Appendix C: Draft updates to EIEP13B – marked up version showing changes

This appendix sets out the draft proposals for updates to EIEP13B – Summary consumption information. Deletions to the text of current EIEP13B are shown as ~~black strikethrough~~. Proposed new text is shown as red text.

Electricity Information Exchange Protocol (EIEP)

EIEP13B: Summary consumption information

Regulated

~~Version 1.6~~

~~Effective from 26 July 2022~~

Version 2.01 DRAFT

Effective from 30 October 2026

Version control

Version	Date amended	Comments
1.4	1 February 2016	
1.5	19 December 2019	Updated to reflect changes as per the ACCES project, including: • mandatory use of the EIE system • a unique request identifier must be provided • two new response codes (005 and 006).
1.6	26 April 2022	Increase the 'unique request identifier' field from 15 Char to 36 Char
V2.01DRAFT	4 June 2026	Draft following industry workshops Jan/Feb 2026, for consultation

Contents

1 EIEP13B: Summary Consumption Information

Title:	**EIEP13B: Summary Consumption Information**
Version:	~~1.6~~ 2.01 DRAFT
Application:	This protocol specifies how retailers (or their appointed agents) must provide summary consumption information
Participants:	Retailers
Non-participants:	Consumers and authorised consumers' agents
Code reference:	Clauses 11.32A – 11.32F
Dependencies:	The Code and procedures document also contains requirements relevant to the information to be provided in files that are created in accordance with this format specification.

Description of ~~W~~when this protocol applies
This protocol applies when a consumer or a consumer's authorised agent requests summary consumption information. ~~If a retailer receives a request for consumption data from a consumer or a consumer's authorised agent, the retailer must send the consumption information in a data file formatted in accordance with this EIEP 13B. Refer clauses 11.32A – 11.32F of the Code.~~ On request from a consumer or a consumer's authorised agent, a data file formatted in accordance with this EIEP13B must be forwarded by the retailer to the consumer, or the consumer's authorised agent, to provide consumption information as required by clauses 11.32A – 11.32F of the Code.

Business requirements
1 Retailers must give consumption information to consumers (clause ~~11.32F(2(b)~~11.32B(2)) in the format specified in this document. ~~2 Consumers may choose whether to receive an output file as a CSV-formatted electronic file by email, or as printed output in a table format or similar by post.~~ [Subsequent text renumbered] 2 If a request for EIEP13B is received from a consumer's authorised agent via the Authority prescribed EIE system, the response must be sent via the prescribed EIE system. 3 Electricity conveyed is to be expressed as compensation-corrected volumes relevant to a date and time period that is defined by a start date/time value and an end date/time value. 4 The time period used for EIEP13B formatted information must match the billed consumption information that the retailer has supplied to the consumer. 5 Any read period comprising date and time can be accommodated using this format, whether monthly, weekly, daily, ~~or certain parts of a day~~hourly, half hourly or sub half hourly:

(a) All date/time fields are to be represented using the full ISO8601 date/time standard including seconds and the time zone offset:
*YYYY-MM-DD***T***HH:MM:SS*±*zzzz*
e.g. 2026-01-31T15:30:00+1300, 2026-06-07T15:30:00+1200

(b) Read periods (consumption intervals) must be represented as the period between an instantaneous start time (marking the start of the second) and an instantaneous end time (marking the end of the second). The time component of the end of one period will therefore be identical to the time component of the start of the next period in a continuous sequence. e.g.:

Start	**End**
2026-01-09T15:30:00+1300	2026-01-09T16:00:00+1300
2026-01-09T16:00:00+1300	2026-01-09T16:30:00+1300

(c) If the interval of a consumption record is less than one whole day, the time part of the date/time formatted value must reflect the appropriate hours, minutes and seconds of the record. e.g. a half hour trading period record could have a start date/time of "2016-01-03T00:30:00+1300" and an end date/time of "2016-01-03T01:00:00+1300".
For clarity, the last period of that day should be shown with a start date/time of "2016-01-03T23:30:00+1300" and an end date/time of either "2016-01-04T00:00:00+1300" (preferred) or "2016-01-03T24:00:00+13" (acceptable alternative under ISO8601 rules).

(d) If the interval of a record is equal to one or more whole days, the Time part of the date/time format is to be coded as 00:00:00. e.g. a consumption record for the period 1 May 2016 to 5 June 2016 (inclusive) would have a start date/time of "2016-05-01T00:00:00+1200" and an end date/time of either "2016-06-06T00:00:00+1200" or "2016-05-01T24:00:00+1200".

(e) The mandatory time zone offset indicator ensures that intervals are unambiguous over daylight savings shifts. So when the clocks go back at the end of daylight savings, intervals appear as follow:

Start	**End**
2026-04-05T02:00:00+1300	2026-04-05T02:30:00+1300
2026-04-05T02:30:00+1300	2026-04-05T03:00:00+1300
2026-04-05T02:00:00+1200	2026-04-05T02:30:00+1200
2026-04-05T02:30:00+1200	2026-04-05T03:00:00+1200

(f) In accordance with clause 15.36 of the Code, senders *must* set the time zone indicator according to whether daylight savings is in force at the time; recipients must nevertheless accept any valid indicator including +1300 (NZDT), +1200 (NZST), or +0000 or 'Z' (UTC) and interpret the absolute time according to the given time zone indicator.

~~(a) If the interval of a consumption record is less than one whole day, the Time part of the DateTime formatted value must reflect the appropriate hours, minutes and seconds of the record (eg a half hour trading period record could have a start date/time of "01/03/2016 00:30:01" and an end date/time of "01/03/2016 01:00:00").~~

~~(b) If the interval of a consumption record is equal to or longer than one whole day, the Time part of the DateTime format is to be coded as 00:00:01 (eg a consumption record for the period 1 1 EIEP13B v1.6: Summary consumption information 2 Business requirements May 2016 to 5 June 2016 (inclusive) would have a start date/time of "01/05/2016 00:00:01" and an end date/time of "06/06/2016 00:00:00" or "05/06/2016 24:00:00").~~

6 A retailer must only use codes that are:

(a) stipulated in this document; or

(b) approved and published by the Authority; or

(c) determined in the registry and reconciliation functional specifications.

7 ~~Language used in the file must be consistent with the terminology used in the Glossary of Standard Terms published by the Authority.~~Information provided in the file must be consistent with the terminology used in the Glossary of Standard Terms published by the Authority.

8 The file must contain all mandatory information. Failure to provide the required information will result in the file being deemed as incomplete.

9 Information must be provided ~~using~~in accordance with the following status codes unless otherwise specified:

O Optional

M Mandatory where applicable

C Conditional - Mandatory if available and required by recipient, otherwise optional.

10 The consumption information to be provided in an EIEP13B formatted file is the energy volume imported or exported at a meter register on the requested ICP within a specified time period, after any 'multiplier' or compensation factor has been applied to the meter read, in units of:

(a) kilowatt hours (kWh) for active energy; and

(b) kilovolt ampere reactive hours (kVArh) for reactive energy.

11 Unmetered load is to be calculated as the volume of unmetered electricity applicable for the period between invoicing dates.

12 The amount of historical consumption information to be provided by the retailer in response to a consumer request is specified in clause 11.32A of the Code.

13 If ~~the retailer holds~~ reactive energy volumes are held by the retailer, ~~the retailer must provide them~~they must be provided if the consumer (or their agent) specifically requests this.

14 If the retailer becomes aware of a format error in a transmitted file, or the file is incomplete or otherwise inaccurate, the retailer must advise the consumer as soon as practicable after becoming aware of the issue. This obligation is contained in clause 11.2 of the Code.

15 ~~Where~~If previously transmitted information is to be corrected, the retailer must provide a complete replacement file.

16 The file must be named in accordance with the registry functional specification EI-030.

~~18 All DateTime formatted data must specify NZDT (New Zealand Daylight Savings time) values, adjusted in accordance with clause 15.36 of the Code.~~

General requirements

1 If there are any conflicts between this document and the Code, the Code will take precedence.

2 For clarity, it is the responsibility of retailers to:

(a) comply with the Privacy Act 2020

(b) maintain business confidentiality when exchanging consumer details

(c) ensure that agent arrangements are recorded.

Data inputs

Information from a retailer's ~~information~~back office system.

Event data	Format	~~Retail to Consumer~~ Mandatory/ Optional/ Conditional	JSON key	Validation rules
Header record type	Char 3	M	(root element)	"HDR" – indicates the row is a header record type
File type	Char 7	M	FileType	Must be ICPCONS.
Version of EIEP	Num 3.1	M	Version	Version of EIEP that is being used for this file. Currently "2.01 DRAFT".
Sender	Char 20	M	Sender	Name of sending party. Authority-approved participant and non-participant identifiers must be used where allocated.
Sent on behalf of	Char 4	M	SentOnBehalfOf	Participant identifier of party on whose behalf consumption information is provided.
Recipient Participant identifier	Char 4	M	Recipient	Valid recipient participant or non-participant identifier. In the case of a: a) consumer - this should be CUST b) consumer's agent - should be the Authority approved (non-)participant identifier
Report run date/time	~~DD/MM/YYYY~~ ISO 8601 date/time	M	RunDateTime	Date and time the report is run
Unique request identifier	Char 36	M	RequestId	The unique request identifier is provided in the requesting EIEP 13C.
Number of detail records	~~Num~~Int 8	M	RecordCount	Total number of DET records in report
Report period start date	ISO 8601 dated~~/MM/YYYY~~	M	StartDate	Report run start date (inclusive)
Report period end date	ISO 8601 dated~~/MM/YYYY~~	M	EndDate	Report run end date (inclusive)
~~*NZDT adjustment*~~	~~Char 4~~	~~C~~		~~Refer to clause 15.36 of Part 15 of the Code. If information is NZDT adjusted, the field may be left BLANK, otherwise if it is not adjusted, NZST must be used~~

Event data	Format	Mandatory/ Optional/ Conditional	Validation rules
Title column 1	Char 3	C	"DES" – indicates the row contains CSV field descriptions, to align with columns in detail records. *Note that this whole record is optional, but if included must be structured as specified herein.*
Title column 2	Char 30	C	Must be "Consumer authorisation code"
Title column 3	Char 30	C	Must be "ICP identifier"

Title column 4	Char 30	C	Must be “Response code”
Title column 5	Char 30	C	Must be “Metering component serial number”
Title column 6	Char 30	C	Must be “Meter channel”
Title column 7	Char 30	C	Must be “Energy flow direction”
Title column 8	Char 30	C	Must be “Register content code”
Title column 9	Char 30	C	Must be “Period of availability”
Title column 10	Char 30	C	Must be “Read period start date and time”
Title column 11	Char 30	C	Must be “Read period end date and time”
Title column 12	Char 30	C	Must be “Read status”
Title column 13	Char 30	C	Must be “Tariff name”
Title column 14	Char 30	C	Must be “Active energy kWh”
Title column 15	Char 30	C	Must be “Reactive energy kVArh”

~~Event data~~	~~Format~~	~~Mandatory/ Optional/ Conditional~~	~~Validation rules~~
~~*Title column 1*~~	~~Char 3~~	~~M~~	~~DES – indicates the row contains CSV field descriptions, to align with columns in detail records~~
~~*Title column 2*~~	~~Char 30~~	~~M~~	~~Must be “ICP identifier”~~
~~*Title column 3*~~	~~Char 30~~	~~M~~	~~Must be “Metering component serial number”~~
~~*Title column 4*~~	~~Char 30~~	~~M~~	~~Must be “Energy flow direction”~~
~~*Title column 5*~~	~~Char 30~~	~~M~~	~~Must be “Register content code”~~
~~*Title column 6*~~	~~Char 30~~	~~M~~	~~Must be “Period of availability”~~
~~*Title column 7*~~	~~Char 30~~	~~M~~	~~Must be “Read period start date and time”~~
~~*Title column 8*~~	~~Char 30~~	~~M~~	~~Must be “Read period end date and time”~~
~~*Title column 9*~~	~~Char 30~~	~~M~~	~~Must be “Read status”~~
~~*Title column 10*~~	~~Char 30~~	~~M~~	~~Must be “Tariff name”~~
~~*Title column 11*~~	~~Char 30~~	~~M~~	~~Must be “Active energy kWh”~~
~~*Title column 12*~~	~~Char 30~~	~~M~~	~~Must be “Reactive energy kVArh”~~

Event data	Format	~~Retailer to Consumer:~~ Mandatory/ Optional/ Conditional	JSON key	Validation rules
Detail record type	Char 3	M	ICPResponses[] (in header)	"DET" – indicates the row is a detail record of consumption information.
Consumer Authorisation code	Char 36	C	ConsumerAuthCode	A unique number that links the data response to the request. Mandatory if the corresponding request was made with EIEP 13C, otherwise BLANK
ICP identifier	Char 15	M	ICP	ICP identifier means a unique identifier for an ICP created by a distributor in accordance with clause 1 of Schedule 11.1

Event data	Format	~~Retailer to Consumer:~~ Mandatory/ Optional/ Conditional	JSON key	Validation rules
Response code	Char 3	M	ResponseCode	Indicates that the request for the specific ICP identifier is either accepted or rejected. The following codes must be used: 000 – Request accepted, data follows 001 – Request rejected, no ICP or address or customer match 002 – Request rejected, no ICP record 003 – Request rejected, no customer record 004 – Request rejected, no agent authority 005 – Request rejected, agent authority requested 006 – Request rejected, incorrect format If Response code is 000, all of the following fields are required per the field specifications If Response code is non-zero, all of the following values in the DET row are to be set to NULL.
List container for JSON only			MeterData[] *(in ICPResponse)*	
Metering component serial number	Char 30	C	MeterSerial	Mandatory for a metering component. Identifies the metering component for installations that have multiple metering components. ~~Includes unmetered load where there is a metering component and unmetered load on the same register content code~~. For unmetered load "UNM" must be used
Meter channel number	Num 2	C	MeterChannel	Meter channel number Leave blank if not applicable
Energy Flow direction	Char 1	~~C~~M	FlowDirection	An identifier of whether the channel records the import (injection from the ICP into the Network) ("I"), or the export (extraction from the Network to the ICP) ("X"). ~~If "X" format must show words = "Consumption"~~ ~~If "I" format must show words = "Generation"~~ ~~Mandatory unless response code is 001, 002, 003 or 004~~
Register content code	Char 6	~~C~~M	RegisterContentCode	Identifies the register content code that information is provided for. Refer to SD-020 of the registry functional specification for a list of register content codes ~~Mandatory unless response code is 001, 002, 003 or 004~~ For unmetered loads, use "UNM" unless a specific code applies.
Period of availability	Char 6	~~C~~M	PeriodOfAvalability	Identifies the period of availability that applies to the register content code ~~Mandatory unless response code is 001, 002, 003 or 004~~ For unmetered loads, use "24" unless a specific PoA applies.

Event data	Format	~~Retailer to Consumer:~~ Mandatory/ Optional/ Conditional	JSON key	Validation rules
List container for JSON only			ReadPeriods[] in MeterData	
Read period start date and time	~~DD/MM/YYYY HH:MM:SS~~ ISO 8601 date/time	~~C~~M	StartDateTime	Date and time of start of read period in full ISO8601 format ~~Mandatory unless response code is 001, 002, 003 or 004~~
Read period end date and time	~~DD/MM/YYYY HH:MM:SS~~ ISO 8601 date/time	~~C~~M	EndDateTime	Date and time of end of read period in full ISO8601 format ~~Mandatory unless response code is 001, 002, 003 or 004~~
Read status	Char 2	~~C~~M	ReadStatus	RD = actual ES = estimated ~~Mandatory unless response code is 001, 002, 003 or 004~~ Use "ES" for unmetered loads
Tariff name	Char 50	~~C~~O	TariffName	Optional tariff name assigned by the retailer to the tariff rate that applies to this reading - as defined in EIEP14A and/or EIEP14B. ~~Name of tariff rate, e.g. "Anytime" or "Controlled" etc. To be assigned by the retailer to align with terminology it has used in its price schedule.~~ ~~Mandatory unless response code is 001, 002, 003 or 004~~
Unit quantity active energy volume	Num ~~12.2~~ 12.4	~~C~~M	kWh	Volume information for injection or extraction in kWh ~~Mandatory unless response code is 001, 002, 003 or 004~~
Unit quantity reactive energy volume	Num ~~12.2~~ 12.4	C	kVArh	Volume information for extraction in kVArh. Mandatory if requested and the information is available to the retailer, otherwise optional. BLANK if information is not provided

Protocol specifications

1. ~~The information is to be a comma delimited text file (CSV). Comma are therefore prohibited within fields.~~EIEP 13B specification may be used to structure:
    a. Comma delimited text files (CSV): refer to point 6 below for requirements and restrictions.
    b. JSON files or API responses: refer to point 7 below for requirements and restrictions.
2. ~~Each formatted file must consist of one or more records, with each record being a single line of text as defined in this format specification document. Records must be delimited with one of the following:~~
    ~~a. a carriage return character and a line feed character combination (ASCII characters 13 and 10) commonly used in the Microsoft Windows operating system~~
    ~~b. a line feed character (ASCII character 10) commonly used in the Unix operating system, or~~
    ~~c. a carriage return character (ASCII character 13) commonly used in the Apple OS X operating system.~~
2. To accommodate limitations in some retailers' legacy systems and allow EIEP13B files to be transformed between JSON and CSV,
    a. the character encoding must be UTF-8, and
    b. the character set used in files must be restricted to the US-ASCII subset shown in 2.2 Table 2, unless otherwise agreed by sender and recipient e.g. to represent macrons in te reo Māori.
3. Data fields within files must be defined using the attributes in the table following these specifications.
4. Matching of file names, code list values, etc, must be case insensitive.
5. Any number of ICPs, register content codes and date ranges may be included in a single file or response.
6. ~~Each data file must contain only one header line.~~ Where the protocol specification is used to structure a CSV file:
    a. Each formatted file must consist of one or more records, with each record being a single line of text as defined in this format specification document.
    b. The file must follow the CSV conventions set out in RFC 4180 with the exception that recipients must allow line terminators conforming any of the following formats:
        i. a carriage return character and a line feed character combination (ASCII characters 13 and 10) commonly used in the Microsoft Windows operating system
        ii. a line feed character (ASCII character 10) commonly used in the Unix operating system, or
        iii. a carriage return character (ASCII character 13) formerly used in the legacy Apple MacOS operating system.
    c. Senders should avoid the use of commas and double quotation marks within fields wherever possible, but if their use cannot be avoided, senders of CSV files must apply the quotation and escaping conventions described in RFC 4180 Section 2, and recipients must recognise these conventions
    d. The first line of the file must contain header information (Type "HDR"). Each data file must contain only one header line.
    e. The second line of the file may contain an optional description / column label row (Type "DES").
    f. Zero or more lines containing detail records (Type "DET") follow the header and optional description lines.
    g. Each record in the file must include every field for the corresponding record type defined in the specification below.
    h. Any null/blank fields are to be represented by consecutive commas according to the CSV convention.
7. ~~The first record of a file must contain "Header" information (HDR) followed by one heading description row (DES) zero or more detail rows (DET).~~ Where the protocol specification is used to structure a JSON file or API response:
    a. JSON keys (field names) must follow the definitions specified in the tables.
    b. Unlike the CSV form wherein all fields are included in every detail line, the JSON form is subdivided into an object hierarchy to reduce repetition.

c. The JSON object hierarchy is as follows:

i. The root object contains header information for a file and the list of response detail objects (ICPResponses[]).

ii. Each ICPResponse object contains information pertaining to the whole response for a requested ICP, and a list of objects for each meter channel for which data is returned (MeterData[])

iii. Each MeterData object contains information pertaining to a meter and channel associated with the parent ICP (meter component serial number, meter channel number, flow direction, RCC, PoA), and a list of read period objects for the meter/channel (ReadPeriods[])

iv. Each ReadPeriod object contains the information specific to the measurement interval, including the interval start and end times and the measured consumption or injection values.

d. Any null/blank fields may be represented by omitting the key-value pair (preferred) or setting the value to *null*.

8. File naming process shall be in accordance with the registry functional specification EI-030.

Data outputs
1. File delivered electronically to a consumer or to the consumer's agent

2 Table of codes used in EIEP13B

2.1 Table 1: List of attributes to define data fields used in EIEP13B

Logical format	Data type	Rules	Example
INT (n)	Integer	ASCII representation of an integer number (ie no decimals), no leading zeros, no spaces, a leading "-" if negative (no sign if positive), with 1 to n digits. Numbers only: ASCII characters 48 to 57, and 45 where applicable.	INT (4) 12 -1234
NUM (n.d)	Decimal	ASCII representation of a decimal number (ie a rational number), no spaces, a leading "-" if negative (no sign if positive), with up n digits including up to (n minus d) digits to the left of the decimal place, and up to d digits to the right of the decimal place. For integers, the decimal point is not required. A decimal point on its own must not be used to represent zero (use "0") Trailing zeros are optional. No leading zeros other than when the number starts with "0." Numbers only: ASCII characters 48 to 57, and 45/46 where applicable.	NUM (6.2) 123.45 1234.0 -12.32 NUM (6.3) -0.123 23.987 987.000 8

Logical format	Data type	Rules	Example
CHAR (n)	Text	Up to n characters (ASCII characters 32 to 43 and 45 to 126 only). As commas (ASCII character 44) are used as field separators, they must not be used within the field data (it is recommended that any commas found in source data be changed to a semicolon (ASCII character 59) when files are created. Fields must not contain any leading or trailing spaces.	The quick brown fox
ISO8601 Date ~~DATE~~	Date	ASCII format ~~YYYY-MM-DD~~YYYY-MM-DD with: Year represented as: — YYYY for century and year Month represented as: — MM to display leading zero Day represented as: — DD to display leading zero ASCII format for separator: {~~forward slash (47)~~hyphen (45)}	March 1st 2026: 2026-03-01 ~~16/02/2005~~
ISO8601 Date/Time ~~DATETIME~~	DateTime	ASCII format: ~~DD/MM/YYYY HH:MM:SS~~ *YYYY-MM-DD***T***HH:MM:SS±zzzz* Year represented as: — YYYY for century and year Month represented as: — MM to display leading zero Day represented as: — DD to display leading zero Hour represented as: — HH to display leading zero Minute represented as: — MM to display leading zero Second represented as: — SS to display leading zero Time zone offset from UTC: — plus or minus zzzz being the hours and minutes ahead of (+) or behind (-) UTC; +1300 for NZDT; +1200 for NZST. UTC is represented as the letter 'Z'. ASCII format for separators:	e.g. Times in Wellington, NZ: **4th March 2026, 12:30 PM**: "2026-03-04T12:30:00+1300" (NZDT) = "2026-03-03T23:30:00Z" (UTC) **4th June 2026, 12:30 PM:** "2026-06-04T12:30:00+1200" (NZST) = "2026-06-04T00:30:00Z" (UTC) Times in Waitangi, Chatham Islands, NZ **4th March 2026, 12:30 PM:** "2026-03-04T12:30:00+1345" (CHADT) = "2026-03-03T22:45:00Z" (UTC) **4th June 2026, 12:30 PM:** "2026-06-04T12:30:00+1245" (CHAST) = "2026-06-03T23:45:00Z" (UTC)

Logical format	Data type	Rules	Example
		{~~forward slash~~hyphen (47), capital letter 'T' (84), colon (58)~~, space 32~~) }	
BLANK		Field contains no data – ~~(~~appears in the CSV file as two sequential commas (,,) ~~in the file)~~and in JSON as an omitted key-value pair or the value *null*.	,,

2.2 Table 2: US-ASCII character set for use within fields of EIEP13B

Character	ASCII
32	Space
33	!
34	"
35	#
36	$
37	%
38	&
39	'
40	(
41	)
42	*
43	+
44	,
45	-
46	.
47	/
48	0
49	1
50	2
51	3
52	4
53	5
54	6
55	7
56	8
57	9
58	:
59	;
60	<
61	=
62	>
63	?

Character	ASCII
64	@
65	A
66	B
67	C
68	D
69	E
70	F
71	G
72	H
73	I
74	J
75	K
76	L
77	M
78	N
79	O
80	P
81	Q
82	R
83	S
84	T
85	U
86	V
87	W
88	X
89	Y
90	Z
91	[
92	\
93	]
94	^
95	_

Character	ASCII
96	`
97	a
98	b
99	c
100	d
101	e
102	f
103	g
104	h
105	i
106	j
107	k
108	l
109	m
110	n
111	o
112	p
113	q
114	r
115	s
116	t
117	u
118	v
119	w
120	x
121	y
122	z
123	{
124	|
125	}
126	~

Note: ASCII control characters 00 – 31,127 are not to be used within fields.

3 Glossary of abbreviations and terms

Act	Electricity Industry Act 2010
AMI	Advanced metering infrastructure
API	(Web) Application Programming Interface
Authority	Electricity Authority
Consumer	means a person who is supplied electricity for consumption, and includes a distributor, a retailer or a generator if the distributor, or the retailer or the generator is supplied with electricity for its own consumption
CSV	Comma separated values
EIEP	Electricity Information Exchange Protocol
FTP	File Transfer Protocol
ICP	Installation Control Point
ISO8601	International Standards Organisation Standard 8601 - Date and time format representation.
JSON	JavaScript Object Notation - defined as ECMA Standard 404
kVArh	Kilovolt Ampere hour - reactive energy
kWh	Kilowatt hour
PoA	Period of Availability
RCC	Register Content Code
RFC	Internet Engineering Task Force Request for Comments
Registry	National database that contains information on every point of connection on a network to or from a site for which electricity is supplied or generated.
(US-)ASCII	American Standard Code for Information Interchange - 7-bit character encoding for English language characters originally developed by the American Standards Association in 1963.
UTC	Co-ordinated Universal Time
UTF-8	Unicode Transformation Format - 8-bit: character encoding capable of representing any Unicode code point (international character, symbol, emoji etc.). The encoding of any US-ASCII character is identical to its UTF-8 encoding, thus US-ASCII is a subset. of UTF-8.

[Two example tables removed from original EIEP13B and replaced with new examples in new sections 4 and 5]

4 JSON file format example

This example shows a response to two ICP requests for a year of billing-aligned summary data. The first shows monthly usage data across two-meter channels; the second fails with error code 001 indicating the requested ICP or customer number was not found in the requested period.


```
{
 "FileType": "ICPSUMM",
 "Version": 2.01,
 "Sender": "ASRL",
 "SentOnBehalfOf": "ASRL",
 "Recipient": "CUST",
 "RunDateTime": "2026-03-11T11:39:00+1300",
 "RequestId": "8efefd66-42df-46a1-a374-0c25edbcc724",
 "RecordCount": 25,
 "StartDate": "2025-02-20",
 "EndDate": "2025-02-20",
 "ICPResponses": [
  {
   "ConsumerAuthCode": "a3c42db9-597a-445c-921a-6a97d9b8ae34",
   "ICP": "0000091747EG0F4",
   "ResponseCode": "000",
   "MeterData": [
    {
     "MeterSerial": "172979803",
     "FlowDirection": "X",
     "RegisterContentCode": "UN",
     "PeriodOfAvailability": 24,
     "MeterChannel": 1,
     "ReadPeriods": [
      {
       "StartDateTime": "2025-02-20T00:00:00+1300",
       "EndDateTime": "2025-03-20T00:00:00+1300",
       "ReadStatus": "RD",
       "kWh": 176.6200
      },{
       "StartDateTime": "2025-03-20T00:00:00+1300",
       "EndDateTime": "2025-04-20T00:00:00+1200",
       "ReadStatus": "RD",
       "kWh": 236.9200
      },{
       "StartDateTime": "2025-04-20T00:00:00+1200",
       "EndDateTime": "2025-05-20T00:00:00+1200",
       "ReadStatus": "RD",
       "kWh": 291.9300
      },{
       "StartDateTime": "2025-05-20T00:00:00+1200",
       "EndDateTime": "2025-06-20T00:00:00+1200",
       "ReadStatus": "RD",
       "kWh": 277.5200
      },{
       "StartDateTime": "2025-06-20T00:00:00+1200",
       "EndDateTime": "2025-07-20T00:00:00+1200",
       "ReadStatus": "RD",
       "kWh": 484.9200
      },{
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```
      "StartDateTime": "2025-07-20T00:00:00+1200",
      "EndDateTime": "2025-08-20T00:00:00+1200",
      "ReadStatus": "RD",
      "kWh": 410.8500
    },{
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      "EndDateTime": "2025-09-20T00:00:00+1200",
      "ReadStatus": "RD",
      "kWh": 317.7100
    },{
      "StartDateTime": "2025-09-20T00:00:00+1200",
      "EndDateTime": "2025-10-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 234.7700
    },{
      "StartDateTime": "2025-10-20T00:00:00+1300",
      "EndDateTime": "2025-11-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 191.5200
    },{
      "StartDateTime": "2025-11-20T00:00:00+1300",
      "EndDateTime": "2025-12-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 155.0100
    },{
      "StartDateTime": "2025-12-20T00:00:00+1300",
      "EndDateTime": "2026-01-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 96.6300
    },{
      "StartDateTime": "2026-01-20T00:00:00+1300",
      "EndDateTime": "2026-02-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 103.6500
    }
  ]
},{
  "MeterSerial": "172979803",
  "FlowDirection": "X",
  "RegisterContentCode": "CN",
  "PeriodOfAvailability": 17,
  "MeterChannel": 2,
  "ReadPeriods": [
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      "EndDateTime": "2025-03-20T00:00:00+1300",
      "ReadStatus": "RD",
      "kWh": 136.1100
    },{
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      "EndDateTime": "2025-04-20T00:00:00+1200",
      "ReadStatus": "RD",
      "kWh": 185.1500
    },{
      "StartDateTime": "2025-04-20T00:00:00+1200",
      "EndDateTime": "2025-05-20T00:00:00+1200",
      "ReadStatus": "RD",
      "kWh": 222.6000
    },{
      "StartDateTime": "2025-05-20T00:00:00+1200",
      "EndDateTime": "2025-06-20T00:00:00+1200",
      "ReadStatus": "RD",
```

```
          "kWh": 205.2700
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          "StartDateTime": "2025-06-20T00:00:00+1200",
          "EndDateTime": "2025-07-20T00:00:00+1200",
          "ReadStatus": "RD",
          "kWh": 263.4500
        },{
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          "EndDateTime": "2025-08-20T00:00:00+1200",
          "ReadStatus": "RD",
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        },{
          "StartDateTime": "2025-08-20T00:00:00+1200",
          "EndDateTime": "2025-09-20T00:00:00+1200",
          "ReadStatus": "RD",
          "kWh": 201.5400
        },{
          "StartDateTime": "2025-09-20T00:00:00+1200",
          "EndDateTime": "2025-10-20T00:00:00+1300",
          "ReadStatus": "RD",
          "kWh": 183.4500
        },{
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          "EndDateTime": "2025-11-20T00:00:00+1300",
          "ReadStatus": "RD",
          "kWh": 170.2400
        },{
          "StartDateTime": "2025-11-20T00:00:00+1300",
          "EndDateTime": "2025-12-20T00:00:00+1300",
          "ReadStatus": "RD",
          "kWh": 107.6700
        },{
          "StartDateTime": "2025-12-20T00:00:00+1300",
          "EndDateTime": "2026-01-20T00:00:00+1300",
          "ReadStatus": "RD",
          "kWh": 109.7400
        },{
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          "EndDateTime": "2026-02-20T00:00:00+1300",
          "ReadStatus": "RD",
          "kWh": 108.6300
        }
      ]
    }
  ]
 },{
  "ConsumerAuthCode": "aa12437b-0b4f-4221-9a8d-7adc1f7f02f0",
  "ICP": "0000075791EG7C4",
  "ResponseCode": "001",
  "MeterData": []
 }
]
}
```

5 CSV file format example

This example (with the same data as the JSON example above) shows a response to two ICP requests for a year of billing-aligned summary data. The first shows monthly usage data across two-meter channels; the second fails with error code 001 indicating the requested ICP or customer number was not found in the requested period.

```
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DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-03-20T00:00:00+1300,2025-04-20T00:00:00+1200,RD,,236.9200,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-04-20T00:00:00+1200,2025-05-20T00:00:00+1200,RD,,291.9300,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-05-20T00:00:00+1200,2025-06-20T00:00:00+1200,RD,,277.5200,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-06-20T00:00:00+1200,2025-07-20T00:00:00+1200,RD,,484.9200,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-07-20T00:00:00+1200,2025-08-20T00:00:00+1200,RD,,410.8500,
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DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,1,X,UN,24,2025-11-20T00:00:00+1300,2025-12-20T00:00:00+1300,RD,,155.0100,
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DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,2,X,CN,17,2025-07-20T00:00:00+1200,2025-08-20T00:00:00+1200,RD,,224.0500,
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DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,2,X,CN,17,2025-09-20T00:00:00+1200,2025-10-20T00:00:00+1300,RD,,183.4500,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,2,X,CN,17,2025-10-20T00:00:00+1300,2025-11-20T00:00:00+1300,RD,,170.2400,
DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,2,X,CN,17,2025-11-20T00:00:00+1300,2025-12-20T00:00:00+1300,RD,,107.6700,
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DET,a3c42db9-597a-445c-921a-6a97d9b8ae34,0000091747EG0F4,000,172979803,2,X,CN,17,2026-01-20T00:00:00+1300,2026-02-20T00:00:00+1300,RD,,108.6300,
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