Because sometimes we need your help to lighten the load.
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Overview
The purpose of this document is to provide participants with a simple guide on how to use the iOS version of the Demand Response application.

This guide is intended for participants who have only one, or a small number of sites signed up to our Demand Response programme.

Demand Response Application
The Demand Response iPhone Application can be downloaded on the App Store by searching for ‘Demand Response’.

Further Information
Further information can be found on our website, including:

- current demand response programmes being offered
- case studies you could learn from
- Request for Proposal forms
- FAQs

Support
For anything regarding contracts or expressing interest in signing up to demand response programmes, please contact us.

For any support queries, please send an email to the support mailbox at DRMS@ems.co.nz.

<table>
<thead>
<tr>
<th>Demand Response Manager</th>
<th>Demand Response Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quintin Tahau</td>
<td>Che Lewis</td>
</tr>
<tr>
<td><a href="mailto:Quintin.Tahau@transpower.co.nz">Quintin.Tahau@transpower.co.nz</a></td>
<td><a href="mailto:Che.Lewis@transpower.co.nz">Che.Lewis@transpower.co.nz</a></td>
</tr>
</tbody>
</table>
Registrations

Once you have a signed contract in place with us we will setup your Registration/s in our Demand Response Management System – you’ll then be able to view them in the application.

A Registration contains details of your location or site, including the amount of load reduction your location or site has registered for.

The first time you login to the App you should look at the Registrations that have been setup. If you have any questions or if any of these details are incorrect, please email us at DRMS@ems.co.nz.

Viewing Registrations

The menu displays a list of active Registrations you have in the programme.

- You can access the menu by touching the menu symbol at the top left hand corner.
- Tapping a Registration will bring you to the Registration screen which will show all of the current and past events that it has been involved in.

Registration Information

Tapping the information symbol in the upper right hand corner will bring up details such as the sites:

- Address
- Network Company
- Installation Control Point (ICP). An ICP is a unique identifier that all sites are assigned with in New Zealand
- Load reduction amounts. What resources are used to provide it and how much can be provided from each resource during an event
Event Process

Demand Response Event Required

When Transpower identifies a need to call a Demand Response event, then an Offer Window is opened at least 3 hours in advance of the Event start time.

When the Offer Window is opened an email notification is sent with the following information:

- the amount of demand response (kW) requested for each registration.
- the maximum price ($/MWh) to provide demand response.
- the event start and end time.

Offer Window Open

The offer will be open for at least 30 minutes for you to accept, decline or counter offer through the demand response application.

If you plan on countering the offer, then there are a few rules based to keep in mind:

- The price bid to Transpower must be equal to or less than the original price offered by us.
- The amount of demand response being offered back to us must be no less than 50% of what the site is registered for in the programme.

You can revise your offer as many times as you want while the offer window is open.

If you have more than one registration then you must submit a bid for each registration that you want to participate in the Event.

Offer Window Closed

Offer Windows remain open for at least 30 minutes. An email notification will be sent to you when the offer window has closed.

During this status no more bids/offers can be submitted while we select which offers we will accept into the event.

- Bids/offers are generally accepted in merit order, based on price. So, if you bid in at a lower price than other participants then you are more likely to be accepted for the Event.
- If multiple bids have the same price then the submission time is used to rank them with the earliest having priority.

Scheduled

An event notification will be sent at least 2 ½ hours in advance of the Event start time, advising if you have been accepted or denied. If your bid has been accepted, you are now scheduled to participate in the Event. If you were not scheduled then the Event will be denied if you submitted bids for multiple Registrations then take care to check the status of each.

Demand Response Event

Once you have been ‘scheduled’ into an Event it is then up to you to deliver the demand response you offered for the full duration of the event.
Viewing Events

Current Events

Using the menu you can navigate to the current events screen.

- The current events screen will display all upcoming events as well as any past events that have yet to be calculated for settlement payments.
- Touching an event will bring you to the event details screen

Event Details

On this screen you can see more details about the event such as the target kW amount and the price offered for the event

- You can also tap the Locations for this event button which will bring you to the Registration details screen.
- Tap Set a reminder to your iPhone calendar for the start and end times of the event.
- If you want to share an event with someone then use the Share event button which will allow you to email the details of the event to whoever you want.

During the Offer Window Open status of an event you will want to navigate to the ‘event details’ screen so that you can ‘Make an offer’

Make an Offer

On the Make an offer screen you can change the demand kW level you will respond with for the event or change the price you want to offer. If you are happy with the kW and $/MWh then tap the Submit offer button.
Demand Response – iPhone user guide

Event Settlements
Below is a high-level diagram showing the Demand Response Event Settlement process. Event Settlements occur after a DR Event to determine the level of DR provided by each Registration. We use the information provided when your locations were set up in our main system and data from your electricity meter. Most of this process happens in the background and you usually don’t have to do anything, but we update the Event status at each step.

Settlement Process
Demand Response Event Completed
After an Event is completed the next step will be to measure and verify your response.

Settlement Incomplete
When the Event is in this status it means that we need to obtain your electricity meter data. In most cases we will be able to gain access to it on your behalf, if not we can work together to find a way to obtain it. Once we have your meter data we can determine your response level (in kWh) for the event.

Settlement Pending
During this status we review your response to work out:

- How much demand response you provided
- Your overall performance percentage for the Event (compared to what we agreed when you were confirmed for the Event)
- Your delivery fee

If we determine that you did not provide the demand response target during the event, then we will let you know so that we work out how we can meet those targets in future. In some cases your payment may be affected.

Settlement Complete
Once we have reviewed your response your event will remain in a Settlement Complete status until the end of the month.

Settlement Invoiced
At the start of each month we begin our billing process, including a buyer-created tax invoice which include:

- The delivery fees for all events that have changed to a status of ‘settlement completed’ within the previous month
- The availability fee for the previous month if you have contracted one with us.
- Any Establishment fees owing if you have contracted one with us

We then send a copy of the invoice to you and it will be paid out to you normally by the 2nd Wednesday of the month.

Once this is done the events in the app will change status to Settlement Invoiced.
Viewing Settlements

**All Events**

Using the menu you can navigate to the All events screen.

- The all events screen will display all current and past events which include all events that have some form of settlement status.
- Tapping an Event will take you to the *Event Details* screen.

**Event Details**

For events that are in a Settlement status you will now see details on your registrations performance for those events.

<table>
<thead>
<tr>
<th><strong>Trading Period</strong></th>
<th>Each 30 minute period that starts on the hour or half hour is called a Trading Period. Each day has 48 trading periods(^1) starting with midnight to 00:29 as Trading Period 1.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target</strong></td>
<td>The kWh you were required to deliver for each Trading Period. Remember that Trading Periods are half hour periods, so if you agreed to deliver 200kW, then that’s 100kWh for each Trading Period (200kW for 30 mins).</td>
</tr>
<tr>
<td><strong>CBL/Gen</strong></td>
<td>The estimate of what your electricity consumption would have been for that Trading Period had you not participated in the event.</td>
</tr>
<tr>
<td><strong>Reduction</strong></td>
<td>The estimate of your demand response, which is based on your actual meter data compared to your CBL/Gen.</td>
</tr>
</tbody>
</table>

To achieve 100% performance you will need each period of the events ‘Reduction’ amount to be equal to or greater than the ‘Target’ amount.

If you have any questions about a particular Event Settlement calculation or questions about the calculation methodologies in general then please contact us at [DRMS@ems.co.nz](mailto:DRMS@ems.co.nz).

\(^1\) Except the days when daylight savings time changes, with 46 (for the short day in September) and 50 (for the long day in April).