

# Electricity Information Exchange Protocols (EIEP)

## EIEP 14: Retailer tariff rate notification

Non-regulated (voluntary EIEP): Effective from 1 November 2016

20 September 2016

## **Version control**

Version	Date amended	Comments
1.0	20 September 2016	Template reformatted Finalisation of file format for publication by the Authority

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#### 1 EIEP 14: Retailer tariff rate notification

Title:	Electricity Information Exchange Protocol 14 – Retailer tariff rate notification
Version	Version 1.0
Application:	This protocol applies when a third party service provider requests a retailer to provide its generally available tariff rates.
Participants:	Retailers
Code references:	Clause 11.1(g) and 11.32(g) of Part 11. Not regulated.
Dependencies:	This protocol should be read in conjunction with the connection data available for an ICP from the Authority's web portal.

#### Description of when this protocol applies

A retailer may use this protocol when responding to a request from a third party service provider that requests the retailer's generally available tariff plans. This is a voluntary protocol.

#### **Business requirements**

- The protocol is primarily designed to generate a CSV-formatted file. As an additional option, it can be used to develop an alternative file format (such as JSON) conveying the same content as agreed by the requesting and supplying parties.
- 2. The format should include a full and complete file of the retailer's generally available tariffs that are in use and comply with the attribute specifications and the protocol specifications that are set out in this protocol.
- 3. If the retailer becomes aware of an error in the file, the retailer must advise the recipient of the error as soon as practicable after becoming aware of the error. The retailer may provide the recipient with a partial or full replacement file.
- 4. A plan notification must include the conditions for application of the tariff rate.
- 5. Where a tariff rate applies to a brand name, the brand name should be identified in the "Retailers name" field, and the parent participant identifier of the brand name should be used in the "Retailer participant identifier" field.
- 6. Tariff rates included in this format must:
  - a. be GST exclusive
  - b. have the effect of any discounts removed. Where a tariff rate has different discounts applicable, the tariff rate description should be have the discount condition appended to the tariff name eg "Anytime Wellington domestic direct debit", and each different discount must be identified with a different tariff.

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- c. all components (such as separate rates, fees, levys etc) making up the plan must be included.
- 7. A file will consist of:
  - a. single header row
  - b. one or more customer type rows
  - c. optional additional attribute/condition rows for each customer type
  - d. one or more plan rows for each customer row
  - e. optional additional attribute/condition rows for each plan
  - f. one Network/Distributor row for each plan

- g. optional additional attribute/condition rows for each plan
- h. one or more rate rows for each plan row
- i. optional rows if there is a time component attached to the rate.
- 8. Attribute codes used in this format are listed at the end of this format to describe certain characteristics that apply to the application of a retailers pricing plan. Attribute codes may be specific to "customer", "plan" or "tariff" information. Where an attribute applies to a tariff, and an attribute code in Appendix 1 describes that attribute, the attribute code must be used. Where there is no attribute code that describes the attribute, a retailer may create an additional attribute code but:
  - a. additional attribute codes must conform to the standard naming convention detailed below
  - b. retailers must provide a definition of what the attribute code means within 2 business days of a request from a third party service provider
  - c. the retailer must provide the additional attribute code to the Authority within three months of its first use to update EIEP 14. The Authority will only decline to update a new code to EIEP 14 if another code for the same purpose already exists
  - d. <u>a retailer that uses a new code for the first time should advise the details of the new code to recipients of EIEP 14 until such time as the Authority publishes an update to EIEP 14.</u>
- 9. Additional attribute codes must conform to the following:
  - a. abbreviations should be avoided
  - b. words must be upper case separated by an underscore and should generally describe what the attribute is for
  - c. not exceed 50 characters in length
  - d. any ASCII characters used must comply with Table 1 ASCII character set shown in Appendix 1.

#### 10. In this format, the term:

- a. <u>"trader" represents the participant that buys and sells electricity from and to the clearing manager, which may be a retailer, purchaser, or generator</u>
- b. <u>"retailer" represents the participant that sells electricity to a consumer, which may be a participant hat busy electricity from the clearing manager, or a participant that buys electricity from another participant.</u>

#### Data inputs

Retailers' generally available price plans.

#### **Specifications**

The specification has multiple levels, and contains optional segments to enable simplicity along with future flexibility within a csv structure.

- Level 1 Customer type. This level specifies attributes particular to the customer class that the retailer is providing plans for, followed by 0 or more attribute rows as applicable
  - Attributes that relate to customers which is a collection of factors that define the customer
  - Level 2 Plan. A plan means a collection of Tariffs and Attributes available for a particular set of conditions, (ie region, configuration, etc)
    - o Attributes that relate to the plan which are not customer related. It is a collection of factors

- that can additionally be applied to a plan (ie a discount, constraint filter, or extra piece of information such as T&C text or a URL)
- Level 3 A network record providing common distributor level details that will make up a portion of the above set of conditions if applicable
- Level 3 A tariff record provide a collection of single rates that will be applied per defined unit (ie \$/kWh, \$/day, \$/month). Some of these may be meter register, timespan or metering configuration dependant.
  - Attributes that relate to tariffs which are not customer or plan related. It is a collection of factors that can additionally be applied to a tariff (ie requires loss adjustment)
  - Schedules that relate to tariffs are a collection of timespans to which a tariff or attribute may be limited.

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
Header record type	Char 3	М	(Root)	HDR – indicates the row is a header record type
File type	Char 7	М	FileType	Pricing Information - RETPRCEPRCSCHD
Version of EIEP	Num 3.1	М	Version	Version of EIEP that is being used for this file.
Sender	Char 20	М		Name of sending party. Participant identifier to be used if the sender is a participant.
Sent on behalf of	Char 4	М		Participant identifier of party on whose behalf data is provided.
Recipient	Char 4	М		Party code of recipient or if the same information is provided to multiple parties may be "ANY"
				If no party code has been assigned by the Authority leave the field blank.
Report run date	DD/MM/YYY Y	М	RunDate	Date the report is run
Report run time	HH:MM:SS	М	RunTime	Time the report is run
Unique file identifier	NUM 15	М	Uniquifier	Reference that uniquely identifies the file
Number of detailed records	NUM 8	М	RecordCount	Total number of DET records in report
Where the information is provided as CSV is the				
number of lines in the report. Where the information is				
provided as				

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JSON is the number of tariffs contained in the file				
Utility type	Char 1	<u>M</u>	<u>UtilType</u>	Type of energy supply, use "E" = Electricity
File status	Char 1	M		I (Initial) or R (Replacement) or X (replace only those tariffs contained in this replacement file)

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
<u>Retailer</u>				<u>I</u>
Retailer record type	<u>Char 15</u>	<u>M</u>	Retailer	"RETAILER" – indicates the row defines the retailer that
	Char 4	N/I	Trodorld	the plan is relevant for
<u>Trader</u> participant	Chai 4	<u>M</u>	<u>TraderId</u>	Mandatory if a participant identifier has been assigned to
<u>identifier</u>				the trader by the Authority.
	Char 4	-	Deteilerld	Null if the trader does not have a participant identifier.
Retailer participant	Char 4	<u>C</u>	RetailerId	Participant identifier of the retailer assigned by the
<u>identifier</u>				Authority to the participant that purchases electricity from
				the clearing manager, that is then on-sold as part of this
				tariff
D 4 11	0. 50		D . " D	Null if the retailer does not have a participant identifier.
Retailer	<u>Char 50</u>	<u>M</u>	dName	Brand name of retailer
<u>name</u>			ulvaille	
Customer ty	ре			
Customer	Char 15	М	CustomerGro	Must be "CUSTOMER"
record type			ups[]	
Customer	Char 1000	С	CustomerGro	Text value or description of the rules for allocation to
text			up	customers.
				Null if there are no rules
Customer attr	ributes			
An extendabl	e list of commo	on customer att	ributes that is	common to a CUSTOMER TYPE
Attribute	Char 15	М	Attributes[]	"ATTRIBUTE" – indicates the attributes additional to rates
record type				that apply to the plan
Attribute code	Char 50	С	Attribute	The name of the attribute eg "ANZSIC"
Attribute	Num 20.6	С	NumValue	The numerical value (which may be either +ve or -ve) of
n <u>N</u> umerical				the attribute eg "10.012345" or "10".
value				Null if non-numerical attribute, ie "URL"
Unit of	Char <del>25</del> 50	С	UnitTextValu	The unit of the attribute eg "%", '\$'.
<del>measure</del> Text	<u></u>		<u>e</u>	Null if non-numerical attribute, ie "ANZSIC"
<u>value</u>				Train in the manner out attribute, to ANZOIO
Attribute text	Char 1000	С	<del>TextValue</del> De	Text value or description of the rules of the attribute eg
<del>value</del> Descript			<u>scription</u>	"Applies only to domestic customers with red roofs"
<u>ion</u>				Null if there is no attribute
Retailer				
<del>rotanor</del>				

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
Retailer record type	<del>Char 15</del>	M	Retailer	"RETAILER" – indicates the row defines the retailer that
Trader participant identifier	Char 4	M	TraderId	Mandatory if a participant identifier has been assigned to the trader by the Authority.  Null if the trader does not have a participant identifier.
Retailer participant identifier	Char 4	C	RetailerId	Participant identifier of the retailer assigned by the Authority to the participant that purchases electricity from the clearing manager, that is then on-sold as part of this tariff Null if the retailer does not have a participant identifier.
Retailer name	Char 50	М	RetailerBran dName	Brand name of retailer
Plan				
Plan record type	Char 15	М	Plans[]	"PLAN" – indicates the row defines the retailer that the tariff rate is relevant for is a tariff plan record.
Retailers plan code	Char 50	0	Plan	A plan code assigned by a retailer that is unique to the plan
Retailers plan description	Char 50	М	Description	A plan description assigned by a retailer that is unique to the plan
	DD/MM/YYYY	С	StartDate	The future start date of the new tariff rate Null if the start date is in the past
End date of plan	DD/MM/YYYY	С	EndDate	The future end date of the tariff rate if it is known.  Null if there is no end date
Close date	DD/MM/YYYY	С	CloseDate	The final date a customer can be signed up to the plan (no new customers after this date).  Null if there is no close date
<del>LFC</del> Low Fixed Charge	Char 1	М	LowFixedCh arge	'Y' if provided as low fixed charge plan under the "Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004" otherwise "N"
Plan attribute	S.			
An extendabl common to a		n attributes, el	igibility criteria	, pricing conditions, additional information etc that is
Attribute record type	Char 15	М	Attributes[]	"ATTRIBUTE" – indicates the attributes additional to rates that apply to the plan
Attribute code	Char 50	С	Attribute	The name of the attribute eg  "DISCOUNT_PROMPT_PAYMENT",  "EXIT_FEE",  "KVA_MAX",  "URL"
<del>Value</del> Numeri cal value	Num 20,6	С	NumValue	The numerical value (which may be either +ve or –ve) of the attribute eg "10.012345" or "10". Null if non-numerical attribute, ie "URL"
<del>Unit of</del> measure <u>Text</u>	Char <del>25</del> 50	С	<del>Unit</del> TextValu <u>e</u>	The unit of the attribute eg "%", '\$'. Null if non numerical attribute, ie "URL"

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
<u>value</u>				
Attribute text valueDescript ion		С	TextValueDe scription	Text value or description of the rules of the attribute eg "Applicable if paid within 10 business days" Null if there is no attribute
Network				
	lentifies the netweetwork row prov	-		. Where a plan applies to more than one network, there
Network record type	Char 15	M	Networks[]	"NETWORK" – defines the network that the plan is relevant to.
Distributor participant identifier	Char 4	С	Network	Details of the distributors network (obtainable for an ICP from the registry web portal) that the plan is applicable for.
NSP	Char 200	С	NSP	Network supply point where a tariff rate is specific to 1 or more NSP eg CPK0331CKHK. Separate NSPs with a space where there are multiple NSPs. Mandatory if the tariff rate is applicable to an NSP. Null if not applicable
Distributor price category code	Char 200	С		Price category code where a tariff rate is specific to 1 or more price category codes.  Separate price category codes with a space where there are multiple codes.  Mandatory if the tariff rate is applicable to a price category code.  Null if not applicable
Distributor loss category code	Char 50	С		Loss category code where a tariff rate is specific to 1 or more loss category codes. Separate loss category codes with a space where there are multiple codes. Mandatory if the tariff rate is applicable to a loss category code. Null if not applicable
Tariff				
Tariff record type	Char 15	М	Tariffs[]	"TARIFF" – defines the eligible rates for the plan.
Retailers tariff identifier	Char 50	0	Tariff	A retailer identifier description or code assigned by a retailer that is unique to the tariff rate  Mandatory if tariff identifier used in published information
Tariff name	Char 50	М	Description	The name of this component used by the retailer and that appears on the customers invoice eg "Domestic low fixed charge under 15kVA", "Electricity Authority levy" not necessarily tied to a meter register
Fixed / Variable	Char 1	М	Fix <u>ed</u> Var <u>iabl</u> <u>e</u>	Identifies a data row as either "V" for variable where the rate applies to a variable and measured electricity quantity such as volume or demand or in all other cases "F" for fixed

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
Tariff rate	Num 6.6	М	Rate	The specific tariff rate in either  a) where unit type is spot + %, % of cost. In all other cases  b) dollars per unit type
Unit type	Char 25	С	Unit	The type of unit to which the tariff rate applies as per unit of measure text value type table.
Flow direction indicator	Char 1	С	FlowDirection	For energy tariff components only, the flow direction that the plan is eligible for  X – Consumption only I – Generation only B – Both
Register content code	Char 6	С	RegisterCont entCode	Identifies the register content of a meter register to be eligible for the tariff rate.  a) for fixed charges code is "Fixed" or b) for all electricity conveyed charges ie EA levy, meter lease charges "Null" or in all other cases c) for electricity delivered rate tariff components, as set out in SD-020 of the registry functional specification
Period of availability	Num 2.1	С	PeriodOfAvai lability	Identifies the period of availability of a meter register to be eligible for the tariff rate  Null if not applicable
Tariff attribute An extendable common to a	e list of commor	n attributes, el	igibility criteria	, pricing conditions, additional information, etc that is
Attribute record type	Char 15	М		"ATTRIBUTE" – indicates the attributes additional to rates that apply to the plan
Attribute code	Char 50	С	Attribute	The name of the attribute eg "FIXED_TERM_PERIOD"
Date <u>value</u>	DD/MM/YYYY	С	<u>DateValue</u>	Date if attribute is dependent on a date Null if non-date attribute, ie "URL"
<del>Value</del> Numeri cal value	Num 20.6	С	NumValue	The numerical value (which may be either +ve or –ve) of the attribute eg "10.012345" or "10".  Null if non-numerical attribute, ie "URL"
<del>Unit of</del> measure <u>Text</u> value	Char <del>25</del> 50	С	UnitTextValu e	Eg The type of unit in which data is supplied as per unit of measure text value type table.  Null if non-numerical attribute, ie "URL"
Attribute text valueDescript ion	Char 1000	С	TextValueDe scription	Text value or description of the rules of the attribute eg "Applicable if paid within 10 business days" or "Network or transmission losses are not included in costs" Null if there is no attribute

#### Schedule

If no schedule record, then applicable period assumed to be available 24x7x365

If there are multiple active periods associated with a tariff rate, then multiple rows as required so that

Event data	Format	Retailer to Agent	JSON element/ attribute	Validation rules
a) there is	no more than o	ne on and off	period per row	,
b) an activ	ve period canno	nt span midnigl	ht, if it does tw	o rows should be used.
le Off peak:				
00:00-06:00,	and,			
22:00-24:00				
Schedule	Char 15	M	Schedules[]	"SCHEDULE" – indicates the schedule(s) for which a tariff
record type				rate applies
Daylight	Char 1	С	DaylightSavi	Indicator that the time periods during the period of daylight
savings			ngs	saving
adjustment				1 – are adjusted to daylight saving time (NZDT), or
				2 – remain as standard time (NZST)
Start time	HH:MM	С	StartTime	Start time that the tariff is active for during a day
				expressed as
				a) If all day, Null, or 00.00
				b) If part of a day the start time.
End time	HH:MM	С	EndTime	the end time that the tariff is active for during a day
				expressed as
				a) If all day, Null, or 24.00
				b) If part of a day the end time.
Day type	Char 50	M	DayType	The day type that a tariff applies for
				ANY/Null – no set day type
				BD – national business day
				NBD – national non business day
				WD – weekday
				WE – weekend
				LBD – local business day
				LNBD – local non business day declared in the network
				tariff structure
				SBD – special business day declared in the network tariff
				structure
				SPNBD – special non business day declared in the
				network tariff structure
				Or any combination of days expressed as the first three
				letters of a day name separated by a space.
Month	Char 50	M	Month	Month of year that tariff rate applies to. ANY/Null or if it
				applies to selected months, the name of the months that
				the rate applies to expressed as the first three letters of a
				month separated by a space

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## Appendix A Optional attributes list, ASCII character set, and text value table

A.1 Optional attributes list: to be confirmed and extended over time.

Code	Whei	Where attributes used		Values/Description
	Customer	Plan	Tariff	
ANZSIC	>			The customers type that the tariff applies to  1 – domestic residential only  2 – domestic non-residential (ie holiday) only  3 – retail only  4 – commercial only  5 – industrial only  or  Valid codes separated by a space, from a list of Australian and New Zealand Standard Industrial Classification codes stored in the registry reference tables with an additional code 000000 to indicate a residential customer.  Mandatory if eligibility applies. Assumed 000000 if not.
BUNDLED_GAS	~			Indicates that the tariff is only available bundled with gas
BUNDLED_OTHER	*	•		Use the free text field to describe the bundling requirements As necessary, other codes may be approved by the Authority and appended to this document
CLAW BACK		>		Claw back of a joining bonus should the contract period be broken
CREDIT_CHECK	>			Indicates that a satisfactory credit check is necessary for eligibility
DISCOUNT_PROMPT_PAYMENT	•	•		
DISCOUNT_ PAYMENT_CUSTOMER_INITIATED	•	•		
DISCOUNT_ PAYMENT RETAILER INITIATED	•	•		
DISCOUNT_OTHER	•	•		

EXIT_FEE	•	•		Break fee
FIXED_TERM_DATE		<u>~</u>	~	
FIXED_TERM_PERIOD			~	
FIXED_PRICE_DURING THE TERM			~	
FUSE_SIZE_MIN		•		
FUSE_SIZE_MAX		•		
KWH_MIN		~		
KWH_MAX		~		
KVA_MAX		•		
KVA_MIN		~		
LOSS_ADJUSTMENT		•	•	Indicator that electricity tariff rates are loss exclusive, and local and/or embedded network losses must be applied to either the electricity volume, demand or tariff rates  1 = losses are included in the tariff rates  2 = losses are excluded from the tariff rates
METER_TYPE_AMI	•	•	<b>&gt;</b>	The plan is only eligible for ICPs with an AMI meter and operating two communications
METER_TYPE_C_AND_I	•	•	~	The plan is only eligible for ICPs with an HHR C&I time of use meter
METER_TYPE_NHH	•	•	•	The plan is only eligible for ICPs with NHH meter registers that are not prepay
METER_TYPE_PP		•	~	The plan is only eligible for ICPs with prepay meter registers
PHASES		~		The number of phases that the plan is eligible for apply for which may be 1 – single phase 2 – two phase 3 – three phase 4 – any number of phases
REPRESENTATIVE_TARIFFS		~	~	Indicates basis of tariff structure.  1 – Tariffs are fixed rates  2 – Tariffs are a mix of variable rates over and above spot rates. (I.e. Flick)  3 – Tariffs are variable rates that are over and above spot rates but with a fixed volume hedge

				4 – Tariffs are unknown/estimated for a period, (ie Powershop)
SIGNON_FEE	>	>		Entrance fee
SIGNON_BOND	<b>&gt;</b>	>		Bond requirements
SIGNON_BONUS	~	<b>&gt;</b>		Sign on credit/value/bonus
SURCHARGE	~	<b>&gt;</b>		Applies to certain types of payments
TERMS_AND_CONDITIONS	~	~	~	Additional terms and conditions, free text
URL		~	~	Web link for more information, free text

#### **Protocol specifications**

- 1. Where the file is delivered as a:
  - a. Comma delimited text file. Commas must not be used within fields. If portions of a field require separation, a tilde character (~) must be used. If commas need to be used in the fields, quotation marks must be used to exclude them as separators, as per the DOS CSV format.
  - b. JSON file. JSON element attributes as schedule in this format must be used.
- 2. Matching of file names, code list values, and other information must not be case sensitive.
- 3. The file must contain one header.
- 4. The first record of a file must contain header information followed by three (RETAILER, PLAN, NETWORK, TARIFF, ATTRIBUTE and SCHEDULE) or more detailed lines.
- 5. The file must have a file name that complies with the following, and must have a name that is unique to the month to which the file relates:

Sender + Utility Type (only "E" must be used) + Recipient + File Type (only "PRCSCHD" must be used) + Report Year and Month (yyyymm) + Report Run Date (yyyymmdd) + UniqueID# (e.g. hhmm run time, or ICP but limited to Char(60)) with an extension of .TXT and with the components concatenated using the underscore character, to assist readability.

e.g. TRUS\_E\_UNET\_<u>PRCSCHD</u>\_200007\_20000802\_ UniqueID.TXT

[Char4\_Char1\_Char4\_ Char7\_yyyymm\_yyyymmdd\_Char60.TXT]

#### **Data outputs**

Completed notification of generally available tariffs for transmission by the retailer to the requestor.

#### **Definitions**

- 1. In this protocol, the following definitions apply:
  - a. Code means the Electricity Industry Participation Code 2010
  - b. day means the measure of time for fixed daily charges
  - c. kWh means kilo watt hour energy (real energy).
- 2. Unless the context otherwise requires, any term that is defined in the Code and used in this protocol has the same meaning as in the Code.

#### A.2 Table 1 ASCII character set for use within fields of EIEP 14.

Table 1: ASCII character set for use within fields of EIEP 14

Character	ASCII
32	Space
33	ļ
34	II
35	#
36	\$
37	%
38	&
39	1
40	(
41	)
42	*
43	+
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	Α
66	В
67	С
68	D
69	Е
70	F
71	G
72	Н
73	I
74	J
75	K
76	L
77	M
78	N
79	0
80	Р
81	Q
82	R
83	5
84	Т
85	U
86	V
87	W X Y Z
88	Х
89	У
90	Z
91	[
92	\
93	]
94	^
95	_
96	`

α
b
С
d
e
f
9
h
i
j
k
1
m
n
o
þ
q
r
s
†
u
V
w
X
У
Z
{
}
~

#### A.3 Table 2 Unit of measure Text value table.

Table 2: Unit of measure Text value table

Unit	Description
Day	Period measured in days
Week	Period measured in weeks
Month	Period measured in months
kWh	kilowatt hour energy (real energy)
kW	kilowatt demand (real power)
kVAh	kilovolt ampere hour energy (apparent energy)
kVA	kilovolt ampere demand (apparent power)
kVArh	kilovolt ampere reactive hour energy (reactive energy)
kVAr	kilovolt ampere reactive demand (reactive power)
kVAkm	Kilovolt ampere multiplied by kilometres
Day	Measure of time for fixed daily charges
PF	Power factor
Equipment	Fixed charges for specific equipment (eg transformers)
Day PF	Measure of time for fixed daily charges  Power factor

Note: This list is not exhaustive, alternative units and descriptions may be used if contained in the distributors price schedule.

## Appendix B CSV file format examples

#### Example 1

Simple example available to the entire Wellington (CKHK) region from 'A Simple Retailer Ltd'.

a) Two basic plans, (LFC and SFC both covering IN, CN and UN tariffs) for domestic consumers

HDR,PRCSCHD,1,ASRL,ASRL,ANY,23/05/2016,01:23:45,12345,15,I RETAILER,ASRL,ASRL,Simple Retailer Ltd CUSTOMER,General domestic ATTRIBUTE,ANZSIC,,,0000000 PLAN,PRSU,Residential - standard user,,,,N NETWORK,CKHK,,RSU, TARIFF,RSU-FIXED,Daily supply charge,F,2.1560,Day,B,Fixed, TARRIF,RSU-24UN,Anytime,V,0.1937,kWh,X,UN,24 TARRIF,RSU-AICO,All inclusive,V,0.1737,kWh,X,IN,17 TARRIF,RLU-CTRL,Controlled - hot water,V,0.1537, kWh,X,CN,19 PLAN,PRLU,Residential - low user,,,Y NETWORK, CKHK,,RLU, TARRIF,RLU-FIXED,Daily supply charge,F,0.3333,Day,B,Fixed, TARRIF,RLU-24UN,Anytime,V,0.2768,kWh,X,UN,24 TARRIF,RLU-AICO,All inclusive,V,0.2568,kWh,X,IN,17 TARRIF,RLU-CTRL,Controlled - hot water,V,0.2368, kWh,X,CN,19

#### Example 2

Simple seasonal (summer/winter) example available to the entire Wellington (CKHK) region from 'A Simple Retailer Ltd'.

a) Two basic (seasonal) plans, (LFC and SFC both covering IN, CN and UN tariffs) for domestic consumers

HDR, PRCSCHD, 1, ASRL, ASRL, ANY, 23/05/2016, 01:23:45, 12345, 15, I RETAILER, ASRL, ASRL, Simple Retailer Ltd CUSTOMER, General domestic ATTRIBUTE, ANZSIC,,,0000000 PLAN, PRSU, Residential - seasonal standard user, ,,, N NETWORK, CKHK, , RSU TARIFF,RSU-FIXED,Daily supply charge,F,2.1560,Day,B,Fixed, TARRIF, RSU-24UN, Anytime (summer), V, 0.1837, kWh, X, UN, 24 SCHEDULE, NZDT,,, JAN FEB MAR APR OCT NOV DEC TARRIF,RSU-24UN,Anytime (winter),V,0.2037,kWh,X,UN,24 SCHEDULE, NZDT,,,, APR MAY JUN JUL AUG SEP, TARRIF, RSU-AICO, All inclusive (summer), V, 0.1637, kWh, X, IN, 17 SCHEDULE,NZDT,,,,JAN FEB MAR APR OCT NOV DEC, TARRIF,RSU-AICO,All inclusive (winter),V,0.1837,kWh,X,IN,17 SCHEDULE,NZDT,,,,APR MAY JUN JUL AUG SEP, TARRIF,RLU-CTRL,Controlled - hot water (summer),V,0.1437, kWh,X,CN,19 SCHEDULE, NZDT,,,, JAN FEB MAR APR OCT NOV DEC. TARRIF,RLU-CTRL,Controlled - hot water (winter),V,0.1637, kWh,X,CN,19 SCHEDULE, NZDT, ,,, APR MAY JUN JUL AUG SEP, PLAN, PRLU, Residential - seasonal low user, ,, Y NETWORK, CKHK, RLU, TARIFF,RLU-FIXED, Daily supply charge (low user), F, 0.3333, Day, B, Fixed, TARRIF,RLU-24UN,Anytime (low user - summer),V,0.2668,kWh,X,UN,24 SCHEDULE,NZDT,,,,JAN FEB MAR APR OCT NOV DEC, TARRIF, RLU-24UN, Anytime (low user - winter), V, 0.2868, kWh, X, UN, 24 SCHEDULE, NZDT,,,, APR MAY JUN JUL AUG SEP, TARRIF,RLU-AICO,All inclusive (low user - summer),V,0.2468,kWh,X,IN,17 SCHEDULE,NZDT,,,,JAN FEB MAR APR OCT NOV DEC, TARRIF, RLU-AICO, All inclusive (low user - winter), V, 0.2668, kWh, X, IN, 17 SCHEDULE,NZDT,,,,APR MAY JUN JUL AUG SEP,
TARRIF,RLU-CTRL,Controlled - hot water (low user - summer),V,0.2268, kWh,X,CN,19 SCHEDULE, NZDT,,,, JAN FEB MAR APR OCT NOV DEC, TARRIF, RLU-CTRL, Controlled - hot water (low user - winter), V, 0.2468, kWh, X, CN, 19 SCHEDULE, NZDT,,,, APR MAY JUN JUL AUG SEP,

#### Example 3

Simple example available to a subset of the Wellington (CKHK) region from 'A Simple Retailer Ltd'.

- a) Two basic plans, (LFC and SFC both covering available distribution tariffs ie IN, CN, UN, Day/Night and EV) for domestic consumers. The rates come into effect 1 April 2016, and will not be offered to new customers after 30 June 2016. The plan offers a 10% discount for prompt payment, and a further 2% discount for a direct debit payment.
- b) They are further limited to a region (Three central city NSPs) and Distributor Price Categories, (separate sets for LFC and SFC as tends to be the case in Wellington)
- c) Schedules are provided for the EV tariffs

HDR,PRCSCHD,1,ASRL,ASRL,ANY,23/05/2016,01:23:45,12345,25,I RETAILER, ASRL, ASRL, Simple Retailer Ltd CUSTOMER, General domestic ATTRIBUTE, ANZSIC,,,,0000000
ATTRIBUTE, DISCOUNT\_PROMPT\_PAYMENT, 10,%,
ATTRIBUTE, DISCOUNT\_PAYMENT\_RETAILER INITIATED, 2,%, PLAN, PRSU, Residential - standard user, 01/04/2016, ,30/06/2016, N NETWORK, CKHK, WILO331 CKHK CPK0331 CKHK CPK0111 CKHK, RSU, LCC1 TARIFF,RSU-FIXED,Daily supply charge,F,2.1560,Day,B,Fixed, TARRIF,RSU-24UN,Anytime,V,0.1937,kWh,X,UN,24 TARRIF, RSU-AICO, All inclusive, V, 0.1737, kWh, X, IN, 17 TARRIF, RLU-CTRL, Controlled - hot water, V, 0.1537, kWh, X, CN, 19 TARRIF,RSU-16D,Daytime,V,0.1937,kWh,X,D,16 TARRIF, RSU-NITE, Night only, V, 0.1337, kWh, X, N, 8 TARRIF, RSU-EVNITE, Electric vehicle - night only, V, 0.1337, kWh, X, UN, 10 SCHEDULE, NZDT, 21:00, 24:00,,, SCHEDULE,NZDT,00:00,07:00,,, PLAN,PRLU,Residential - low user,01/04/2016,,30/06/2016,Y NETWORK,CKHK,WIL0331CKHK CPK0331CKHK CPK0111CKHK,RLU,LCC1 TARIFF,RLU-FIXED,Daily supply charge,F,0.3333,Day,B,Fixed, TARRIF,RLU-24UN,Anytime,V,0.2768,kWh,X,UN,24 TARRIF,RLU-AICO,All inclusive,V,0.2568,kWh,X,IN,17 TARRIF, RLU-CTRL, Controlled - hot water, V, 0.2368, kWh, X, CN, 19 TARRIF, RLU-16D, Daytime, V, 0.2768, kWh, X, D, 16 TARRIF, RLU-NITE, Night only, V, 0.2368, kWh, X, N, 8 TARRIF,RLU-EVNITE, Electric vehicle - night only, V, 0.2368, kWh, X, UN, 10 SCHEDULE, NZDT, 21:00, 24:00,,, SCHEDULE, NZDT, 00:00, 07:00, ,,

## Appendix C JSON file format examples

#### **Example 1**

Simple example available to the entire Wellington (CKHK) region from 'A Simple Retailer Ltd'. (As per appendix 2, example 1)

```
"FileType": "PRCSCHD",
"Version": 1,
"Sender": "ASRL",
"SentOnBehalfOf": "ASRL",
"Recipient": "ANY",
"RunDate": "2016-05-23",
"RunTime": "01:23:45",
"Uniquifier": 12345,
"RecordCount": "8"
"RecordCount": "8", 
"FileStatus": "I",
 "Retailers" :
           "TraderId" : "ASRL",
"RetailerId" : "ASRL",
           "RetailerBrandName" : "A Simple Retailer Ltd",
            "CustomerGroups":
           [
                      "CustomerGroup": "General domestic",
                      "Attributes" :
                      [
                                 "Attribute" : "ANZSIC",
"TextValue" : "0000000"
                     ],
"Plans" :
                           {
                                 "Plan" : "PRSU",
"Description" : "Residential - standard user",
                                 "LowFixedCharge" : "N",
                                 "Networks" :
                                 [
                                            "Network": "CKHK",
                                            "DistributorPriceCategory": "RSU"
                                      },
                                ],
"Tariffs" :
                                 [
                                            "Tariff": "RSU-FIXD",
                                           "Description" : "Daily supply charge",
"FixedVariable" : "F",
                                           "Rate" : 2.1560,
"Unit" : "Day",
                                            "FlowDirection" : "B",
                                            "RegisterContentCode": "Fixed",
                                            "Tariff": "RSU-24UN",
                                           "Description" : "Anytime", 
"FixedVariable" : "V",
                                            "Rate" : 0.1937,
"Unit" : "kWh",
                                            "FlowDirection": "X",
                                            "RegisterContentCode": "UN",
                                            "PeriodOfAvailability": 24
                                            "Tariff": "RSU-AICO",
                                            "Description": "All inclusive",
```

```
"Rate" : 0.1737,
"Unit" : "kWh",
                               "FlowDirection" : "X"
                               "RegisterContentCode": "IN",
                               "PeriodOfAvailability": 24
                              "Tariff": "RSU-CTRL",
"Description": "Controlled/Hot water",
"Fixed Variable": "V",
                               "Rate" : 0.1537,
"Unit" : "kWh",
                               "FlowDirection": "X",
                               "RegisterContentCode" : "CN",
                               "PeriodOfAvailability": 17
                    ]
               },
{
                    "Plan" : "PRLU",
"Description" : "Residential - low user",
                     "LowFixedCharge": "Y",
                     "Networks" :
                    [
                               "Network": "CKHK",
                               "DistributorPriceCode": "RLU"
                          },
                    ],
"Tariffs" :
                    [
                               "Tariff": "RLU-FIXD",
                              "Description": "Daily supply charge",
"FixedVariable": "F",
"Rate": 0.3333,
"Unit": "Day",
                               "FlowDirection" : "B",
                               "RegisterContentCode": "Fixed",
                               "Tariff": "RLU-24UN",
                              "Description" : "Anytime",
"FixedVariable" : "V",
                              "Rate": 0.2768,
"Unit": "kWh",
"FlowDirection": "X",
"RegisterContentCode": "UN",
                               "PeriodOfAvailability": 24
                               "Tariff": "RLU-AICO",
                              "Description" : "All inclusive",
"FixedVariable" : "V",
                              "Rate" : 0.2568,
"Unit" : "kWh",
                               "FlowDirection": "X",
                               "RegisterContentCode": "IN",
                               "PeriodOfAvailability": 24
                               "Tariff": "RLU-CTRL",
                              "Description": "Controlled/Hot water",
"FixedVariable": "V",
"Rate": 0.2368,
"Unit": "kWh",
                               "FlowDirection" : "X",
"RegisterContentCode" : "CN",
                               "PeriodOfAvailability": 17
                         }
                   ]
              }
         ]
    }
]
```

"FixedVariable": "V",

1

#### Example 2

Simple seasonal example available to the entire Wellington (CKHK) region from 'A Simple Retailer Ltd'. (As per appendix 2, example 2)

```
"FileType" : "PRCSCHD",
"Version" : 1,
"Sender" : "ASRL",
"Sentor : ASKL,
"SentOnBehalfOf" : "ASRL",
"Recipient" : "ANY",
"RunDate" : "2016-05-23",
"RunTime" : "01:23:45",
"Uniquifier" : 12345,
"RecordCount": 8,
"FileStatus": "I",
"Retailers":
           "TraderId" : "ASRL",
"RetailerId" : "ASRL",
"RetailerBrandName" : "A Simple Retailer Ltd",
           "CustomerGroups" :
           [
                       "CustomerGroup": "General domestic",
                       "Attributes" :
                       [
                                  "Attribute" : "ANZSIC",
"TextValue" : "0000000"
                      ],
"Plans" :
                            {
                                  "Plan" : "PRSU",
"Description" : "Residential – seasonal standard user",
                                  "LowFixedCharge" : "N",
                                  "Networks":
                                  [
                                             "Network": "CKHK",
                                             "DistributorPriceCategory": "RSU"
                                       }
                                 ],
"Tariffs" :
                                             "Tariff": "RSU-FIXD",
                                             "Description" : "Daily supply charge",
"FixedVariable" : "F",
                                             "Rate" : 2.1560,
"Unit" : "Day",
                                             "FlowDirection": "B",
                                             "RegisterContentCode": "Fixed"
                                             "Tariff": "RSU-24UN",
                                            "Description": "Anytime (summer)",
"FixedVariable": "V",
"Rate": 0.1837,
"Unit": "kWh",
                                             "FlowDirection" : "X",
                                             "RegisterContentCode": "UN",
                                             "PeriodOfAvailability" : 24,
"Schedules" : [{"Month" : "JAN FEB MAR APR OCT NOV DEC"}]
                                             "Tariff": "RSU-24UN",
                                             "Description" : "Anytime (winter)",
"FixedVariable" : "V",
                                             "Rate" : 0.2037,
"Unit" : "kWh",
                                             "FlowDirection" : "X",
```

```
"PeriodOfAvailability": 24,
"Schedules": [{"Month": "APR MAY JUN JUL AUG SEP"}]
                                                 "Tariff": "RSU-AICO",
                                                 "Description": "All inclusive (summer)",
"FixedVariable": "V",
                                                 "Rate" : 0.1637,
"Unit" : "kWh",
                                                 "FlowDirection" : "X",
                                                 "RegisterContentCode" : "IN",
"PeriodOfAvailability" : 24,
"Schedules" : [{"Month" : "JAN FEB MAR APR OCT NOV DEC"}]
                                            },
{
                                                 "Tariff": "RSU-AICO",
                                                 "Description": "All inclusive (winter)",
"FixedVariable": "V",
                                                 "Rate": 0.1837,
"Unit": "kWh",
"FlowDirection": "X",
                                                  "RegisterContentCode": "IN",
                                                 "PeriodOfAvailability": 24,
"Schedules": [{"Month": "APR MAY JUN JUL AUG SEP"}]
                                            },
{
                                                 "Tariff" : "RSU-CTRL",
"Description" : "Controlled/Hot water (summer)",
"FixedVariable" : "V",
                                                 "Rate" : 0.1537,
"Unit" : "kWh",
                                                 "FlowDirection" : "X",
                                                  "RegisterContentCode": "CN",
                                                 "PeriodOfAvailability" : 17,
"Schedules" : [{"Month" : "JAN FEB MAR APR OCT NOV DEC"}]
                                                 "Tariff" : "RSU-CTRL",
"Description" : "Controlled/Hot water (winter)",
"Fixed/Variable" : "V",
                                                 "Rate" : 0.1537,
"Unit" : "kWh",
                                                 "FlowDirection" : "X",
                                                  "RegisterContentCode" : "CN",
                                                 "PeriodOfAvailability": 17,
"Schedules": [{"Month": "APR MAY JUN JUL AUG SEP"}]
                                     ]
                                }
                           ]
        ]
                     }
    ]
}
```

"RegisterContentCode": "UN",

#### Example 3

An example available to a subset of the Wellington (CKHK) region from 'A Simple Retailer Ltd'. (As per appendix 2, example 3)

- a) Two basic plans, (LFC and SFC both covering available distribution tariffs ie IN, CN, UN, Day/Night and EV) for domestic consumers. The rates come into effect 1 April 2016, and will not be offered to new customers after 30 June 2016. The plan offers a 10% discount for prompt payment, and a further 2% discount for a direct debit payment.
- b) They are further limited to a region (Three central city NSPs) and Distributor Price Categories, (separate sets for LFC and SFC as tends to be the case in Wellington)
- c) Schedules are provided for the EV tariffs

```
"FileType" : "PRCSCHD",
"Version" : 1,
"Sender" : "ASRL",
"Sender : ASKL,"
"SentOnBehalfOf": "ASRL",
"Recipient": "ANY",
"RunDate": "2016-05-23",
"RunTime": "01:23:45",
"Uniquifier": 12345,
"RecordCount": "14", 
"FileStatus": "I",
"Retailers":
            "TraderId" : "ASRL",
"RetailerId" : "ASRL",
            "RetailerBrandName" : "A Simple Retailer Ltd",
             "CustomerGroups":
            [
                        "CustomerGroup": "General domestic",
                        "Attributes" :
                                    "Attribute" : "ANZSIC",
"TextValue" : "0000000"
                                    "Attribute" : "DISCOUNT_PROMPT_PAYMENT",
"NumValue" : 10,
"TextValue" : "%"
                                    "Attribute" : "DISCOUNT_PAYMENT_RETAILER INITIATED", "NumValue" : 2, "TextValue" : "%"
                       ],
"Plans" :
                                    "Plan": "PRSU",
"Description": "Residential - standard user",
"StartDate": "2016-04-01",
"CloseDate": "2016-06-30",
                                     "LowFixedCharge": "N",
                                    "Networks" :
                                    [
                                                 "Network": "CKHK",
                                                 "NSP": "WIL0331CKHK CPK0331CKHK CPK0111CKHK",
                                                "DistributorPriceCategory" : "RSU",
"DistributorLossCategrory" : "LCC1"
```

```
},
],
"Tariffs" :
            "Tariff": "RSU-FIXD",
            "Description": "Daily supply charge",
"FixedVariable": "F",
           "Rate" : 2.1560,
"Unit" : "Day",
            "FlowDirection": "B",
            "RegisterContentCode" : "Fixed",
           "Tariff": "RSU-24UN",
"Description": "Anytime",
"FixedVariable": "V",
           "Rate" : 0.1937,
"Unit" : "kWh",
            "FlowDirection": "X",
            "RegisterContentCode": "UN",
            "PeriodOfAvailability" : 24
      },
            "Tariff": "RSU-AICO",
           "Description" : "All inclusive",
"FixedVariable" : "V",
           "Rate": 0.1737,
"Unit": "kWh",
"FlowDirection": "X",
            "RegisterContentCode" : "IN",
"PeriodOfAvailability" : 24
           "Tariff" : "RSU-CTRL",
"Description" : "Controlled/Hot water",
"Fixed/Variable" : "V",
           "Rate": 0.1537,
"Unit": "kWh",
"FlowDirection": "X",
            "RegisterContentCode": "CN",
            "PeriodOfAvailability": 17
      },
            "Tariff": "RSU-16D",
           "Description" : "Daytime", 
"FixedVariable" : "V",
           "Rate": 0.1937,
"Unit": "kWh",
"FlowDirection": "X",
            "RegisterContentCode": "D",
            "PeriodOfAvailability": 16
           "Tariff": "RSU-NITE",
"Description": "Night only",
"FixedVariable": "V",
"Rate": 0.1337,
"Unit": "kWh",
            "FlowDirection" : "X",
"RegisterContentCode" : "N",
            "PeriodOfAvailability": 8
      },
           "Tariff": "RSU-EVNITE",
"Description": "Electric vehicle - night only (9PM-7am)",
"FixedVariable": "V",
            "Rate" : 0.1337,
"Unit" : "kWh",
            "FlowDirection": "X",
            "RegisterContentCode": "UN",
            "PeriodOfAvailability": 10,
            "Schedules":
            [
                       "DaylightSavings": 1,
```

```
"StartTime" : "21:00",
"EndTime" : "24:00",
                   },
                          "DaylightSavings": 1,
"StartTime": "00:00",
"EndTime": "07:00",
           ]
      }
]
"Plan" : "PRLU",
"Description" : "Residential - low user",
"StartDate" : "2016-04-01",
"CloseDate" : "2016-06-30",
 "LowFixedCharge": "Y",
 "Networks" :
[
             "Network": "CKHK",
             "NSP": "WIL0331CKHK CPK0331CKHK CPK0111CKHK",
"DistributorPriceCategory": "RLU",
"DistributorLossCategory": "LCC1"
       },
],
"Tariffs" :
[
             "Tariff" : "RLU-FIXD",
"Description" : "Daily supply charge",
"FixedVariable" : "F",
             "Rate": 0.3333,
"Unit": "Day",
             "FlowDirection" : "B",
             "RegisterContentCode": "Fixed",
             "Tariff" : "RLU-24UN",
"Description" : "Anytime",
"FixedVariable" : "V",
            "Rate": 0.2768,
"Unit": "kWh",
"FlowDirection": "X",
             "RegisterContentCode": "UN",
             "PeriodOfAvailability": 24
             "Tariff": "RLU-AICO",
            "Description": "All inclusive",
"FixedVariable": "V",
"Rate": 0.2568,
"Unit": "kWh",
             "FlowDirection" : "X",
"RegisterContentCode" : "IN",
             "PeriodOfAvailability" : 24
       },
             "Tariff" : "RLU-CTRL",
"Description" : "Controlled/Hot water",
"FixedVariable" : "V",
             "Rate" : 0.2368,
"Unit" : "kWh",
             "FlowDirection" : "X",
"RegisterContentCode" : "CN",
             "PeriodOfAvailability": 17
             "Tariff": "RLU-16D",
             "Description" : "Daytime",
"FixedVariable" : "V",
             "Rate": 0.2768,
"Unit": "kWh",
"FlowDirection": "X",
             "RegisterContentCode": "D",
```