

Retail Energy Market Company

Apparent breach of Rules 197 of the Retail Market Rules by Various Users

Overview:

In March 2016, REMCo observed that smaller "secondary" Swing Service spikes were occurring two days after other Swing Service spikes that had occurred in the North Metro sub-network. REMCo investigated the secondary Swing Service spikes and determined that they were caused in varying degrees by the behaviour of the following Users in nominating repayment of their Swing Repayment Quantities ("SRQs"):

- Alinta Sales Pty Ltd ("Alinta");
- APT Facility Management Pty Ltd ("APTFM");
- Kleenheat Gas Pty Ltd ("Kleenheat");
- Perth Energy Pty Ltd ("Perth Energy"); and
- Electricity Generation and Retail Corporation (trading as "Synergy").

On 25/05/16, REMCo released the *Market Report – Secondary Swing Service Spikes* (the "Report") that presented REMCo's analysis of the secondary Swing Service spikes, including:

- (1) background;
- (2) cause of the secondary Swing Service spikes;
- (3) impact of the secondary Swing Service spikes; and
- (4) compliance implications of the investigation into the secondary Swing Service spikes.

A copy of the Report is attached.

Impact:

REMCo has formed the view that Alinta, APTFM, Kleenheat, Perth Energy, and Synergy have all breached Rule 197 of the Retail Market Rules (the "Rules") to varying degrees. Sections (3) and (4) of the attached Report provide information on the nature of each Users' breaches of Rule 197 and the impact of these breaches on the market.

REMCo sent the Report to all affected Users by e-mail on 25/05/16, seeking comments by 08/06/16. Responses from the Users are summarised as follows:

Alinta

 Alinta indicated that the Report provided a good analysis and did not have any further comment.

APTFM

APTFM did not provide a response.

Kleenheat

- Kleenheat acknowledged that it had breached Rule 197; but indicated that it rectified its behaviour within days of being notified by REMCo, and has been proactive to ensure that there have been no further breaches.
- REMCo should provide Swing Service training to the Users on an individual basis, as a matter of priority.
 - This training should include a flow chart of the Swing Service nomination process to enable ongoing education and knowledge sharing of Swing Service nominations.
- Kleenheat agrees with REMCo's analysis of the materiality of the secondary Swing Service spike issue, and suggested that the Rule Change Committee ("RCC") should discuss this issue and agree a path forward at its June 2016 meeting.

Perth Energy

Perth Energy did not provide a response.

Synergy

- Synergy agreed the materiality of the secondary Swing Service spike issue will be difficult to determine. Synergy considers the impact of this issue to be low and that no further work to quantify the materiality is warranted.
- Synergy considers that there is a need for User-specific, targeted training to be conducted as soon as possible.
 - This training could include an overview and then have direct interaction with each Users' trading teams to clarify the steps that must be taken to comply with the Rules.
 - There would be benefit in an ongoing (annual) refresher training programme.
- There could be some value in conducting a follow-up investigation about 6 months after the training is complete to assess whether there are any residual breaches, and to assess whether the underlying Rule frame work is correct.
- Synergy does see a need for a separate meeting to discuss the issue further, but it should be added to the agenda for the June 2016 RCC meeting.

REMCo has analysed the nomination behaviour of the Users since June 2016, which is summarised as follows:

- Alinta continues to reliably repay their SRQs on the Parmelia Pipeline;
- there is no evidence that APTFM has changed their behaviour to start adjusting their users' pipeline nomination amount ("UPNA") to reflect their daily SRQs;
- Kleenheat started repaying their SRQs on the Parmelia Pipeline, but then stopped when they
 started nominating on the Parmelia Pipeline Kleenheat are updating their systems to handle
 their allocations on the Parmelia Pipeline and will need to make sure the systems adjust their
 UPNAs to reflect their daily SRQs;
- Perth Energy appear to be manually renominating their UPNAs to reflect their SRQs when the SRQ reach a certain level: and
- Synergy continues to reliably repay their SRQs on the Parmelia Pipeline.

Resolution:

REMCo proposes that the secondary Swing Service spike issue be determined to be not material, and that REMCo should exercise its discretion under Rule 329 to take no further action in this matter from a compliance perspective, subject to:

- any comments from Users that they have been materially impacted by this issue; and
- successful completion of the actions proposed below.

Proposed Further Actions:

REMCo proposes that REMCo and the Users are to take the following actions:

Correct behaviour

- All Users are to take any steps necessary, as soon as possible and on an ongoing basis, to ensure their compliance with Rule 197.
- In particular, all Users are to ensure that their UPNAs and SRQs are properly nominated on all days, for both the North Metro and South Metro sub-networks, for both the DBNGP and Parmelia Pipeline.

Training

 REMCo will deliver a Swing Service training program in the last week of July and the first week of August 2016.

Review

• REMCo will review the nomination behaviour of Alinta, APTFM, Kleenheat, Perth Energy, and Synergy about 6 months after completing the proposed training program (i.e. in about February 2017) to ensure compliance with Rule 197.

Invitation for submissions:

Before determining whether any further action is required, REMCo invites written submissions from participants as to:

- the effect that this incident has on their operations, and
- their view with regard to the determination, if any, REMCo should make under Rule 329 in respect of the apparent Rule breaches.

Submissions are requested by no later than 5pm (AEST) on **02 August**, **2016**. Submissions should be sent by e-mail to remco_administration@aemo.com.au.

Alternatively, submissions can be sent by post to REMCo at:

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Melbourne
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If you have any questions regarding this matter, please contact Carol Poon on (03) 9609 8509.

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Market Report - Secondary Swing Service Spikes

There were three instances of breaches of the Swing Service-related provisions in Chapter 5 of the Retail Market Rules (the "Rules") by two Users in March and April 2016. These three matters have been the subject of separate compliance processes, but have also exposed a further Swing Service-related issue where smaller "secondary" Swing Service spikes are occurring two days after other Swing Service spikes.

REMCo has undertaken a preliminary analysis of the secondary Swing Service spikes and presents its findings in this market report, including:

- (5) background;
- (6) cause of the secondary Swing Service spikes;
- (7) impact of the secondary Swing Service spikes; and
- (8) compliance implications of the investigation into the secondary Swing Service spikes.

REMCo will contact the Users to arrange a meeting to discuss this market report and determine next steps in addressing the related compliance matter.

(1) Background

APT Facility Management Pty Ltd ("APTFM") and Alinta Sales Pty Ltd ("Alinta") had Swing Service-related compliance matters in late March and early April 2016 on the North-Metro sub-network (1106), including:

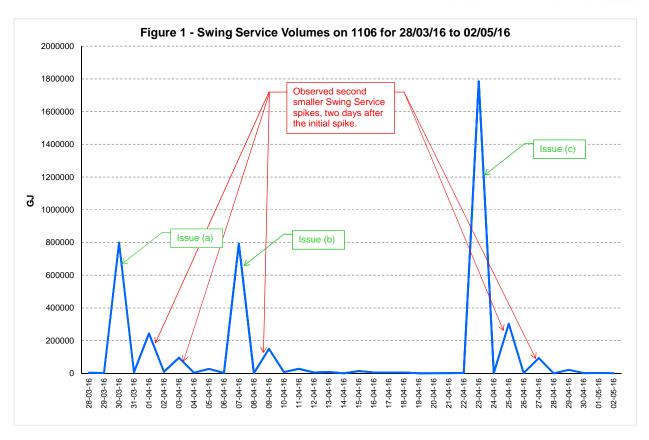
- (a) APTFM provided User's pipeline nomination amount ("UPNA") and User's allocation instructions ("UAI") files for 1106 for the Parmelia Pipeline (the "Parmelia") on 29/02/16 for gas day 29/03/16. APTFM revised their UAI on 13/03/16 and the revised UAI did not include an allocation for the Parmelia. This caused a 799 GJ Swing Service spike, and was a breach of Rule 188(3) by APTFM.¹
- (b) APTFM's nominations for 1106 for the Parmelia for gas day 06/04/16 did not have an UPNA. This caused 799 GJ Swing Service spike, and was a breach of Rule 197(2) by APTFM.¹
- (c) Alinta provided an UPNA for 1106 for the Parmelia for gas day 22/04/16 that reflected a 2 TJ nomination and its 744 MJ Swing Repayment Quantity ("SRQ"). However, Alinta did not provide a matching UAI to ship the 2 TJ on the Parmelia. This resulted in a 1.785 TJ Swing Service spike, and was a breach of Rules 197 and 178 by Alinta.²

In observing the Swing Service market data in March and early April 2016, REMCo noticed that smaller Swing Service spikes occurred two days after the initial Swing Service spikes for all three of these compliance matters. This is illustrated in Figure 1, which presents the Swing Service volumes for 1106 for 28/03/16 to 02/06/16.

REMCo published a Notice of Apparent Rule Breach regarding issues (a) and (b) on 20/04/16, seeking comments by 04/05/16. REMCo did not receive any submissions from market participants indicating that they had been materially impacted by these incidents, so REMCo exercised its discretion under Rule 329 to dismiss these matters. REMCo published a Compliance Determination Notice on 05/05/15.

REMCo published a Notice of Apparent Rule Breach regarding issue (c) on 09/05/15, seeking comments by 23/05/15. REMCo will make a determination on how to proceed with compliance issues (c) after the comment period closes.





These "secondary" Swing Service spikes observed in March and early April 2016 do not appear to be material in themselves:

- Issue (a) was a Swing Service spike of 799 GJ and had a secondary Swing Service spike of 244 GJ (and a further secondary Swing Service spike of 96 GJ):
- Issue (b) was a Swing Service spike of 793 GJ and had a secondary Swing Service spike of 150 GJ; and
- Issue (c) was a Swing Service spike of 1,785 GJ and had a secondary Swing Service spike of 302 GJ (and a further secondary Swing Service spike of 93 GJ).

However, the regular appearance of the secondary Swing Service spikes suggests that there is a systematic problem, and since Swing Service for gas day D is repaid two days later on gas day D+2, that the secondary Swing Service spikes are likely related to repayment of SRQs.

(2) Cause of the Secondary Swing Service Spikes

Chapter 5 of the Rules require (amongst other things):

- REMCo is to calculate SRQs for all Users for both the Parmelia and Dampier to Bunbury Natural Gas Pipeline (the "DBNGP"), and is to advise Users of their SRQs for gas day D by 5 hours after the end of that day (see Rules 299 and 300); and
- Users are to nominate to repay their SRQs for gas day D on both the Parmelia and DBNGP on gas day D+2 (see Rule 178).

REMCo has reviewed the nomination behaviour of each of the Users active on 1106, including the relevant Self Contracting User ("SCU"). Table 1 indicates the Users' approach to nominating UPNAs and SRQs on both the Parmelia and DBNGP for the period from 01/04/15 to 15/04/16 (380 days).



Table 1 – User Nomination Behaviour			
Nomination Approach	On the Parmelia	On the DBNGP	
 Appropriate Nominations Alinta and Electricity Generation and Retail Corporation (trading as "Synergy") make UPNA nominations ahead of time on both pipelines and re-nominate to include SRQs on both pipelines when the SRQ values are issued. 	 Alinta appears to have made nomination errors on 7 days (1.8% of the time). 	Alinta appears to have made nomination errors on 4 days (1.0% of the time).	
	 Synergy appears to have made nomination errors on 13 days on both pipelines (2.6% of the time). 		
 Appropriate Nominations on One Pipeline Kleenheat Gas Pty Ltd ("Kleenheat") makes UPNA nominations ahead of time on the DBNGP, and re-nominates to include SRQs when the SRQ values are issued; but does not make nominations on the Parmelia. 	Kleenheat has never made an UPNA or SRQ repayment nomination on the Parmelia.	Kleenheat appears to have made nomination errors on 2 days (0.5% of the time).	
Potentially Deficient Nominations on One or both Pipelines	APTFM is active on both pipelines, as indicated in the left-hand column.		
 APTFM and Perth Energy Pty Ltd ("Perth Energy") make UPNA nominations on one or both pipelines ahead of time, but do not re-nominate to include SRQs when the SRQ values are issued. This nomination approach will work if the nominations are sufficient to cover both Users' customers' usage and SRQs, which may be the case if customer usage is low and/or predictable and Swing Service is low However, this approach is likely to be a problem on high Swing Service days or where customer usages is unpredictable. 	Perth Energy has never made an UPNA nomination on the Parmelia, and has never nominated repayment of SRQs.	Perth Energy is active on the DBNGP, as indicated in the left-hand column.	

Given the Users' nomination behaviour indicated in Table 1, the secondary Swing Service spikes are explained as follows:

- Swing Service occurs on gas day D;
- one or more Users fail to nominate their SRQ on either (or both) pipeline(s) on gas day D+2;
- the sub-network fails to balance on gas day D+2 by the amount (or a portion) of the unnominated SRQs, (in addition to the "normal" Swing Service on gas day D+2); and
- this creates further Swing Service that will then need to be repaid on gas day D+4 this shows up in the market as the secondary Swing Service spikes.



(3) Impact of the Secondary Swing Service Sikes

The secondary Swing Service spikes will have a cumulative impact on the volume and cost of Swing Service in the market.

Volume Impact

The market data indicates that the secondary Swing Service spikes are smaller than the original Swing Service spikes – there are two reasons for this phenomenon:

Proportional Allocation

The secondary Swing Service spike on gas day D+2 will be treated in the same way as all Swing Service – it will be proportionally allocated to Users.³ Further the User Specific Swing Error ("USSE") allowance prescribed in the Rules (20%) also socialises the impact of the secondary Swing Service spike.

Alinta and Synergy are the two largest Users on 1106 by volume, and since they typically nominate their SRQs on both pipelines on a daily basis, these two Users would have been allocated the majority of the SRQs from the repayment of the secondary Swing Service spikes. This partially explains why the secondary Swing Service spikes decline over time.

This also suggests that Alinta and Synergy may be absorbing some of the Swing Service volumes from the other Users. This is supported by the operation of the USSE allowance that socialises Swing Service allocations across Users.

Random Direction

Analysis of the Swing Service data indicates that the direction of Swing Service on a day-to-day basis (i.e. whether it is a park or a loan) appears to be random. That is, there is no apparent pattern to Users' over/under nomination on any given gas day, so Swing Service (and the resulting park/loan on the two pipelines) is random. Nominations are based on forecast customer load, which can mitigate the impact of missing SRQs because nominations will exceed portfolio requirements on some days, and therefore apply as if an SRQ was provided.

When a secondary Swing Service spike occurs, the impact of the secondary spike on gas day D+2 is added to/subtracted from the "normal" Swing Service calculated for gas day D+2, which could also be a park or loan. The secondary Swing Service would then:

- make Swing Service on day D+2 larger than it would otherwise be if the secondary Swing Service is the same direction as the normal Swing Service on the day; or
- make Swing Service on day D+2 small than it would otherwise be if the secondary Swing Service is the opposite direction as the normal Swing Service on the day.
- Over- or under-forecasting of customer load can have similar added or subtracted impact on the level of secondary Swing.

1.5%

Alinta 65.5% • Perth Energy

APTFM 5.2% • Synergy 15.2% Kleenheat 12.7%

For example, the estimated North-Metro market share by volume, based on a single gas day is approximately:



Cost Impact

Presumably, the failure of a User or SCU to properly nominate SRQs on either (or both) pipeline(s) will impact the Swing Service volume calculations, which will in turn impact the amount that Swing Service Providers ("SSPs") invoice for the park/loan service, with the amount of the cost impact related to the size of the volume impact. The cost of this will be impacted by:

- the Users' use of off-market Swing Service arrangements;
- the prices bid into the Swing Service bid stacks; and
- the need to rely on the Swing Service Provider of Last Resort ("SSPOLR"), if any.

(4) Compliance Implications of the Investigation into the Secondary Swing Service Spikes

Rule 197 places requirements on Users nominations, and reads as follows:

197. User's pipeline nomination amount

- (1) For each *user* for each *gate point* for each *gas day*, a "user's pipeline nomination amount" is the sum of:
 - (a) the user's amounts of its related shipper's nominations for the gate point for the gas day (summed across all related shippers for the gate point) calculated under rule 196; and
 - (b) the user's swing service repayment quantities for the gate point for the gas day as notified by REMCo under rule 300(4) or rule 300D(1)(b) (whichever is applicable).

REMCo's investigation into the secondary Swing Service spikes led to a further investigation of all of the Users' nomination behaviour on the Parmelia and DBNGP injections into 1106. This investigation has indicated that all of the Users active on 1106 appear to have breached Rule 197 at some point in time, and to varying degrees. Table 2 summarises the results of REMCo's investigations into the Users' compliance with Rule 197.

Table 2 – Users' Compliance with Rule 197			
Company	Number of Rule Breaches		
Alinta	11 known breaches Rule 197:		
	• 7 breaches on the Parmelia for the period between 01/04/15 to 15/04/16; and		
	4 breaches on the DBNGP for the period between 01/04/15 to 15/04/16.		
	It is estimated that Alinta has breached Rule 197 about 60 times since market start, noting that some of these breaches would have caused Swing Service spikes that are likely to have already been addressed via previous compliance processes. 4		

Alinta has been active in the market since market start on 31/05/14, so based on a 1.4% average rate of breaching Rule 197 in the period between 31/05/05 and 01/04/15 (see Table 1), this suggests that Alinta has breached Rule 197 about 60 times since market start. A more detailed analysis of historic market data would be required to determine the precise number of breaches of Rule 197 by Alinta, and while REMCo has the data back to market start, it would be expensive and time consuming to extract and then analyse the data.



Table 2 – Users' Compliance with Rule 197		
Company	Number of Rule Breaches	
Synergy	26 known breaches of Rule 197 – that is 13 breaches on each of the Parmelia and DBNGP for the period between 01/04/15 to 15/04/16. It is estimated that Synergy has breached Rule 197 113 times since market start, noting that some of these breaches may have caused Swing Service spikes that are likely to have already been addressed via previous compliance processes. ⁵	
Kleenheat	 1,142 known breaches of Rule 197: 1,140 breaches on the Parmelia (every day since Kleenheat's market entry); and 2 breaches on the DBNGP for the period between 01/04/15 to 15/04/16. It is estimated that Kleenheat has breached Rule 197 1,146 times since it entered the market.⁶ 	
APTFM	Based on APTFM's approach to nominations, it is impossible to estimate the number of days where APTFM did not nominate sufficiently on the Parmelia, but it is certainly larger than the known 714 breaches. ⁷	
Perth Energy	2,306 known breaches of Rule 197 on the Parmelia (every day since Perth Energy's market entry). Based on Perth Energy's approach to nominations, it is impossible to estimate the number of days where Perth Energy did not nominate sufficiently on the DBNGP, but it is certainly larger than the known 2,306 breaches. ⁷	

The materiality of these breaches will be very difficult to determine because:

- there are too many variables to accurately model the implications of multiple Users failing to meet their SRQ obligations;
- the impact will be mitigated by Users and SCUs use of off-market Swing Service arrangements, and by APA's decision to not invoice for Swing Service on the Parmelia over at least the last year; and
- the nomination process is inherently imprecise in itself, so determining whether a nomination fully covers a User's reasonable estimate of their customers' usage + SRQs would be an arbitrary exercise.

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Synergy (and its predecessors) has been active in the market since market start on 31/05/14, so based on a 2.6% rate of breaching Rules 197 in the period between 31/05/05 and 01/04/15 (see Table 1), this suggests that Synergy has breached Rules 197 approximately 112 times since market start. A more detailed analysis of historic market data would be required to determine the precise number of breaches of Rule 197 by Synergy, and while REMCo has the data back to market start, it would be expensive and time consuming to extract and then analyse the data.

Kleenheat entered the market on 01/03/15, which is a period of 1,140 days to 01/04/16. This indicates that Kleenheat has breached Rule 197 1,140 times on the Parmelia, and based on the 0.5% rate of breaching Rule 197 in the period between 31/05/05 and 01/04/15 (see Table 1), this suggests that Kleenheat has breached Rule 197 about 1,146 times since it entered the market.

The Rules require Users to nominate their best estimate of their customers' usage plus their SRQs on both pipelines. However, APTFM and Perth Energy make nominations on one or both of the Parmelia and DBNGP for each gas day and do not re-nominate when they are informed of their SRQs. It would be arbitrary to determine whether APTFM's and Perth Energy's nominations sufficiently cover their estimate of their customer usage plus its SRQ on each day, but it is clear that this nomination approach would not be sufficient on gas days with Swing Service spikes, or where customer usage is unexpectedly high or low.



The "swings and roundabout" nature of the Swing Service market means that allocating causality for the secondary Swing Service spikes will be on any given day will is problematic.

However, this difficulty in assigning causality to the historic secondary Swing Service amounts should not limit the market participants' attempts to minimise the occurrence in the future. REMCo is of the view that a compliance process should be conducted to:

- ensure there are no viable grounds to argue whether compensation is due; and
- provide industry with the information needed, and incentive to ensure appropriate behaviour going forward.

It may also be of benefit for REMCo to develop an updated reporting regime that allows it to more readily identify whenever a User fails to meet its obligations. This issue can be discussed at a forthcoming Rule Change Committee meeting.