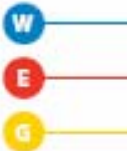


The Horizon Range For Monitoring Power



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Login

Welcome to the Horizon site

Please enter a username and password
and click the [Login] button

Username:	<input type="text"/>
Password:	<input type="password"/>

Login

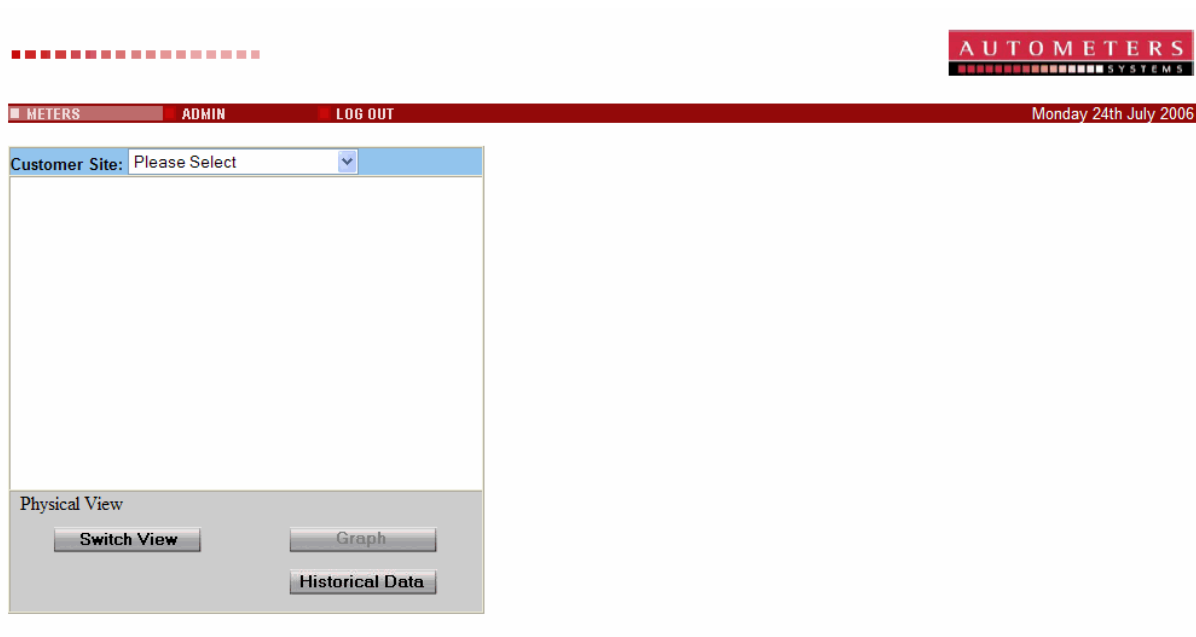
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To retrieve the Horizon login screen enter the following URL in a web browser:
<http://195.10.231.31:8080/METERS/>

Login

Complete the Username and Password boxes and click here to enter the Horizon site.

Customer Meters



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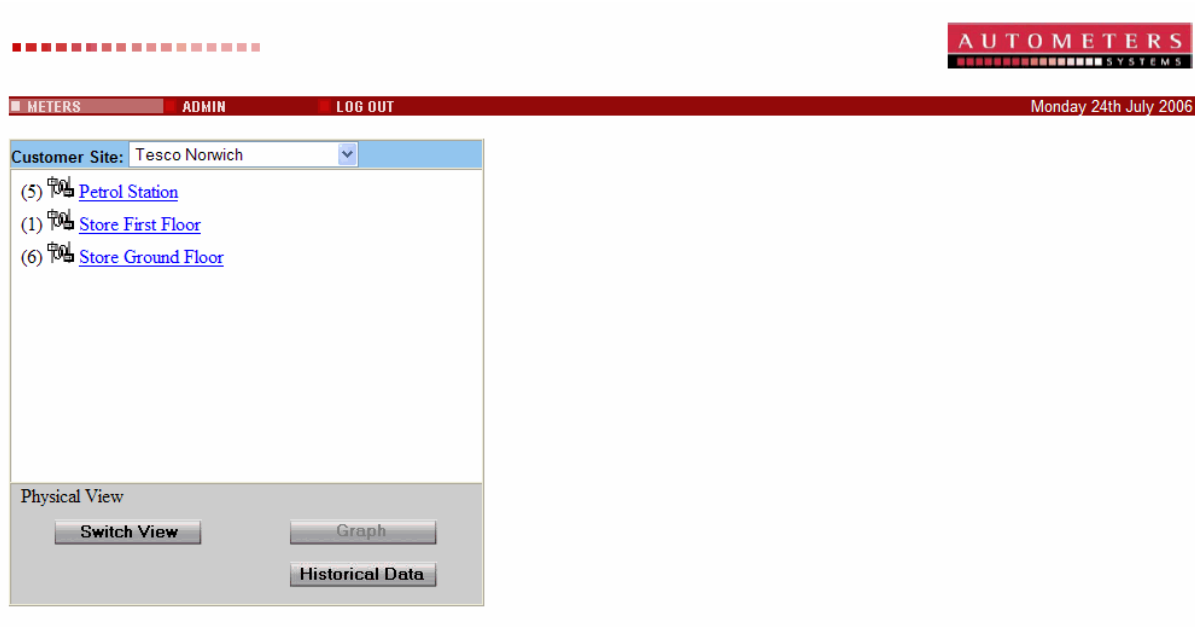
The Customer Meters screen has a drop down list of customer sites. Once one is selected it will show all the collectors or groups, depending on the view type, for that location.

ADMIN

Click on 'Admin' within the header bar to progress to the Administration menu. You must have access for this function.

LOG OUT

Logs you out of the current session and returns the browser to the Login screen.



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The number in brackets to the left of each collector or group indicates the number of Meters attributed.

Petrol Station

Click on a collector / group to expand it, showing all the Meters connected to it. If the collector / group has pulses then a new window will pop up with all the pulse data.

Switch View

Switches from Physical View to Logical View and vice versa. The Physical View loads the screen with a list of collectors and the Meters and Pulses that are physically connected to them. The Logical View shows the same Meters and Pulses for the selected customer site but they can be placed against user made groups that hold to physical resemblance.

Historical Data

Clicking here takes you to the View and Export Historical Data screen.

Customer Site: Tesco Norwich

(5) [Petrol Station](#)
 [Modbus 1](#)
 [Lighting](#)
 [Car Wash](#)
 [Pump 6 & 7](#)
 HCC [Petrol HCC Coll AAA](#)
 HCC [Petrol HCC Coll B](#)
 (1) [Store First Floor](#)
 (6) [Store Ground Floor](#)

Physical View

20: Horizon : Collector - Microsoft Internet Explorer

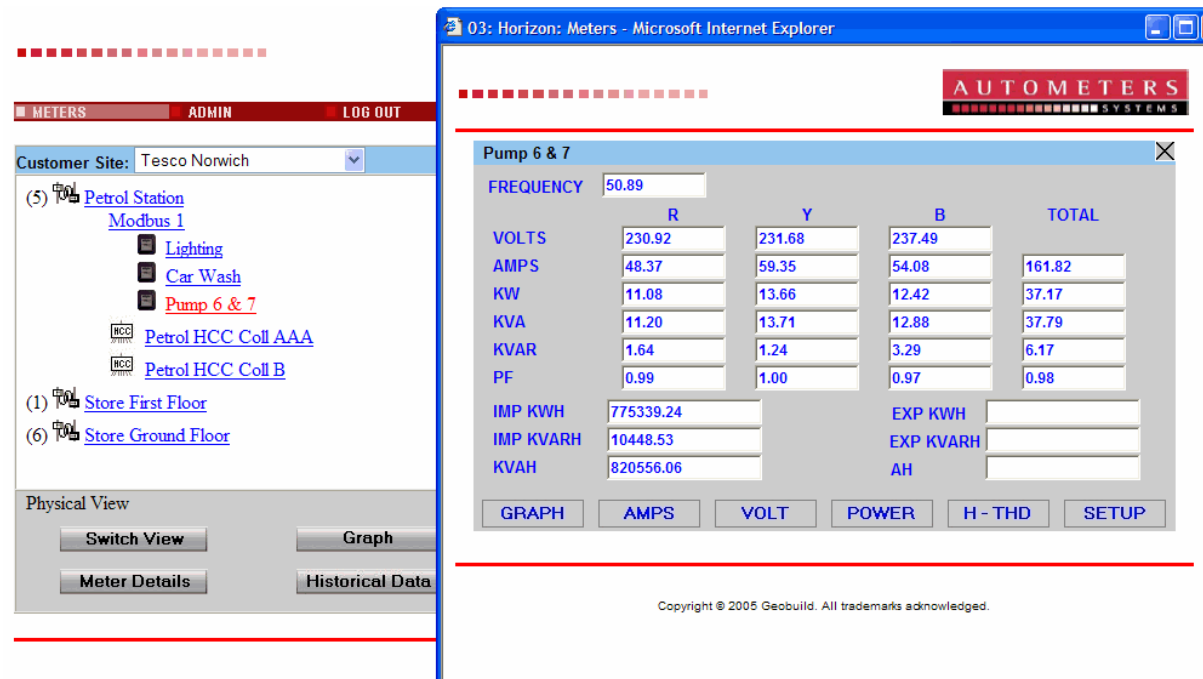
Petrol Station

Pulse	TARIFF - A PULSE			TARIFF - B PULSE			TARIFF - C PULSE			TC
	Count	Factor	Value	Count	Factor	Value	Count	Factor	Value	
Shop & Payment Hut	1.00	999.00	1000.00	1.00	2.02	2.02				2.00
Neon Signs	200.00	1.03	206.00	2.10	1.02	2.14				202.10
Pump 1 unleaded	3.00	2.00	6.00	32.00	1.01	32.32				35.00
Pump 2 diesel	414.00	1.50	621.00	2.00	2.01	4.02				416.00
Pump 3 unleaded	1.00	1.00	1.00	1.00	3.01	3.01	1.00	0.06	0.06	3.00
Super Unleaded Pump Number 4	1.00	88.00	88.00	1.00	1.01	1.01				2.00
LPG Site 5	1.00	1.50	1.50	1.00	2.02	2.02				2.00

This pop up window shows the Pulses for the Petrol Station collector. Clicking on the Petrol Station link a second time will collapse the list.

Collector Details

Produces the same pop up window with the collector's Pulses. Useful if the pop up has been closed and you wish to view it's details again.



Clicking on a Meter will pop up the relevant Meters window and enable the 'Meters Detail' and 'Graph' button

Meter Details

Produces the same Meters pop up window. Useful if the pop up has been closed and you wish to view it's details again.

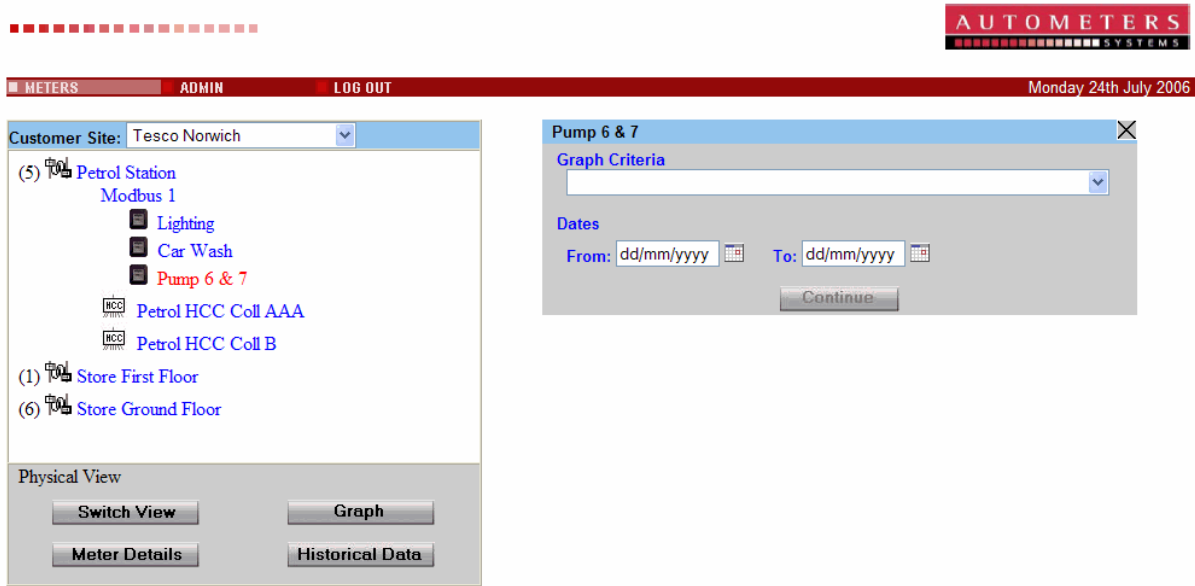
Graph

Allows you to select various data items for the selected Meter and view data as a graph with a date range.

GRAPH

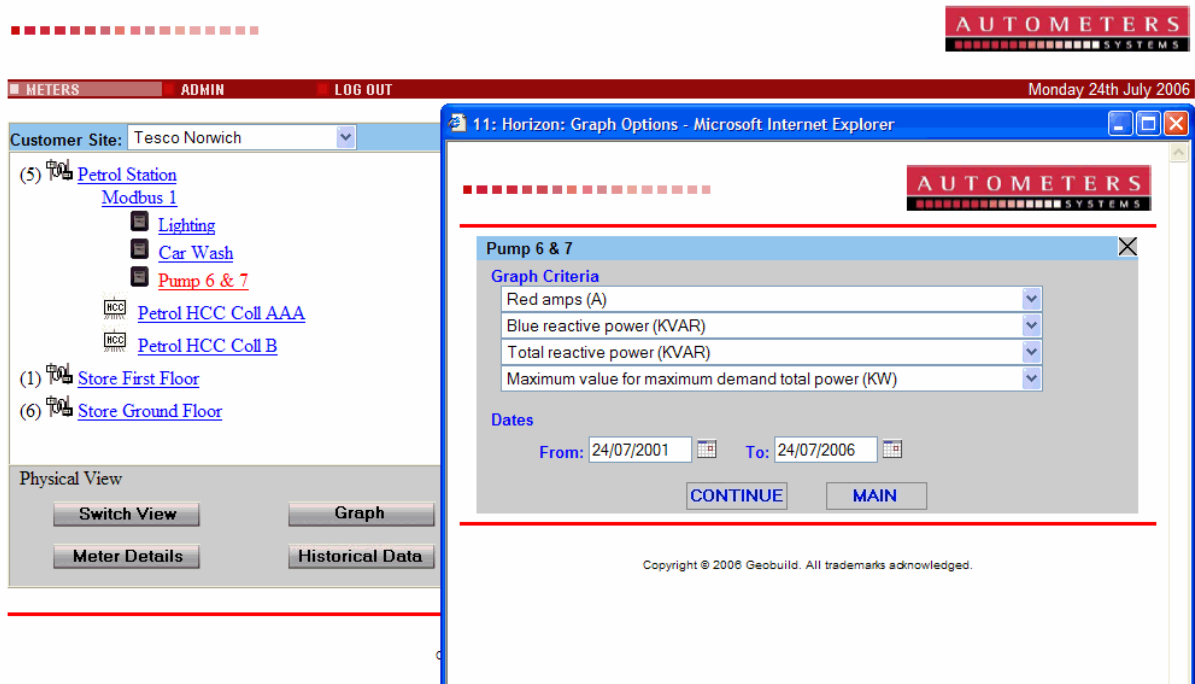
Allows you to view the same graph as above, but the selection criteria is displayed in the pop up window.

The graph criteria selection screen. Once an item is selected from the first drop down list, another drop down list is enabled. A maximum of 4 lists can be selected. Enter the From and To dates then click 'Continue' to produce the graph.



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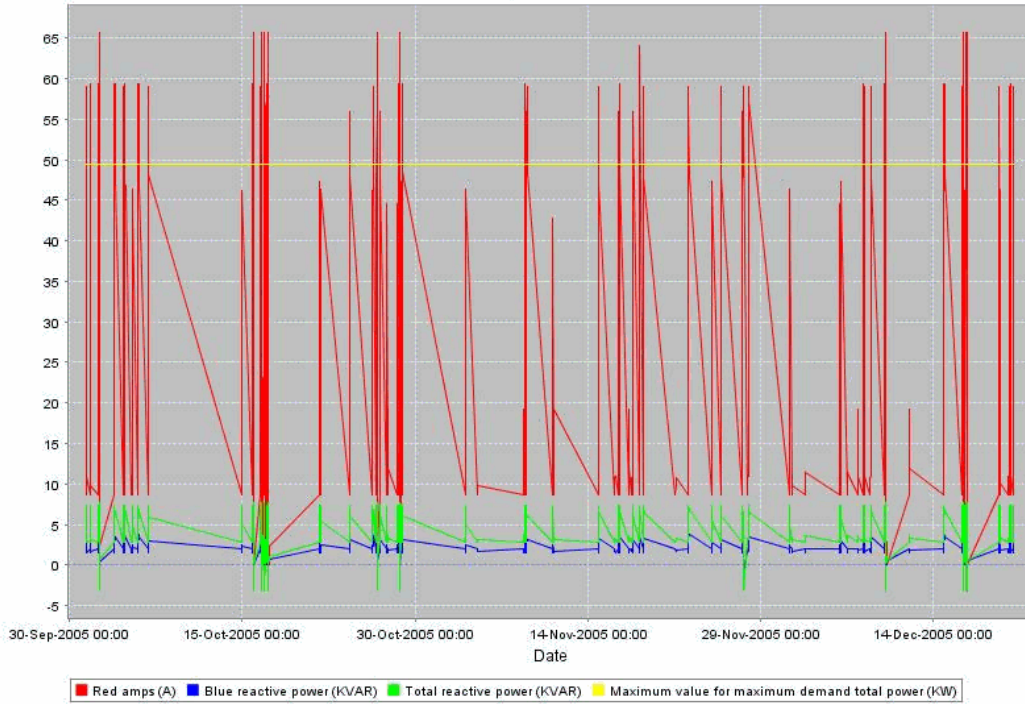
The graph criteria selection screen within the pop up window with 4 items selected and dates entered.



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The produced graph is displayed in a new pop up window.

Pump 6 & 7



View / Export Data

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View / Export Data

Clicking here forwards the main window to the View and Export Historical Data screen with the site, collector and meter preset.

Meter Details

Pump 6 & 7

FREQUENCY 50.89

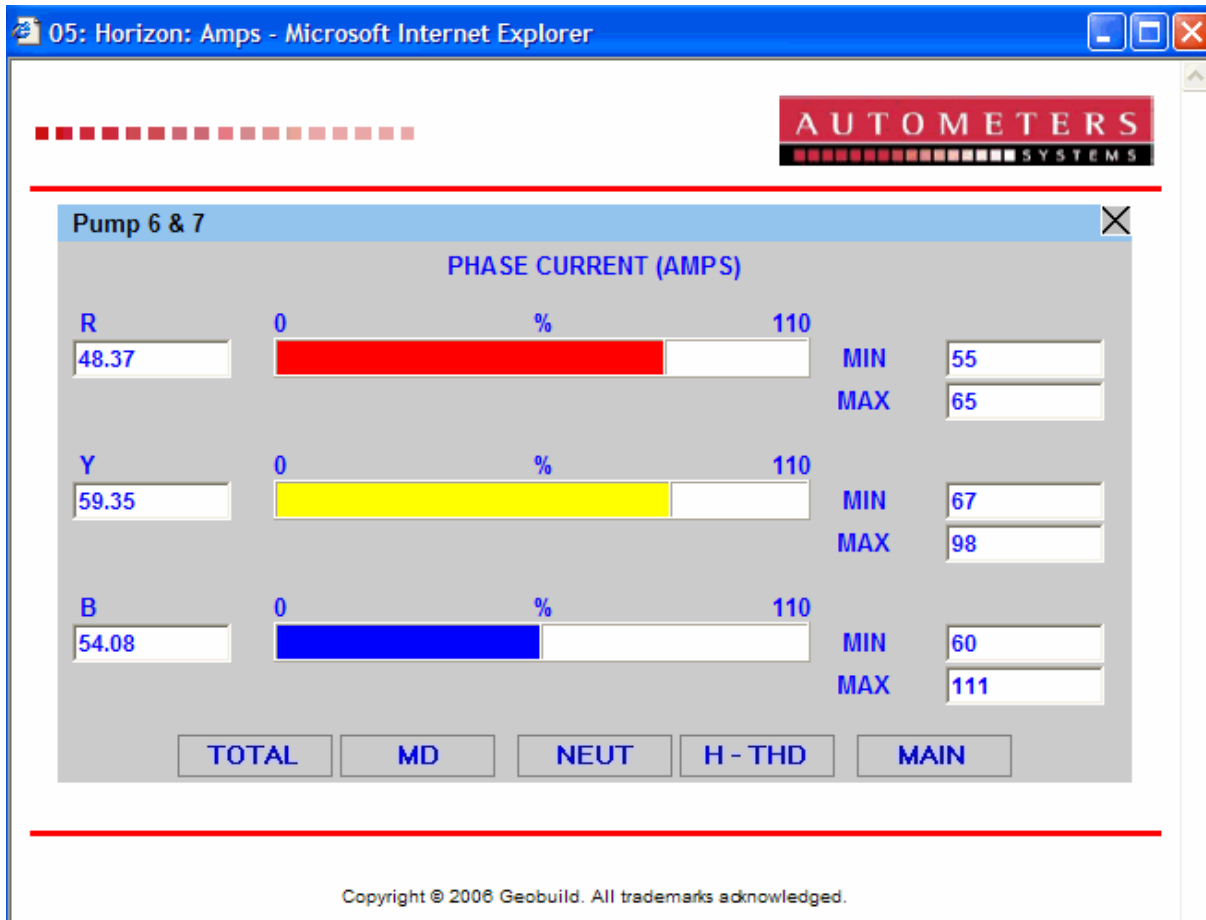
	R	Y	B	TOTAL
VOLTS	230.92	231.68	237.49	
AMPS	48.37	59.35	54.08	161.82
KW	11.08	13.66	12.42	37.17
KVA	11.20	13.71	12.88	37.79
KVAR	1.64	1.24	3.29	6.17
PF	0.99	1.00	0.97	0.98
IMP KWH	775339.24		EXP KWH	
IMP KVARH	10448.53		EXP KVARH	
KVAH	820556.06		AH	

GRAPH AMPS VOLT POWER H - THD SETUP

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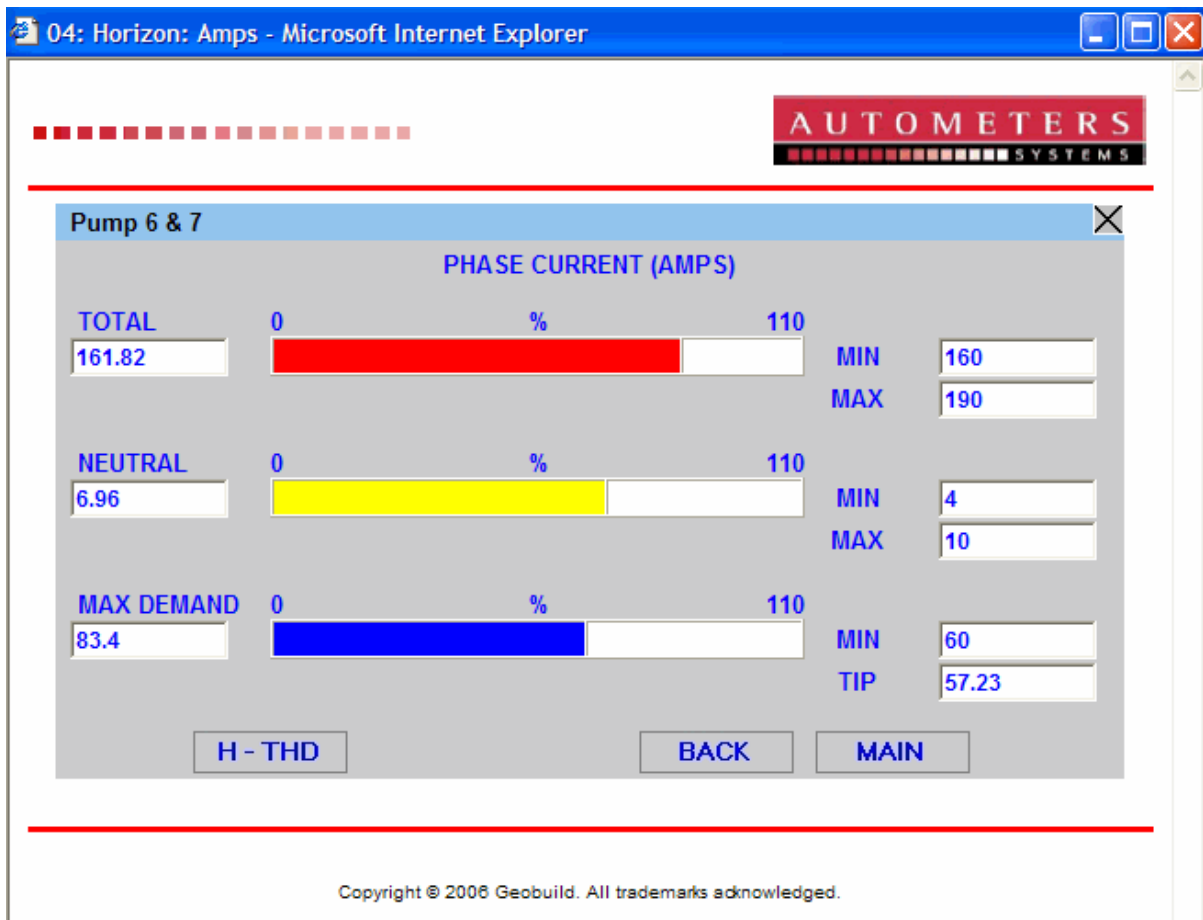
Here you can see the main Meter details screen showing the latest data received.

- AMPS** Forwards you to the Phase Current AMPS screen.
- VOLT** Forwards you to the PH-N Voltage screen.
- POWER** Forwards you to the Real Power (KW) screen.
- H - THD** Forwards you to the Harmonics screen for Amps and Volts allowing you to view L1, L2, L3 and Neutral Harmonics data as a graph or list of percentages



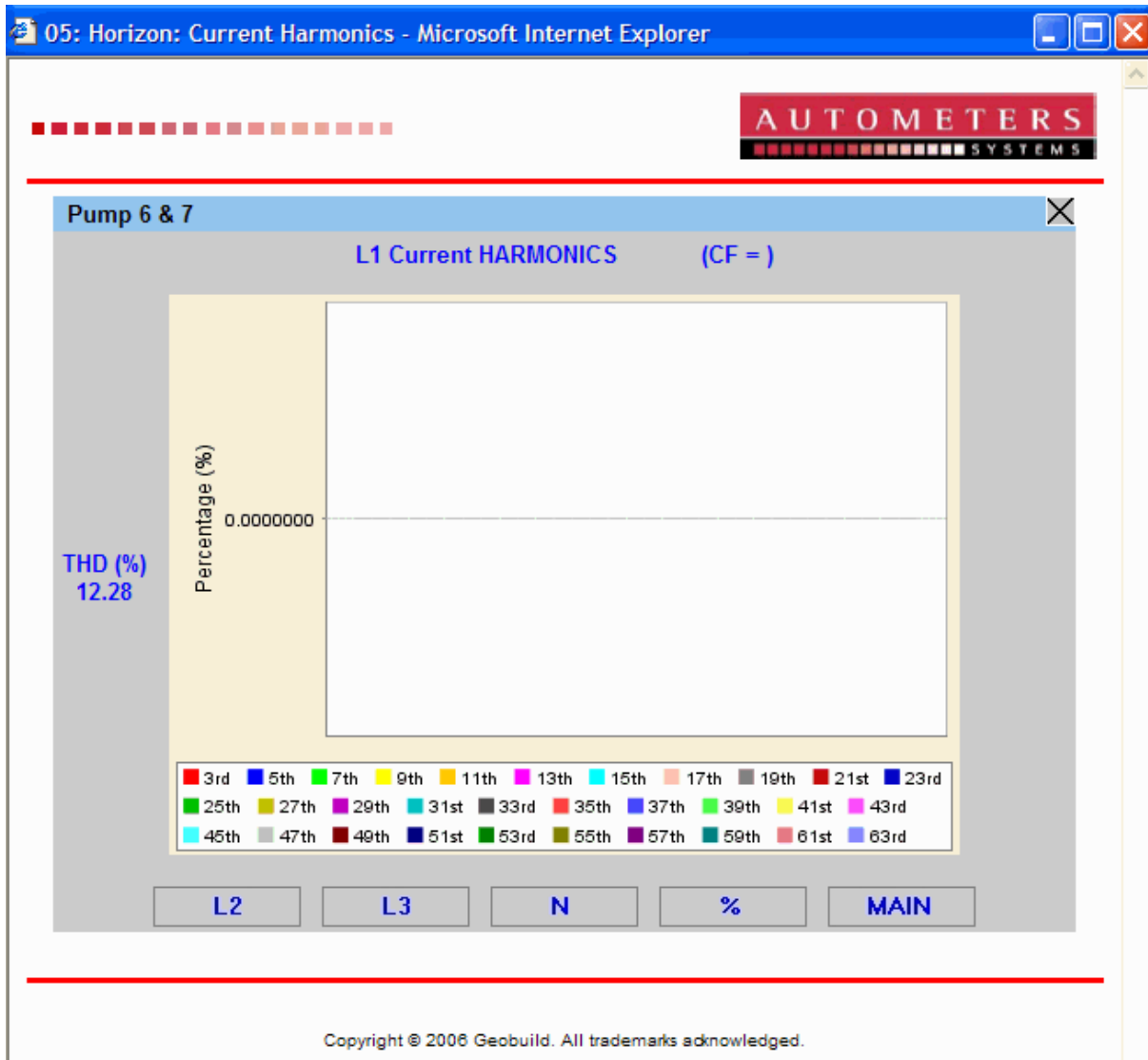
Here you can see the Meter's Amps screen.

- TOTAL** Forwards you to the Total Amps screen.
- MD** Forwards you to the MD Amps screen.
- NEUT** Forwards you to the Neutral Amps screen.
- H - THD** Forwards you to the Harmonics screen for Amps allowing you to view L1, L2, L3 and Neutral Harmonics data as a graph or list of percentages.
- MAIN** Returns you back to the Meter details screen.



Here you can see the Meter's MD Amps screen.

- H - THD
Forwards you to the Harmonics screen for Amps allowing you to view L1, L2, L3 and Neutral Harmonics data as a graph or list of percentages.
- BACK
Returns you back to the Meter's main Amps details screen.
- MAIN
Returns you back to the Meter details screen.



Here you can see the Harmonics Amps data as a graph.

L2

Produces the harmonics graph for L2 Amps.

L3

Produces the harmonics graph for L3 Amps.

N

Produces the harmonics graph for Neutral Amps.

%

Produces the harmonics data as list rather than a graph.

MAIN

Returns you back to the Meter details screen.

Collector Details

Petrol Station

Pulse	TARIFF - A PULSE			TARIFF - B PULSE			TARIFF - C PULSE			TOTAL PULSE		
	Count	Factor	Value	Count	Factor	Value	Count	Factor	Value	Count	Value	Measure
Shop & Payment Hut	1.00	999.00	1000.00	1.00	2.02	2.02				2.00	1002.02	KWH
Neon Signs	200.00	1.03	206.00	2.10	1.02	2.14				202.10	208.14	KWH
Pump 1 unleaded	3.00	2.00	6.00	32.00	1.01	32.32				35.00	38.32	CUBIC M
Pump 2 diesel	414.00	1.50	621.00	2.00	2.01	4.02				416.00	625.02	KW
Pump 3 unleaded	1.00	1.00	1.00	1.00	3.01	3.01	1.00	0.06	0.06	3.00	4.07	KWH
Super Unleaded Pump Number 4	1.00	88.00	88.00	1.00	1.01	1.01				2.00	89.01	CUBIC M
LPG Site 5	1.00	1.50	1.50	1.00	2.02	2.02				2.00	3.52	KW

SAVE SETUP

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The Collector details pop up window displays the latest data for each of the collector's Pulses. There can be up to 4 Tariffs (A, B, C and D), for each there is a Count, Factor and Value. There are also Count, Value and Measure fields for the Total Pulses. Only the Factor and Measure columns can be edited.



If changes are made, click 'Save' to update the database.



Forwards you to the Collector Set-up screen.

21: Horizon : Collector - Microsoft Internet Explorer

AUTOMETERS
SYSTEMS

Petrol Station

Pulse	SETUP				SYS TIME	BASE VALUES		
	TARIFF TYPE	TARIFF A	TARIFF B	TARIFF C		TARIFF A	TARIFF B	TARIFF C
Shop & Payment Hut	Dual	08 00	10 01		08 02	0.00	5.00	
Neon Signs	Dual	05 00	12 00		Sys Time To	0.00	0.00	
Pump 1 unleaded	Dual	08 00	20 00		14 03	0.00	0.00	
Pump 2 diesel	Dual	05 00	20 00			0.00	0.00	
Pump 3 unleaded	Tripple	06 00	16 00	22 46		1.00	2.00	3.00
Super Unleaded Pump Number 4	Dual	07 00	17 00			77.00	0.00	
LPG Site 5	Dual	00 00	20 00			0.00	0.00	

SAVE MAIN

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The Collector Set-up enables the tariff structure to be programmed for each individual Pulse and a Base Value input from which the collector is to start counting.

SAVE

If changes are made, click 'Save' to update the database.

SETUP

Returns you back to the Collector Set-up screen.

Historical Data

View And Export Historical Data

AUTOMETERS
SYSTEMS

METERS ADMIN LOG OUT Monday 24th July 2006

Select View Type:	Physical View		Select Customer Group:	Tesco
Select View, Export or Email Data	View Data		Customer Site:	Tesco Norwich
Select Item Type to View	Data for a Collector		Select Collector :	Store Ground Floor
Enter Date Range	24/07/2000	to	24/07/2006	

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The Historical Data screen allows you to view data for a selected collector, meter or group of meters. By changing the View, Export or Email Data drop down box the results can either be seen on screen, popped up or emailed as a Winzip file containing the data in csv format.



Click View to see the results in table form on the screen.

View And Export Historical Data

AUTOMETERS
SYSTEMS

METERS ADMIN LOG OUT Monday 24th July 2006

Select View Type:	Physical View		Select Customer Group:	Tesco
Select View, Export or Email Data	Email Data		Customer Site:	Tesco Norwich
Select Item Type to Email	Data for a group of Meters		Select Collector :	Petrol Station
Enter Date Range	Data for a Collector		Select Email Group:	tesco headquarters
	Data for a Meter			
	Data for a group of Meters			

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If Email Data is selected then the Select Email Group drop down list is enabled and must be set. New email groups can be created in the Admin section.



Click here to run the report and send the results to the users in the email group.

View And Export Historical Data

METERS ADMIN LOG OUT Monday 24th July 2006

Select View Type:	Physical View	Select Customer Group:	Tesco
Select View, Export or Email Data	View Data	Customer Site:	Tesco Norwich
Select Item Type to View	Data for a Collector	Select Collector :	Store Ground Floor
Enter Date Range	24/07/2000 to 24/07/2006		

Date	Freezers 1 to 3				Freezers 4 to 6				Tariff
	Tariff A	Tariff B	Tariff C	Tariff D	Tariff A	Tariff B	Tariff C	Tariff D	
06 02 2006 14:46	333.00	22.00	3.00	11.50	3.00	3.00	3.00	4.00	
06 02 2006 14:45	300.31	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
06 02 2006 14:45	1.02	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
06 02 2006 14:45	1.01	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
05 02 2006 14:46	3.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	
05 02 2006 14:45	1.31	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
05 02 2006 14:45	1.02	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
05 02 2006 14:45	1.01	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
04 02 2006 14:45	1.31	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
04 02 2006 14:45	1.02	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
04 02 2006 14:45	1.01	2.01	3.01	4.01	1.02	2.02	3.02	4.02	
03 02 2006 14:46	3.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	

Refresh

Here you can see the results of a collectors data report. The results are ordered by date and grouped by tariff and Pulse. Changing the criteria in the top half of the screen will remove the results from view.

Refresh

Click Refresh to run the report again using the same criteria.

View And Export Historical Data

METERS ADMIN LOG OUT Monday 24th July 2006

Select View Type:	Physical View	Select Customer Group:	Tesco
Select View, Export or Email Data	View Data	Customer Site:	Tesco Norwich
Select Item Type to View	Data for a Meter	Select Collector :	Petrol Station
Enter Date Range	24/07/2000 to 24/07/2006	Meter	Pump 6 & 7

Select data items to view	
L1 Amp	<input checked="" type="checkbox"/>
L2 Amp	<input checked="" type="checkbox"/>
L3 Amp	<input checked="" type="checkbox"/>
N Amp	<input checked="" type="checkbox"/>
Tot. Amp	<input checked="" type="checkbox"/>
L1 Volt	<input checked="" type="checkbox"/>
L2 Volt	<input checked="" type="checkbox"/>
L3 Volt	<input checked="" type="checkbox"/>
L1 L2 Volt	<input checked="" type="checkbox"/>
L2 L3 Volt	<input checked="" type="checkbox"/>
L3 L1 Volt	<input checked="" type="checkbox"/>

Select All

Deselect All

View

If you wish to View data for a Meter you will first be presented with a list of Meter items. Deselecting one will mean it's results will not be displayed. You may choose to leave all selected or just select one.

Select All

Ticks all check boxes

Deselect All

Removes the tick from all check boxes.

View

Click View to see the results in table form on the screen.

View And Export Historical Data

METERS ADMIN LOG OUT Monday 24th July 2006

Select View Type: Physical View
 Select View, Export or Email Data: View Data
 Select Item Type to View: Data for a Meter
 Enter Date Range: 24/07/2000 to 24/07/2006

Select Customer Group: Tesco
 Customer Site: Tesco Norwich
 Select Collector: Petrol Station
 Meter: Pump 6 & 7

Date	L1 Amp	L2 Amp	L3 Amp	N Amp	Tot. Amp	L1 Volt	L2 Volt	L3 Volt	L1 L2
20 12 2005 23:12	48.37	59.35	54.08	6.96	161.82	230.92	231.68	237.49	
20 12 2005 23:11	48.56	58.44	54.59	7.14	161.55	232.79	235.58	236.00	
20 12 2005 23:09	48.09	59.03	53.54	6.79	160.45	237.18	233.50	233.50	
20 12 2005 23:08	59.09	58.17	53.18	16.95	170.43	234.65	235.44	239.14	
20 12 2005 23:07	48.71	58.53	53.68	7.17	160.90	234.92	235.05	238.67	
20 12 2005 23:06	47.93	58.52	53.40	7.03	159.84	234.17	235.94	236.81	
20 12 2005 23:05	56.01	58.33	53.59	13.33	167.93	234.83	235.00	237.54	
20 12 2005 23:04	47.26	58.44	52.99	6.59	158.65	237.53	234.48	237.74	
20 12 2005 23:02	46.60	58.83	52.35	6.11	157.73	237.64	234.20	234.94	
20 12 2005 23:01	46.65	58.68	52.54	5.67	157.43	237.39	234.49	234.85	
20 12 2005 23:00	47.32	58.71	65.10	11.06	171.17	239.89	234.67	233.29	
20 12 2005 22:59	45.83	58.18	61.64	5.59	165.59	240.41	234.93	233.06	
20 12 2005 22:58	46.21	57.86	53.15	6.44	157.28	239.01	235.69	237.19	

More Refresh

Here you can see the results of a Meter's data report. The results are ordered by date. Changing the criteria in the top half of the screen will remove the results from view.

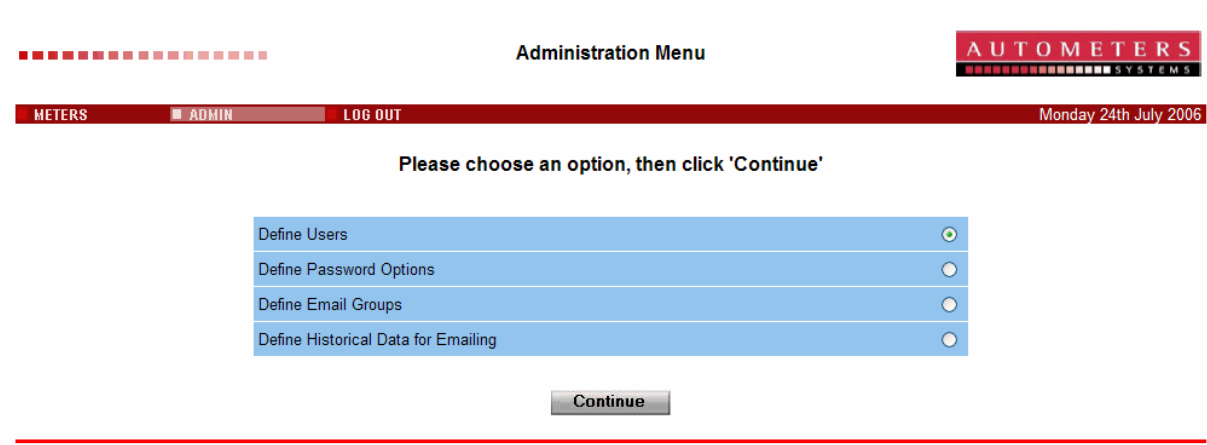


Click Refresh to run the report again using the same criteria.



Only a certain number of results are displayed on screen at any one time. Click 'More' to retrieve the next chunk of results.

Administration Menu



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Click on a radio button to enable the 'Continue' button.

METERS

Returns you to the Customer Meters screen.

Continue

Takes you to the selected Admin screen

User Admin

Define Users



METERS
ADMIN
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Customer Site:	Tesco Norwich		
Select User:	james		
User Name:	james		
Full Name:	James A Lawrie		
Password:	••••••		
Confirm Password:	••••••		
Access to All Customer's Sites:	<input type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> View Only
User Admin Access:	<input type="radio"/> No	<input checked="" type="radio"/> Yes	<input type="radio"/> View Only
Last Logged in:	27/08/2005 13:16		
Password Last Changed:	27/08/2005 09:47		

Update
Delete User

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This screen allows you to create, amend and delete users. Select 'Create New User' or an existing user from the drop down list to view their data. The password must conform to the password options set-up and may not be in the prohibited password list.

Update

Validates the input and updates the database with any changes.

Delete User

Deletes the selected user from the database.

Password Options

Define Password Options

AUTOMETERS
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Tesco

Password Change Interval (Days):	<input type="text" value="30"/>	(0 = User Not Forced To Change)
Password Minimum Length:	<input type="text" value="6"/>	
Allow One Character Repeatedly:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Password Can Be All Numeric:	<input type="radio"/> No	<input checked="" type="radio"/> Yes
Password Can Be All Characters:	<input type="radio"/> No	<input checked="" type="radio"/> Yes
Password Can Contain Spaces:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Allow Password To Equal User Id:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Allow Password To Contain User Id:	<input type="radio"/> No	<input checked="" type="radio"/> Yes

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This screen allows you set certain rules for user's passwords including their minimum length and the number of days before a password has to be changed for security reasons.

Submit

Validates the input and updates the database with any changes.

Prohibited Passwords

Forwards you to the Prohibited Passwords screen.

Prohibited Passwords

Define Prohibited Passwords

Tesco

Prohibited Passwords	Select To Delete
password	<input type="radio"/>
testtest	<input type="radio"/>
tesco	<input type="radio"/>

New Prohibited Password:

Add **Previous**

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This screen allows you to control which passwords cannot be used by users. To Add a password to the prohibited list just type it in the box and click 'Add'. To remove one from the list click on it's radio button which enables a 'Delete' button, clicking that will remove it from the database.

Add

Adds the input password to the prohibited password list.

Previous

Returns you to the Password Options screen.

Email Groups

METERS
ADMIN
LOG OUT
Monday 24th July 2006

Define Email Groups

Select Email Group:	tesco headquarters
Email Group Name:	tesco headquarters
Email Addresses:	<div style="border: 1px solid #ccc; padding: 2px;"> jameslawrie@bopenworld.com test@hotmail.com </div>
Delete	
Add Email Address:	<input style="width: 80%;" type="text"/> <input style="float: right;" type="button" value="Add"/>

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This screen allows you to create and maintain groups of email addresses that can be used to send historical data reports.

Add

Enter a new email address into the bottom box then click 'Add' to move it into the list.

Delete

Click on an email address to enable the 'Delete' button, clicking this removes it from the list.

Update

Validates the input and updates the database with any changes.

Historical Data for Emailing

Define Historical Data for Emailing

AUTOMETERS
SYSTEMS

METERS ADMIN LOG OUT Monday 24th July 2006

Select Customer Group:	Tesco
Customer Site:	Tesco Norwich
Select Setup:	Manager petrol pump report
Description:	Manager petrol pump report
Select View Type:	Physical View
Select Item Type to Email:	Data for a Collector
Select Collector :	Petrol Station
Select Email Group:	local managers
Interval:	Weekly
Next Data Due:	30/07/2006 23 : 00

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This screen allows you to set-up historical data reports to be automatically run at set intervals. Select data in all the criteria fields, then enter the date and time for the report to be run. When a due date passes, the report is created and then emailed to everyone in the selected email group. The Next Date Due is then incremented by the selected interval.

Update

Validates the input and updates the database with any changes.

Delete

Deletes the selected report setup from the database.