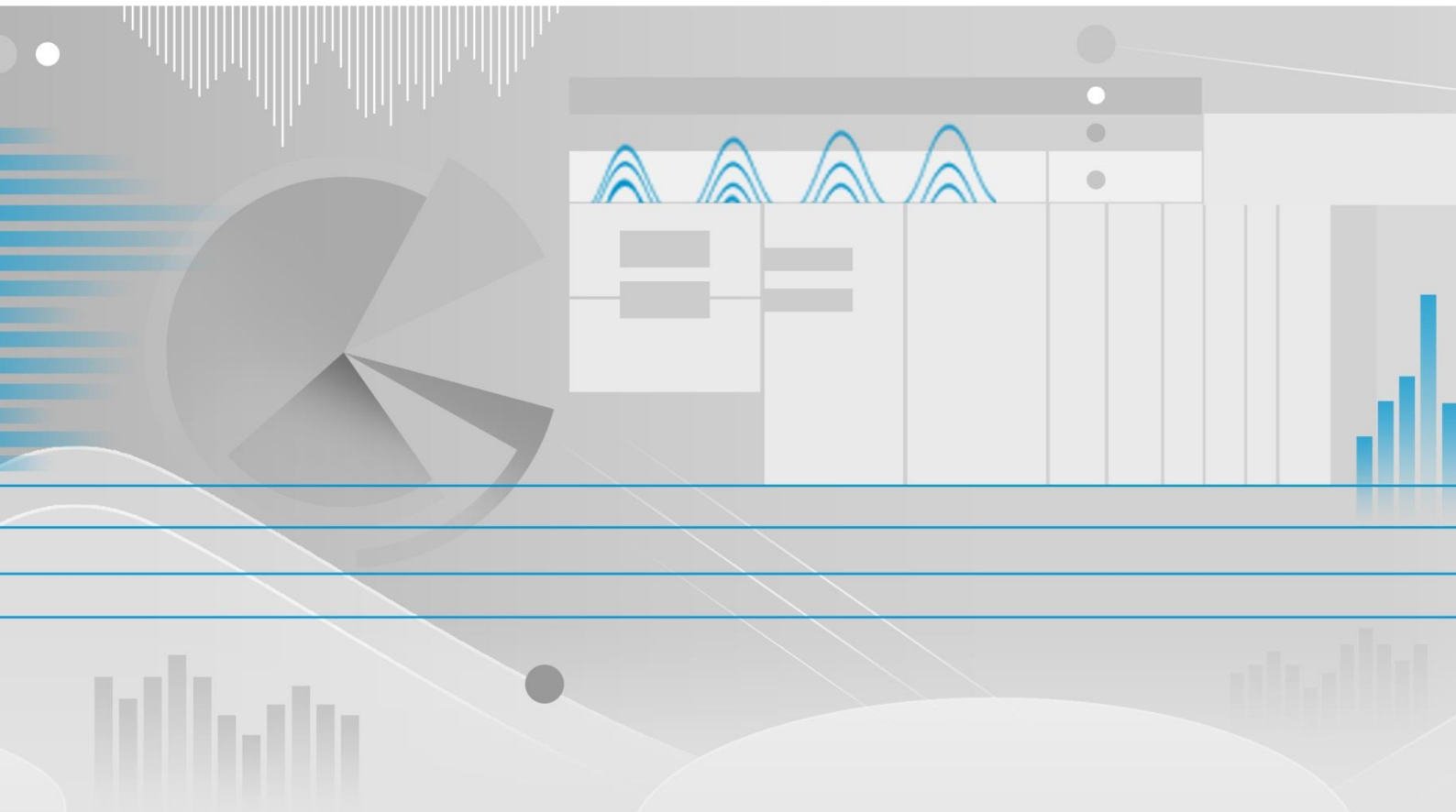


# NEOpoint

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## USER GUIDE



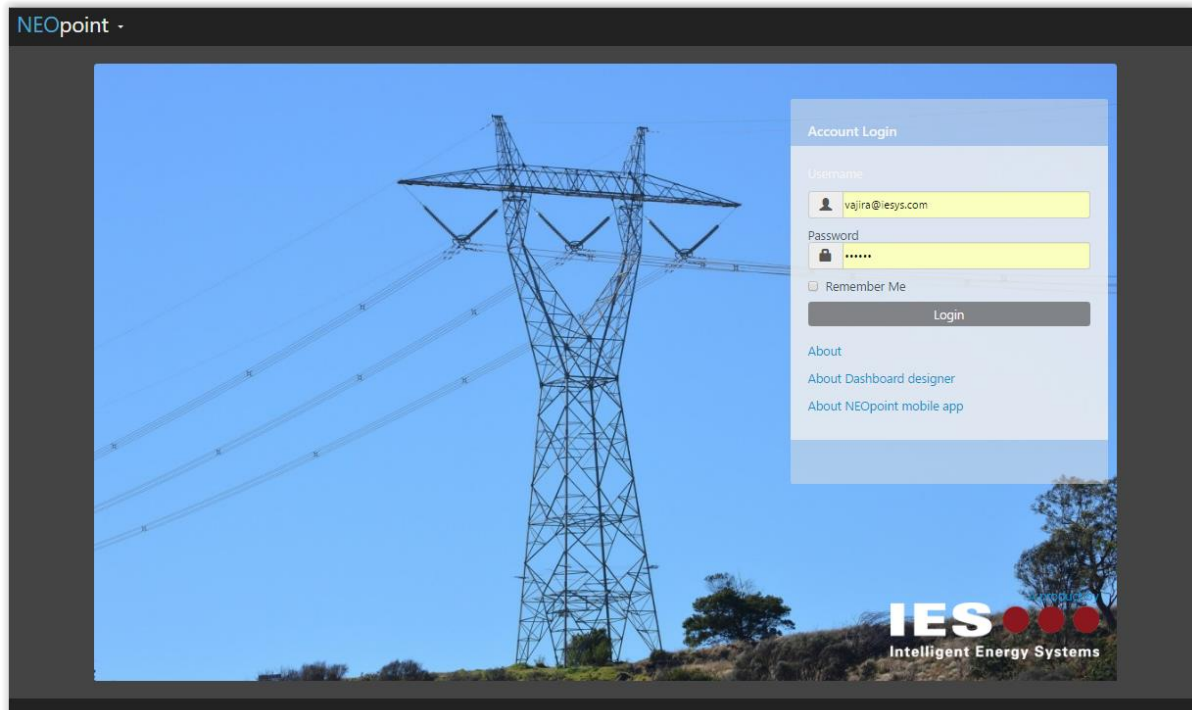
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## 1 Login Page

The NEOpoint login page has two fields for enter 'Username' and 'Password'.

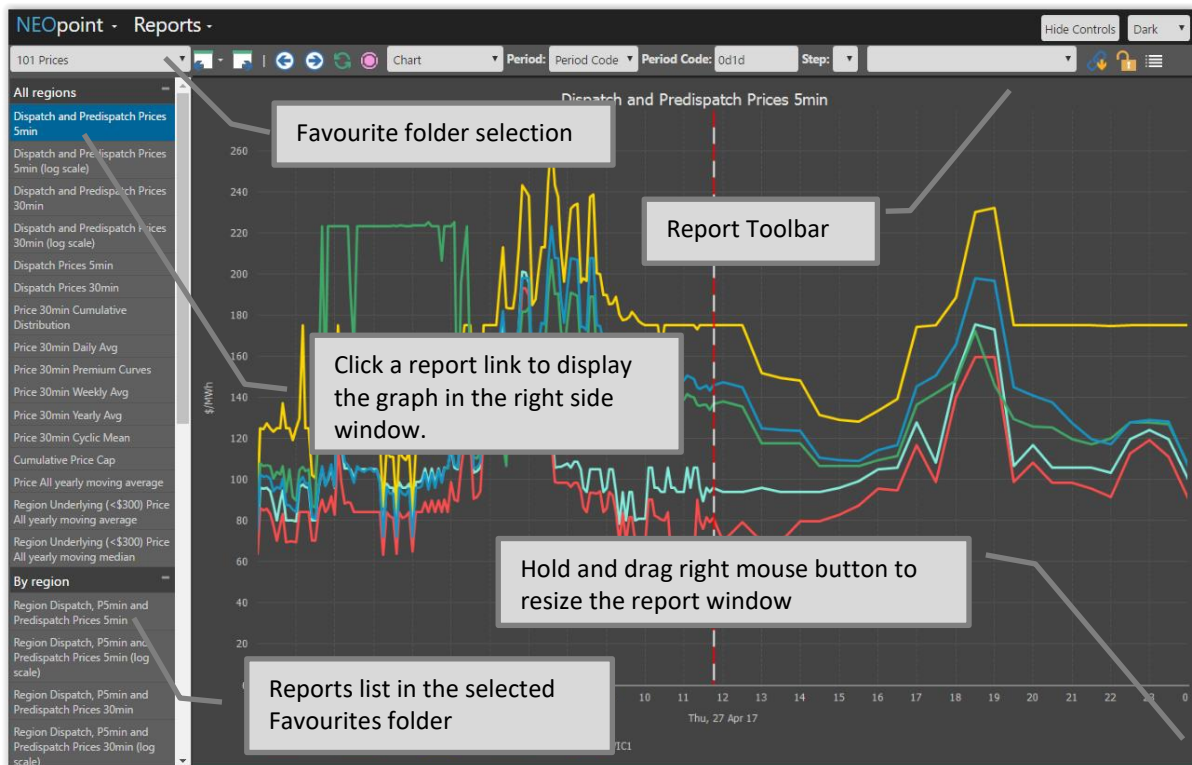
There is a 'Remember Me' checkbox, which remembers the user information in the browser.



The NEOpoint login page display only when authentication mode is "Forms". For Windows authentication, user login in using windows account.

## 2 Chart View

Reports Tab is the place where the user can select and view charts.



The toolbar at the top of the chart view has controls to set report start date, report period, step, instances (e.g. NSW1, QLD1), refresh, next, previous. In addition, there are back and forward buttons for history reports.

### 3 Table View

Table View is the place where the user can view report data.

NEOpoint - Reports -

101 Prices

Table - All

Period: Period Code Period Code: OdId Step:

SETTLEMENTDATE	PRICE	QLD1.PRICE	SA1.PRICE	TAS1.PRICE	VIC1.PRICE
27/04/2017 00:00:00	63.33	89.16	78.39	75.02	
27/04/2017 00:05:00	86.34	124.89	107.88	102.72	
27/04/2017 00:10:00	84.83	124.63	106.72	101.34	
27/04/2017 00:15:00	85.73	127.25	107.01	101.62	
27/04/2017 00:20:00	83.46	124.99	106.7	100.56	
27/04/2017 00:25:00	87.72	77.69	123.44	100.55	94.29
27/04/2017 00:30:00	80.22	70.51	124.99	103.6	96.62
27/04/2017 00:35:00	89.63				95.47
27/04/2017 00:40:00	94.98				100.32
27/04/2017 00:45:00	80.22				88
27/04/2017 00:50:00	80.22				87.41
27/04/2017 00:55:00	80.16				85.25
27/04/2017 01:00:00	79.67				84.01
27/04/2017 01:05:00	96.31	84.01	129.72	104.61	99.08
27/04/2017 01:10:00	97.74	84.04	174.99	106.35	101.26
27/04/2017 01:15:00	96.4	84.01	124.99	104.24	98.23
27/04/2017 01:20:00	96	84.01	124.99	105.15	98.57
27/04/2017 01:25:00	80.22	70.41	102.23	87.09	81.63
27/04/2017 01:30:00	80.22	70.38	101.07	86.55	80.93
27/04/2017 01:35:00	96.36	84.01	121.42	142.71	97.2
27/04/2017 01:40:00	105.96	90.39	139.64	223.45	106.66
27/04/2017 01:45:00	97.08	84.04	121.03	142.37	96.86
27/04/2017 01:50:00	100.27	86.16	125.57	223.45	100.98
27/04/2017 01:55:00	105.96	91.78	137.75	223.45	107.56
27/04/2017 02:00:00	96	83.06	121.27	223.45	96.52
27/04/2017 02:05:00	135.74	115.93	174.99	223.45	140.07
27/04/2017 02:10:00	117.38	98.93	148.47	223.45	120.09

Table View can select using the tool bar Chart/Table selection box.

Report table view has several options to select:

- Table – All                      Display all the columns.
- Table – Properties            Display properties of each data column.
- Table – Merged                Display combining all the datetime values into a single datetime column.

#### Table – Merged Option

This option displays data only when the first column is datetime.

The column name must remain as Datetime because it is combining the datetime columns of potentially many sections with different names.

The Datetime must always be in order. The reason is that each sections rows are scanned, the datetime is read and that section added to a single sorted dictionary of datetimes.

NEOpoint - Reports -

108 Price Setter

Table - Merged

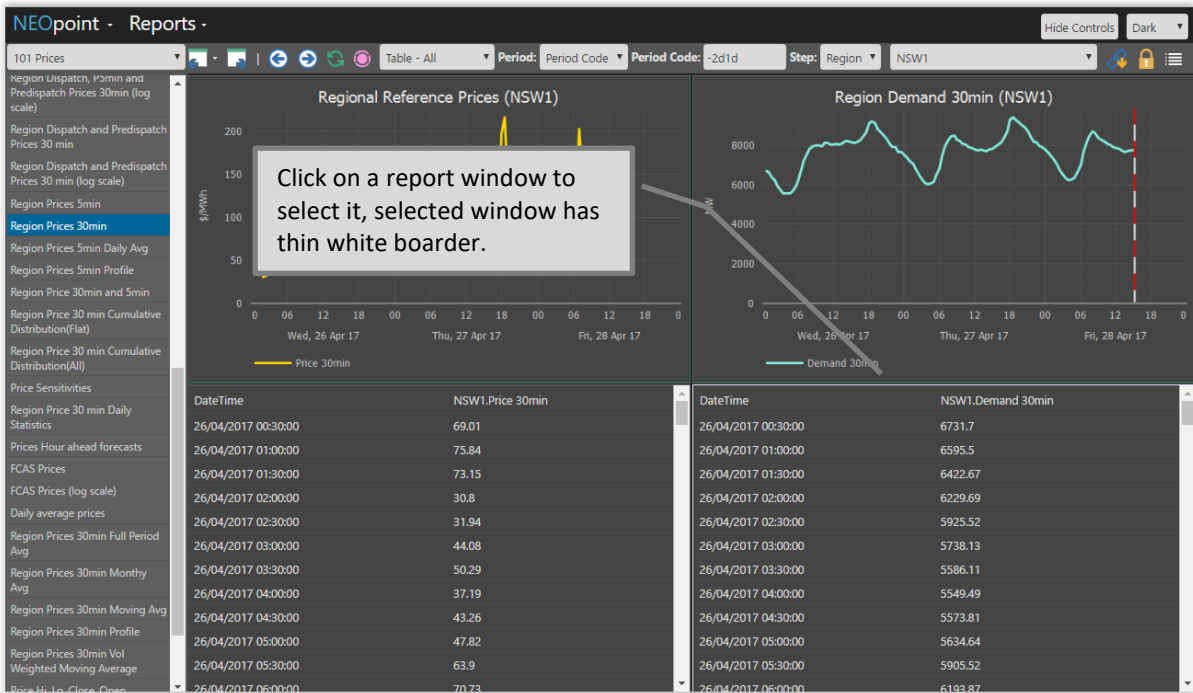
Period: Period Code Period Code: OdId Step: Region SA1

DateTime	Bayswater.PERCENTSETTING	Darling Downs Power Station.PERCENTSETTING	Eraring.PERCENTSETTING	Mortlake.PERCENTSETTING	Poatina.PERCENTSETTING	Tarong.PERCENTSETTING
Pricesetter fuelype 30min			8.7719		16.6667	
Pricesetter fuelype and region demand 30min		16.6667			16.6667	
Pricesetter fuelype and system demand 30min			33.3333			16.6667
Pricesetter station 30min	33.3333	16.6667	16.6667			16.6667
30min Data			33.3333			33.3333
Pricesetter fuelype 5min	16.6667		16.6667			
Pricesetter station 5min				16.6667		33.3333
Pricesetter fuelype and system demand 5min				33.3333		33.3333
Summary						
Pricesetter Station						
Pricesetter All Data Table						
Pricesetter Data Table -no FCAS						
Pricesetter unit and fuel by region						

Merged data

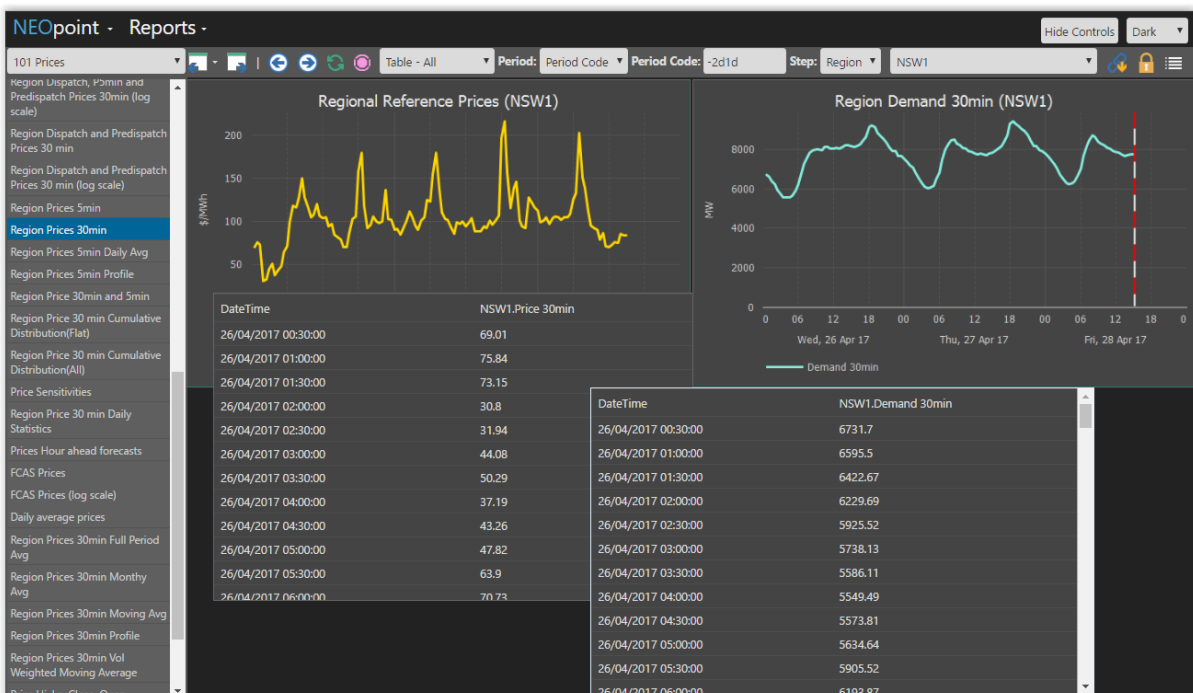
## 4 Multiple Reports Windows

NEO allows displaying more than one report windows. User can compare charts and data in the same screen.



While holding the mouse over the chart, the report window can shift in any direction. User can lock this report windows are shifting by clicking the 'Lock pane positions' toolbar option.

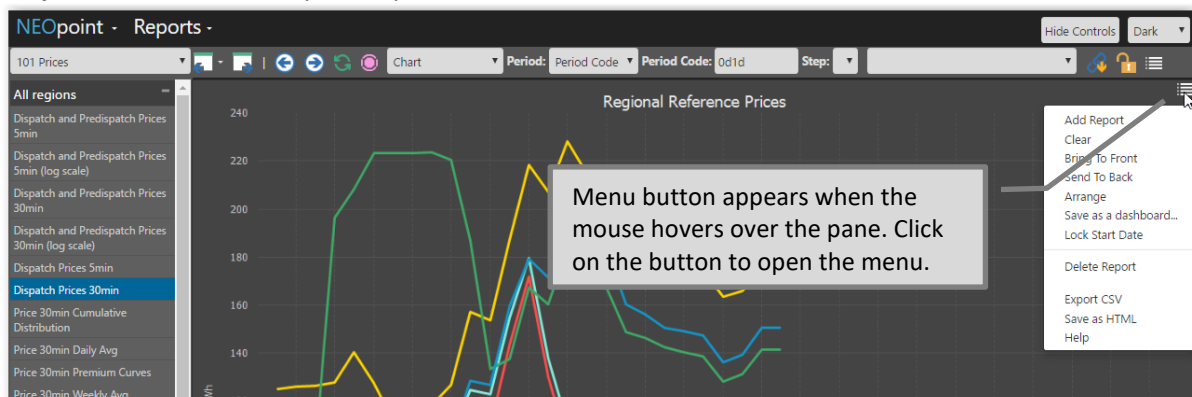
Lock pane positions toolbar icon toggle close to open image as in the image.



## 5 Report Menu Options

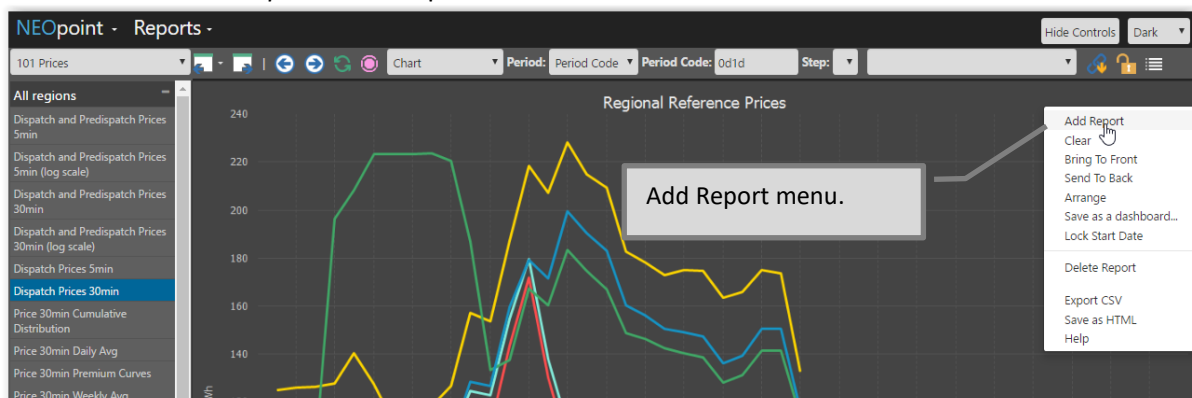
Report menu options are:

<b>Add Report</b>	add a new report window.
<b>Clear</b>	close all open report windows and clear the report view.
<b>Bring To Front</b>	selected report window bring to front.
<b>Send To Back</b>	selected report window send to back.
<b>Arrange</b>	allocate fixed amount of chart space as determined by the number of charts.
<b>Save as a dashboard...</b>	save open reports into a dashboard.
<b>Lock Start Date</b>	all open report windows lock to a same time.
<b>Delete Report</b>	delete selected report window.
<b>Export CSV</b>	report data export into a CSV file.
<b>Save as HTML</b>	arrange multiple reports and save as a HTML file.
<b>Help</b>	open help file.



### 5.1 Add a new report window

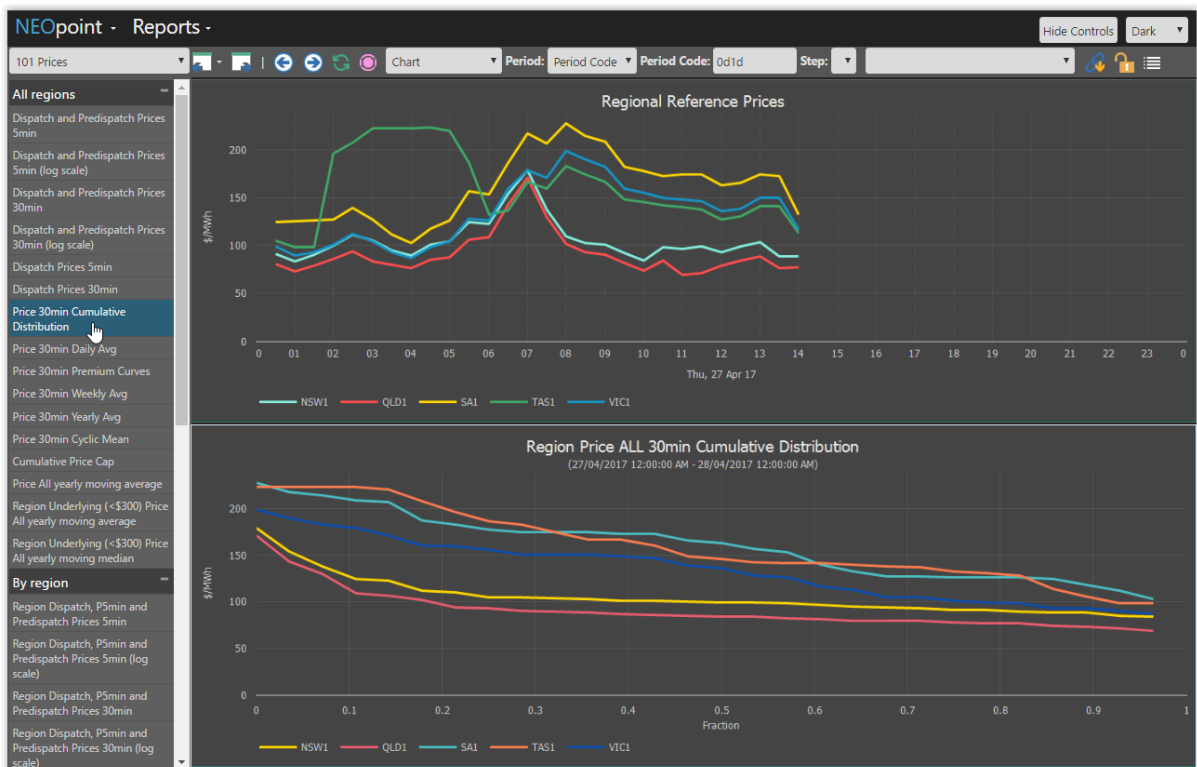
1. Select the 'Add Report' menu option.



2. New report window displays as in the image below.



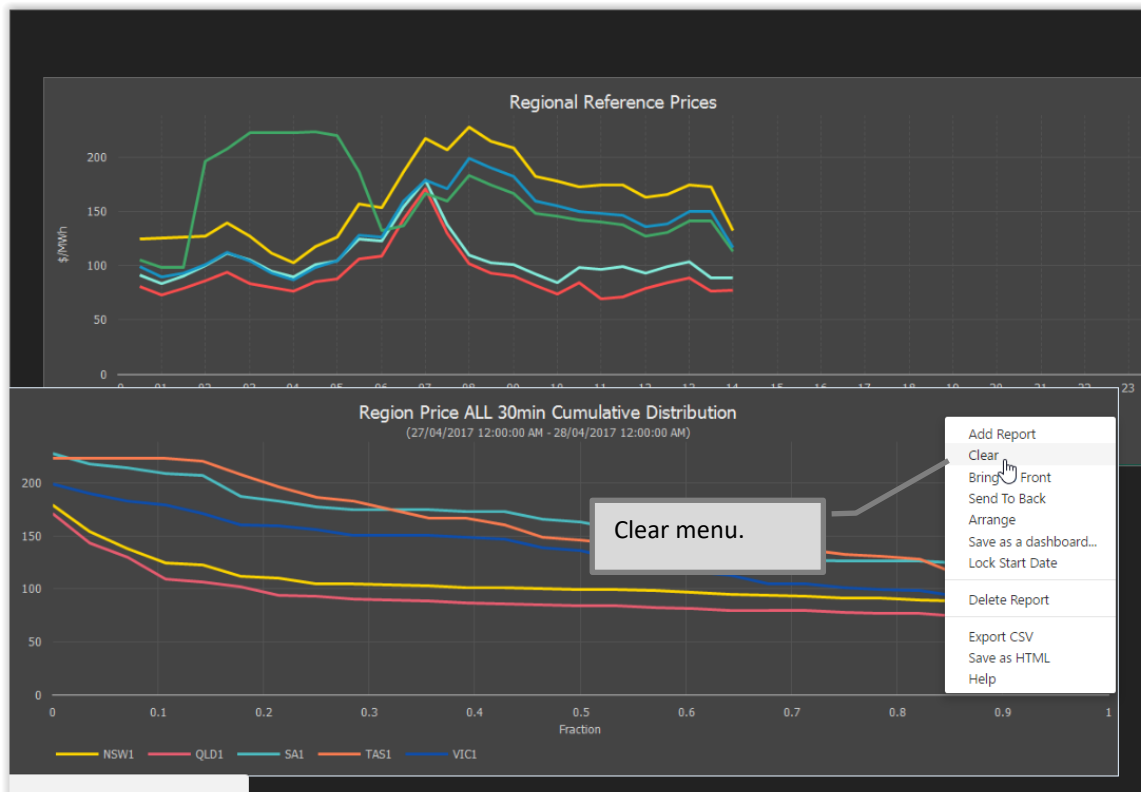
3. Select the new report window and click on a report link. The chart displays in the new report window.





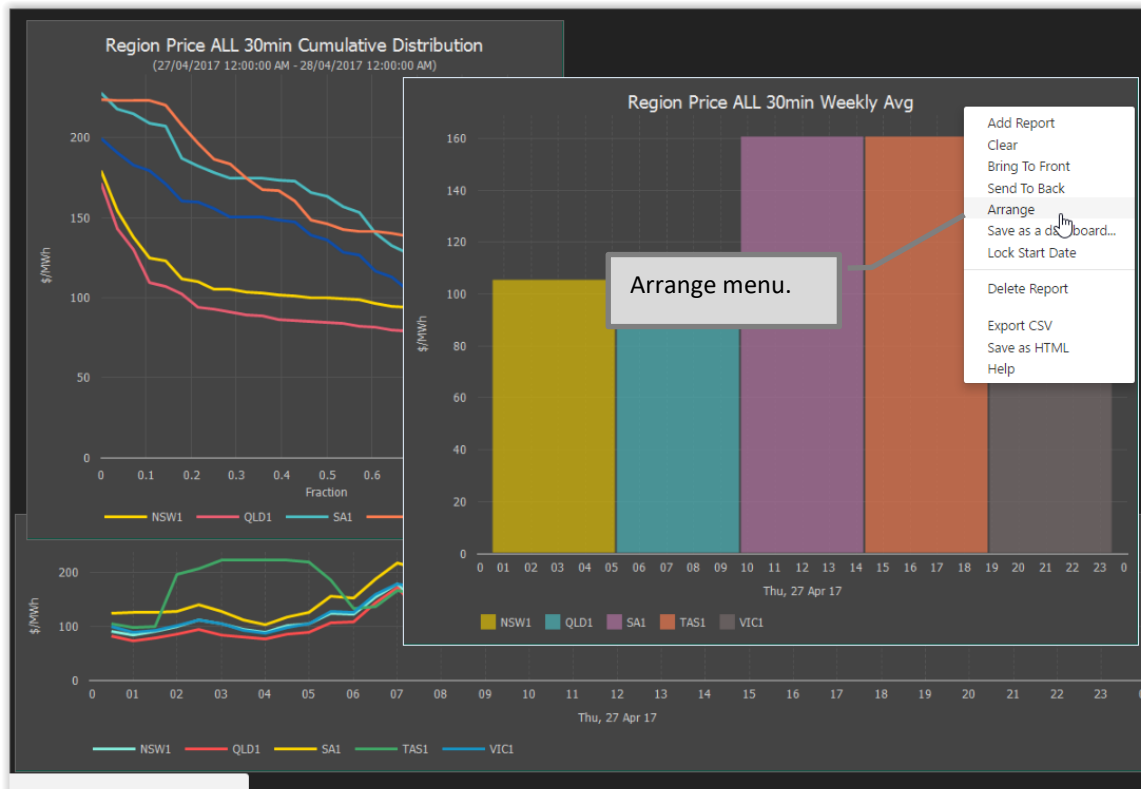
## 5.2 Clear all open reports

1. Select the 'Clear' menu option and then display blank report window.

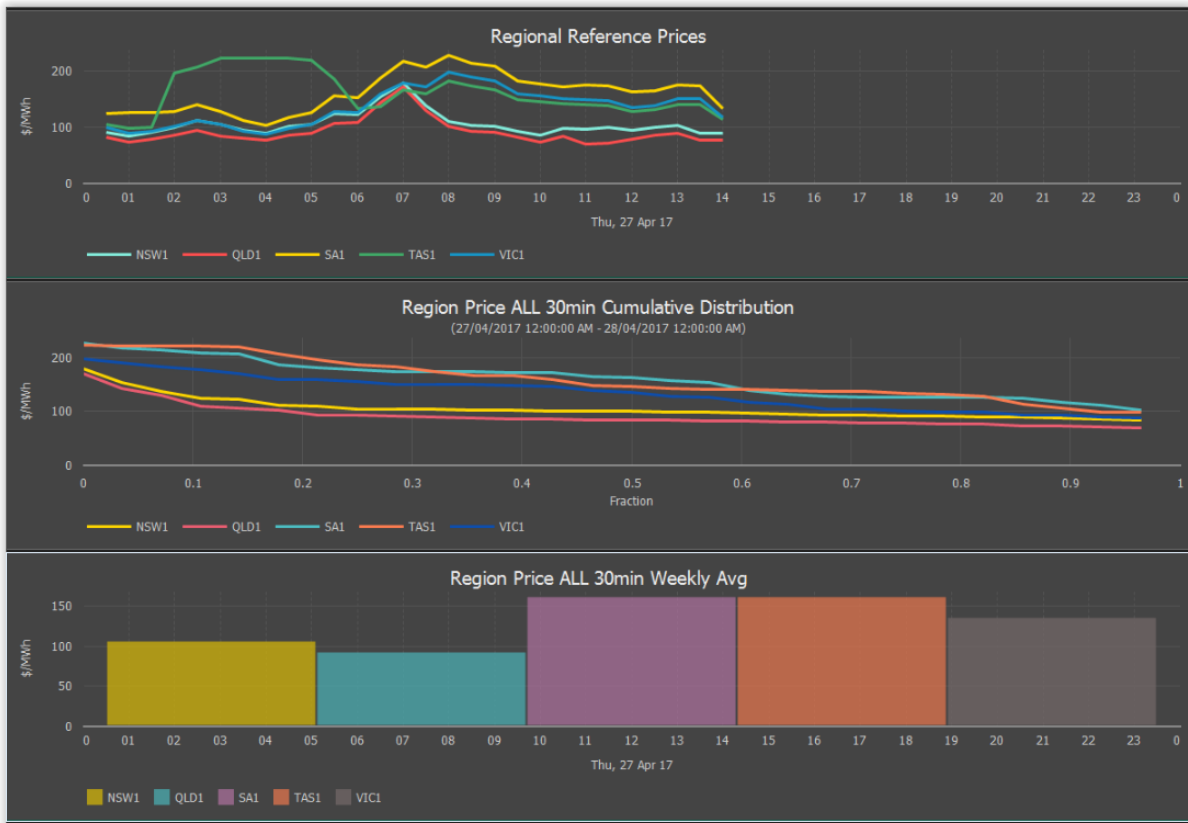


## 5.3 Arrange report windows

1. Select the 'Arrange' menu option.

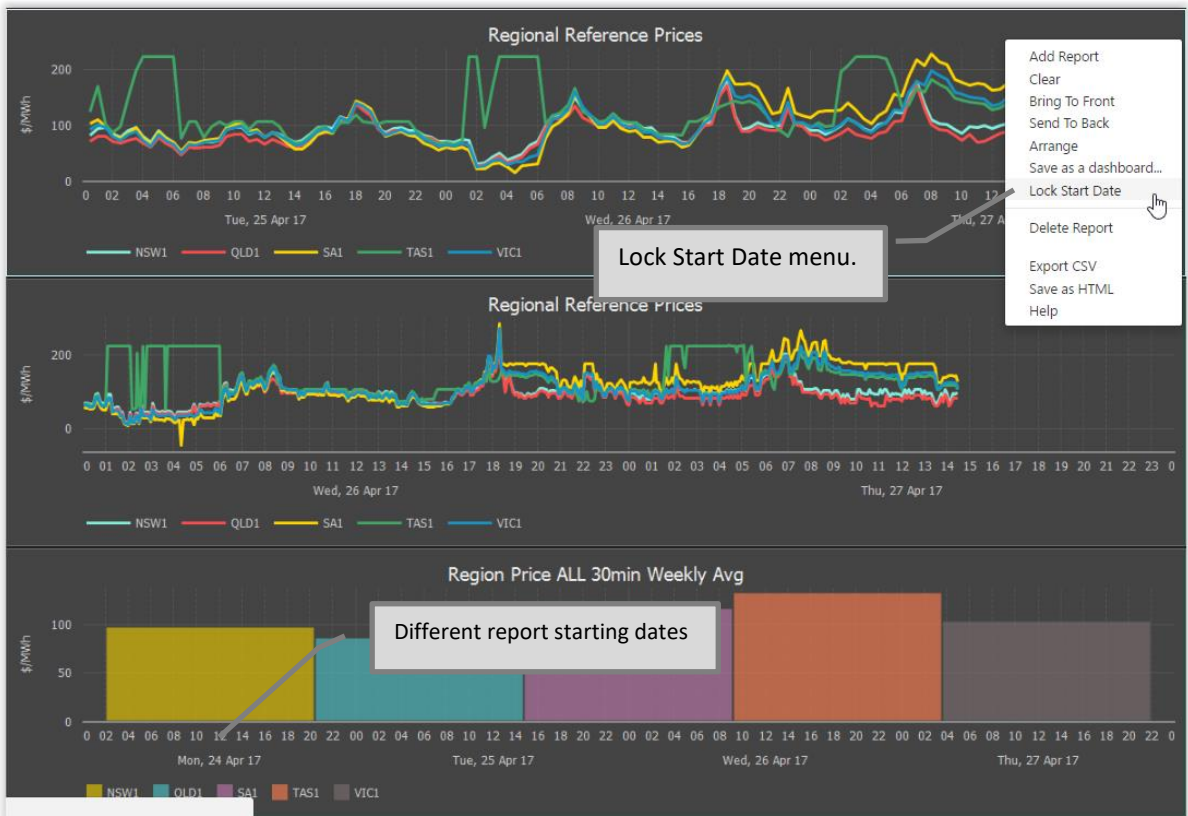


2. Reports arranged to the fixed amount of chart space as determined by the number of charts.

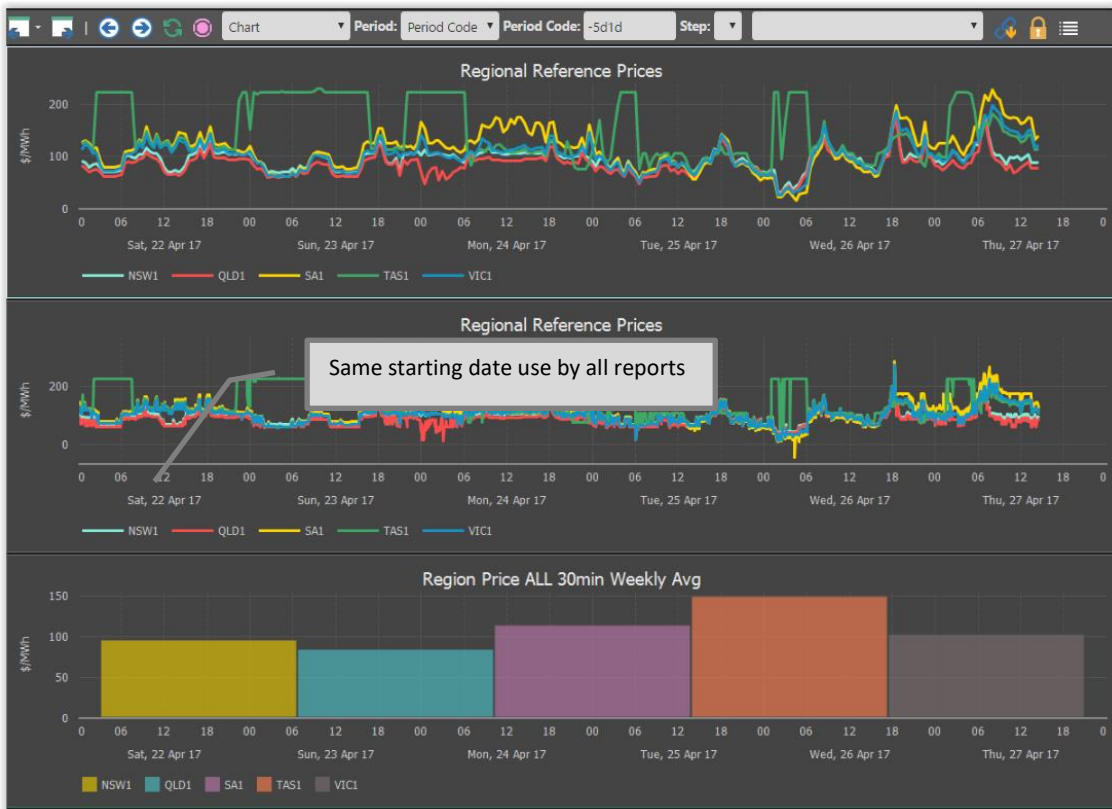


5.4 Lock start date for all reports

1. Select the 'Lock Start Date' menu option.



2. Change the starting date and click on the Refresh button. All open reports refreshed and display the same starting date.



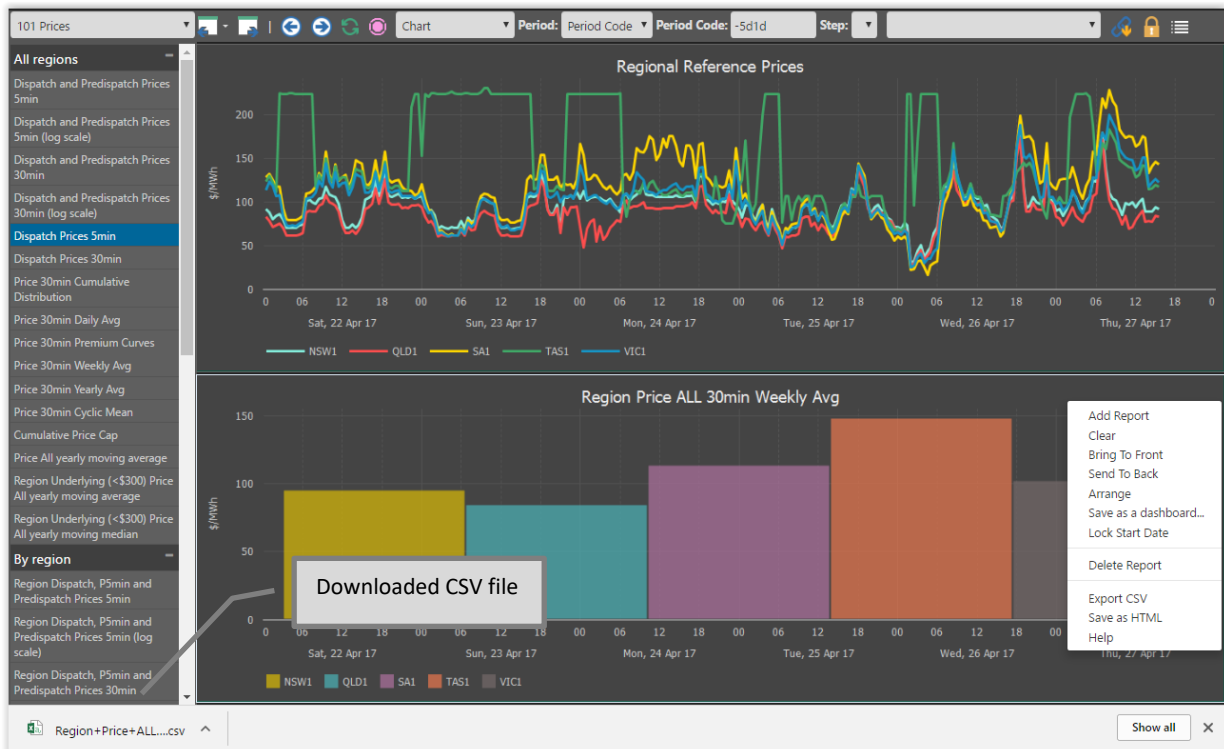
### 5.5 Delete a report

1. Select a report and click the 'Delete Report' menu option.



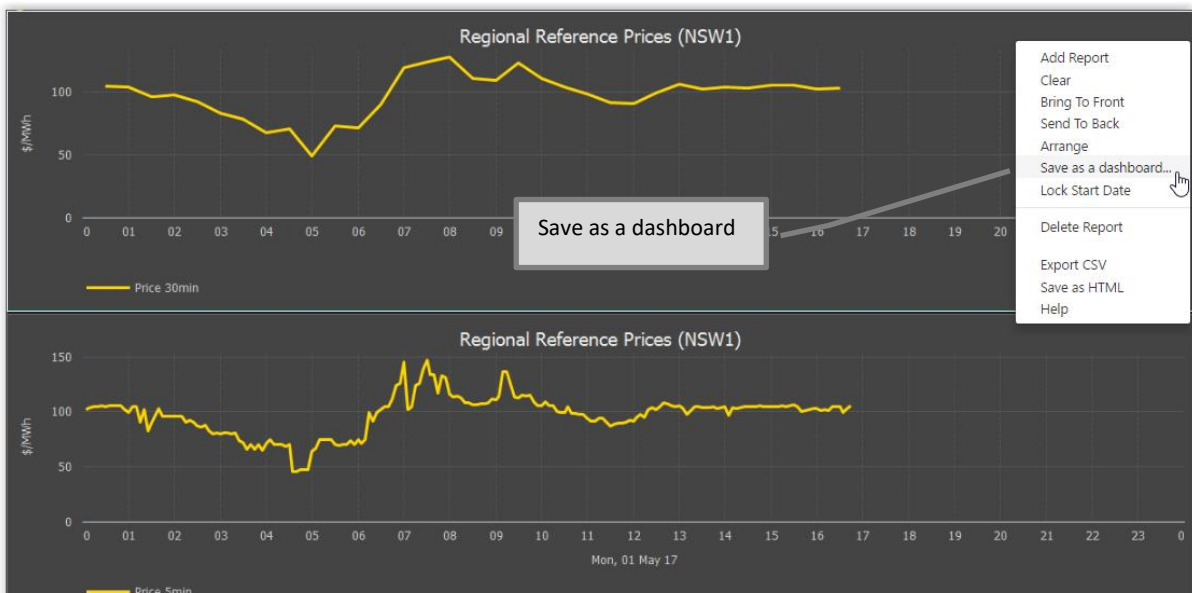
## 5.6 Export report data into a CSV file

1. Select a report and click the 'Delete Report' menu option.

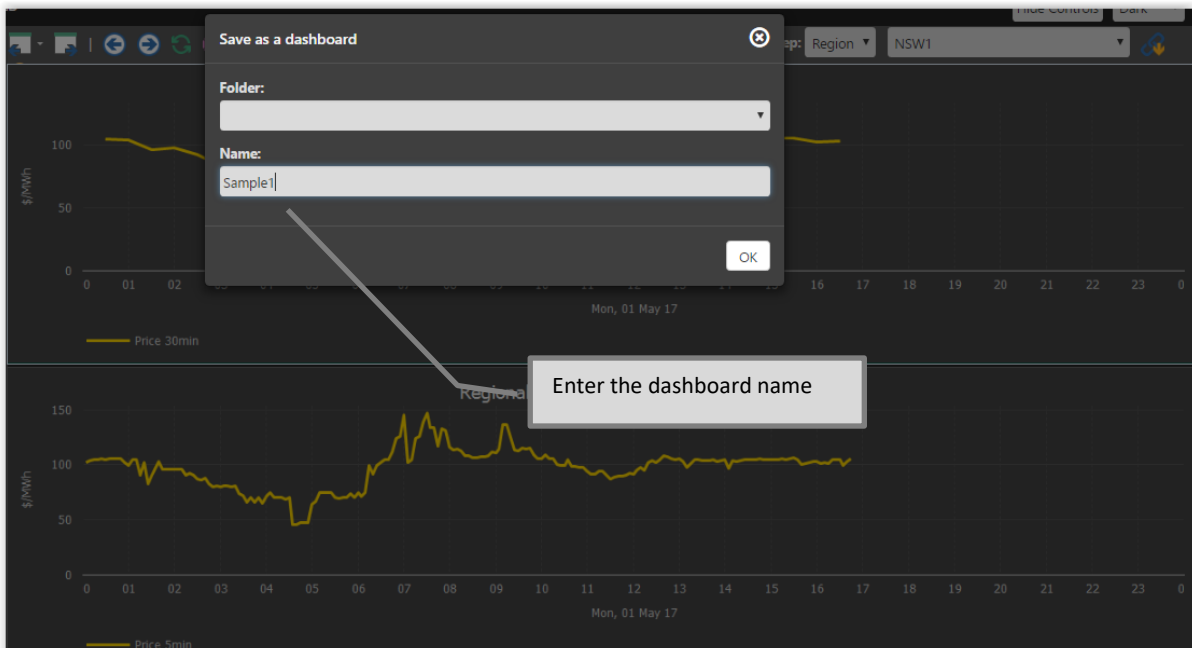


## 5.7 Reports save as a Dashboard

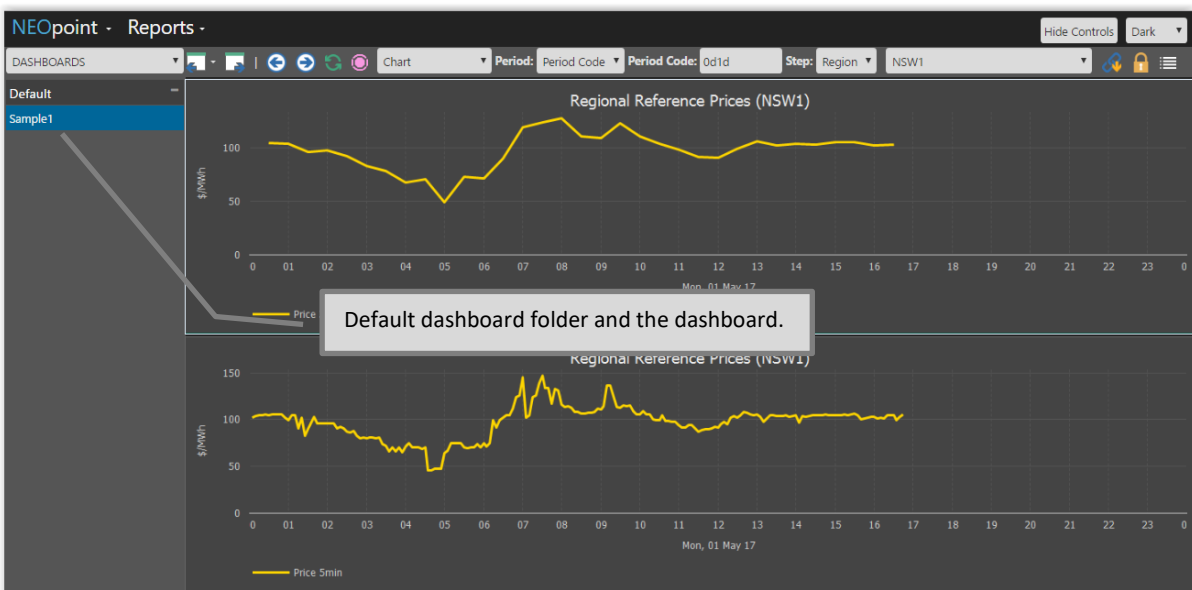
1. Arrange reports and select the 'Save as a dashboard' menu option.



2. Enter a dashboard name. Click OK button. A dashboard must create inside a folder. Default dashboard folder automatically create for you.



3. Go to the DASHBOARD folder and select the saved dashboard to view.



## 5.8 Save as HTML

1. Open multiple reports. All reports must have 'Period Code' selected as report period.
2. Select the 'Save as HTML' menu option.
3. Reports save as standalone HTML page and automatically download the HTML file.

The screenshot shows the NEOpoint Reports interface. The top navigation bar includes '103 Generation', 'Chart', 'Period: Daily', 'Start Dates: 26 Apr 2017', and 'Steps: Region NSW1'. The left sidebar lists various report categories. The main area contains two charts: 'Regional Reference Prices (NSW1)' and 'Region Demand 30min (NSW1)'. A context menu is open over the demand chart, with 'Save as HTML' selected. Below the charts are two data tables:

DateTime	Bairnsdale.TotalCleared_30min
26/04/2017 00:30:00	20
26/04/2017 01:00:00	20
26/04/2017 01:30:00	20
26/04/2017 02:00:00	20
26/04/2017 02:30:00	20
26/04/2017 03:00:00	0.8
26/04/2017 03:30:00	0
26/04/2017 04:00:00	0
26/04/2017 04:30:00	0
26/04/2017 05:00:00	0
26/04/2017 05:30:00	0
26/04/2017 06:00:00	0

DateTime	NSW1.Demand 30min
26/04/2017 00:30:00	6731.7
26/04/2017 01:00:00	6595.5
26/04/2017 01:30:00	6422.67
26/04/2017 02:00:00	6229.69
26/04/2017 02:30:00	5925.52
26/04/2017 03:00:00	5738.13
26/04/2017 03:30:00	5586.11
26/04/2017 04:00:00	5549.49
26/04/2017 04:30:00	5573.81
26/04/2017 05:00:00	5634.64
26/04/2017 05:30:00	5905.52
26/04/2017 06:00:00	5905.52

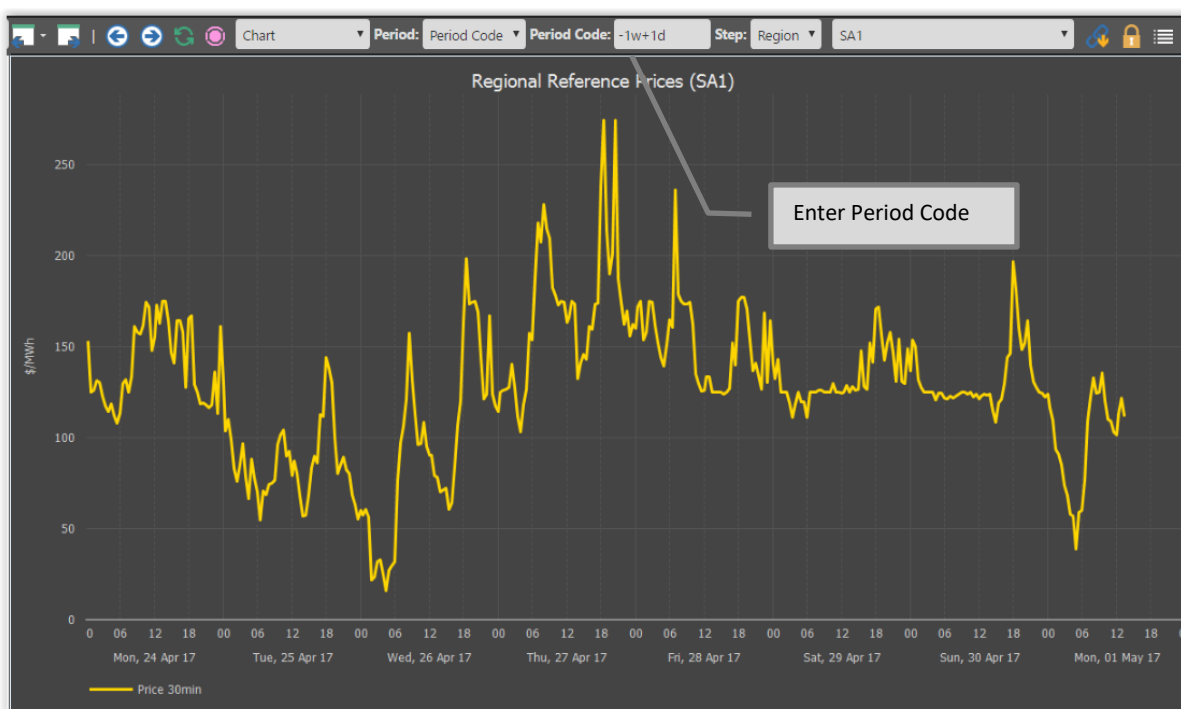
4. Open the HTML file using any browser.

The screenshot shows a web browser window displaying the standalone HTML file. The browser address bar shows 'file:///C:/Users/Vajira/Downloads/Standalone.html'. The content is identical to the screenshot above, showing the two charts and data tables.

## 6 Use Period Code

Select the 'Period Code' option from the **Period** drop-down list. This will cause the **Start Date** selectors to hide and the **Period Code** text box to appear.

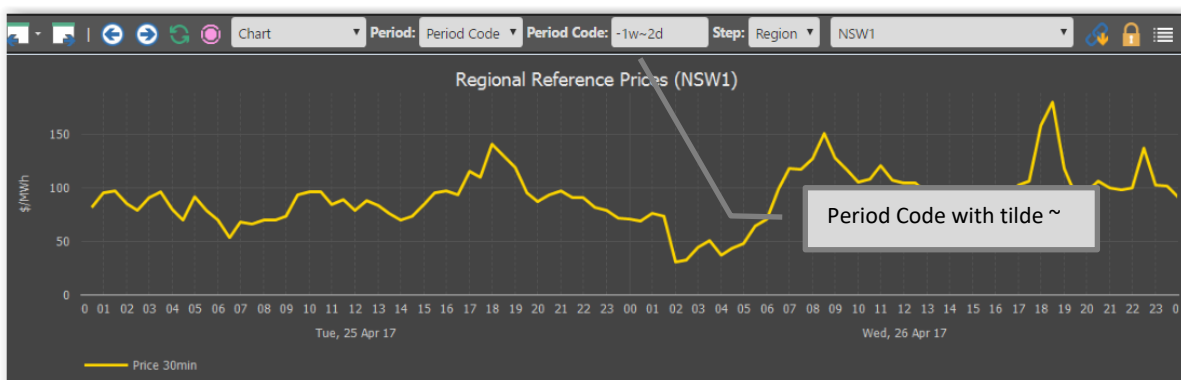
As an example type -1w+1d (-1w1d) in the **Period Code** text box and refresh the report. Report data display for last 8 days including current date.



Period codes:

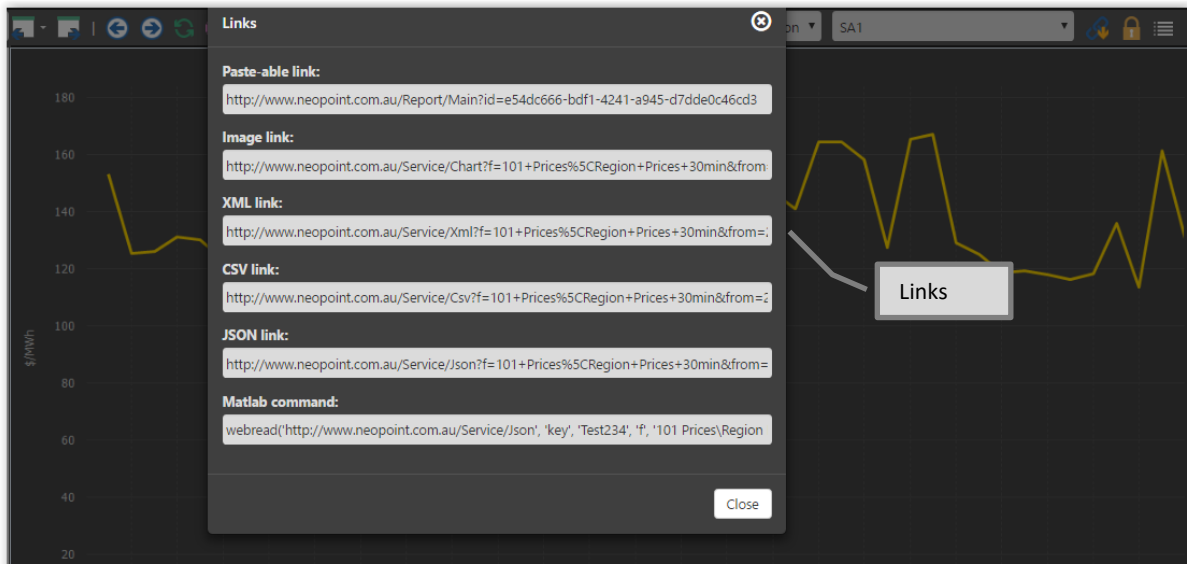
- y = year(s)
- m = month(s)
- w = week(s)
- d = calendar day(s)
- h = hour(s)
- l = minute(s)
- g = 6am offset ( -1gd+1gd )
- t = 4am offset ( -1td+1td )

You can also use tilde (~) to calculate the report to date based on how many periods from the report from date, i.e. -1w~1d means the report from date is 1 week before the start of current day and the report to date is 1 day after the report from date.

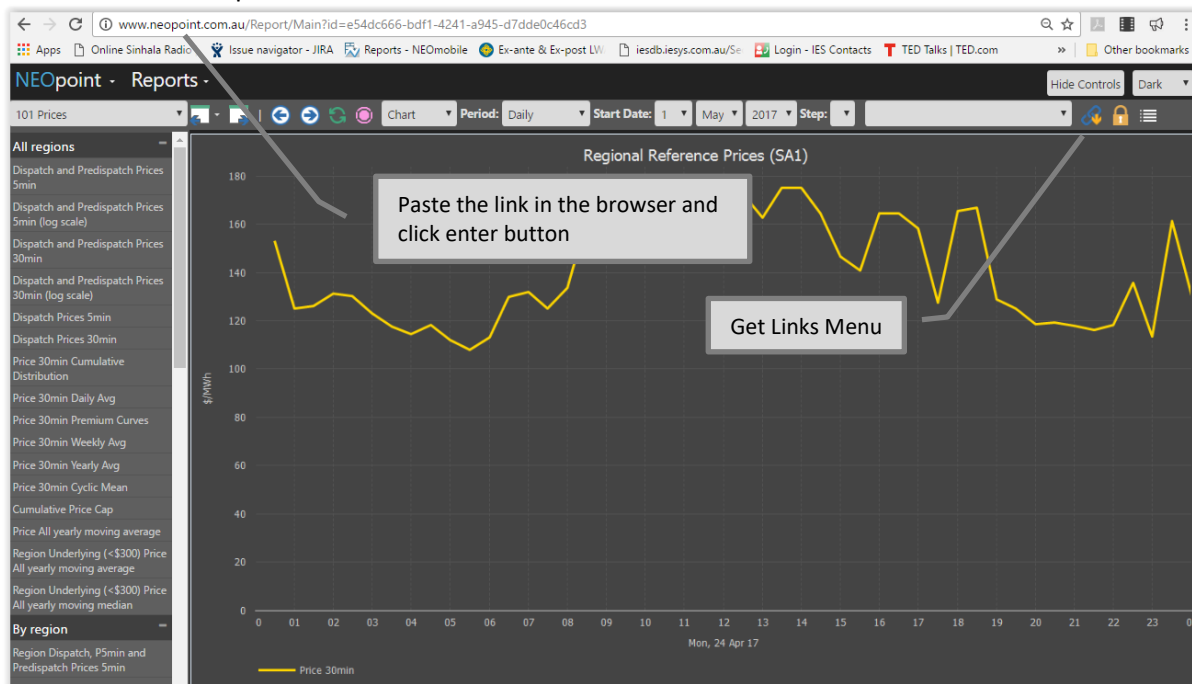


## 7 Get Links

Links dialog box open when selecting the Get Links menu option in the tool bar. As an example, select, copy the paste-able link.



Paste the above-copied link into a new browser window.



The CSV download link by default is for the merged view so it only shows sections that have datetime in the first column but when a report has no sections with datetime then nothing will be displayed in the download file.

There are two ways around this:

- Modify the link so section=0 instead of -1; or
- Click on the menu button on the pane and select "Export CSV".



## 8 View Reports History

Back and Forward buttons to go through and view history reports.

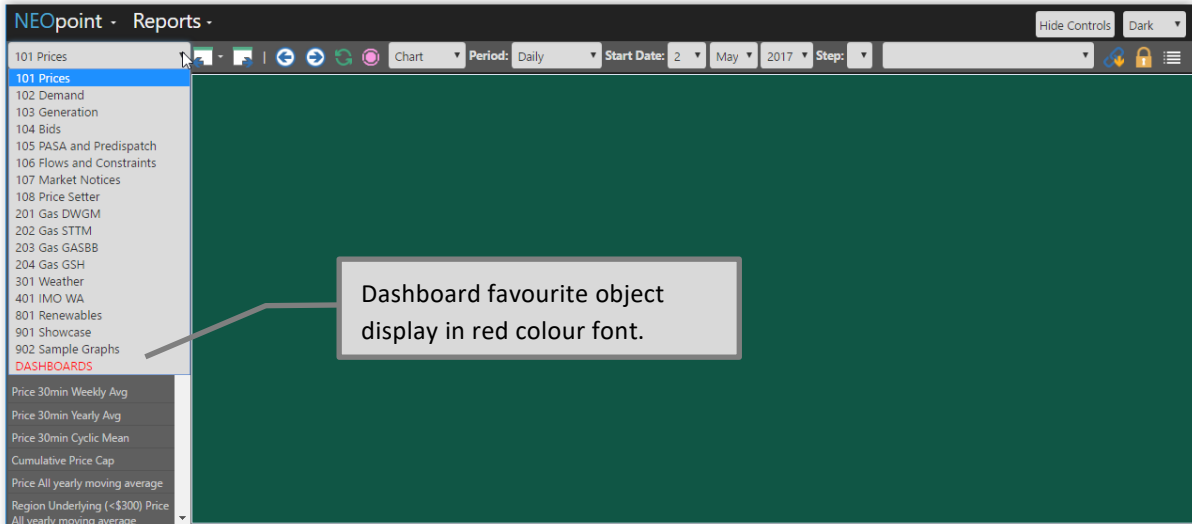
The screenshot displays the NEOpaint Reports interface. At the top, there is a navigation bar with the title "NEOpaint - Reports -" and a "Dark" theme toggle. Below this, a dropdown menu shows "101 Prices". The main area is divided into a left sidebar with a list of reports under "All regions" and a central pane showing a list of report titles. A callout box with a white background and a grey border points to the "Forward" and "Backward" report history buttons in the top navigation bar. The callout text reads "Forward and Backward report history buttons".

Report titles visible in the list include:

- Region Price ALL 30min Yearly Avg, 2017-05-01, Daily
- Region Reserve 5min (NSW1), 2017-05-01, Daily
- Region Demand, Imports + Price (5min), 2017-05-01, Daily
- Region Demand + D
- Region Demand 30min
- 04 Constraint binding
- Regional Reference Prices, 2017-05-01, Daily
- Region Demand 30min (NSW1), 2017-05-01, Daily
- Pricesetter fueltype and region demand (NSW1), 2017-05-01, Daily
- Pricesetter Station 30min (NSW1), 2017-05-01, Daily
- Large Portfolios Snapshot (Latest), 2017-05-01, Daily
- Region / Plant Total Cleared 5min (NSW1, Generator), 2017-05-01, Daily
- Region Operational Demand + Forecast 30min ALL, 2017-05-01, Daily
- Dispatch and Predispach Prices 5min, 2017-05-01, Daily

## 9 Dashboards

The Dashboard page select using the DASHBOARD favourites.



NEOpaint - Reports -

101 Prices  
102 Demand  
103 Generation  
104 Bids  
105 PASA and Predispatch  
106 Flows and Constraints  
107 Market Notices  
108 Price Setter  
201 Gas DWGM  
202 Gas STTM  
203 Gas GASBB  
204 Gas GSH  
301 Weather  
401 IMO WA  
801 Renewables  
901 Showcase  
902 Sample Graphs  
**DASHBOARDS**

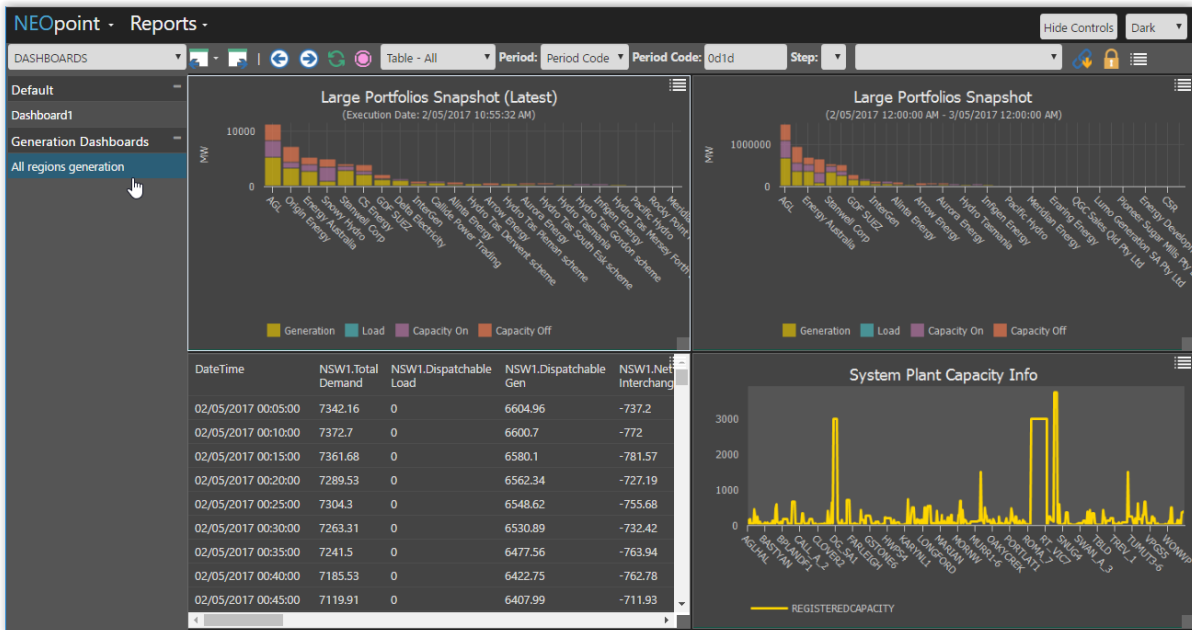
Price 30min Weekly Avg  
Price 30min Yearly Avg  
Price 30min Cyclic Mean  
Cumulative Price Cap  
Price All yearly moving average  
Region Underlying (<\$300) Price  
All yearly moving average

Hide Controls Dark

Chart Period: Daily Start Date: 2 May 2017 Step:

Dashboard favourite object display in red colour font.

Dashboards page lists all the dashboards that have been created.



NEOpaint - Reports -

DASHBOARDS Table - All Period: Period Code Period Code: 0d1d Step:

Default  
Dashboard1  
Generation Dashboards  
All regions generation

Large Portfolios Snapshot (Latest)  
(Execution Date: 2/05/2017 10:55:32 AM)

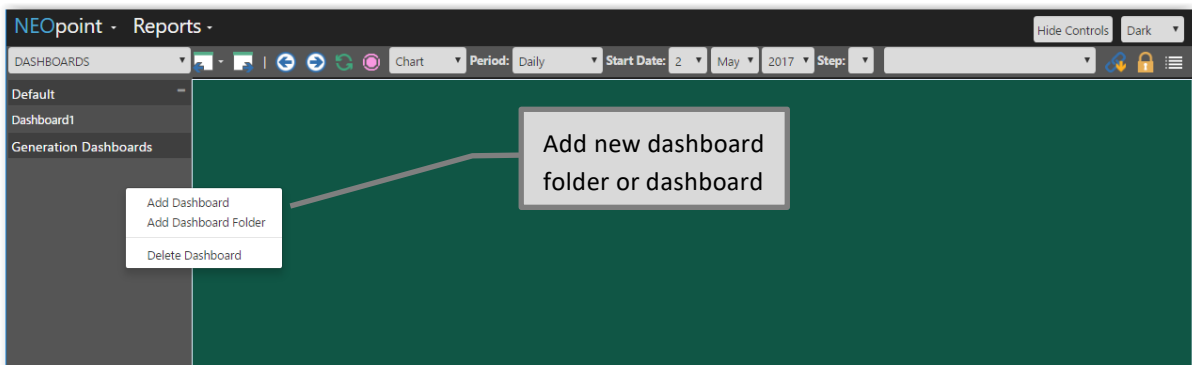
Large Portfolios Snapshot  
(2/05/2017 12:00:00 AM - 3/05/2017 12:00:00 AM)

DateTime	NSW1.Total Demand	NSW1.Dispatchable Load	NSW1.Dispatchable Gen	NSW1.Net Interchange
02/05/2017 00:05:00	7342.16	0	6604.96	-737.2
02/05/2017 00:10:00	7372.7	0	6600.7	-772
02/05/2017 00:15:00	7361.68	0	6580.1	-781.57
02/05/2017 00:20:00	7289.53	0	6562.34	-727.19
02/05/2017 00:25:00	7304.3	0	6548.62	-755.68
02/05/2017 00:30:00	7263.31	0	6530.89	-732.42
02/05/2017 00:35:00	7241.5	0	6477.56	-763.94
02/05/2017 00:40:00	7185.53	0	6422.75	-762.78
02/05/2017 00:45:00	7119.91	0	6407.99	-711.93

System Plant Capacity Info

REGISTERED CAPACITY

Right click on the right side panel and select ADD DASHBOARD FOLDER menu option to add a new folder.



NEOpaint - Reports -

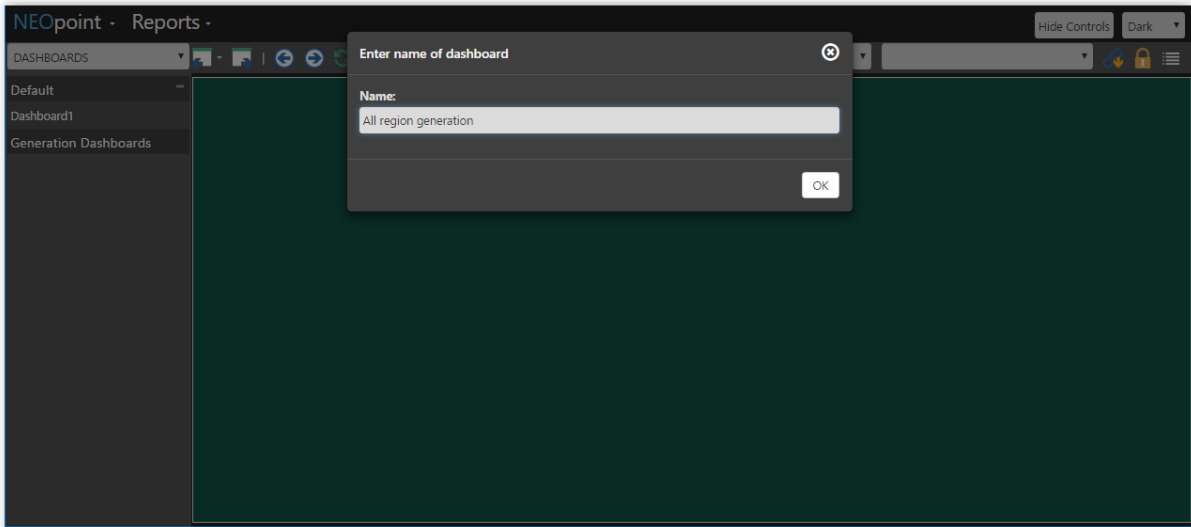
DASHBOARDS Chart Period: Daily Start Date: 2 May 2017 Step:

Default  
Dashboard1  
Generation Dashboards

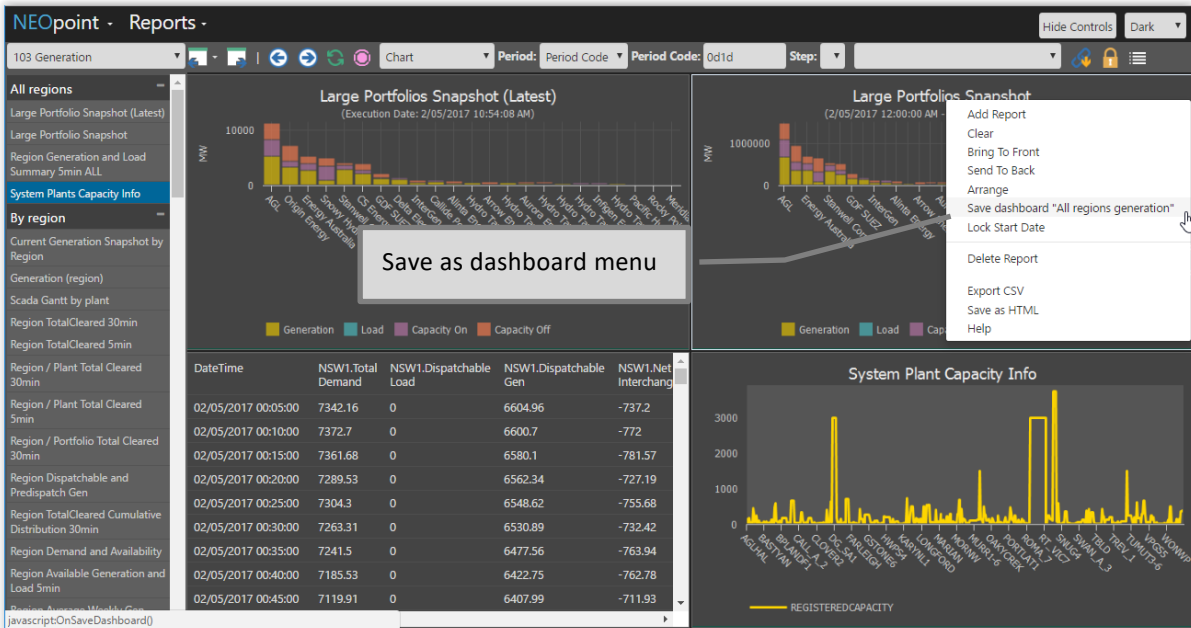
Add Dashboard  
Add Dashboard Folder  
Delete Dashboard

Add new dashboard folder or dashboard

Enter the dashboard name, click OK button, and newly created dashboard display under the dashboard favourite object.



Select reports, arrange and save as a dashboard.



## 10 All Reports

This page lists down all reports used in NEOpoint. User allows expanding and collapsing list of reports under the heading section in the list. Search text box is located top of the page. Enter search string and click the SEARCH button to highlight report names with the search string.

The screenshot displays the 'AllReports' page in the NEOpoint application. At the top, there is a search bar with the text 'profile' and a search icon. Below the search bar, the page is organized into five main columns, each representing a report category. Each category has a sub-heading and a list of individual reports. The reports are listed in a grid format, with some reports highlighted in orange. The categories and their respective reports are as follows:

101 Prices	102 Demand	103 Generation	104 Bids	105 PASA and Predispatch
All regions	All regions	All regions	By region	MTPASA
Dispatch and Predispatch Prices 5min	Demand 5min	Large Portfolio Snapshot (Latest)	Region Bids in Price Ranges 5min	MTPASA Projection
Dispatch and Predispatch Prices 5min (log scale)	Demand 30min	Large Portfolio Snapshot	Region Bids in Actual Price Ranges 5min	MTPASA Outlook NSW
Dispatch and Predispatch Prices 30min	Demand ALL 30min Duration curves	Region Generation and Load Summary 5min ALL	Region Merit Order Stack 5min	MTPASA Outlook QLD
Dispatch and Predispatch Prices 30min (log scale)	Demand 30min (sum)	By region	Region Rebids in Price Ranges 5min	MTPASA Outlook SA
Dispatch Prices 5min	Demand 5min (sum)	Current Generation Snapshot by Region	By portfolio	MTPASA Outlook TAS
Dispatch Prices 30min	Total vs Region Demand 30min	Generation (region)	By station	MTPASA Outlook VIC
Price 30min Cumulative Distribution	Operational Demand + Forecast 30min	Scada Gantt by plant	Station Bids in Price Ranges 5min	MTPASA 3 Hours Delta
Price 30min Daily Avg	Operational Demand 30min	Region TotalCleared 30min	Station Bids in Actual Price Ranges 5min	MTPASA 3 Hours Comparison
Price 30min Premium Curves	By region	Region TotalCleared 5min	Station Rebids in Price Ranges 5min	MTPASA Delta since last update
Price 30min Weekly Avg	Demand 5min by Region	Region / Plant Total Cleared 30min	By plant	MTPASA Delta since yesterday
Price 30min Yearly Avg	Demand 30min by Region	Region / Plant Total Cleared 5min	By corporation	MTPASA Delta since 7 days ago
Price 30min Cyclic Mean	Operational Demand 30min by Region	Region / Portfolio Total Cleared 30min	By fuel	MTPASA Delta since 1 month ago
Cumulative Price Cap	Demand 30min Daily Statistics	Region TotalCleared Cumulative Distribution 30min	By load	STPASA
Price All yearly moving average	Demand Duration Curve 5min	Region Available Generation and Load 5min	Corporation Bids in Price Ranges 5min Reverse	STPASA Projection
Region Underlying (<\$300) Price All yearly moving average	Demand Duration Curve 30min	Region Average Weekly Gen Profile 30min	Plant Load Bids Actual Price 5min Reverse	STPASA Outlook NSW
Region Underlying (<\$300) Price All yearly moving median	Demand Daily Energy 30min	Region Avg Daily Gen Profile (Flat, Peak, Off-Peak) 30min	Plant Load Bids in Price Ranges 5min Reverse	STPASA Outlook QLD
By region	Reserve 5min	Region Availability, Dispatch and Demand 30min	Plant Load Rebids in Price Bands 5min Reverse	STPASA Outlook SA
Region Dispatch, P5min and Predispatch Prices 5min	Demand, Imports and Prices	Region Total Cleared, Capacity & Availability 30min	Station Load Bids in Price Ranges 5min Reverse	STPASA Outlook TAS
Region Dispatch, P5min and Predispatch Prices 5min (log scale)	Demand + Demand and NonSchedGen 30min	Region Capacity Utilisation 30min	By MNSP	STPASA Outlook VIC
Region Dispatch, P5min and Predispatch Prices 30min	Demand 30min and 5min	Region Generation and Load 30min	MNSP Bids in actual price 5min	Predispatch
Region Dispatch, P5min and Predispatch Prices 30min (log scale)	Demand 30min Average Weekly Profile	Region Generation and Load 30min	MNSP Bids in price range 5min	Predispatch Forecast
	Demand 30min Profile (Flat, Peak, Off-Peak)	Region Generation and Load 5min	By system	Weather and Demand
	Demand 30min Overlay Week	Region Plants Dispatch Percentages 30min	System Bids in Price Ranges 5min	Region Available Generation and Projection
	Demand 5min Forecast Adjustment	Region Registered Capacity	System Max Avail 5min	Region Demand and Projection 5min
	Demand 5min NSW v VIC Scattergraph	Region Semi-scheduled LUIGF and Intermittent		Region RRP and Projection 5min
	Region Demand AVG Daily Price			

## 11 Events Page

Recently run report events, including error messages display in the Event View.

NEOpoint - Events -					
Index	DateTime	Category	Message	Module	EventType
0	06/12/2016 15:43:33		Opening Report:'Region Price ALL 30min Cumulative Distribution' SingleType=":	Report	Event
1	06/12/2016 15:43:33		'#MMS (IES) icloud\Report\Services\NEOpointZ\Prices\New\1 EnergyPrice\Region Price ALL 30min Cumulative Distribution'; Title: 'Region Price ALL 30min Cumulative Distribution'	Report	UserAction
2	06/12/2016 15:43:33		#MMS (IES) icloud\Variable\Australia\MMS R6\Dispatch\1 Dispatch-Price, Demand and Flows\1 EnergyPrice\Region Price by Region 30min	VariableProvider	Action
3	06/12/2016 15:43:33		select REGIONID, SETTLEMENTDATE, RRP as "Price_30min" from MMS.TRADINGPRICE where SETTLEMENTDATE between to_date('2016/12/6 0:0:0', 'yyyy/mm/dd hh24:miss') and to_date('2016/12/7 0:0:0', 'yyyy/mm/dd hh24:miss') order by REGIONID	MMS (IES) icloud	Query
4	06/12/2016 15:43:33		Autodetecting Rebid=False, Sparse Bids=False, Collation=True, Vector Collation=False, Single Trace Tag Names=False, Spanning=False, Transpose=0 (0), nullis0=0.	MMS (IES) icloud	Event
5	06/12/2016 15:43:33		Records read 150. Execution time 0 secs. Read time 0 secs.	MMS (IES) icloud	Event

## 12 Alerts Page

The Alerts page list all the alerts that belong to the current account. It allows you to Insert, Duplicate and Remove alerts.

When user click on the Send test alert button, it will immediately trigger alert and send the test email.



User must tick one of the checkboxes to enable alerts notifications.

The screenshot shows the NEOpoint Alerts page. On the left, the 'Alert list' tab is active, displaying two alerts:

- Region P5minPrice**: QLD1 Greater than 0, vajira@iesys.com
- Region Price 5min**: QLD1 Greater than 40, ron@iesys.com

Buttons for 'Insert new alert', 'Duplicate alert', and 'Remove alert' are visible. On the right, the 'Selected alert' configuration is shown for the first alert:

- Variable**: Region P5minPrice
- Instance**: QLD1
- Condition**: Greater Than
- Value**: 0
- Email**: vajira@iesys.com
- Delay before retrigger (mins)**: 0
- Sound**: Elec noise short.mp3
- Enable email alerts**:
- Enable mobile alerts**:
- Send test alert**: Button

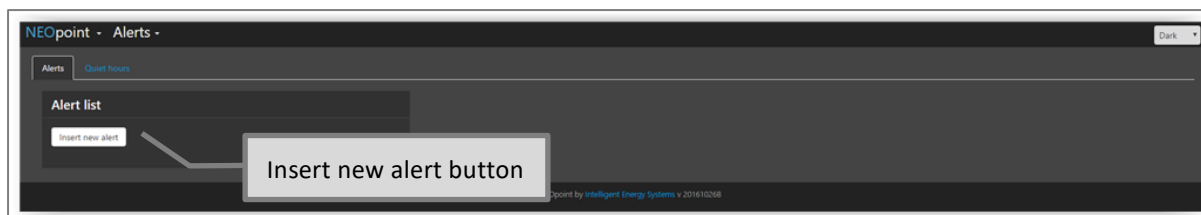
The Quiet hours tab is the place user can select hours that they are not wish to get alert notifications.

The screenshot shows the NEOpoint Alerts page with the 'Quiet hours' tab active. The configuration is a grid where users can select hours they do not wish to be alerted. The grid is titled 'Select hours you do not wish to be alerted: (Click at top of column to toggle entire column, or left of row to toggle entire row)'. The columns represent days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat) and the rows represent hours of the day (0 to 23). The grid shows that hours 8 through 19 are selected for quiet hours on Monday, Tuesday, Wednesday, and Thursday.

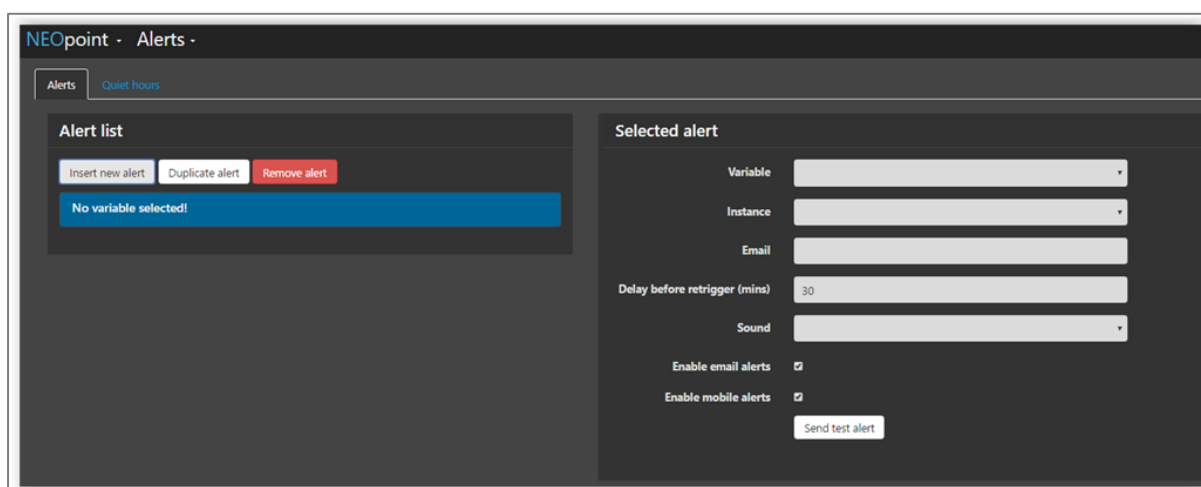
Time of day	Sun	Mon	Tue	Wed	Thu	Fri	Sat
0							
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

## 12.1 Create an Alert

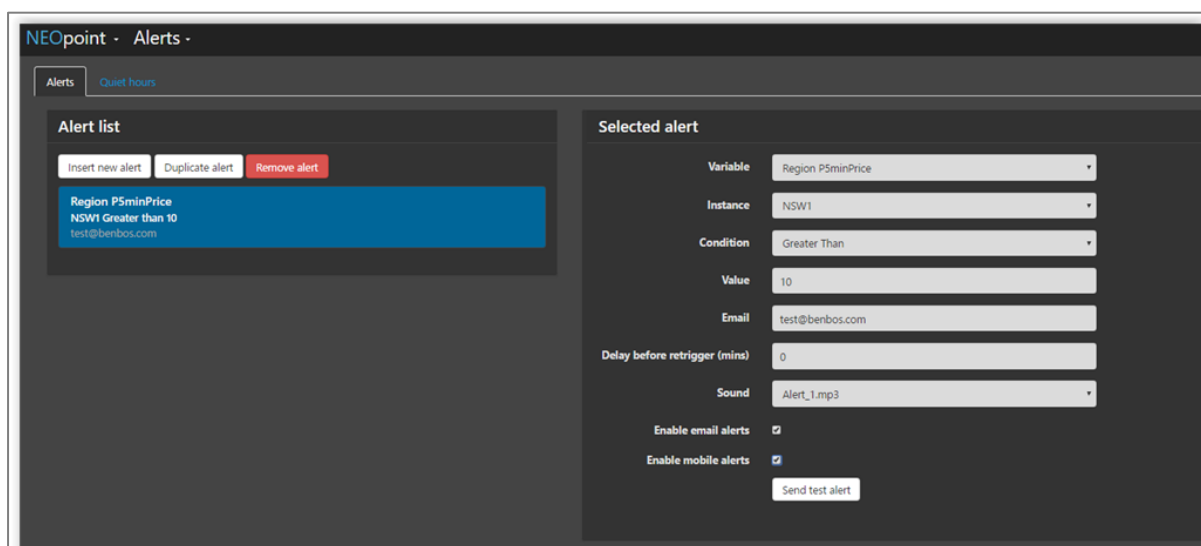
1. Select the Alerts menu option from the menu list.
2. Click on the INSERT NEW ALERT button.



3. Select a variable. DUPLICATE ALERT button duplicates the selected alert and REMOVE ALERT button deletes the selected alert.



4. Select data fields appropriately. Enter the email address and tick the Enable email alerts check box to activate the Alert.



5. Click the SEND TEST ALERT button to test the created alert. This will sent an email and a record will be displayed in the Alert Notification page.

## NEOpoint - Alert Notifications -

[Delete history](#)

Datetime	Email	DeviceId	Message	Report	Sound
2016-11-30 15:25:00	vajira@iesys.com		P5min in QLD1 will be \$265.72. For 30-NOV-2016 15:25 [DI=15:00]		Elec noise short.mp3
2016-11-30 15:25:00	vajira		P5min in QLD1 will be \$295.00. For 30-NOV-2016 15:25 [DI=14:55]		Elec noise short.mp3



## 13 Alert Notifications Page

Alert Notifications page display all executed Alerts. When you click on the Message link, it will open related Alert.

NEOpoint - Alert Notifications -

Delete history

Datetime	Email	DeviceId	Message	Report	Sound
2016-11-30 15:25:00	vajira@iesys.com		P5min in QLD1 will be \$265.72. For 30-NOV-2016 15:25 [DI=15:00]		Elec noise short.mp3
2016-11-30 15:25:00	vajira		P5min in QLD1 will be \$295.00. For 30-NOV-2016 15:25 [DI=14:55]		Elec noise short.mp3

## 14 About Page

The About page display important NEOpoint information such as authentication mode, user account name, lists of favourites that user can view, version number and list of errors for NEOpoint.

**NEOpoint** ▾ **About** ▾

### About the product

NeoPoint is Copyright (C) 2015 by Intelligent Energy Systems (IES).  
Please send any requests or bug reports to [neosupport@iesys.com](mailto:neosupport@iesys.com) or call us on 02-9436-2555 and ask for Neo support.

### Login details

You are in 'Forms' authentication mode with account 'iesys.com'.

You can view the following Favourites:

- Main Favourites\102 Demand
- Main Favourites\104 Bids
- Main Favourites\103 Generation
- Main Favourites\105 PASA and Predispatch
- Main Favourites\106 Flows and Constraints
- Main Favourites\107 Market Notices
- Main Favourites\201 Gas DWGM
- Main Favourites\202 Gas STTM
- Main Favourites\203 Gas GASBB
- Main Favourites\301 Weather
- Main Favourites\101 Prices
- Main Favourites\901 Showcase
- Main Favourites\801 CEC
- Main Favourites\902 Sample Graphs
- Main Favourites\108 Price Setter
- NeoDashboard\IESWeb

### Custom NeoDashboard samples

NeoDashboard is an optional module for NeoPoint and allows easy creation of complex dashboards with charts, tables and data driven displays. All display elements are automatically updated when new data becomes available. Please contact us for more details on how to create custom dashboards. [You can check out some samples here.](#)

### System

The Model file is loaded and there are 106 object types.

The Local workspace file is loaded.

The main workspace is correctly configured and contains 38323 objects.

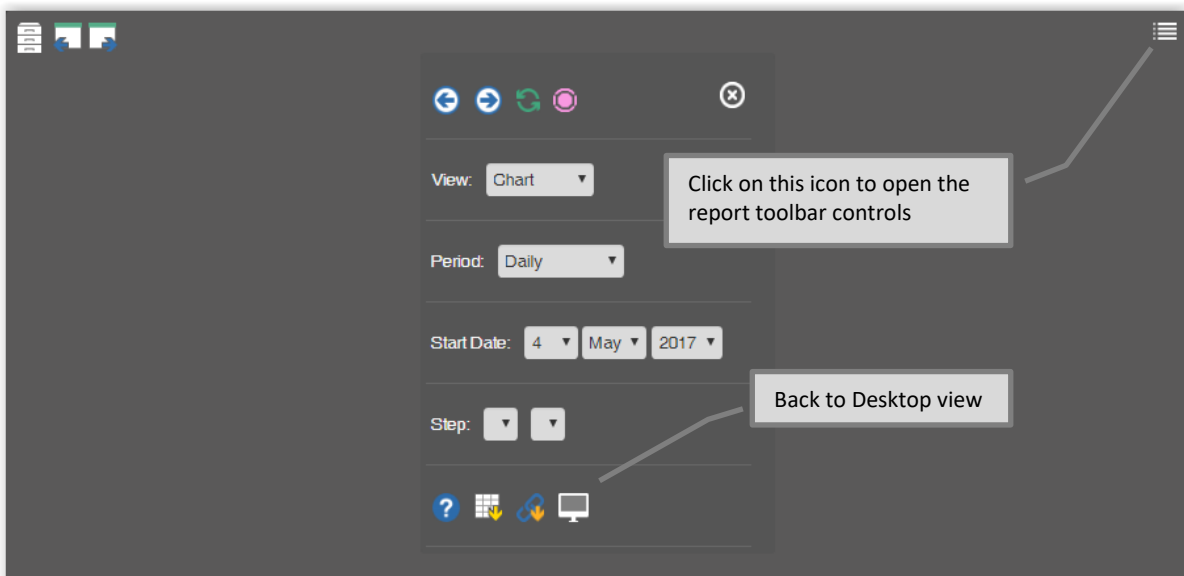
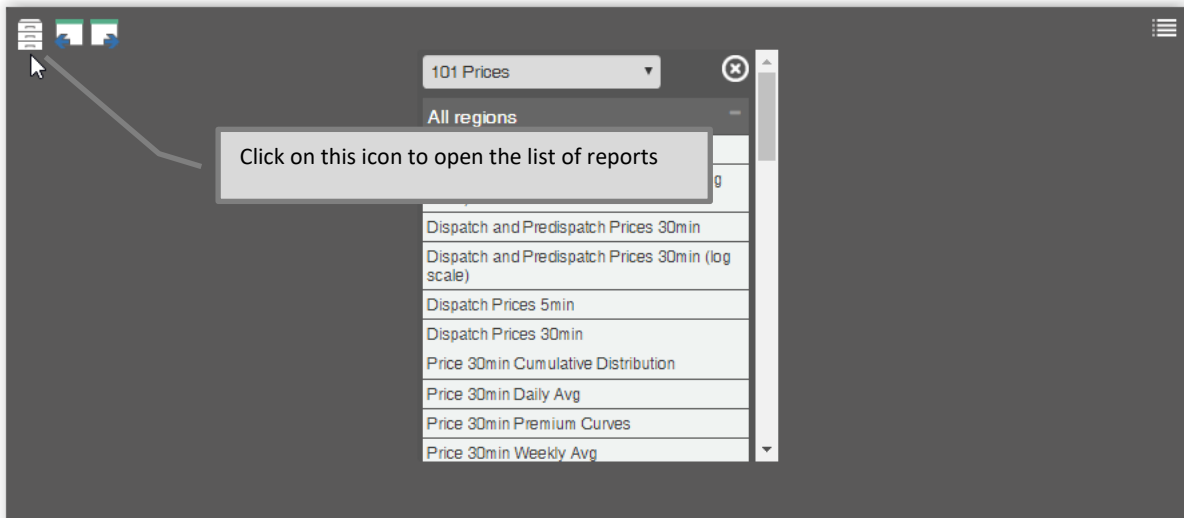
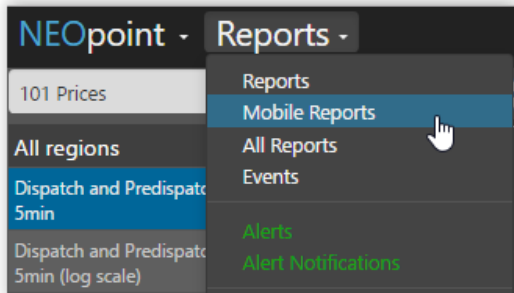
### ActivityLog

The Activity Log is enabled.

The Activity Log is operating normally and has written out 41 rows.

## 15 NEOpoint Mobile View

Use NEOpoint mobile view for tablets and smartphones. Select the Mobile Reports menu option to open the mobile view as in the image below.



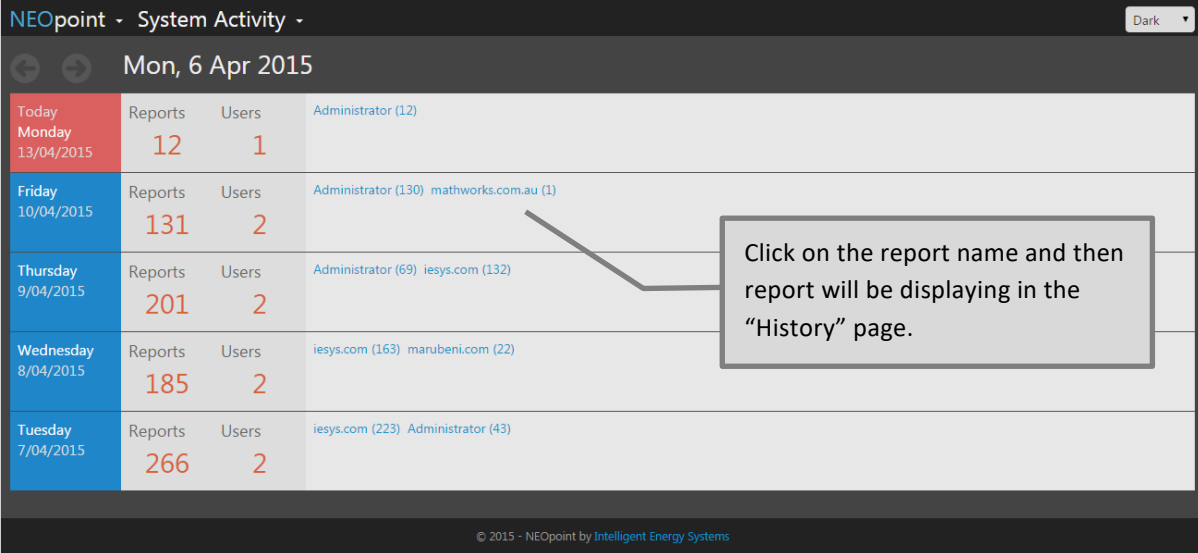
## 16 System Events Page

The System Events page allows viewing all the events related to NEOpint system start up. Some of the displayed events are system initialisation, authentication mode, load favourites related to the authentication mode and errors.

NEOpint - System Events -					
Index	DateTime	Category	Message	Module	EventType
75	2016-12-06 15:38:49		In object 'Region Demand All 30min', section Axes, Row 1 has a duplicate Type and is therefore ignored.	ChartLoader	Warning
76	2016-12-06 15:40:15		Report: Unrecognised Target='Chart Axes Label[H]'. Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning
77	2016-12-06 15:40:15		Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning
78	2016-12-06 15:40:34		In object 'Interconn Flow and Limits 5min (V-SA)', section Axes, Row 1 has a duplicate Type and is therefore ignored.	ChartLoader	Warning
79	2016-12-06 15:40:35		In object 'Region Demand 5min (SA1)', section Axes, Row 1 has a duplicate Type and is therefore ignored.	ChartLoader	Warning
80	2016-12-06 15:40:58		Report: Unrecognised Target='Chart Axes Label[H]'. Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning
81	2016-12-06 15:40:58		Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning
82	2016-12-06 15:45:26		In object 'Region Demand 5min (SA1)', section Axes, Row 1 has a duplicate Type and is therefore ignored.	ChartLoader	Warning
83	2016-12-06 15:45:27		In object 'Interconn Flow and Limits 5min (V-SA)', section Axes, Row 1 has a duplicate Type and is therefore ignored.	ChartLoader	Warning
84	2016-12-06 15:48:25		Report: Unrecognised Target='Chart Axes Label[H]'. Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning
85	2016-12-06 15:48:25		Report: Unrecognised Target='Chart Axes Label[H]'.	ChartLoader	Warning

## 17 System Activity Page

A site Administrator can view seven days of system activities at one time including number of reports run and number of logins. Forward and backward buttons allow viewing previous or next week's data. User names are clickable and allow viewing each user's activities in the **User Activity** page.



NEOpaint - System Activity - Dark

Mon, 6 Apr 2015

Day	Reports	Users	Users
Today Monday 13/04/2015	12	1	Administrator (12)
Friday 10/04/2015	131	2	Administrator (130) <a href="#">mathworks.com.au</a> (1)
Thursday 9/04/2015	201	2	Administrator (69) <a href="#">iesys.com</a> (132)
Wednesday 8/04/2015	185	2	<a href="#">iesys.com</a> (163) <a href="#">marubeni.com</a> (22)
Tuesday 7/04/2015	266	2	<a href="#">iesys.com</a> (223) Administrator (43)

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## 18 Report Usage Page

Administrator can view report usage for selected date period including/excluding weekends. Select a start date and an end date and then click on UPDATE button. Usage by report details will be displayed. Select a report name in the list and then date, distinct users and hit count details display for the selected report.

The screenshot displays the NEOpoint ReportUsage interface. At the top, there are date selection fields for Start Date (20 Oct 2016) and End Date (27 Oct 2016), along with an 'Include Weekends' checkbox and an 'Update' button. The main content is divided into two sections: 'Usage by report' and 'Regional Reference Prices'.

**Usage by report**

Report	Avg Hits / Day	Avg Unique Visitors / Day	Total Visitors
NEM Regional FCAS Prices	0.34	0.02	5
Region Demand 5min	0.26	0.01	4
03 - System Withdraw Merit Order Stack Intraday D+0	0.19	0.00	1
Regional Reference Prices	0.19	0.02	6
STPASA Last 10 runs	0.17	0.00	1
Dispatch and Predispatch Prices 5min	0.15	0.01	4
Regional Price Sensibilities	0.14	0.00	1
02 - System Withdraw Bidstack Intraday D+0	0.14	0.00	1
Dispatch and Predispatch Prices 5min	0.14	0.02	5
Region Price ALL 30min Cyclic Mean	0.13	0.01	2
Wind Farm Generation 5min by Region Stacked	0.13	0.00	1
MTPASA Outlook SA	0.12	0.01	2
Region Snapshot	0.10	0.01	4
Region Price 30min and 5min	0.09	0.00	1
Dispatch and Predispatch Prices 30min	0.08	0.01	4
Market Notices	0.08	0.00	1
Region Price ALL 30min Daily Avg	0.07	0.01	3
Region Dispatch and Predispatch Prices 30min	0.07	0.00	1
Region Price ALL 30min Weekly Avg	0.07	0.01	3
DWGM Prices Graph	0.06	0.01	3
Live Generation	0.06	0.01	4
Region Dispatch, P5min and Predispatch Prices 5min	0.06	0.01	2
Region Price ALL 30min Yearly Avg	0.06	0.01	3
00 - System Inject Bidstack	0.05	0.00	1
00 - System Inject Bidstack Intraday D+0	0.05	0.00	1
Interconn Flow 5min	0.05	0.01	2
Region Dispatch, P5min and Predispatch Prices 30min	0.05	0.01	4
NEM Regional FCAS Prices - log scale	0.05	0.01	3
Region Demand All 5min	0.04	0.00	1
Binding Energy Constraints	0.04	0.01	2
DWGM Withdrawals	0.04	0.01	3
Interconn Flow 30min	0.04	0.01	2

**Regional Reference Prices**

Date	Distinct Users	Hit Count
2016-10-20	3	31
2016-10-21	3	15
2016-10-23	1	1
2016-10-24	2	5
2016-10-26	2	5

**2016-10-24**

Account	IP Address	Hit Count
administrator	220.233.158.187	4
sesys.com	220.233.158.187	1

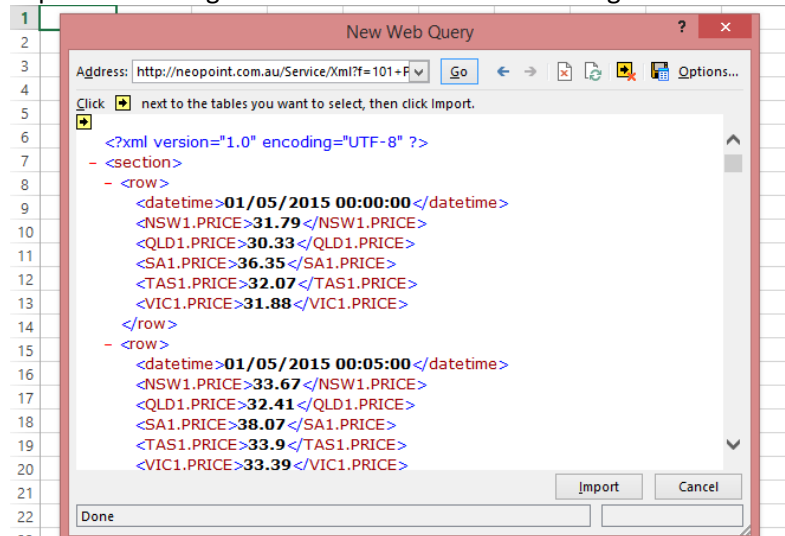
## 19 Import data from NEOpoint to Excel

Run a report in NEOpoint and click on the “Get links” icon in the report tool bar to grab the XML link for the report data you wish to export.

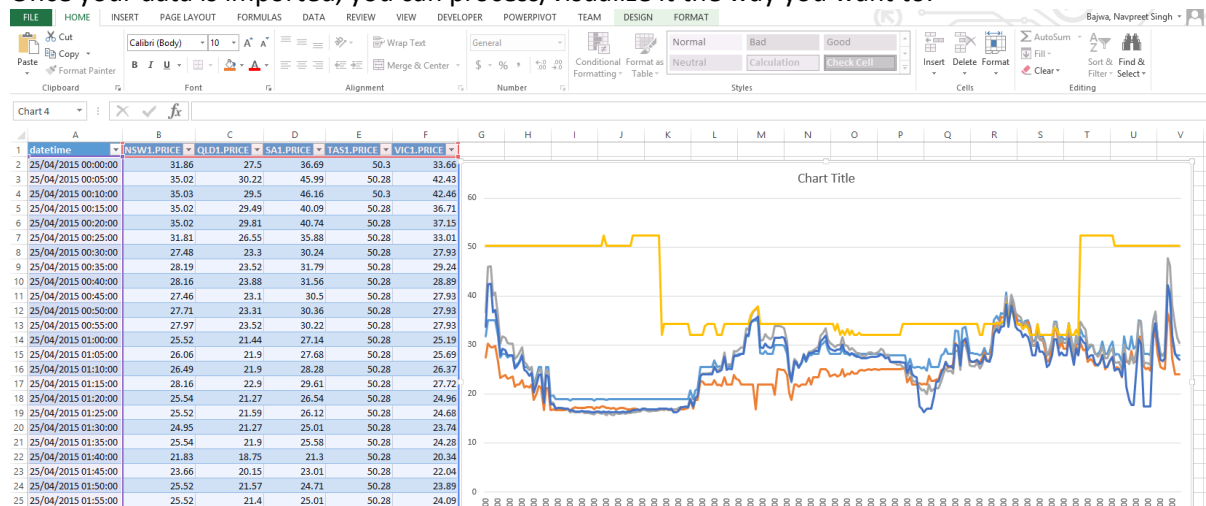
XML link (for Excel):

<http://dev.neopoint.com.au/Service/XML?f=101+Prices%5cDispatch+and+Predispatch+Pric>

In Excel, go to the Data Tab. Click on the “From Web” menu option and paste the copied link. Import copied data using the IMPORT button as in the image below.

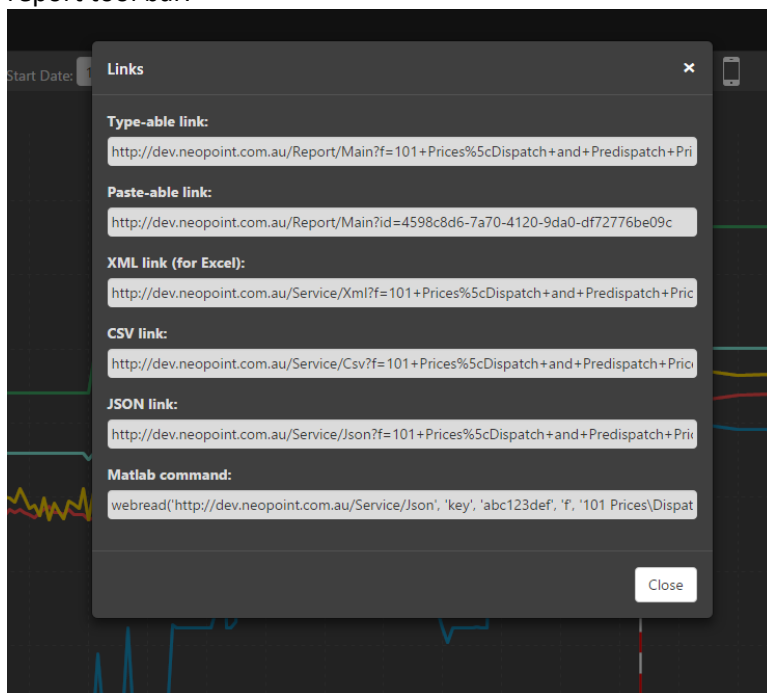


Once your data is imported, you can process/visualize it the way you want to.



## 20 Import data from NEOpoint to Matlab

Run the report that you want to import in NEOpoint and then click on the “Get links” icon in the report tool bar.



Copy the Matlab command from the list of links and do the next steps in Matlab.  
In Matlab, paste the command and get the output into a variable of name ‘data’

```
Trial>> data = webread('http://neopoint.com.au/Service/Json', 'key', 'abc123def', 'f', '101 Prices\Dispatch and Predispach Prices 5min', 'from', '8/05/2015 12:00:00 AM', 'period', 'Daily', 'pc', '', 'instances', '', 'section', '-1');
Trial>> data

data =

190x1 struct array with fields:

    DateTime
    NSW1_PRICE
    QLD1_PRICE
    SA1_PRICE
    TAS1_PRICE
    VIC1_PRICE
```

For example `webread('http://dev.neopoint.com.au/Service/Json', 'key', 'abc123def', 'f', '101 Prices\Region Dispatch, P5min and Predispach Prices 5min', 'from', '26/04/2015 12:00:00 AM', 'period', 'Daily', 'pc', '', 'instances', 'NSW1', 'section', '-1')`

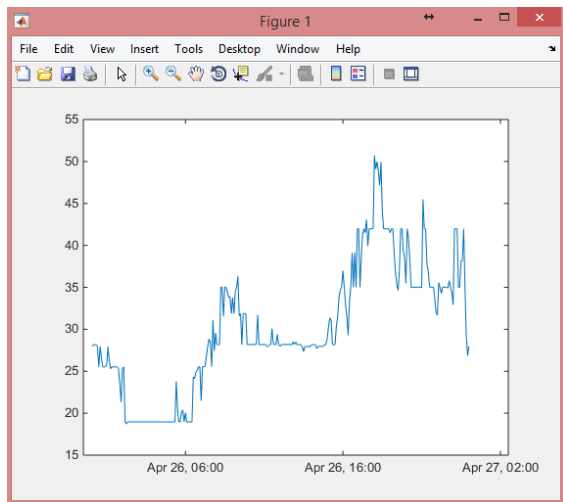
Press Enter to run the command, this should import the data for the report into Matlab in variable ‘Data’

Now, to plot this data, use the following command

```
X = {data.DateTime}';
X = datetime(X, 'InputFormat', 'yyyy-MM-dd HH:mm:ss');
Y = [data.NSW1_RRP]';
```

```
plot(X,Y)
```





## 20.1 Getting timeout error

If you are getting Timeout error for large size of data, create weboptions and set timeout to a larger value.

For example: `options = weboptions('TimeOut',120);`

And use the options as last argument in webread command.

For example:

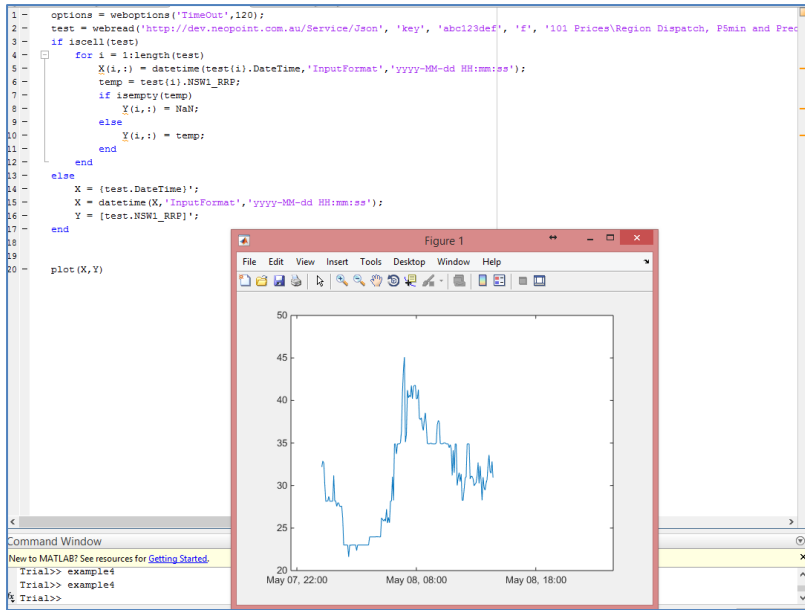
```
data = webread('http://neopoint.com.au/Service/Json', 'key', 'abc123def', 'f', '101 Prices\Dispatch and Predispatch Prices 5min', 'from', '8/05/2015 12:00:00 AM', 'period', 'Daily', 'pc', '', 'instances', '', 'section', '-1', options);
```

## 20.2 How to handle missing data

To handle empty or null values as in case of some reports, using the following commands

```
options = weboptions('TimeOut',120);
test = webread('http://dev.neopoint.com.au/Service/Json', 'key',
'abc123def', 'f', '101 Prices\Region Dispatch, P5min and Predispatch
Prices 5min', 'from', '08/05/2015 12:00:00 AM', 'period', 'Daily', 'pc',
'', 'instances', 'NSW1', 'section', '-1',options);
if iscell(test)
    for i = 1:length(test)
        X(i,:) = datetime(test{i}.DateTime,'InputFormat','yyyy-MM-dd
HH:mm:ss');
        temp = test{i}.NSW1_RRP;
        if isempty(temp)
            Y(i,:) = NaN;
        else
            Y(i,:) = temp;
        end
    end
else
    X = {test.DateTime}';
    X = datetime(X,'InputFormat','yyyy-MM-dd HH:mm:ss');
    Y = [test.NSW1_RRP]';
end

plot(X,Y)
```



## 21 Import data from NEOpoint to R

R is a very popular open source language based on the S language and used for statistical data analysis. Simplest way to read is via CSV format.

To get CSV link, run the report that you wish to import and on the “Get links” icon in the report tool bar.

Copy the CSV link from the box.

CSV link:

```
http://dev.neopoint.com.au/Service/Csv?f=101+Prices%5cDispatch+and+Predispatch+Pric
```

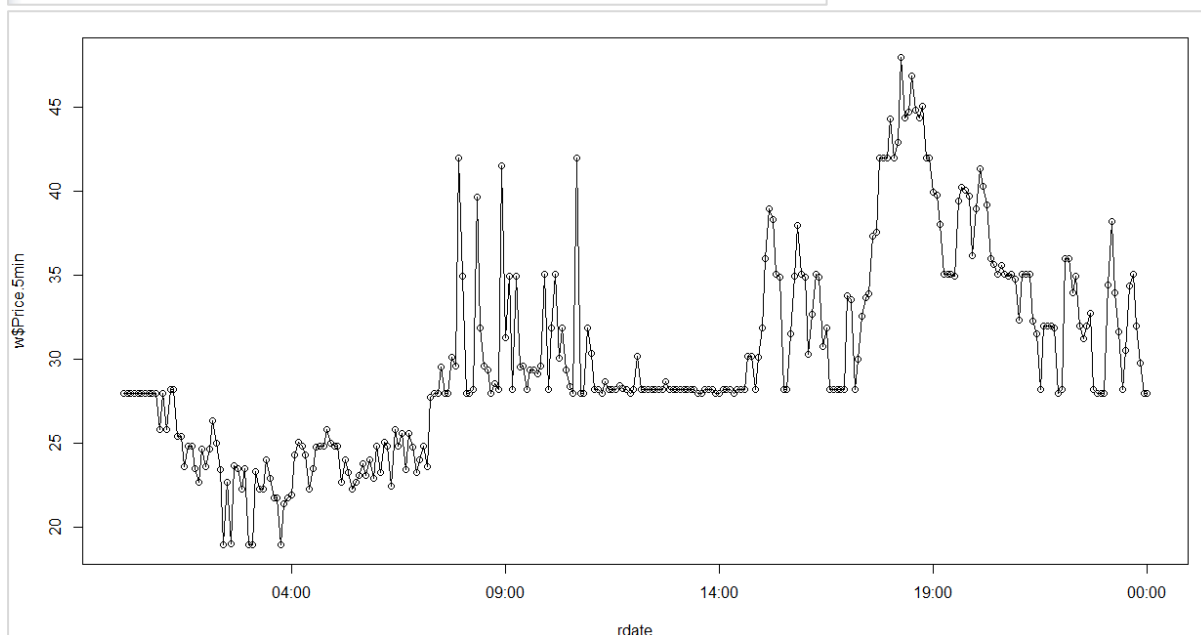
To read the data into R, use the read.csv command and paste the URL link

```
Read.csv(file="URL")
```

Following lines of code shows how to plot a chart using the loaded data.

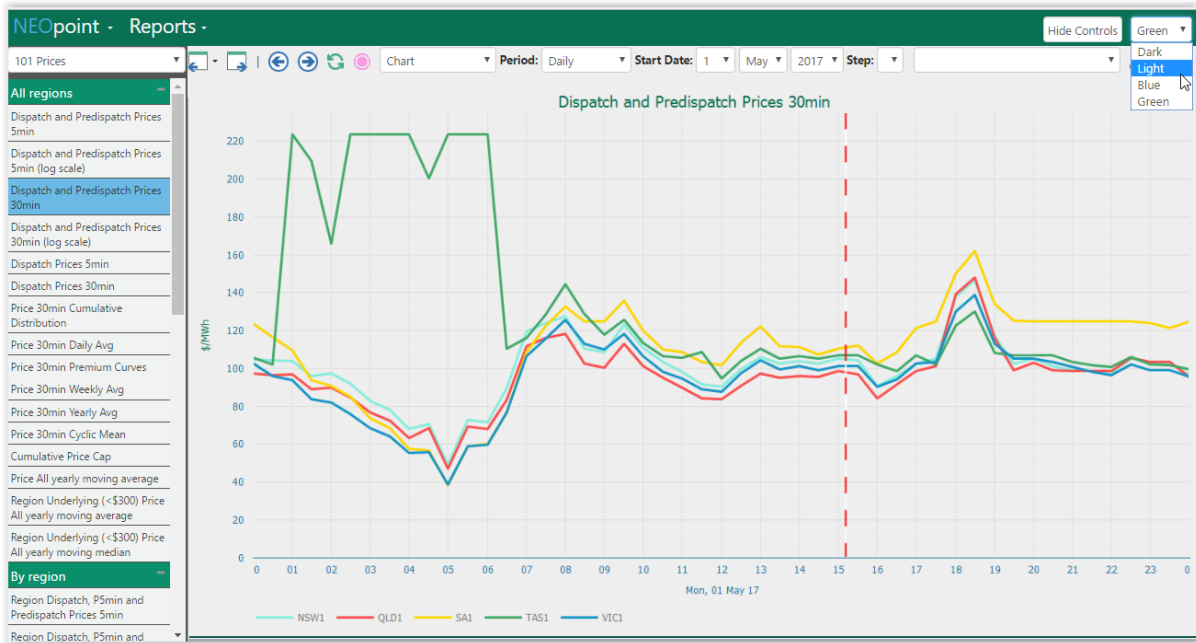
Added more lines to convert the first column from string to datetime and plot it again.

```
> w=read.csv(file="http://localhost:52419/Service/Cs
>
> plot(w$DateTime, w$Price.5min)
> lines(w$DateTime, w$Price.5min)
> rdate<-strptime(w$DateTime, "%Y-%m-%d %H:%M:%S")
> plot(rdate, w$Price.5min)
> lines(rdate, w$Price.5min)
> |
```



## 22 Change NEOpoint Screen Themes

To change theme, use the dropdown on the top right hand corner. Currently, NEOpoint has 4 different themes as Dark, Light, Blue and Green that affects the page scheme and reports as well. Reports are styled in NEO for those themes.



## 23 Contact NEOpoint support

NEO Support contact details are also available on the **About** page:

NEOpoint ▾ About ▾

### About the product

NeoPoint is Copyright (C) 2015 by Intelligent Energy Systems (IES).

Please send any requests or bug reports to [neosupport@iesys.com](mailto:neosupport@iesys.com) or call us on 02-9436-2555 and ask for Neo support.

E-mail: [NEOsupport@iesys.com](mailto:NEOsupport@iesys.com)

Phone: +61 2 9436 2555

Fax: +61 2 9436 1218