

Noddy Guide for

Meter Software Configuration and

Miniflex Scheme Setup

AS230 Meter



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Date: 16 November 2009

Introduction:

This guide will illustrate the process to create and setup a scheme in the Power Master Unit 3 software and programming of the AS230 meter.

This guide assumes the user has successfully installed the PMU3 software by following the Software Installation procedure in the PMU3 software manual, and that a clean database is used.

(A) Scheme setup:

1. Run the software and log into PMU3:

A screenshot of a Windows-style dialog box titled "Power Master Unit". The dialog has a blue header bar with the title. Below the header, the text "Select User Name and Enter" is displayed. There are two input fields: "User Name" with a dropdown menu showing "Elster" and a small downward arrow, and "Password" with a text box containing several asterisks. At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

Power Master Unit

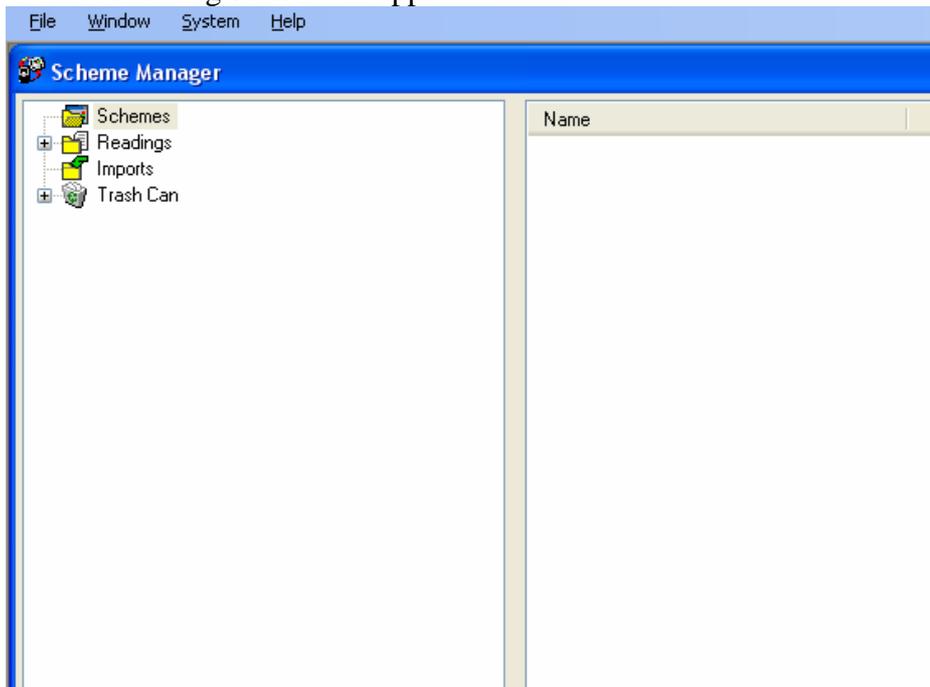
Select User Name and Enter

User Name Elster

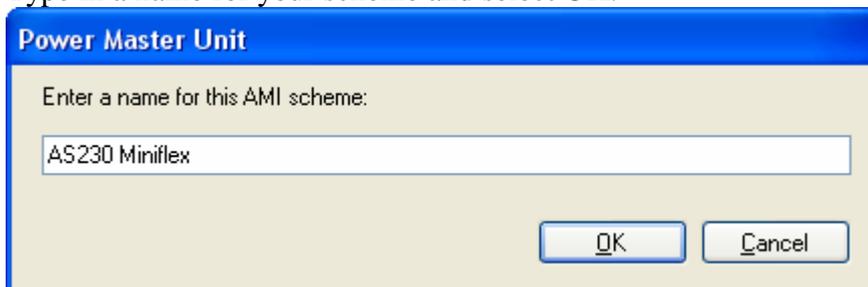
Password *****

OK Cancel

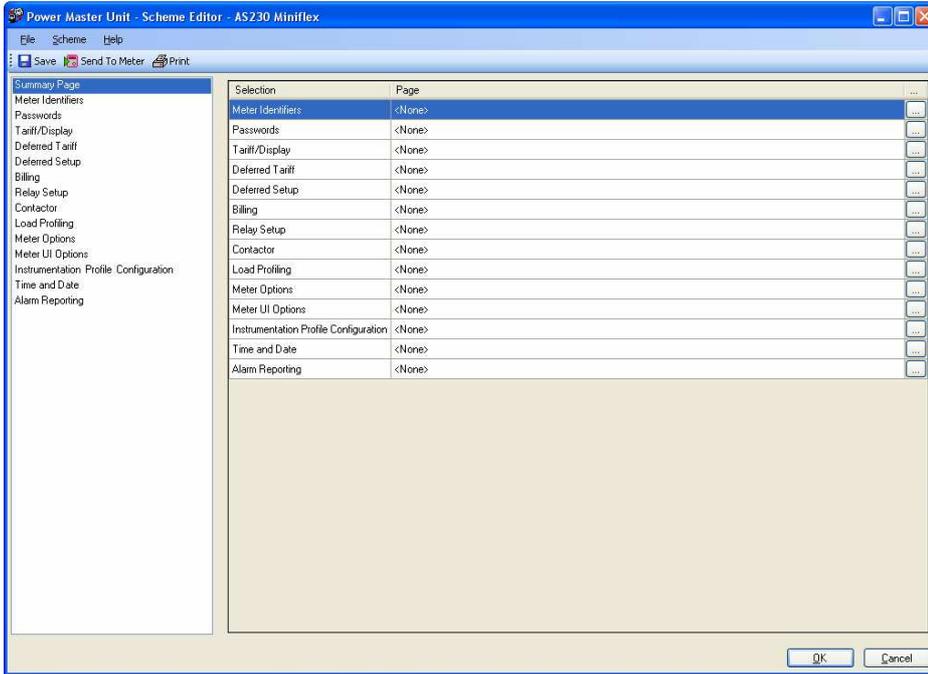
2. The following screen will appear:



3. Using your mouse, right click in the blank Scheme Manager block and choose New and AMI Scheme. Type in a name for your scheme and select OK.



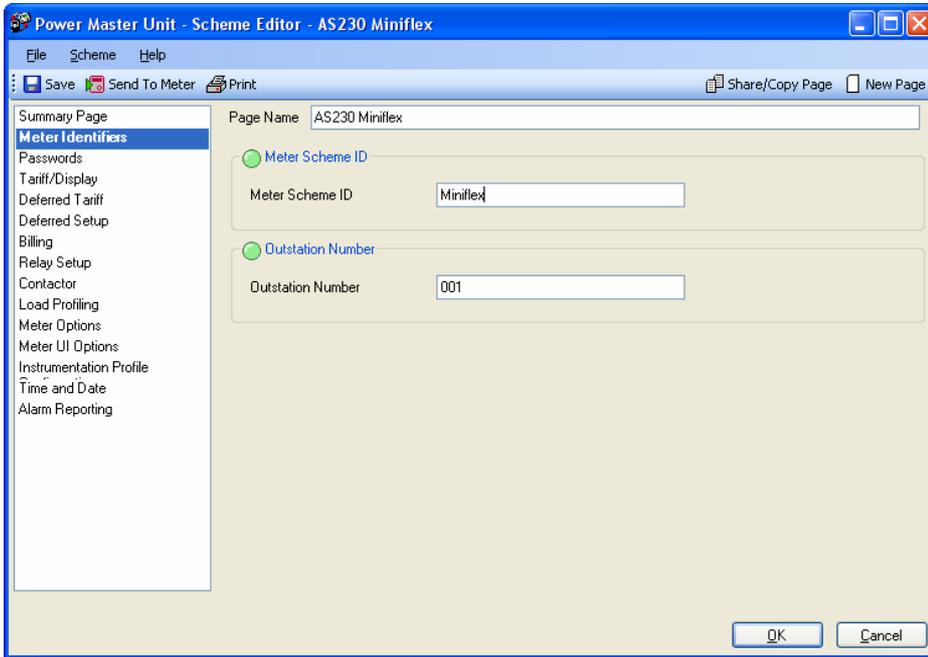
4. Press Enter. A blank scheme will be shown:



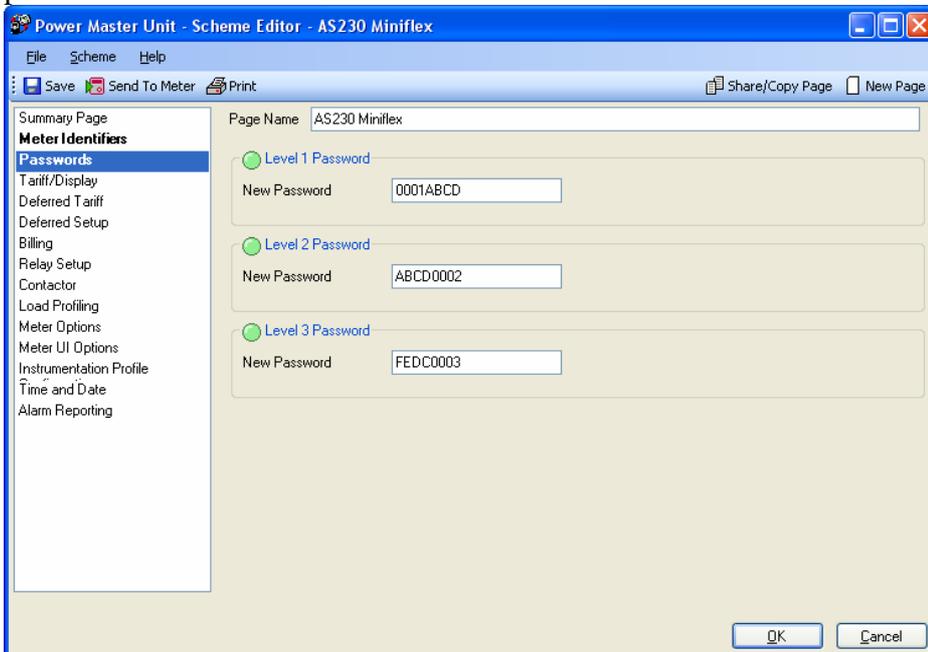
5. Select Scheme Tab and Compatibility option. Select AMI Meters, Single Phase. Select OK.



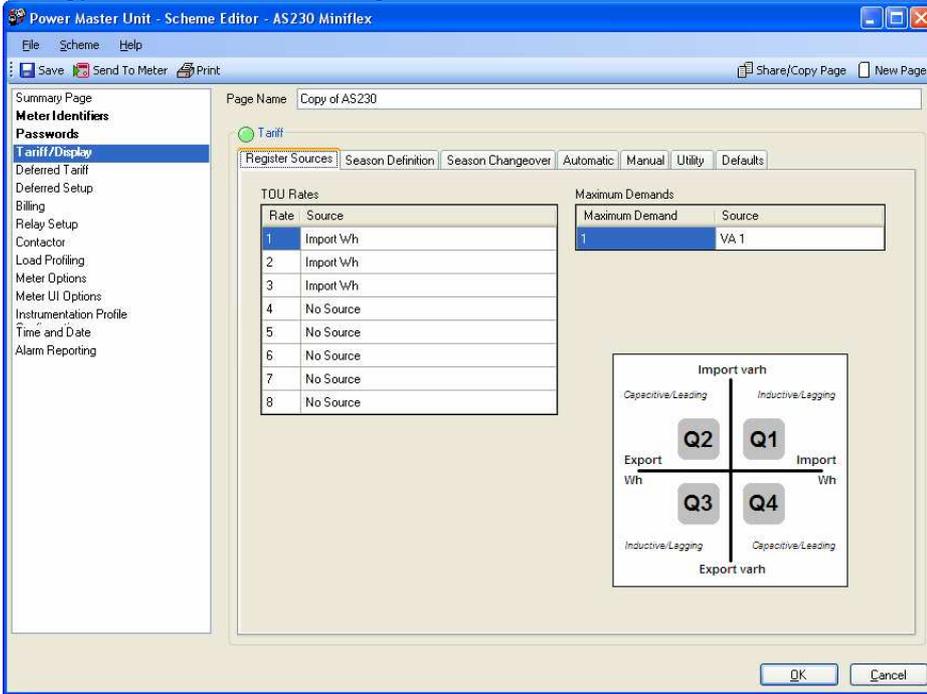
6. Meter Identifiers Page: Here you can set the Scheme and Outstation number for Remote communication.



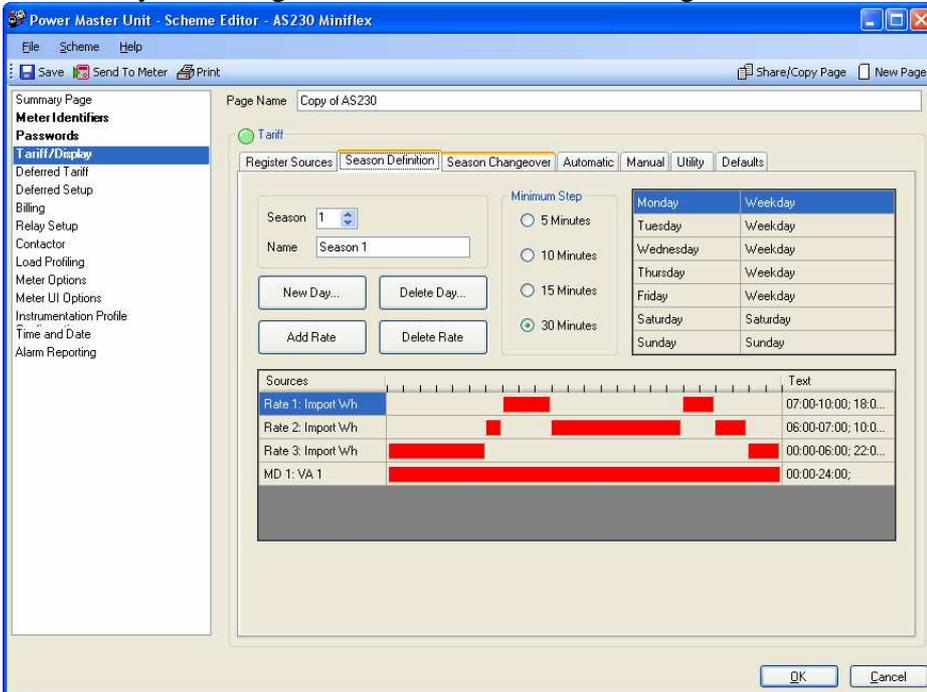
7. Passwords Page: Choose appropriate password for level 1 to 3. Displayed here are the default passwords.

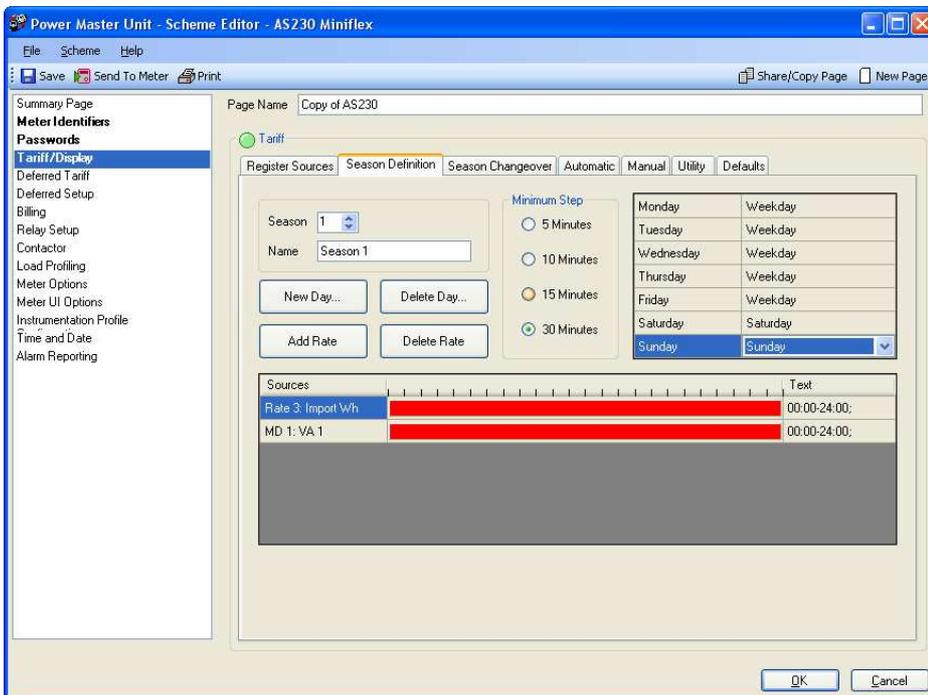
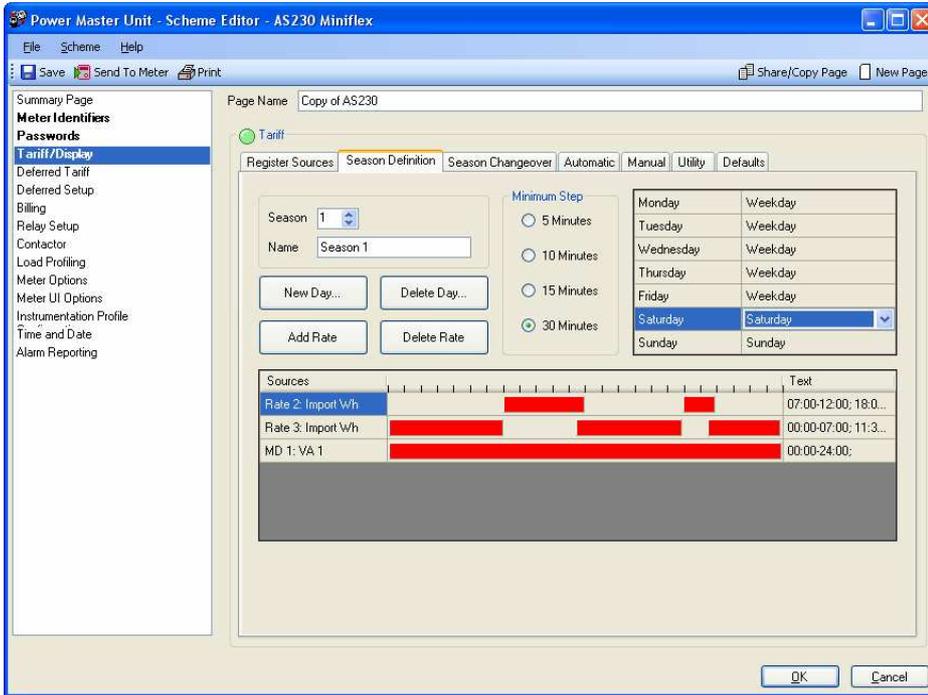


8: Tariff/Display Page – Register Sources Tab: Select the sources for Energy and Demand TOU registers.

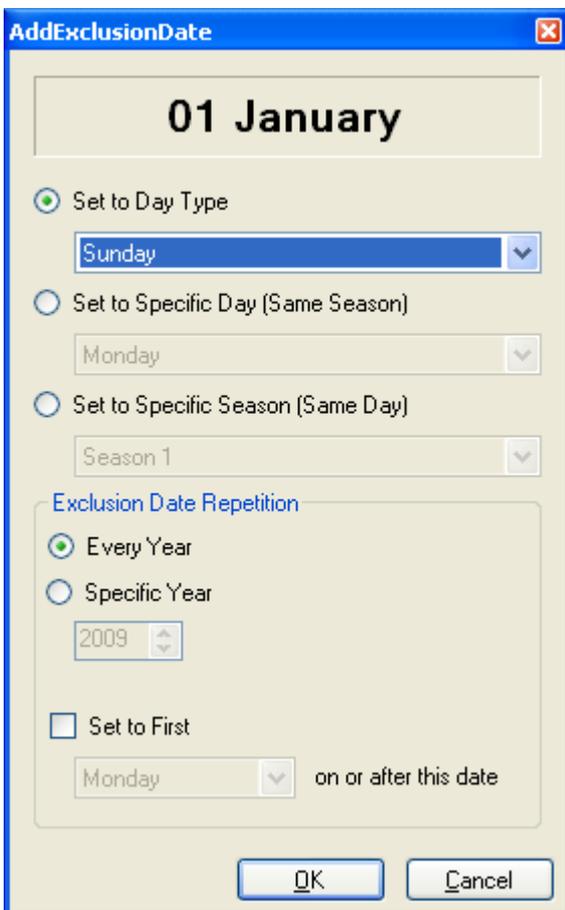
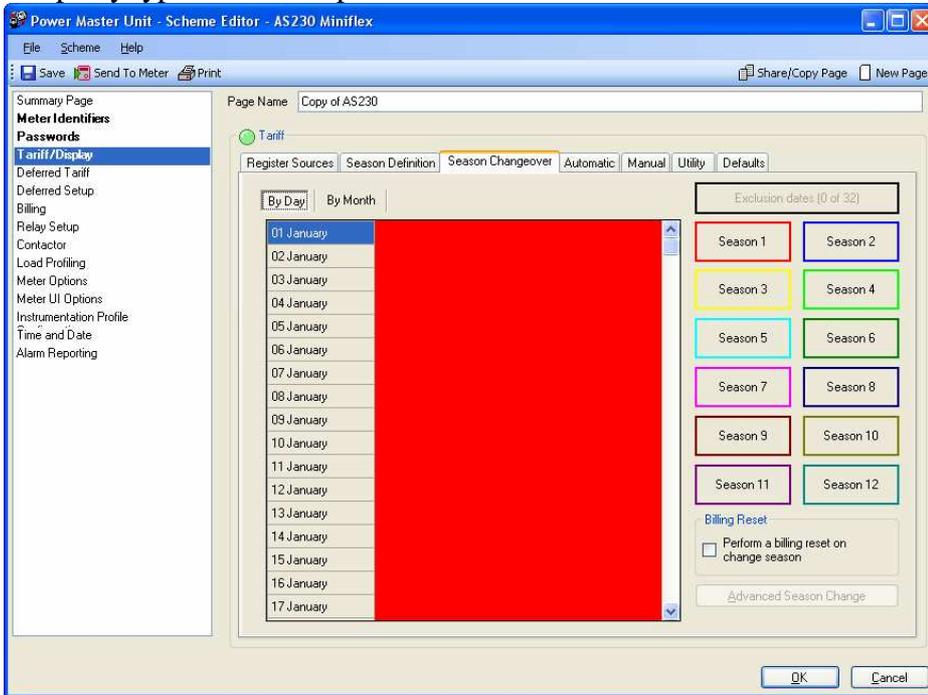


9. Tariff/Display Page – Define Seasons Tab: Setup the switching times for Day-type Weekday, Saturday and Sunday according to the Miniflex TOU switching times.





10. Tariff/Display Page – Season Changeover Tab: Here you can select to enable the various seasons. In our example only one season has been setup. To setup the Public Holidays, select the appropriate day, and setup day type and date repetition for 2009/2010:



AddExclusionDate [Close]

22 March

Set to Day Type
Saturday [v]

Set to Specific Day (Same Season)
Monday [v]

Set to Specific Season (Same Day)
Season 1 [v]

Exclusion Date Repetition

Every Year

Specific Year
2010 [v]

[OK] [Cancel]

AddExclusionDate [Close]

27 December

Set to Day Type
Saturday [v]

Set to Specific Day (Same Season)
Monday [v]

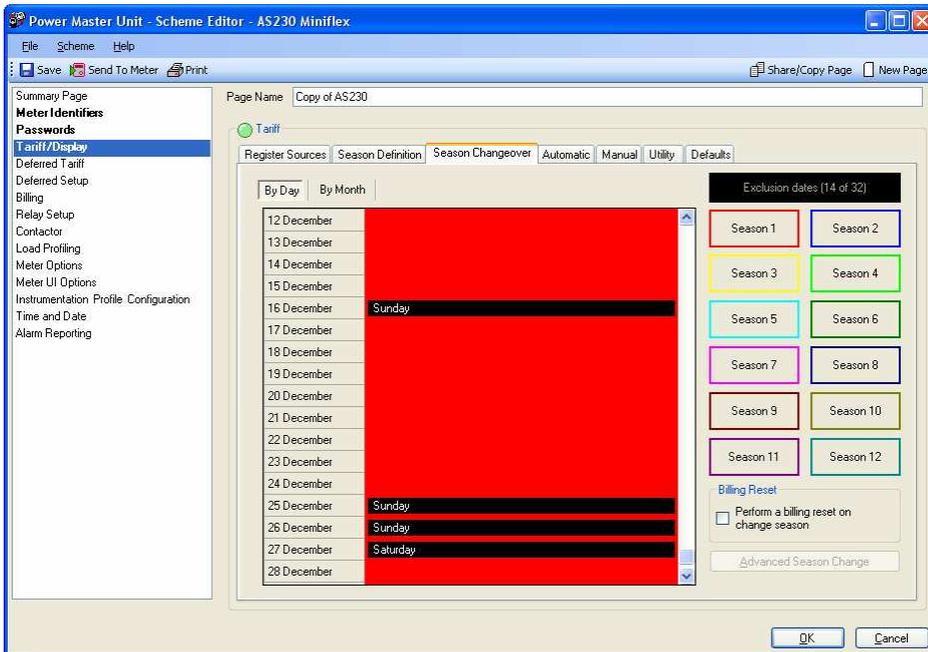
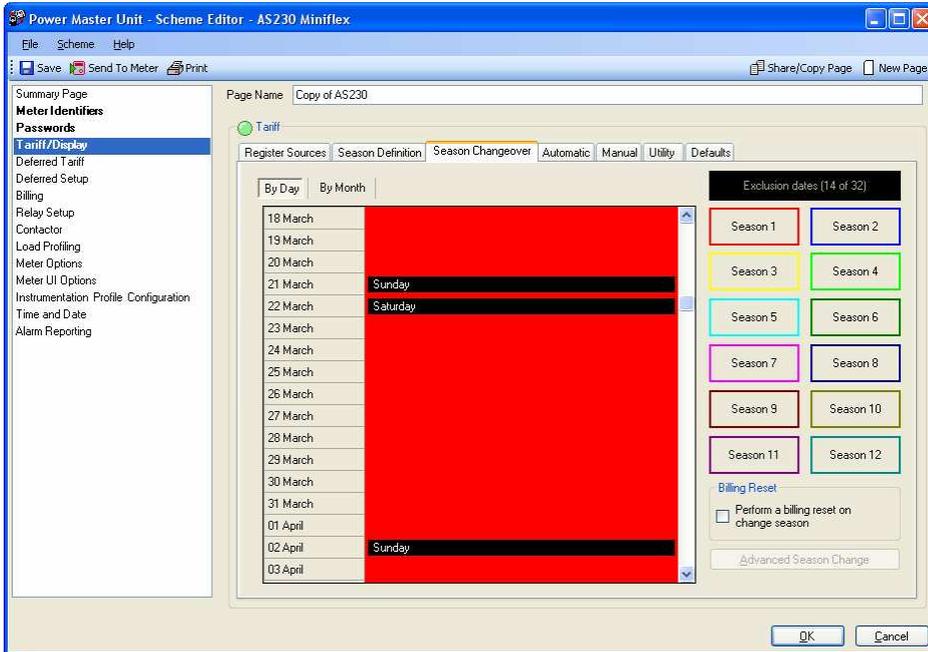
Set to Specific Season (Same Day)
Season 1 [v]

Exclusion Date Repetition

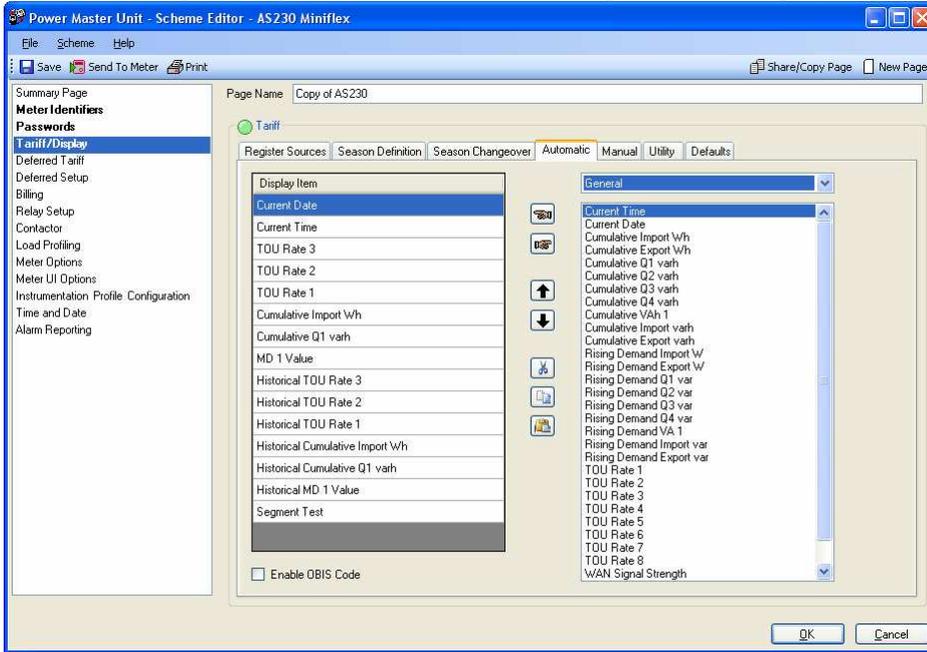
Every Year

Specific Year
2010 [v]

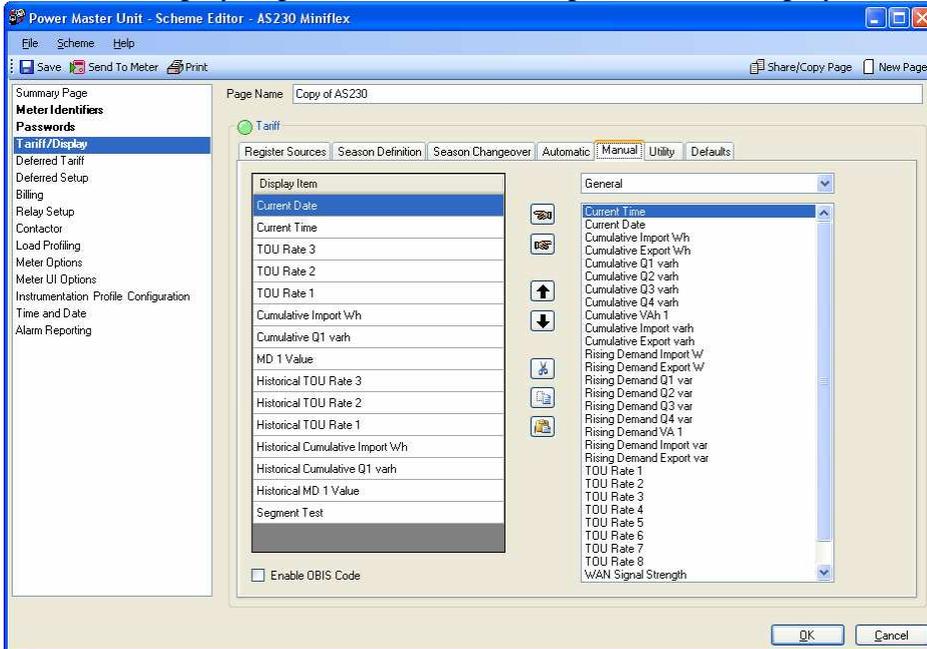
[OK] [Cancel]



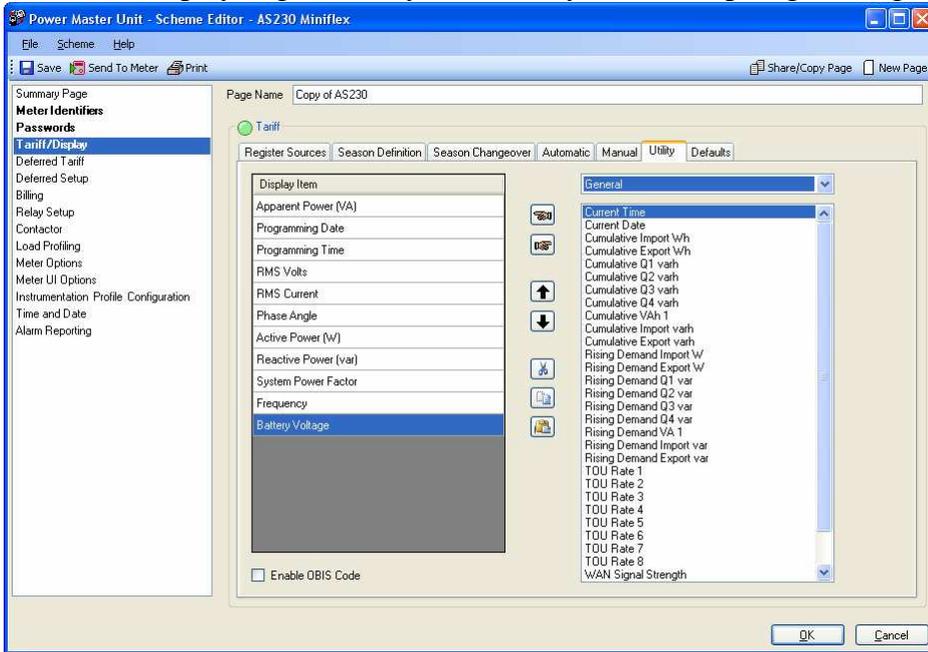
11. Tariff/Display Page – Automatic Tab: Setup the auto display:



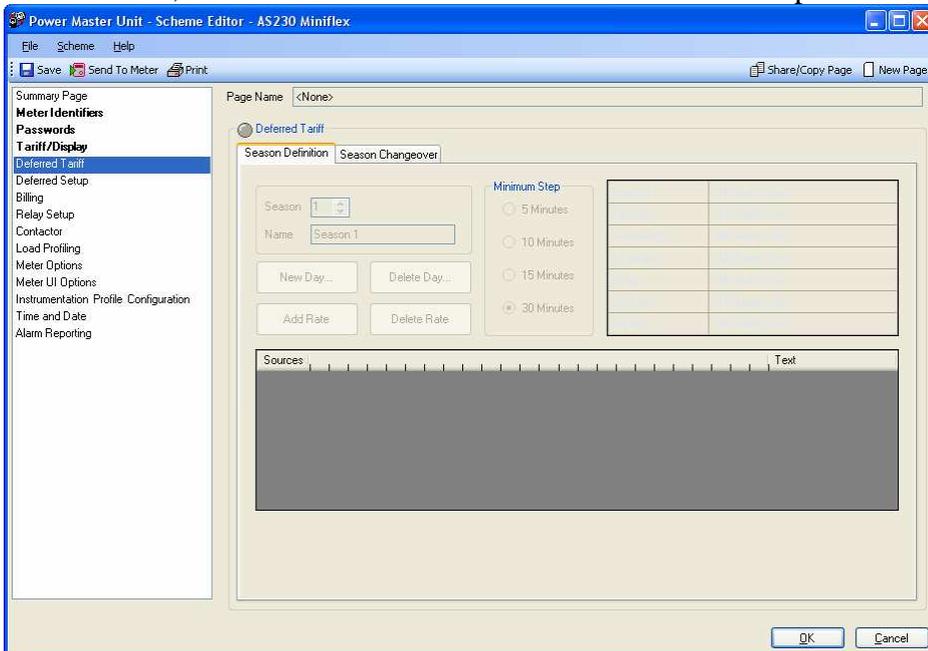
12. Tariff/Display Page – Manual Tab: Setup the Manual display:

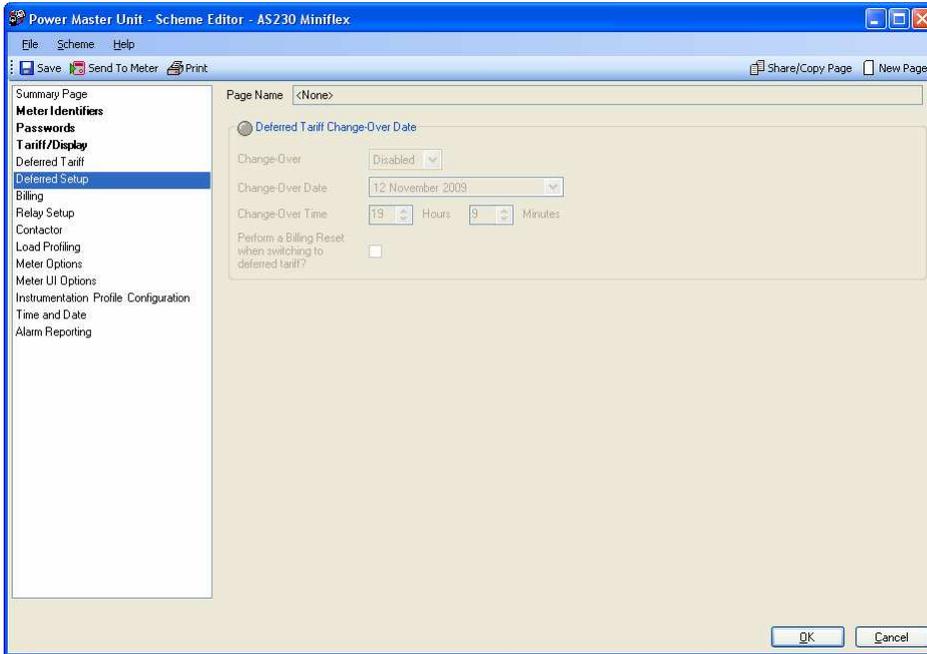


13. Tariff/Display Page – Utility Tab: Here you can setup Engineering values, eg Instrumentation, etc:

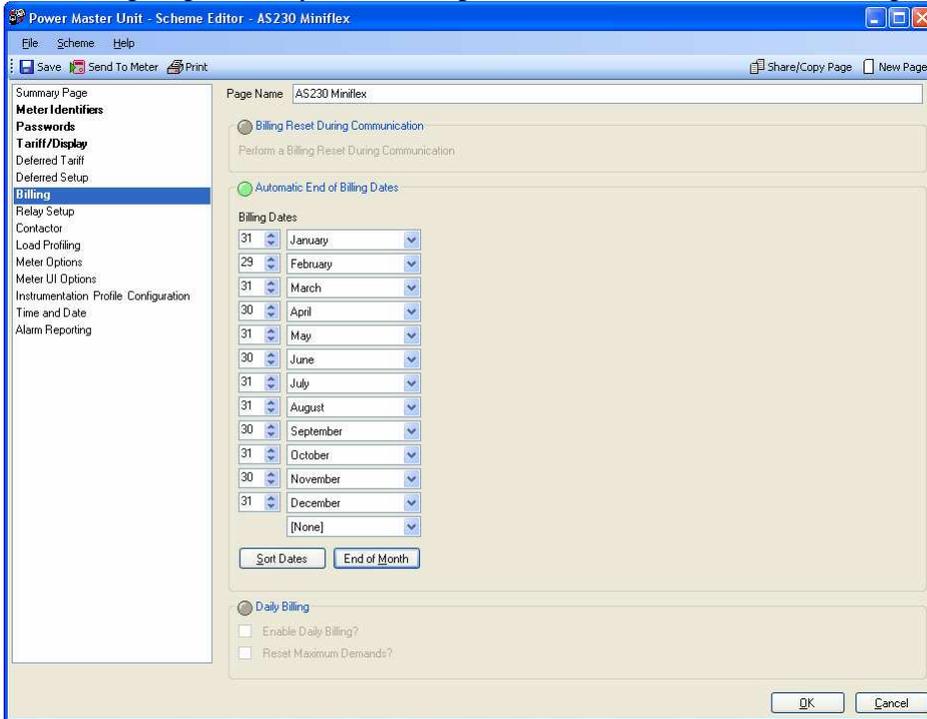


14. If needed, a Deferred Tariff can be set to be enabled at a specific date and time:

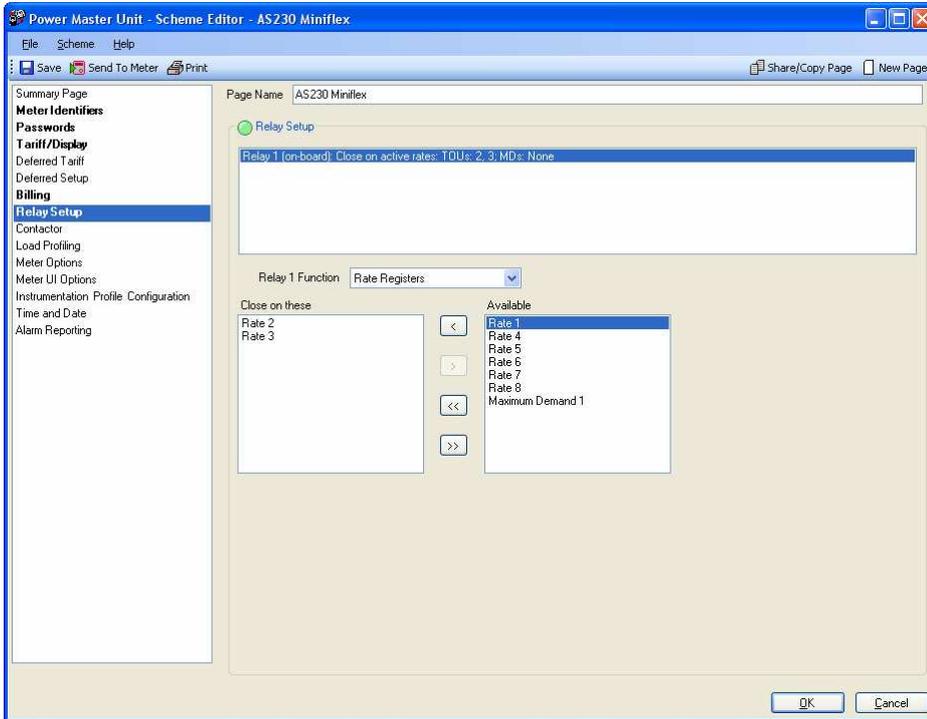




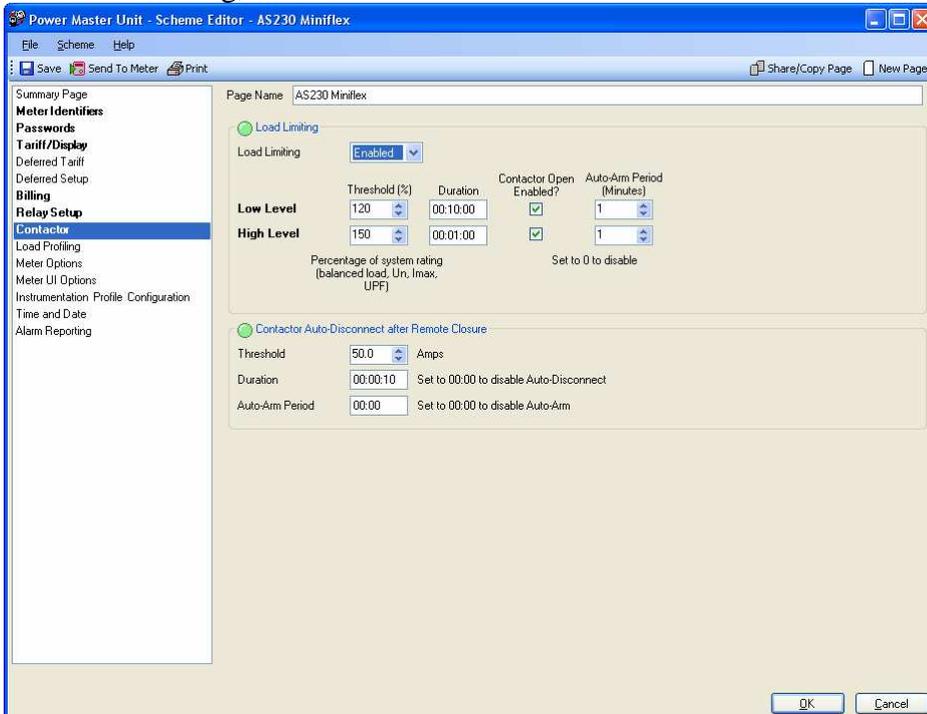
15. Billing Page: Here you can setup the meter to do automatic billing reset on a specified date:



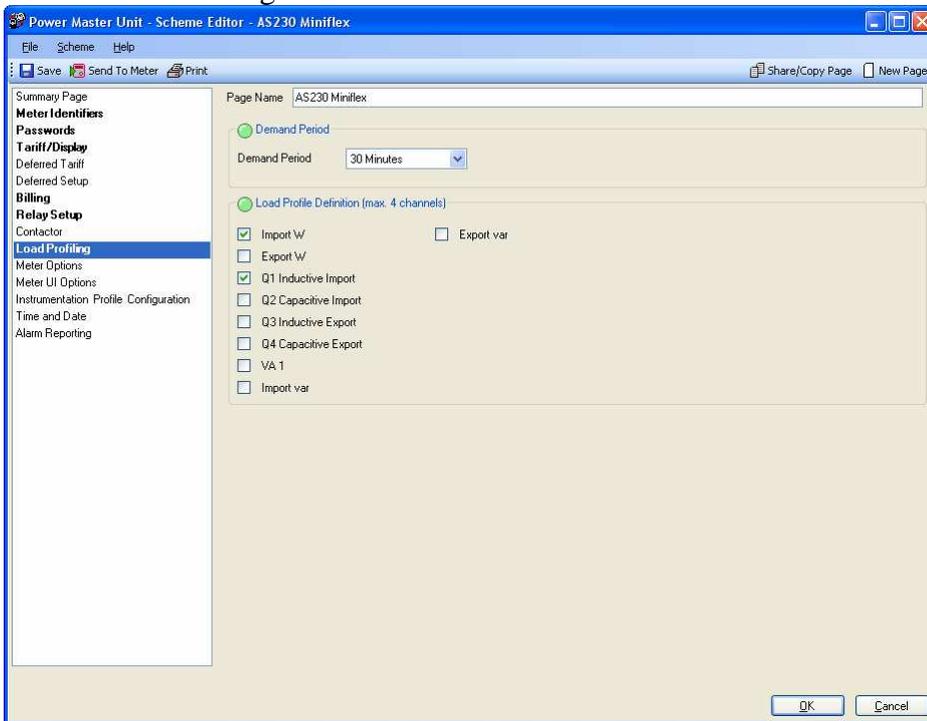
16. Relay Setup Page: Setup according to requirement. The A230 has one relay that can be programmed to follow a TOU rate.



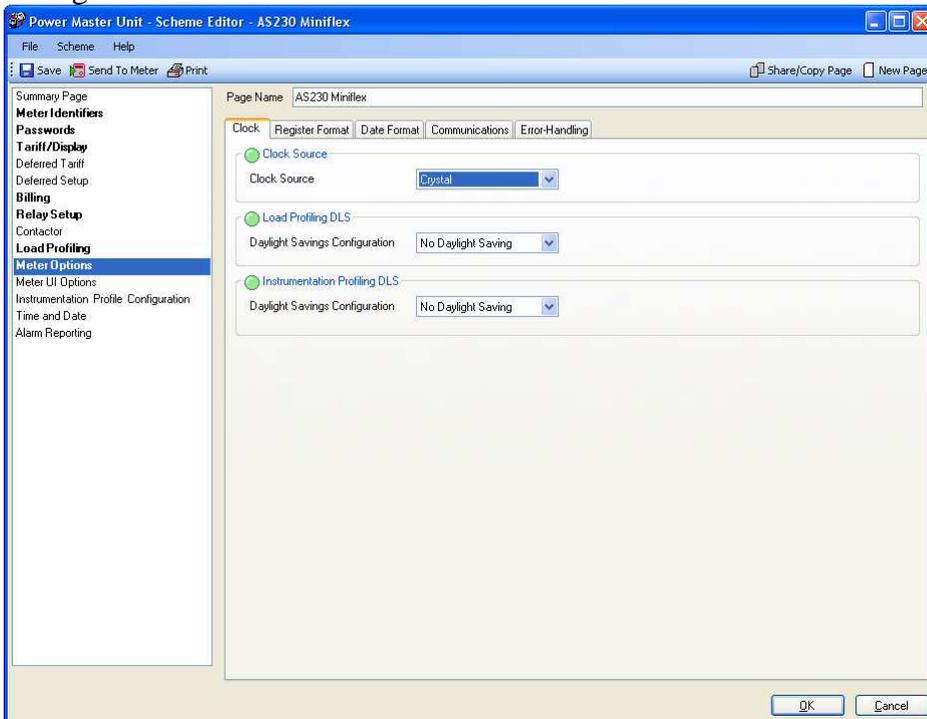
17. Contactor Page: The AS230 has an internal 100Amp Contactor. On this page you can enable and set the Load Limiting, and Auto-Disconnect and Remote Closure functionality.



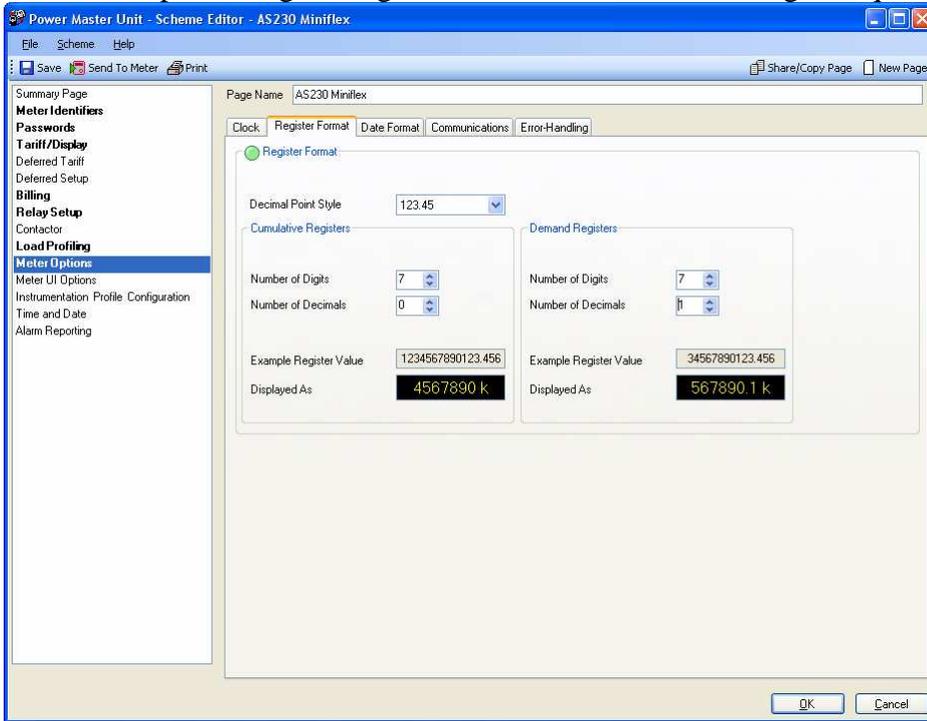
18. Load Profiling Page: Setup the Load Profile Definition and Integration period. Maximum 4 channels can be selected at a given time.



19. Meter Options Page – Clock Tab: Select Crystal (preferred) as clock source, and disable Daylight saving when meter to be installed in South Africa.

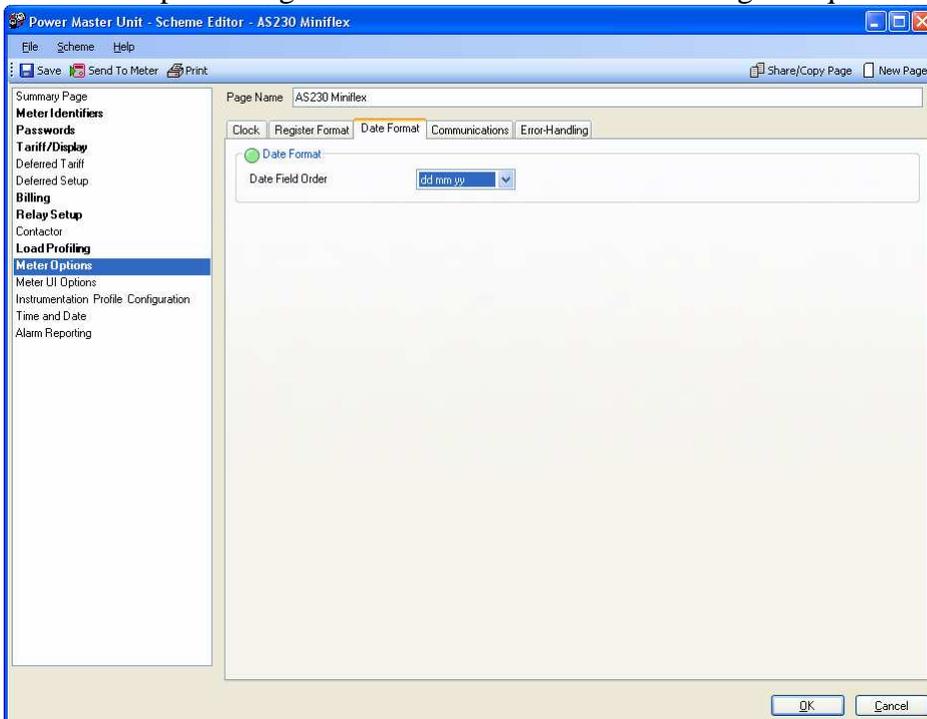


20. Meter Options Page – Register Format Tab: Set according to requirement.



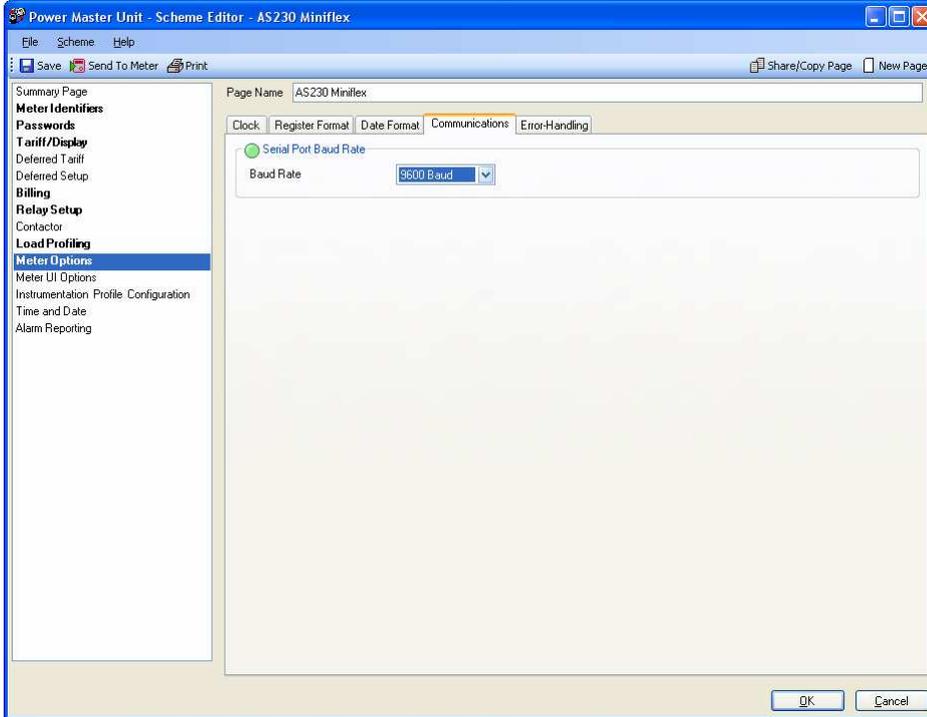
The screenshot shows the 'Register Format' tab in the 'Meter Options' page. The page title is 'Power Master Unit - Scheme Editor - AS230 Miniflex'. The left sidebar lists various configuration options, with 'Meter Options' selected. The main content area is divided into two sections: 'Cumulative Registers' and 'Demand Registers'. Each section has a 'Number of Digits' and 'Number of Decimals' dropdown menu, an 'Example Register Value' text box, and a 'Displayed As' text box. The 'Cumulative Registers' section shows a value of 1234567890123.456 displayed as '4567890 k'. The 'Demand Registers' section shows a value of 34567890123.456 displayed as '567890.1 k'. The 'Decimal Point Style' is set to '123.45'. The 'Date Format' tab is also visible in the background.

21. Meter Options Page – Date Format Tab: Set according to requirement.

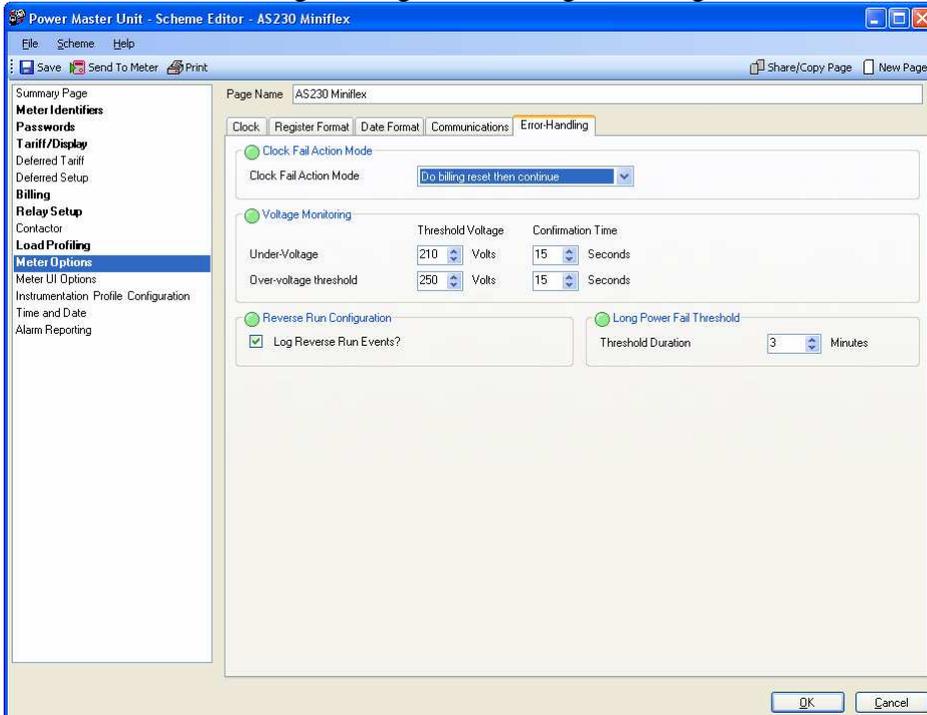


The screenshot shows the 'Date Format' tab in the 'Meter Options' page. The page title is 'Power Master Unit - Scheme Editor - AS230 Miniflex'. The left sidebar lists various configuration options, with 'Meter Options' selected. The main content area is divided into two sections: 'Cumulative Registers' and 'Demand Registers'. Each section has a 'Number of Digits' and 'Number of Decimals' dropdown menu, an 'Example Register Value' text box, and a 'Displayed As' text box. The 'Cumulative Registers' section shows a value of 1234567890123.456 displayed as '4567890 k'. The 'Demand Registers' section shows a value of 34567890123.456 displayed as '567890.1 k'. The 'Date Field Order' is set to 'dd mm yy'. The 'Register Format' tab is also visible in the background.

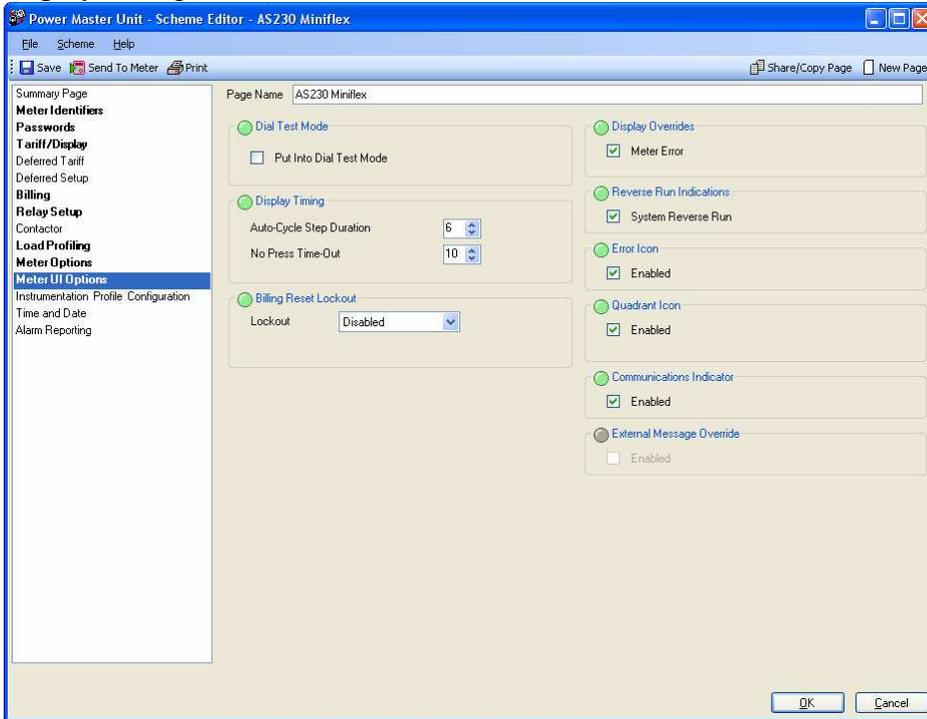
22. Meter Options Page – Communications Tab: Here you can enable/disable the communications of the AS230 to avoid tampering. When using Remote communication, set the Serial Port Baud Rate to 9600.



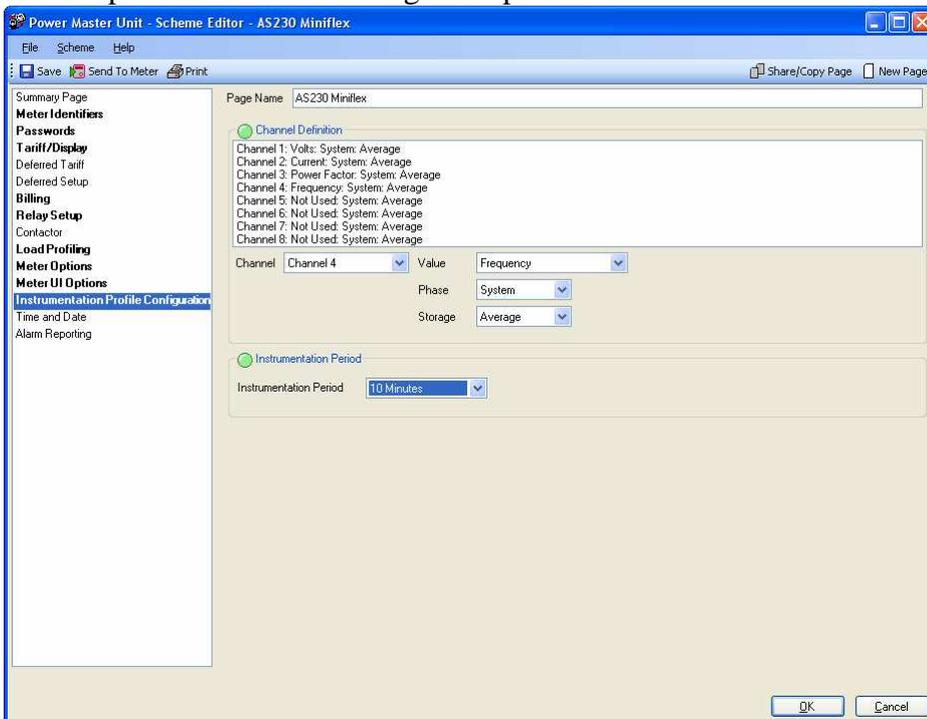
23. Meter Options Page – Error Handling Tab: Here you can set the Phase Fail threshold level monitoring Reverse run monitoring, Voltage monitoring and Long Power Fail Threshold.



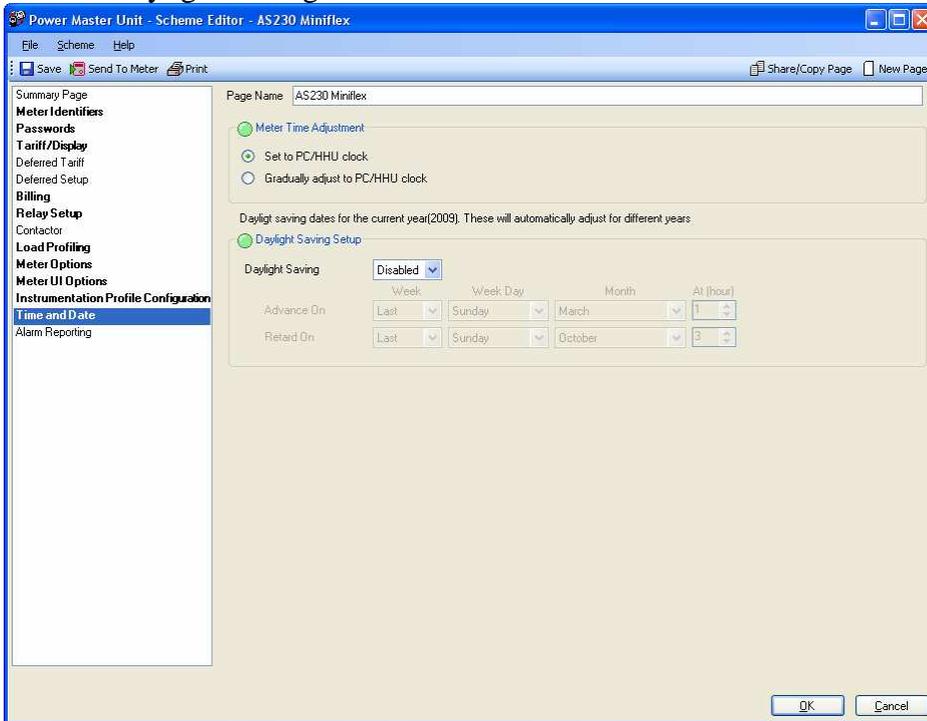
24. Meter UI Options Page: Setup what will be displayed on the meter when an error occurs and set display timing.



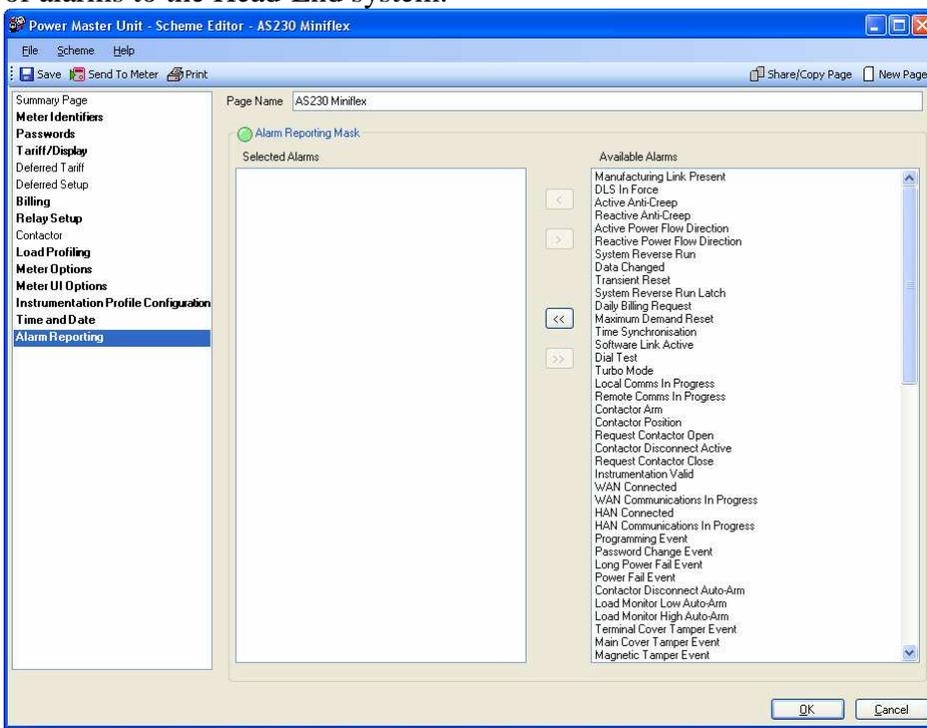
25. Instrumentation Profile Configuration Page: The AS230 can profile Instrumentation values. Here you can setup the channels and Integration period.



26. Time and Date Page: When this page is sent to the meter, the date and time of the meter will be set. Disable Daylight Saving when the meter will be installed in South Africa.

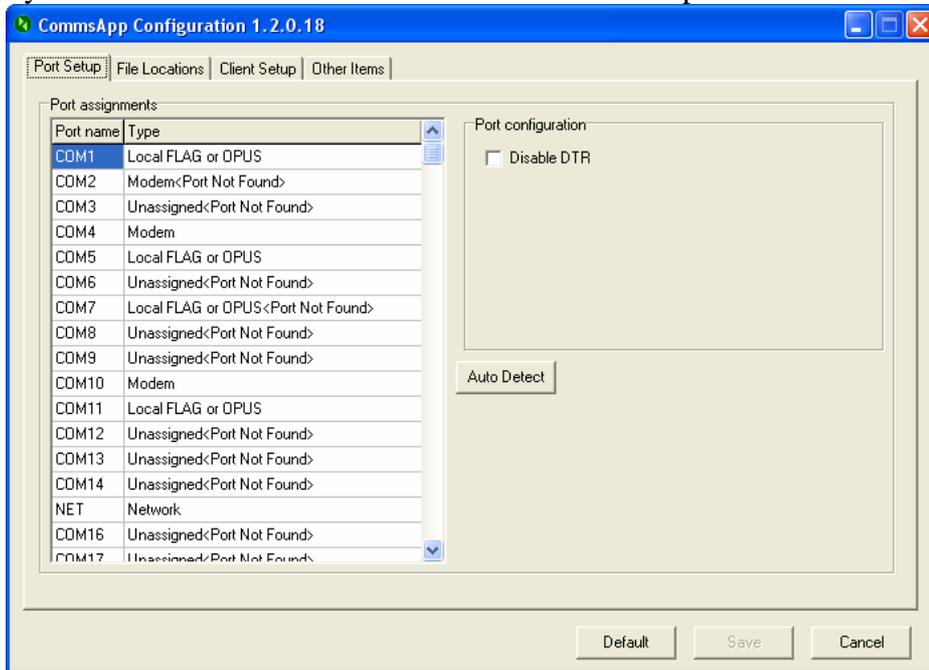


27. Alarm Reporting Page: When using an appropriate modem, the AS230 can be set to report a number of alarms to the Head-End system.

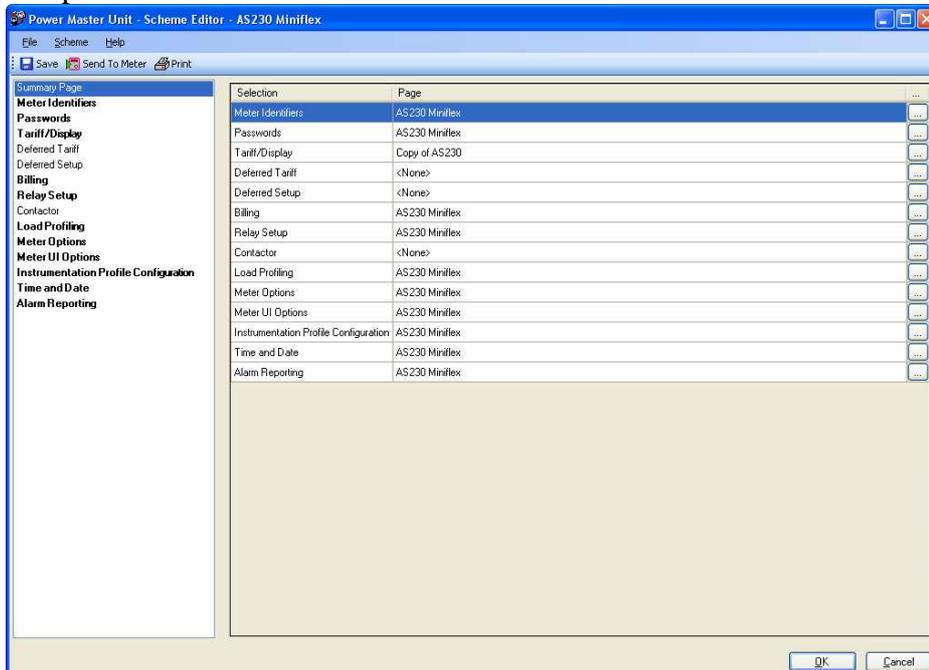


(B) Programming the AS230:

1. Before programming the meter, first verify that the communication has been setup correctly. Select the System Tab and choose Communication Server Setup.



2. Open the scheme that need to be sent to the meter and select the Sent to Meter button:



3. The communication box will be displayed. Select the Connection Type (Local Flag for local communication), insert the level 3 password, and select OK.



Power Master Unit - Communications Settings	
Connection	Local Flag
COM Port	1
Minimum Password Level Required	Level 3
Password	FEDC0003

OK Cancel