

15 August 2017

Register content code and EIEP consultation workshop

INTRODUCTION

COMPETITION • RELIABILITY • EFFICIENCY

PURPOSE OF WORKSHOP

In this workshop, we will cover

- general update
- EIEP consultation
- educational portal
- register content code consultation

- *Morning tea – 11am*
- *Lunch – 12.30pm*
- *Afternoon tea – 3.00pm*

DISCLAIMER

This workshop provides general information to help participants understand how the electricity market functions under the Electricity Industry Participation Code 2010 (Code). It reflects the Authority's view.

The information presented at this course is not intended to be definitive and should not be used instead of legal advice.

Requirements of the Code and service provider systems change over time, and participants should ensure that they review the latest copy of the Code and functional specifications.

If there is any inconsistency between information presented and the Code, the Code takes precedence.

UPDATE - GENERAL

- Switch review and technical group
 - Call for technical group members about October 2017
- Change of terms in the Code and guidelines
 - Connection and energisation guidelines will be re-consulted
- AMI = “Y” in the registry metering records
 - Memo released 26 July 2017
- Authority proposing Part 6 amendments that include
 - EEA “Hosting guidelines”
 - Distributors to advise retailers of applications approved
 - Retailers to advise distributors of reverse power flags

UPDATE - REGISTRY

- Proposed registry “fuel type” additions
 - Addition of ESD (Energy Storage Device)
- Proposed new register content codes
 - Consultation completed, reviewing submissions
- Use of registry inactive “status reason codes”
 - It appears most ICP identifiers populated with de-energised vacant property?

UPDATE - SWITCH BREACH REPORT

- Authority working with Jade to correct reports
 - reports in progress
 - functional specification will be updated
 - Yet to decide on final format of the report. Must choose:
- Integrating new breach types in a way that allows participants that automate the processing of breach reports to do any necessary system changes. Could mean:
 - Giving 2 separate reports for some time (old report type and new with added breach types) and phasing out the shorter report over time
 - Providing a separate report that includes the new types, leaving the old report format alone and in use (but adjusting the timings to be correct)
- Flow charts created to foster understanding of the switching process

UPDATE - ELECTRICITY INDUSTRY ACT 2010

CHANGE

Subpart 2A—Secondary networks

131A Application of electricity industry legislation to secondary networks

- (1) This Act, the regulations, and the Electricity Industry Participation Code apply, with all necessary modifications, to a secondary network provider as if that provider were a distributor.
- (2) In this section,—

secondary network means equipment that—

- (a) is used, designed, or intended for use in, or in connection with, the conveyance of electricity; and
- (b) is indirectly connected to the national grid

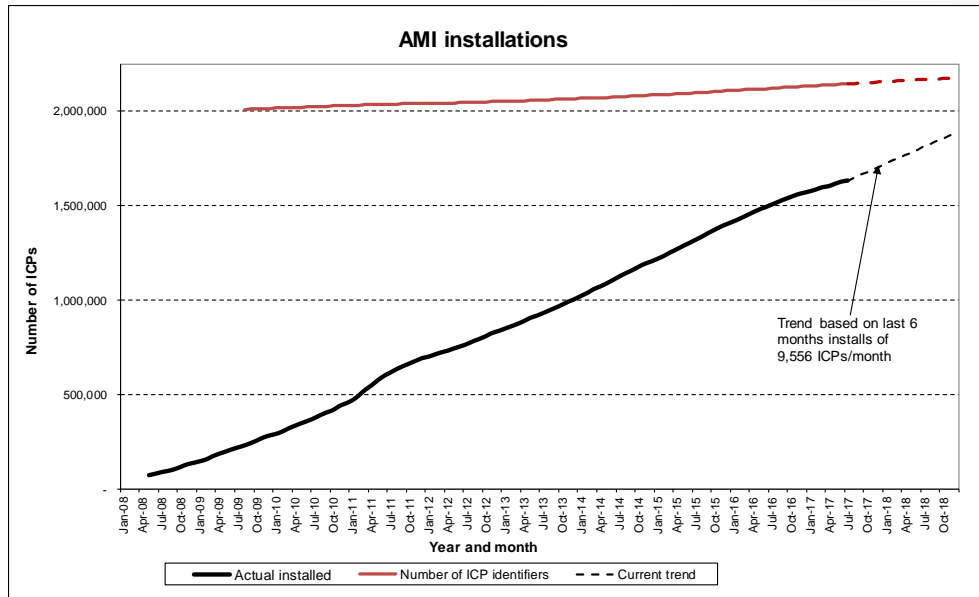
secondary network provider means a business that—

- (a) is engaged in the conveyance of electricity on a secondary network; and
- (b) provides services that are substantially similar to the services provided by a distributor.

- **Reminder**

- The Code (incl Part 12A) and the Levy applies to embedded networks
- Many obligations require internal ICP identifier or an NSP

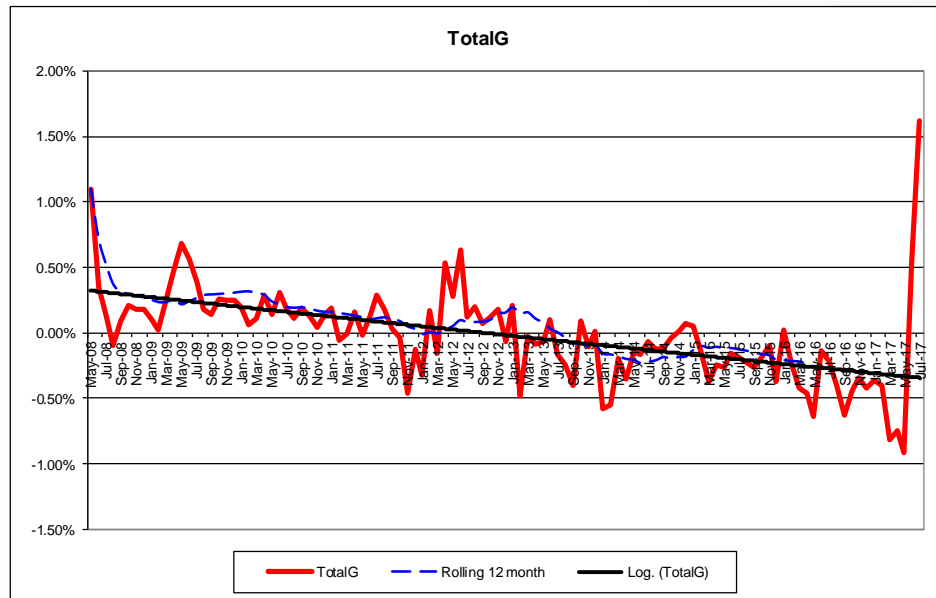
ADVANCED METERING INFRASTRUCTURE (AMI)



- Net ICPs incrementing at about 2,000/month
- As at 31 July 2017, 1,633,075 active and inactive ICP identifiers have AMI (76.09%)
- By Dec 2018, based on current trends, approx 1,795,605 (82.52%) ICP identifiers may have AMI

- AMI – Code does not contain specific definition, but clause 8 of Sch 10.6 states
*.....applies when **raw meter data** can only be obtained from a **metering equipment provider's back office**....*

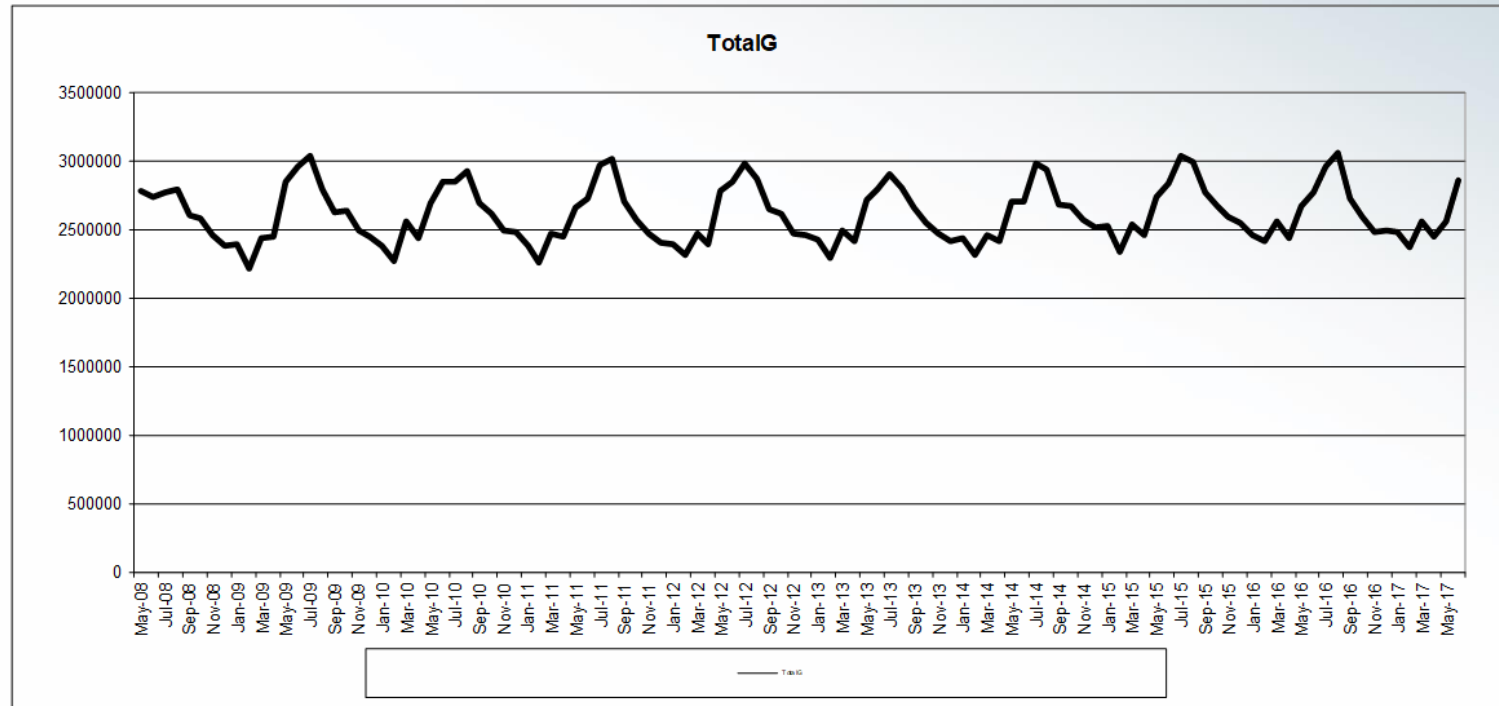
UNACCOUNTED FOR ELECTRICITY (UFE)



- The quantity of electricity unallocated per trading period per balancing area after all submissions, adjustments and losses taken into account
- Can be +ve or -ve

- Impacted by accuracy of
 - metering
 - submission information, data handling and meter readings
 - registry records
 - network reconciliation losses
- UFE varies by network
- R14 UFE
 - average network UFE = -0.15%
 - highest network UFE = 2.30% (BA 4.64%)
 - lowest network UFE = -1.16% (BA - 4.06%)

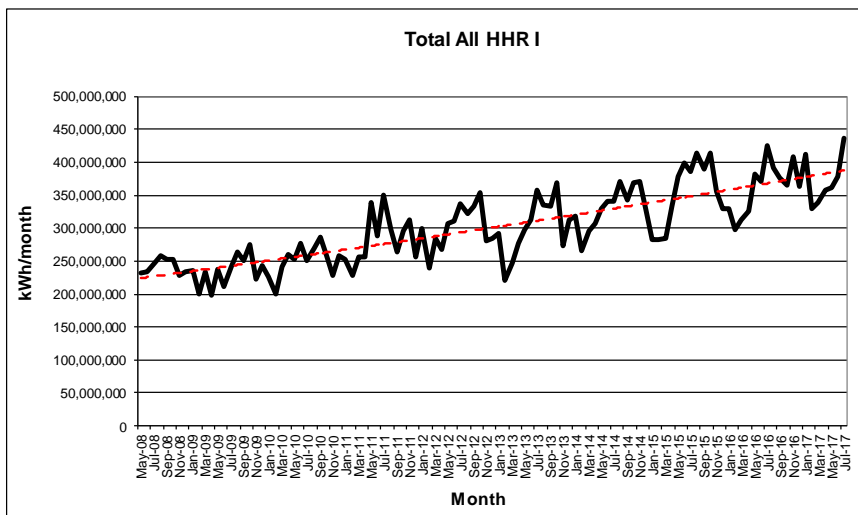
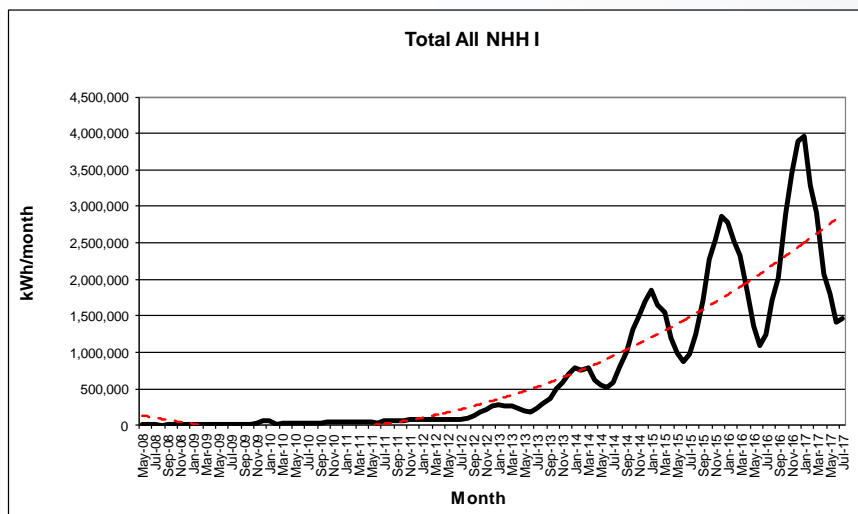
GN NETWORK MONTHLY VOLUMES



Monthly MWh

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008					2,773,248	2,733,835	2,761,619	2,789,403	2,594,476	2,576,619	2,457,106	2,382,179
2009	2,387,160	2,215,595	2,437,454	2,441,619	2,844,621	2,954,828	3,038,557	2,789,351	2,621,285	2,634,094	2,494,250	2,445,230
2010	2,376,929	2,264,570	2,554,698	2,438,367	2,685,387	2,849,829	2,849,829	2,922,529	2,689,862	2,605,791	2,491,461	2,473,959
2011	2,374,187	2,255,590	2,462,700	2,449,336	2,650,057	2,716,704	2,966,963	3,006,807	2,704,205	2,563,779	2,470,636	2,405,416
2012	2,386,758	2,310,243	2,462,858	2,389,914	2,780,728	2,846,559	2,976,124	2,868,336	2,644,667	2,608,305	2,467,575	2,451,993
2013	2,425,783	2,290,071	2,486,652	2,405,686	2,715,860	2,793,295	2,902,809	2,799,227	2,652,226	2,547,325	2,465,600	2,411,275
2014	2,428,726	2,313,172	2,460,401	2,407,470	2,696,079	2,696,694	2,974,443	2,930,535	2,677,106	2,663,388	2,562,642	2,516,440
2015	2,523,007	2,329,425	2,534,412	2,460,742	2,735,675	2,833,919	3,032,838	2,990,408	2,770,553	2,666,374	2,589,217	2,549,317
2016	2,458,522	2,416,081	2,558,101	2,434,533	2,670,638	2,768,159	2,960,629	3,050,504	2,719,536	2,586,402	2,476,397	2,486,407
2017	2,475,815	2,361,766	2,556,707	2,447,522	2,556,695	2,859,965	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

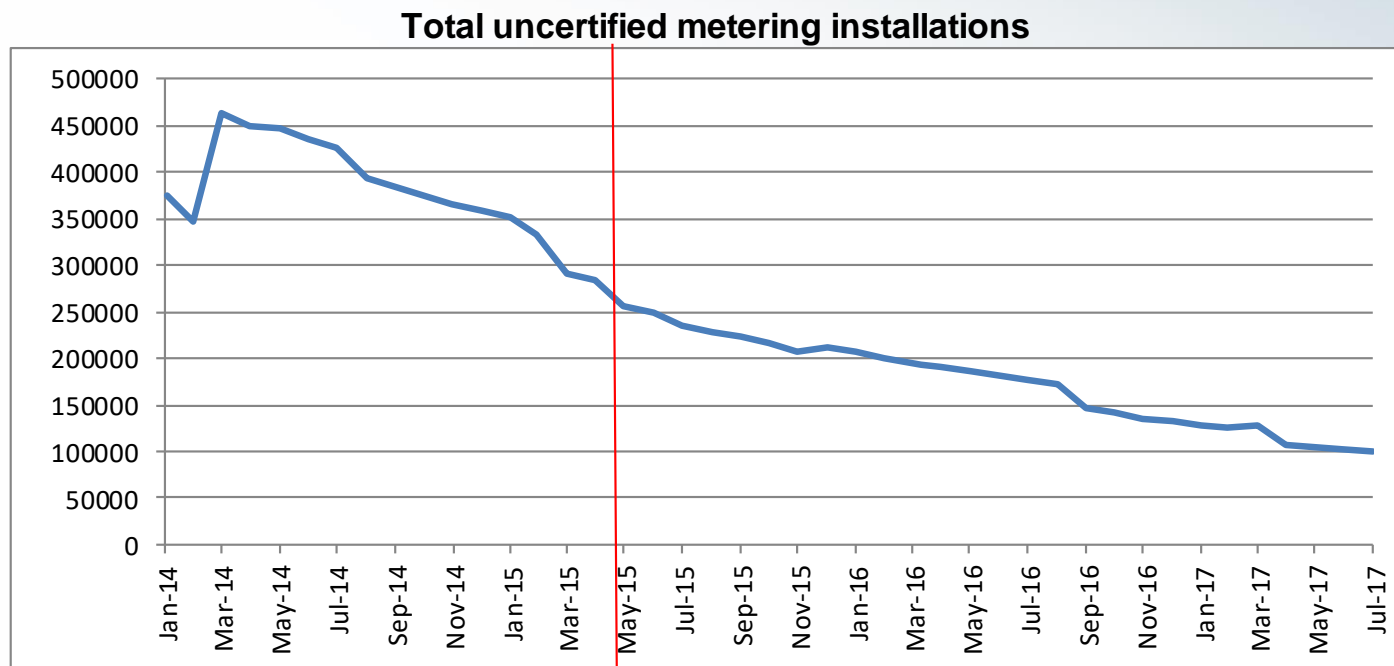
EMBEDDED GENERATION TRENDS



Embedded generation			
Fuel type	ICP identifiers	Installed capacity in MW	% of total capacity
Bio-mass	6	9.25	0.70%
Fresh water	95	288.24	21.95%
Geothermal	7	175.80	13.39%
Industrial processes	9	137.70	10.49%
Liquid fuel	123	103.86	7.91%
Natural gas	11	95.90	7.30%
Other	42	119.82	9.12%
Solar	14,532	54.99	4.19%
Undefined	13	0.003	0.00%
Wind	79	324.29	24.69%
Electric vehicle	-	-	0.00%
Tidal	1	0.00	0.00%
Total	14,918	1,313	

- Part 6 of the Code regulates connection requirements
- Registry information used in many areas
- Note that Code requirement is for any generating plant that can be connected to a network

UNCERTIFIED METERING INSTALLATIONS



- There remains 102,536 ICP identifiers with uncertified metering installations
- The count depends on the accuracy of the registry metering records and the count is not divided into active and inactive