

# **Information Sheet Embedded Generation**



## Embedded Generation

As an owner of an embedded generating station (a generating station connected to a local network) you have obligations under the Electricity Industry Act 2010 (Act) and the Electricity Industry Participation Code 2010 (Code) that relate to the following matters:

- preparation for selling
- offering
- reporting.

This information sheet provides a general introduction to your obligations as an embedded generator under the Act and the Code. Please refer to the Act and the Code to ensure you have a complete understanding of your obligations. You can access this information on the Electricity Authority's (Authority) website: <http://www.ea.govt.nz>

*The general approach set out in this information sheet in no way reduces the requirement upon participants to know and comply with their obligations under the Act and the Code. Neither should it be interpreted as reflecting the Authority's view on the Act or the Code.*

## Preparatory obligations

Before generating there are certain obligations that you must fulfill.

Action	Obligations	Relevant provision	Contact
Connection agreement	You should have completed connection with the relevant distributor that you are connecting to.	Relevant distributors terms and conditions for connection and part 6 of the Code	Relevant distributor
Registering as a participant	You must register if your total generation is greater than 5 MW in capacity or if you intend to buy/sell electricity yourself to/from the clearing manager.  Ensure that you are registered as a participant with the Authority, as being registered offers a number of advantages.	Sections 9, 10 and 27 – 31 of the Act	Locate the registration form on the Authority's website: <a href="http://www.ea.govt.nz">www.ea.govt.nz</a>
Conveyance arrangements	Contact the relevant distributor to discuss the connection and conveyancing arrangements that need to be in place for any electricity trading.	Clause 15.3 of the Code	Refer to the ENA website <a href="http://www.ena.org.nz">www.ena.org.nz</a> to identify your local distributor
Advise system	If any generating unit is greater than 1	Clauses	<a href="mailto:system.operator@transpower.co.nz">system.operator@transpower.co.nz</a>

Action	Obligations	Relevant provision	Contact
operator	MW in capacity, you will need to advise the system-operator, Transpower, of your intention to connect, together with related information such as an asset capability statement (ACS).	8.21(2) and 8.25(4) of the Code	More information can be found at: <a href="http://www.systemoperator.co.nz/offer-and-bid-setup">http://www.systemoperator.co.nz/offer-and-bid-setup</a>
Advise the clearing manager	As an embedded generator you can sell your electricity either to the clearing manager, to a trader trading on the network in which you are embedded. You will need to notify the clearing manager, you intend to sell your generation to at least five days before generation starts and provide appropriate details.	Part 14 of the Code	<a href="mailto:cm@nzx.com">cm@nzx.com</a>
Advise the market administrator	If you sell electricity to the clearing manager, you have responsibilities for the provision of metering, registry updates, submission information to the reconciliation manager, and must be a certified reconciliation participant  The market administrator will also assign you a participant identifier that must be used in all market transactions	Clauses 15.38 and 15.39 of the Code	Email <a href="mailto:retailoperations@ea.govt.nz">retailoperations@ea.govt.nz</a>
Advise the reconciliation manager	You will need to notify the reconciliation manager, you intend to sell your generation to the clearing manager at least five days before generation starts and comply with the requirements.	Clause 15.3 of the Code	<a href="mailto:rm@nzx.com">rm@nzx.com</a>
Comply with the requirements in the Code for trading of electricity	You will need to comply with the requirements for registry maintenance, provision of metering and submission information.	Parts 10 and 11, and clauses 15.4 and 15.5, and parts 15.2 to 15.5 of the Code	
Provide information to the Authority	You will need to comply with the requirements for provision of information requested by the Authority.	Clause 12.54 of the Code	<a href="mailto:info@ea.govt.nz">info@ea.govt.nz</a>

## Offer obligations

If you own an embedded generating station greater than 10 MW in capacity, the system operator, Transpower, may require you to provide market offers under clause 8.25(5) of the Code. If you own multiple embedded generating stations, which together total greater than 10 MW in capacity, the system operator can require you to provide market offers under certain limited situations.

Action	Obligations required	Relevant provision	Contact
Notify system operator	Before making an initial offer to sell electricity from an embedded generating station, the generator must give at least five business days' notice to the system operator, Transpower, and provide any information required by the system operator.	Clause 13.6(4) of the Code	<a href="mailto:system.operator@transpower.co.nz">system.operator@transpower.co.nz</a>
Submitting offers	All offers need to be submitted via the wholesale information and trading system (WITS). Contact the Authority to receive authorisation to become a WITS user. Then, contact M-co to arrange a WITS connection and to discuss the back-up procedures you need to put in place. As an embedded generator offers may be made at \$0.00 per MW.	Clauses 13.6 to 13.27 of the Code	<a href="mailto:info@ea.govt.nz">info@ea.govt.nz</a>
Receiving dispatch instructions	Contact the system operator to arrange access to a GENCO terminal for receipt and acknowledgement of dispatch instructions. Note that there are methods available which provide for auto-acknowledgement of dispatch instructions.	Clauses 13.76 to 13.80 of the Code	<a href="mailto:system.operator@transpower.co.nz">system.operator@transpower.co.nz</a>
Plant with special circumstances	There is an offer process for plant with special circumstances. Contact the system operator if you have any automatic control plant that you want to be considered under this clause.	Clause 13.24 of the Code	<a href="mailto:system.operator@transpower.co.nz">system.operator@transpower.co.nz</a>

## Reporting obligations to the reconciliation manager and the registry

As an embedded generator, if you are buying/selling electricity from/to the clearing manager you have obligations regarding the provision of metering information on a monthly basis to the reconciliation manager.

Action	Obligations	Relevant provision	Contact
Registry maintenance	You will need to maintain the information in the registry for the ICP identifier for your connection to the distributors network	Part 11 of the Code	<a href="mailto:retailoperations@ea.govt.nz">retailoperations@ea.govt.nz</a>
Providing metering information	You also will need to provide the reconciliation manager with the initial submission information and any changes to submission information within the time periods required within the Code.	Part 15 of the Code	<a href="mailto:rm@nzx.com">rm@nzx.com</a>

## Reporting obligations to the pricing manager and grid owner

In addition, if you offer into the market you are also required to provide metering information on a daily basis (unless the generation is intermittent), and to assist the grid owner, Transpower, when a metering situation exists. If you revise offers within 30 minutes prior to a trading period, you will also be required to report on this to the Authority.

Action	Obligations	Relevant provision	Contact
Providing half-hourly metering information	If your embedded generating station is subject to a dispatch instruction, you will need to provide the pricing manager, M-co, and the grid owner, Transpower, with half-hourly metering information, by 5am the next day, for pricing.	Clause 13.136 of the Code	<a href="mailto:managerp@nzx.com">managerp@nzx.com</a>
Reporting obligations	If you change an offer within 30 minutes prior to a trading period you will need to advise the Authority.	Clause 13.21(1) of the Code	<a href="mailto:compliance@ea.govt.nz">compliance@ea.govt.nz</a>
Resolving metering situations	The grid owner may ask you to assist in resolving metering situations where insufficient metering-data was provided initially.	Clause 13.146 of the Code	

## Further information

If you have any questions about metering, reconciliation, connection arrangements or registry activities, please contact [retailoperations@ea.govt.nz](mailto:retailoperations@ea.govt.nz)

If you have any questions about all other information contained in this sheet, please contact the Director, Wholesale at the Authority on 04 460 8860 or by email to: [info@ea.govt.nz](mailto:info@ea.govt.nz)