

Information System Definition

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Summary:

This document identifies the systems that make up the Information System as approved by the Electricity Commission's Board.

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1 Executive Summary

This document details the information systems approved by the Board as the “information system” defined in Part A of the Electricity Governance Rules 2003 (Rules). These systems will be known collectively hereafter as the Information System.

In granting its approval, the Board has approved the use of these systems and not the actual systems themselves.

This document also describes the mechanisms used to transfer information through the Information System as required by the Rules. In addition to this document, each party responsible for the use of the Information System will also require its own internal procedures and processes to support the use of the systems described in this document. The procedures and processes that underpin these transfer mechanisms are the sole responsibility of the party liable for the provision of information, and are not discussed within this document.

This document also describes the backup procedures, where the Rules require them, which are to be used if the Information System is not available.

1.1 Systems used within the Information System

The systems that have been identified as making up the Information System are listed below.

System	Description
WITS	The Wholesale Information and Trading System as defined by the Information System Service Provider Agreement
File Transfer Protocol (FTP)	The standard protocol used to transfer files electronically from one named location to another
Simple Mail Transfer Protocol (SMTP)	The standard protocol used to transfer emails
Transmission Control Protocol/Internet Protocol (TCP/IP)	The standard protocols used to enable one pc to communicate with another
http://www.electricityinfo.co.nz	The WITS Free to Air website for free public access
Relevant participant's official website	Various rules require participants to publish information on the information system. Unless otherwise specified in section 3 of this document, the Board approves the relevant participant's official website (including the Commission's website) as the information system for publication of such information.

Voice	Any recognised voice communication system operating in real time.
Electricity Hedge Disclosure System	The hedge contracts disclosure system (http://www.electricitycontract.co.nz)

1.2 Market Administrator

The Electricity Commission has appointed itself to the service provider role of Market Administrator. Where the Rules refer to the transmission or publication of information by the Market Administrator this document will refer to the Electricity Commission (Board).

1.3 Backup Procedures

Certain rules require the Market Administrator to specify backup procedures which apply if the Information System is unavailable.

Following consultation with relevant participants, the Market Administrator specifies these backup procedures through the WITS and Order Submission User Backup Procedures (Backup Procedures).

The purpose for using the information system, and the type of system failure, will determine what part of the Backup Procedures applies, as summarised in the decision tree at section 2 of the Backup Procedures.

The Backup Procedures are available on the Commission's website at:
<http://www.electricitycommission.govt.nz/opdev/wholesale>.

The Commission notes the following backup procedures which apply in addition to the WITS Backup Procedures in the following particular instances:

Table 1: Additional backup procedures

Rule ref requiring backup procedure	Backup procedure
Part G, section II, rule 3.24	Relevant participants to send a facsimile entitled "Notification of Intention to Bid/Offer" to the system operator on (04) 4957154
Part G, section II, rule 5.13	For electronic transfer the backup is voice communication to the system operator. For voice transfer the backup is an alternative form of voice communication to the system operator such as mobile phone
Part G, section III, rule 3.11 in relation to rule 3.8 of section III of part G	The pricing manager will send a person to the System Operator's premises to access the final information. The System Operator will courier to the clearing manager the final information in a format agreed with the clearing manager.
Part G, section V, rule 3.35 in relation to provisions where the System Operator is required to send information to the pricing manager under rule 3 of section V of part G	In relation to rule 3.33 of section V of part G, the System Operator will email, fax or phone through a list of the values of the model parameters used by the software to produce final prices and final reserve prices, or any updated list of these values. In relation to all other provisions under rule 3 of section V of part G, the pricing manager will send a person to the System Operator's premises to access the information.
Part H, rule 7.7.2	The backup procedure for rule 7.7.1 is facsimile as described in rule 7.7.2, otherwise the Backup Procedures apply.

2 Document Review Process

Reviews of this document may be instigated at any time by the Board. Such reviews may be triggered by:

- (a) information received from participants or any other source;

- (b) information arising from changes to components within the information system;
or
- (c) the rule change process.

For reviews triggered by (a) and (b) above the Board will notify participants of proposed changes to this document and advise the consultation process and timeframes that are to be followed.

Reviews to this document triggered by (c) above will be notified and consulted on via the corresponding rule change consultation.

3 Rule References

Table 1: Part C

No.	Rule reference requiring the use of the information system	Obligation under rule(s)	Approved system
1	Section II, rule 15	System operator publishes system security forecast to participants and the Board.	www.systemoperator.co.nz SMTP TCP/IP
2	Schedule C4, rule 22.4	System operator delivers notification of temporary security constraints (except for frequency keeping constraints) applied to the SPD model that reached or exceeded the constraint percentage threshold to the information system service provider for publication through the information system and on a publicly accessible website.	WITS, SMTP http://www.electricityinfo.co.nz
3	Schedule C4, rule 22.6	System operator provides to the information system service provider, for publication through the information system, the information specified in clause 22.6.	WITS
4	Schedule C4, rule 30.2	System operator notifies the information system service provider for publication through the information system when a market systems constraint, other than a frequency keeping constraint, has been applied to SPD for use in the pre-dispatch schedule, the dispatch schedule, the security schedule, the week ahead dispatch schedule and the SDPQ.	WITS

No.	Rule reference requiring the use of the information system	Obligation under rule(s)	Approved system
5	Schedule C4, rules 30.4 and 30.5	System operator provides to the information system service provider, for publication through the information system, the matters specified in rules 30.4 and 30.5.	WITS
6	Schedule C4, rule 59.1	In the event the system operator identifies a standby residual shortfall, it uses reasonable endeavours to send to the information system service provider, for publication, a standby residual shortfall notice.	WITS, SMTP, TCP/IP
7	Schedule C4, rule 61	The system operator uses reasonable endeavours to send to the information system service provider the input information used to calculate whether there is, or may be, a standby residual shortfall in a trading period.	WITS
8	Schedule C4, rule 92A	Once the system operator has completed a week-ahead dispatch schedule, the system operator provides to the information system service provider, for publication through the information system, prices as specified in clause 92A.	WITS
9	Schedule C5, Appendix A, rules 108 and 110	Offers to provide half hour frequency keeping or to revise or cancel offers to provide half hour frequency keeping to must be submitted to the system operator using same the information system for submitting reserve offers under rule 6.2 or 6.12.1 of section II of Part G	WITS

Table 2: Part G

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
1	Section II, rules 3.2 and 3.4	Generators submit notification of intention to offer (3.2) and purchasers submit notification of intention to bid (3.4)	SMTP (marketservices@transpower.co.nz)
2	Section II, rule 3.19	Transmission of the following information to the Board by participants: <ul style="list-style-type: none"> • report of new, revised, cancelled bids or offers inside the two hour period • report of new, revised, cancelled embedded offers inside the 30 minute period 	SMTP (compliance@electricitycommission.govt.nz). In the event the email address is not working, participants to send a facsimile to (04) 499 3419.
3	Section II, rules 3.21 and 3.22	All information submitted by a purchaser or generator under rule 3 must be submitted to the system operator through the electronic facility in the information system. System operator confirms receipt of such information received by it through the electronic facility in the information system	WITS In the case of an intermittent generator submitting an offer under rule 3.14.3.1, an alternative process may only be used where the system operator has agreed such a process in writing

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
4	Section II, rule 5.10	All information required to be submitted by a grid owner pursuant to rule 5 to be transmitted to the system operator through the electronic facility in the information system	SMTP, TCP/IP. FTP and voice (Standing data is provided via SMTP over TCP/IP or, where the grid owner is Transpower, via shared database access. Changes to standing data are communicated by voice communication or, where the grid owner is Transpower, via database to database transfer over TCP/IP. The system operator confirms receipt of the information by voice or electronically via SMTP over TCP/IP or, where the grid owner is Transpower, via shared database access.)
5	Section II, rules 6.19 and rule 6.20	Ancillary service agents use the information system to either receive reserve offers or cancel reserve offers. The system operator uses the information system to confirm the receipt of such reserve offers or cancellations	WITS
6	Section II, rule 7.2.	All information made available by the market administrator under rule 7 (final bids, final offers and final reserve offers) will be transmitted to participants through the electronic facility in the information system and placed on a publicly available website	WITS http://www.electricityinfo.co.nz

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
7	Section III, rule 3.4	System operator sends the pre-dispatch schedule to the clearing manager and the pricing manager	WITS SMTP (PDS publication)
8	Section III, rule 3.8	System operator sends to the pricing manager and the clearing manager final trading period information	TCP/IP (Remote access over TCP/IP to final trading period information in the market database.)

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
9	Section III, rule 3.9	<p>System operator notifies the generator and the clearing manager of the effective date of the generator's election to have its generating plant dispatched as a station dispatch group (rule 3.9)</p> <p>System operator notifies the generator of—</p> <ul style="list-style-type: none"> (a) the implication of any station security constraints that apply within the station dispatch group (rule 3.9.1); and (b) the fact that the constraint no longer exists (rule 3.9.2.3). <p>System operator notifies the generator and the clearing manager of the effective date of the change from station to unit dispatch (rule 3.9.3).</p>	<p>WITS</p> <p>SMTP</p>
10	Section III, rule 7.3	<p>All information made available by the system operator under rule 7 will be submitted through the electronic facility contained in the information system</p>	<p>WITS (RTP publication)</p>

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
11	Section III, rule 7.6	Information received from the system operator pursuant to rule 7.2 will be made available by the market administrator by placing that information on a publicly accessible website	http://www.electricityinfo.co.nz (RTP publication on FTA)
12	Section III, rule 10.5	All information published by the system operator under rule 10 to be transmitted through the electronic facility contained in the information system	WITS (PDS publication)
13	Section IV, rule 2.9	All information exchanged under rule 2 will be sent electronically through the information system	WITS, SMTP
14	Section IV, rule 3.4	All information relating to auctions to be exchanged through the information system	WITS, SMTP

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
15	Section V, rule 3.2	<p>Transmission of the following information to the pricing manager and the grid owner by generators and embedded generators:</p> <ul style="list-style-type: none"> • adjusted half hour information for participants • half-hour metering information • notice of provision 	FTP
16	Section V, rule 3.3, 3.16, 3.19, 3.26	<p>Transmission of the following information to the pricing manager by the grid owner or generators:</p> <ul style="list-style-type: none"> • existing generation configuration • GIP/GXP actual demand over the trading period • revised data (after a provisional price situation) • revised half-hour metering information following an initial estimate 	<p>TCP/IP, FTP</p> <p>(The pricing manager is provided with remote access over TCP/IP to existing generation configuration and GIP/GXP actual demand information in the market database.</p> <p>Transfer of GIP/GXP actual demand information is provided using FTP.</p>

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
17	Section V, rule 3.3.2	Pricing manager to publish daily half-hour metering data	WITS http://www.electricityinfo.co.nz
18	Section V, rules 3.4, 3.11, 3.12.2, 3.14, 3.15, 3.18, 3.21, 3.22, 3.23	Publication of the following prices by the pricing manager: <ul style="list-style-type: none">• final and final reserve prices• provisional prices	WITS

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
19	Section V, rules 3.5, 3.7, 3.9, 3.11, 3.16, 3.17, 3.18, 3.20, 3.21B, 3.23, 3.24, 3.33	<p>Transmission of the following information to pricing manager and participants by the grid owner, system operator or generators:</p> <ul style="list-style-type: none"> notification of provision of information and whether a SCADA situation exists; notification of estimated or revised information and specification of the revisions made; notification by the grid owner or the system operator to the Board of reason for unresolved provisional price; notification by the pricing manager to participants and the Board of a provisional price situation; notification to the pricing manager from the system operator of Model Variables; notification by the system operator to the pricing manager and participants that the high spring washer price situation relaxation factor has been applied; notification by the system operator to the pricing manager and participants whether an infeasibility situation has been resolved. 	<p>WITS SMTP</p>

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
20	Section V, rules 3.6, 3.18.3, 3.18.4, 3.21, 3.24	Notifications to the grid owner and participants from the pricing manager: <ul style="list-style-type: none"> • notification of an infeasibility situation, metering situation or high spring washer pricing price situation • notification if a provisional price situation is not resolved 	WITS
21	Section V, rules 3.8, 3.16, 3.19, 3.21B	System operator provides revised data to the pricing manager after an infeasibility situation or a high spring washer price situation	TCP/IP
22	Section V, rule 4.5	Publication of the following information to system operator by the clearing manager: <ul style="list-style-type: none"> • Constrained Off Amounts • Constrained On Amounts 	FTP, TCP/IP

No.	Rule reference requiring the use of the information system	Obligation under the rule(s)	Approved system
23	Section V, rule 5.9	All information sent to generators and purchasers under rules 4.6 and 5.7 will be transmitted through the electronic facility contained in the information system	WITS
24	Section VI, rules 10, 11 and 12	Information system makes information submitted under rules 3, 7.1 and 8 publicly available (rule 10.1), verifies information (rule 11) and confirms receipt of information submitted to it under rules 3, 6, 7 or 8 (rule 12)	Electricity Hedge Disclosure System

Table 3: Part H

No.	Rule reference requiring the use of the information system	Obligation under rule(s)	Approved system
1	Rules 7.1, 7.3, 7.7-7.9, 8.1, 11.1	Clearing manager posts invoices to each payer through the electronic facility contained in the information system. Payers confirm receipt of any invoice to the clearing manager	WITS
2	Rule 13.5	Clearing manager publishes block dispatch settlement differences for participants on the information system	WITS