

# EIEP3

Half Hour Metering Information version 6.0

Protocol and Guideline

## Version control

### Version history

This document replaces all previous versions (Inclusive of format, protocol, and examples)

Version	Date	Issue description
V1.0		Initial release
V2.0	April 2004	
V3.0	1 November 2005	Draft for review
V4.0	30/31 May 2006	Draft for approval by Electricity Commission Board
V5.0	8 June 2006	Electricity Commission Board approved
V6.0	6 Oct 2008	Formatted into the Commission's current style.

### Change history

Version	Date	Changes
V2.0	April 2004	Contains consistency changes.
V3.0	1 November 2005	Split format and guide into new structure Changes to format as per DRIEPS Survey Review Draft for review
V4.0	30/31 May 2006	Draft for Electricity Commission Board approval
V5.0	8 June 2006	Electricity Commission Board approved
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### Related documents

Document	Type	Description
Principles of the data format and reports catalogue	Guide	Overarching guide to use of Data Format Catalogue and General principles for use of Electricity Information Exchange Protocols

Data format and reports catalogue (DFRC)	List	Listing of all currently available formats and association between documents
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# Contents

<b>Version control</b>	<b>A</b>
Version history	A
Change history	A
Related documents	A
<b>1. Purpose</b>	<b>1</b>
<b>2. Operation of protocol</b>	<b>1</b>
2.1 File transport mechanism	1
2.2 Field delimiters	1
2.3 Case sensitivity	1
2.4 Note on trading period and daylight savings time	2
2.5 Key field requirements	2
2.6 Supplementary information	2
<b>3. File format for EIEP3: HH metering information</b>	<b>3</b>

## **1. Purpose**

- 1.1.1 This guideline provides the details of how to provide metered half hour data by installation control point (ICP) where the meter “register” set up consists of kWh together with either or both of kVARh or kVAh. This format can accommodate multiple ICPs in a single file or an individual file per ICP.
- 1.1.2 This report can is used for the reporting of half hour (HH) data and utilises the format structure documented in the file format of this document.

## **2. Operation of protocol**

### **2.1 File transport mechanism**

- 2.1.1 Two file transport mechanisms are available for the transfer of data:
  - (a) Manual: via email to a nominated email address; and
  - (b) Electronic: via file transfer protocol (FTP) to a specified FTP inbox
- 2.1.2 The actual mechanism used and destination address is to be configurable at file type level as agreed between the parties. In the case of FTP a security mechanism will be necessary to protect confidentiality. The ability to retrieve files from a remote FTP outbox is not part of this definition.

### **2.2 Field delimiters**

- 2.2.1 The information is to be provided as a comma delimited text file. Commas are therefore prohibited within fields. Where portions of a field require separation, a tilde character (~) should be used. If commas are present in the fields, use quotation marks to exclude them as separators, as per the DOS CSV format.
- 2.2.2 The file format area in this document includes XML tags to enable the move to XML format as and when participants have the capacity to do so (the XML schema will be published with the file format when it is defined).

### **2.3 Case sensitivity**

- 2.3.1 Matching of file names, code list values, etc, is to be case insensitive.

## **2.4 Note on trading period and daylight savings time**

- 2.4.1 Data is to be supplied on an as billed basis, which also aligns with the national reconciliation manager (NRM) purchase volume trading periods. The trading period is the half hour ending based on New Zealand daylight savings time giving 48 trading periods in the day, with the exception of the winter/summer and summer/winter transition days where there are 46 and 50 (respectively) trading periods in the day. This utilises the NRM method for adjusting for NZDT.

## **2.5 Key field requirements**

- 2.5.1 Where an ICP has multiple meter “registers” which differ from the “standard” – a single kWh output together with either kVARh or kVAh – then the additional “registers” should be reported either in separate files, or as additional entries in the same file. These additional files or entries should be identified by using the data stream identifier, data stream Type and direction fields. Where it is agreed between the parties multiple “registers” containing the same information e.g. two kWh registers can be summed which may remove the requirement for the additional files or entries.
- 2.5.2 If one of the optional registers (kVARh or kVAh) is not being reported then the field should be included in the file for completeness but the contents of the field should be Nulls, not loaded with a zero.
- 2.5.3 While it is intended that all HH meters are to supply active and reactive energy usage, if the reactive stream is not available then nulls are preferable in the reactive energy (kVARh) and apparent energy (kVAh) fields.
- 2.5.4 The file should be sorted by ICP then by data stream identifier.

## **2.6 Supplementary information**

- 2.6.1 Note: A reference to the guide being developed by the RIPT for NZDT (New Zealand Daylight Time) is to be put here.

### 3. File format for EIEP3: HH metering information

Data content and format

Each data file will contain one header record and one or many detail records.

Description	Type	XML Tag	Rule	Example
Header record type	Char (3)	<RowType>	HDR - indicates row is header record type.	HDR
File type	Char (7)	<FileType>	ICPHH – indicates data file is of type ICPHH	ICPHH
Sender	Char (4)	<Sender>	Party Code of Sender	TRUS
Sent on behalf of	Char (4)	<OnBehalfOf>	Party code of party on whose behalf consumption data is provided	TRUS
Recipient	Char (4)	<Recipient>	Party code of intended recipient	UNET
Report run date	DD/MM/YYYY	<RunDate>	Date report is created	02/08/2000
Report run time	HH:MM:SS	<RunTime>	Time report is created	17:32:02
File initial or unique identifier	Int (12)	<Identifier>	Number that uniquely identifies the report	647996783451
Number of detail records	Int (8)	<RecordCount>	Number of DET records in the report	4
Report Month	YYYYMM	<ReportMonth>	Month the report is run for	200007
Utility type	Char (1)	<Utility>	G (Gas) or E (Electricity)	E
File status	Char (1)	<FileStatus>	I (Initial) or R (Replacement) or X (Partial Replacement)	I

Description	Type	XML Tag	Rule	Example
Detail record type	Char (3)	<RowType>	DET – indicates the row is a detail record	DET

ICP	Char (15)	<ICP>	ICP 15 character unique identifier	0123456789 XXCCC
Data stream identifier	Char (15)	<DataIdentifier>	Unique data stream Identifier used by Sender (e.g. meter number for each different billable data set under the one ICP)	0123456789
Status	Char (1)	<ReadStatus>	Final (F) or Estimate (E) - estimate status indicates that the meter could not be read and the data will be revised.	F
Date	DD/MM/YYYY	<Date>	Date of consumption	01/07/2000
Trading period	Int (2)	<TradingPeriod>	Trading period, in NZDT utilising the NRM's NZDT adjustment methodology. (46, 48 or 50 Trading Periods)	1
Consumption (kWh)	Num (8.2)	<KWH>	Consumption in kWh	950.02
Reactive energy (kVARh)	Num (8.2)	<KVARH>	Reactive energy in kVARh, Can only be NULL if KVAh is supplied or is not available see PG Document. (recommended that kVARh and KVAh are provided)	312.64
Apparent energy (kVAh)	Num (8.2)	<KVAH>	Apparent energy in kVAh, Can only be NULL if KVARh is supplied or is not available see PG Document. (recommended that kVARh and KVAh are provided)	1000.58
Direction	Char (1)	<Direction>	Load (L) or Generation (G) - Indicates the direction of flow. NULL implies L	L
Data stream type	Char (10)	<DataType>	Null implies standard Billable volume else defined by receiver	CPD