Events Report (jmm)
									Cancel			Returns to Initiating Events Report (jmm)
							Close					Returns to PCSA main screen (jmm)
	Event Tree	Event Scenario		Event Scenario	Frequency Calculation	Failure Worksheet	Calculate					Calculates data entered to give the number of failures to be expected
							Save to File	Data Saved (Gives the file name where the data is saved.)	OK			File saved
							Reset					Clears failure worksheet
							Close					Returns to Events Scenario
					Add Event Sequence	Event Scenario	Update Record					Updates record, returns to Event Scenario
							Cancel					Returns to Event Scenario

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Edit Event Sequence	Event Scenario	Update Record					Updates record, returns to Event Scenario
							Cancel					Returns to Event Scenario
					Delete Event Sequence	PCSA Tool - Do you want to delete Item Sequence No. [00.0]?	Yes					Deletes record, returns to Event Scenario
							No					Returns to Event Scenario
					Add Scenario	Event Scenario	Update Record	ERROR: Initiation Event ID is missing - Select an Initiating Event ID or click 'Cancel'.				OK. Returns to Event Tree Form (jmm)
								ERROR: Event Scenario ID missing - Enter Event Scneario ID or click 'Cancel'.				OK. Returns to Event Tree Form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
								ERROR: Event Scenario description missing - Enter Event Scenario description or click 'Cancel'.				OK. Returns to Event Tree Form (jmm)
												Updates record, returns to Event Scenario (jmm)
							Cancel					Returns to Event Scenario (jmm)
					Delete Scenario	PCSA Tool - Are you sure you want to delete this Scenario and all associated Event Sequences?	Yes					Deletes record, returns to Event Scenario (jmm)
							No					Returns to Event Scenario (jmm)
					Edit Record	Event Scenario	Update Record					Updates record, returns to Event Scenario (jmm)
							Cancel					Returns to Event Scenario (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments		
	1 st Level	2 nd Level	3 rd Level											
					Show Report	PCSA Event Scenario Report	Print	Print	OK			Prints reports, returns to Event Scenario Report (jmm)		
									Cancel			Returns to Event Scenario Report (jmm)		
							Export	Export	Save			Exports file, returns to Event Scenario Report (jmm)		
									Cancel			Returns to Event Scenario Report (jmm)		
					Add Suseq. Event	Event Tree Form	Update Record	ERROR: Description is missing - Enter Subsequent Event Description	OK			OK Returns to Event Tree Form (jmm)		
													Cancel	
							Edit Suseq. Event	Event Tree Form	Update Record					OK Returns to Event Tree Form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Delete Subseq. Event	PCSA Tool - You must click on an event in the list to delete.	OK					OK Returns to Event Tree Form (jmm)
						PCSA Tool - Are you sure you want to delete Item No. [Event No.]?	Yes					OK Returns to Event Tree Form (jmm)
							No					OK Returns to Event Tree Form (jmm)
					Close							Returns to PCSA main screen (jmm)
		Event Sequence	Form	Event Sequence Form	Add Record	Event Sequence Form	Update Record					Updates record, returns to Event Sequence
							Cancel					Returns to Event Sequence
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					Deletes record, returns to Event Sequence
							No					Returns to Event Sequence
					Edit Record	Event Sequence Form	Update Record					Updates record, returns to Event Sequence

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					Returns to Event Sequence
					Show Report	Event Sequence Report	Print	Print	OK			Prints report, returns to PCSA Event Sequence Report
									Cancel			Returns to PCSA Event Sequence Report
							Export	Export	Save			Exports file in selected format, returns to PCSA Event Sequence Report
									Cancel			Returns to Event Sequence Report
					Event Seq. Table	Event Sequence Table	(See below for Table buttons)					Displays Event Sequence Table
					Close							Returns to PCSA main screen
			Table	Event Sequence Table	Event Seq. Form	Event Sequence Form	(See above for Form buttons)					Displays Event Sequence Form

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Add Record	Adding a Record, Event Sequence Table	Apply					Adds record, returns to Event Sequence Table
							Cancel					Returns to Event Sequence Table
					Edit Record	Error! Invalid cell selected: Editing is not allowed in this cell or multiple cells selected	OK					Returns to Event Sequence Table
							Apply					Applies edits, returns to Event Sequence Table
						Editing Event Sequence Table	Cancel					Returns to Event Sequence Table
							Apply					Copies selected record, returns to Event Sequence Table
					Copy Record	Copying a Record, Events Sequence Table	Cancel					Returns to Event Sequence Table
							Yes					Deletes record, returns to Event Sequence Table
					Delete Record	Deleting Record						

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							No					Returns to Event Sequence Table
					Show Report	Event Sequence Report	Print	Print	OK			Prints Events Sequence Report
									Cancel			Returns to Event Sequence Report
							Export	Export	Save			Exports file in selected format, returns to Event Sequence Report
									Cancel			Returns to Event Sequence Report
					Close							Returns to PCSA main screen
	Fault Tree	Form		Fault Tree Form	Add Record	Fault Tree Form	Update Record	PCSA Tool - You must enter the Top Event Name. or click Cancel. (15 characters or less)	OK			OK. Returns to Fault Tree Form (jmm)
												Updates record, returns to Fault Tree Form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					Returns to Fault Tree Form (jmm)
					Delete Record	PCSA Tool - Are you sure you want to delete record?	Yes					Deletes record, returns to Fault Tree Form (jmm)
							No					Returns to Fault Tree Form (jmm)
					Edit Record	Fault Tree Form	Update Record					Updates record, returns to Fault Tree Form (jmm)
							Cancel					Returns to Fault Tree Form (jmm)
					Show Report	Fault Tree Report	Print	Print	OK			Prints PCSA Fault Tree Report (jmm)
									Cancel			Returns to Fault Tree Report (jmm)
							Export	Export	Save			Exports file in selected format (jmm)
									Cancel			Returns to Fault Tree Report (jmm)
					Event Table	Fault Tree Event Table	(See below for Table buttons)					Displays Fault Tree Event Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
		Table		Fault Tree Event Table	Close							Returns to PCSA main screen (jmm)
					Fault Tree Form	Fault Tree Form	(See above for Form buttons)					Displays Fault Tree Form
					Add Record	Adding a Record, Fault Tree Event Table	Apply					Adds record, returns to Fault Tree Event Table (jmm)
							Cancel					returns to Fault Tree Event Table (jmm)
					Edit Record	Error! Invalid cell selected: Editing is not allowed in this cell or multiple cells selected	OK					Returns to Fault Tree Event Table (jmm)
							Apply					Applies edits, Returns to Fault Tree Event Table (jmm)
												Returns to Fault Tree Event Table (jmm)
					Copy Record	Copying a Record, Fault Tree Event Table	Apply					Copies selected record, Returns to Fault Tree Event Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Cancel					Returns to Fault Tree Event Table (jmm)
					Delete Record	Are you sure you want to delete record?	Yes					Deletes record, Returns to Fault Tree Event Table (jmm)
							No					Returns to Fault Tree Event Table (jmm)
					Show Report	Fault Tree Event Report	Print	Print	OK			Prints PCSA Fault Tree Report, Returns to Fault Tree Report (jmm)
									Cancel			Returns to Fault Tree Report (jmm)
							Export	Export	Save			Exports file in selected format, Returns to Fault Tree Report (jmm)
									Cancel			Returns to Fault Tree Report (jmm)
					Close							Returns to Fault Tree Form(jmm)
Saphire	Run Saphire											Opens main Saphire screen (jmm)
Consequence	Public Dose	RSAC	Standard RSAC Input	RSAC Input	Set All Defaults							Applies default settings to each tab (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments		
	1 st Level	2 nd Level	3 rd Level											
					Cancel	PCSA Tool - You did not create an RSAC input file.	OK					Returns to PCSA main screen (jmm)		
					Done/Run	Read RSAC Output File - RSAC is running. This window should go away when RSAC is done.	ABORT [Timed Out]	PCSA Tool - RSAC did not run successfully. Do you wish to see the RSAC Files?	Yes	View RSAC Files	Done	Note pad - Cannot find the rsac5 out.txt file. Do you want to create a new file?	Yes	Creates a new 'empty' Note pad file named rsac5 out.txt (jmm)
													No	Returns to PCSA main screen (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
									No			Returns to PCSA main screen (jmm)
						RSAC Output	View Stored Data	Select a 'pcsastat.out' file	Open	PCSA Tool - No file selected	OK	ERROR. Even after selecting a known file. this message is generated. (JMM)
									Cancel	PCSA Tool - No file seected	OK	OK. Returns to RSAC Output (jmm)
							Save Results	Subdirectory - Enter the subdirectory name.	OK	PCSA Tool - If no directory is desired click on Cancel	OK	Returns to Subdirectory form (jmm)
												OK. Returns to RSAC Output form with "Save Results" button greyed. (jmm)
									Cancel			Returns to the RSAC Output form with the "Save Results" button greyed. (Jmm)
							View RSAC Output File	Notepad file - rsac5out.txt				Displays file (jmm)

Output above)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Done							Returns to PCSA main screen
		MELCOR	Input	MELCOR Input	Defaults							Restores default settings
					Cancel							Returns to PCSA main screen
					Run MELCOR	MELCOR Running - MELCOR is running, and take more than an hour to finish. This dialog box will disappear when the run is complete.	Abort	MELCOR Running - Click of the box MELCOR is running in, and press CTRL-C.	EXIT			Initiates MELCOR
						MELCOR Results	Close					OK Returns to PCSA main screen (jmm)
			Output	MELCOR Results	Close							OK Returns to PCSA main screen (jmm)
	Worker Dose			Worker Dose	Reload Defaults							Restores default settings (jmm)
					Calculate Dose							Calculates dose results (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Defaults							Resets values in the Ci/Assembly column of the "Intermediate Results" area (jmm)
					Close							Returns to PCSA main screen (jmm)
Performance	Current Level Results			Results Table-Functional ID	Refresh							???
					Safety Assessment	Performance Assessment	Search Now	PCSA Tool - You must enter the category to search for	OK			OK. Returns to Performance Assessment form (jmm)
								Safety Assessment - Category 1 Event Sequences		ERROR: Invalid Normal Release Value - Normal Release must be a numeric value, >=0.	OK	OK. Returns to "Category 1 Event Sequences" form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
										WARNING: One or more Dose values are missing. - Event Sequences Dose is a sum of only the valid values. Please check the data.	OK	OK. Returns to Safety Assessment - Category 1 Event Sequences.
									Calculate (Frequency - Weighted Annualized Dose)			OK. Calculates Total Dose. Category 1 Event Sequences remains. (jmm)
									Calculate (Combinati on of Events)			OK. Displays comban.txt as Notepad window. (jmm)
									Done			OK. Returns to Results Table. (jmm)
							Cancel				OK. Return to “Results Table” form (jmm)	

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
	Frequency Categorization			Frequency Categorization	Apply	Frequency Categorization	Close					Returns to PCSA main screen
	Project Results	Safety Assessment		Results Table - Project View Base Case	Refresh							Refreshes screen (jmm)
					Safety Assessment	Performance Assessment	1, Search Now	Safety Assessment - Category 1 Event Sequence	Calculate			Calculates total dose (jmm)
									Calculate	comban.txt - Notepad		Displays notepad file (jmm)
									Done			Returns to Results Table (jmm)
							2, Search Now	Results Table - Project View Base Case	(See above for buttons)			Displays Table (jmm)
							BCFL, Search Now	Results Table - Project View Base Case	(See above for buttons)			Displays Table (jmm)
							Cancel					Returns to Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Edit Record	ERROR: Invalid cell selected - Editing is not allowed in this cell, or multiple cells selected.	OK					OK. Returns to “Results Table” form (jmm)
						ERROR: Field cannot be edited - The only fields that can be edited for non-DOE Event Sequences are ‘DET Conseq Path’ and ‘Prob Conseq Path’.	OK					OK. Returns to “Results Table” form (jmm)
						Select Directory	Accept					OK. Returns to “Results Table” form (jmm)
							No Release					OK. Returns to “Results Table” form (jmm)
							Cancel					OK. Returns to “Results Table” form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Show Report	Performance Assessment Report	Print	Print	OK			Prints report, returns to Performance Assessment Report (jmm)
									Cancel			returns to Performance Assessment Report (jmm)
							Export	Export	Save			Exports file in selected format, returns to Performance Assessment Report (jmm)
									Cancel			Returns to Performance Assessment Report (jmm)
					SSCIS	Results Table - Project View SSCIS Case	Refresh					Refreshes Table (jmm)
												Calculates normal release (jmm)
							Safety Assessment	1, Search Now	Safety Assessment - Category 1 Event Sequence	Calculate		Calculates normal release and total dose (jmm)
										Done		Returns to Table (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
								2, Search Now				Displays Table (jmm)
								BCFL, Search Now				Displays Table (jmm)
								Cancel				Returns to previous Table (jmm)
							Edit Record	You cannot edit Functional ID or Event No. Column.	OK			Returns to Table
								ERROR: Invalid cell selected - Editing is not allowed in this cell, or multiple cells selected!	OK			Returns to "Results Table -Project view SSCIS Case" (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
								ERROR: Field cannot be edited!! - The only fields that can be edited are 'SSC', 'Incl f/SA Calc', 'EvSeq Freq', and Doses.	OK			Returns to "Results Table -Project view SSCIS Case" (jmm)
								Edit/Change Record	OK			Applies edits, returns to Table
									Cancel			Returns to Table
							Show Report	SSCIS Performance Assessment Report	Print	Print	OK	Returns to "Results Table -Project view SSCIS Case" (jmm)
											Cancel	Returns to "Results Table -Project view SSCIS Case" (jmm)
									Export	Export	Save	Exports file in selected format, Returns to "Results Table -Project view SSCIS Case" (jmm)
											Cancel	Returns to "Results Table -Project view SSCIS Case" (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Close					Returns to "Results Table -Project view Base Case" (jmm)
					Close							Returns to PCSA main screen (jmm)
		Risk Assessment		Risk Analysis		Time Change Form - Select or Enter Time in years:	Done	PCSA Tool - You have changed the time. If you continue, previous risk analysis will no longer be valid. Continue?	Yes	PCSA Tool - Previous risk is no longer valid.	OK	Returns to "Risk Analysis" form (jmm)
									No			Returns to "Risk Analysis" form (jmm)
					Deterministic Risk	Deterministic Results	Done					Returns to "Risk Analysis" form (jmm)
					(Initiated by clicking in "Dose. PtEst text box)	Event Scenario Risk	Event Dose	Deterministic Results	Done			Returns to "Risk Analysis" form (jmm)
						Done	PCSA Tool - Event Scenario calculation failed.	OK				Returns to "Risk Analysis" form (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
												Returns to PCSA Tool (jmm)
					Probabilistic Risk	Probabilistic Results	View Table	Probabilistic Results	View Graph	(back to "ViewTable")		Toggles between Graph View and Table View in Probabilistic Results (jmm)
									Done			Returns to Risk Analysis form (jmm)
							Done					Returns to Risk Analysis form (jmm)
	This Level			Results Table	Refresh							Refreshes Table
					Safety Assessment	Performance Assessment	1, Search Now	Safety Assessment	Calculate			Calculates normal dose
									Calculate			Calculates run status
									Done			Returns to Table
							2, Search Now					Displays Table
							BCFL, Search now					Displays Table
							Cancel					Returns to Table
					Add Record	Edit Results Table	OK					Adds record, Returns to Results Table

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments	
	1 st Level	2 nd Level	3 rd Level										
							Cancel					Returns to Results Table	
					Edit Record	You cannot edit Functional ID or Event No. Column. Delete the row and add a new event.	OK						OK
							Edit/Change Record	OK					Applies edits, Returns to Results Table
								Cancel					Returns to Results Table
					Delete Record	Are you sure you want to delete?	Yes					Deletes record, Returns to Results Table	
							No					Returns to Results Table	
					Show Report	Performance Assessment Report	Print	Print	OK			Prints PCSA Performance Assessment Report	
									Cancel			Returns to Performance Assessment Report	

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			Exports file in selected format, Returns to Performance Assessment Report
									Cancel			Returns to Performance Assessment Report
					SSCIS							Not an option in this window
					Close							Returns to PCSA main screen
SW Reliability				Software Systems	Add Software System	Add new Software System	OK					OK returns to "Software Systems" form (jmm)
							Cancel					OK returns to "Software Systems" form (jmm)
					Edit	Software Systems	Update					OK. Returns to Software Systems in non-edit mode. (jmm)
							Cancel	Cancel? - Are you sure you want to cancel?	Yes			OK. Returns to Software Systems in non-edit mode. (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
									No			OK. Returns to Software Systems in edit mode. (jmm)
					Close							Returns to PCSA main screen (jmm)
Failure Rate	View Taxonomy			Taxonomy	Display Data	Invalid Selection - Please click on a sub-level	OK					OK Returns to Taxonomy form
						Search Results for:	New Search	Failure Rate Data Search	Search	PCSA Tool - Sorry, there are no records matching your selection!	OK	OK. Returns to "Failure Rate Data Search"
												OK. Returns to "Failure Rate Data Search" with matches shown in fields. (jmm)
							Find	PCSA Tool - You must input a letter reference.	OK			OK Returns to Search Results for: (Jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
												OK Returns to Search Results with new search results in bottom three windows. (Jmm)
							Close					Returns to Taxonomy form (jmm)
					Close							Returns to PCSA Tool main menu (jmm)
	Search Database (See Search Database under Taxonomy)											
	Failure Calculator			Frequency Calculation	Reset							OK. Resets all text boxes in "Frequency Calculation" form (jmm)
					Calculate							OK. Calculates Frequency of failures per year. (jmm)
					Close							OK. Returns toPCSA main menu (jmm)

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
	HEP Generation (Already tested by another individual)			Human Error Probability Generator	Previous							
					Next	ERROR: Answer and/or Reason missing - You must click and answer and enter the reason for your choice before proceeding.	OK					OK. Returns to Human Error Probability Generator (jmm)
					Accept							
					Cancel							
Checklists	Component Failure Mode Checklist			Component Failure Mode Checklist	Search							OK. Returns "Component Failure Mode Checklist" form with matching criteria. (jmm)
					Close							OK. Returns to the PCSA Tool main menu (jmm)
Ex. Events	Natural			Natural Events	Only Applicable	Natural Events (only applicable to site)						Displays Table

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
					Show All	Natural Events						Displays complete Table
					Add Record	Add Record	Apply	Name of New Record	OK			Adds record
									Apply			Adds record
									Cancel			Returns to Natural Events Table
									Show Report	Natural Events Detail Report	Print	Prints Natural Events Report
							Export	Exports file in selected format				
							View Report File			OK		
								Cancel			Returns to Natural Events Table	
					Delete Record	Are you sure you want to delete?	Yes				Deletes record, returns to Natural Events Table	
							No				returns to Natural Events Table	
					Show Report	Natural Events Report	Print	OK			Prints report, returns to Natural Events Report	

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
								Cancel				returns to Natural Events Table
							Export	Save				Exports file in selected format, returns to Natural Events Report
								Cancel				returns to Natural Events Table
					Close						Returns to PCSA main screen	
	Human Induced			Human Induced External Events	Only Applicable	Human Induced External Events (only applicable to site)					Displays Human Induced External Events- Only Applicable	
					Show All	Human Induced External Events					Displays all Human Induced External Events	
					Add Record	Add Record	Apply	Name of New Record	OK			Returns to Human Induced External Events Table
									Apply			Adds new record

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
									Cancel			Returns to Human Induced External Events Table
									Show Report	Human Induced External Events Detail Report	Print	Prints Human Induced External Events Detail Report
											Export	Exports file
									View Report File			Displays report file
							Cancel					Returns to Human Induced External Events
					Delete Record	Are you sure you want to delete?	Yes					Deletes record, returns to Human Induced External Events Table
							No					returns to Human Induced External Events Table
					Show Report	Human Induced External	Print	Print	OK			Prints report
									Cancel			OK

Events Report

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
							Export	Export	Save			Exports file in selected format, returns to Human Induced External Events Table
									Cancel			OK
					Close							Returns to PCSA main screen
Probability	Taxonomy			Probability Taxonomy	Display Data	Search Results	New Search	Probability Data Search	Search			Searches database
									Close			Closes dialog box, returns to search results
							Close					Returns to Probability Taxonomy
							Find					Uses input information to search database
					Close							Returns to PCSA main screen
	Search Database			Probability Data Search	Search	Search Results	(See above for button function)					Displays search results
					Close							Returns to PCSA main screen

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
	Failure Calculator			Failure Worksheet	Calculate							Calculates input information
					Save to File	Data Saved (Gives the file name where the data is saved.)	OK					Saves file
					Reset							Clears the failure worksheet of values
					Close							Returns to PCSA main screen
Checklists	Component Failure Mode Checklist			Component Failure Mode Checklist	Search							Searches list for specific component
					Close							Returns to PCSA main screen
Regs.	10CFR63			C:\Program Files\PCSA TOOL\NRC_Regs\Part063\10cfr63.htm								Directs user to NRC website
	10CFR20			C:\Program Files\PCSA TOOL\NRC_Regs\Part020\index.html								Directs user to NRC website

Main Menu	Sub-Menu			Form	Button Level 1	Form	Button Level 2	Form	Button Level 3	Form	Button Level 4	Result and Comments
	1 st Level	2 nd Level	3 rd Level									
Help	About			About PCSA	Close							PCSA software information (jmm)
	Disclaimer			Disclaimer								OK (jmm)
	Menu Help			Menu help feature is not implemented yet	OK							OK (jmm)

