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The background of the entire page is a photograph of a wind farm. Several large, three-bladed wind turbines are visible, standing on tall metal towers. They are situated in a field of golden-brown grass under a clear blue sky with a few wispy clouds. The turbines are arranged in a line, receding into the distance.

SEM Market Audit

Independent Market Auditor's Report
For the period ended 30 September 2018

Date 3 May 2019



Market Auditor Report – Notice re Distribution and Publication

This notice concerns the Market Auditor Report to the Commission for Regulation of Utilities (CRU) and the Utility Regulator (UR) (together the Regulatory Authorities (the RAs)) on the SEM Market Audit for the 21 months ended 30 September 2018 dated 3 May 2019 (the "Report").

This notice does not apply to the RAs or Parties to the Code who have signed the "Terms of Release to the Parties to the Code" letter (including their employees acting within the scope of their employment duties).

The requirement for the SEM Market Audit is set out in the Single Electricity Market (SEM) Trading & Settlement Code ("the Code") designated on 3 July 2007 and as amended from time to time. This Report was prepared by Deloitte Ireland LLP (a partnership established in Ireland and with its registered address at Deloitte & Touche House, Earlsfort Terrace, Dublin 2, Ireland) ("Deloitte").

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No work has been carried out nor have any enquiries of RAs or Single Electricity Market Operator management been made since 27 March 2019. The Report does not incorporate the effects, if any, of any events or circumstances which may have occurred or information which may have come to light subsequent to that date. Deloitte makes no representation as to whether, had Deloitte carried out such work or made such enquiries, there would have been any material effect on the Report. Further, Deloitte has no obligation to notify you if any matters come to its attention which might affect the continuing validity of the comments or conclusions in the Report.

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This notice shall be governed and construed in accordance with the laws of Ireland. The courts of Ireland will have exclusive jurisdiction to settle any claim, dispute or difference which may arise out of or in connection with this notice.

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1. Introduction

1.1 Background

The Single Electricity Market ("SEM") was developed by the Commission for Regulation of Utilities ("The Commission" or "CRU") and the Utility Regulator ("UR"), together the Regulatory Authorities ("RAs"). The Single Electricity Market Operator ("SEMO") is responsible for the operation of the SEM. The Trading and Settlement Code ("TSC" or "the Code") was developed as part of the process of establishing the SEM and constitutes the trading and settlement arrangements for the SEM. The Code was designated on 3 July 2007 and since then has been subject to Modification via the processes set out therein.

The Regulatory Authorities have engaged Deloitte as SEM Market Auditor to undertake a Market Audit of the SEM as required under the Code. The requirement for a Market Audit is set out in section 2 of the Code in paragraphs 2.131 to 2.143 respectively which states that:

- The Market Auditor is appointed by the Regulatory Authorities;
- The Market Auditor shall conduct an audit of the Code, its operation and implementation and the operations, trading arrangements, procedures and processes under the Code at least once a year; and
- The Regulatory Authorities shall consult with Parties on the terms of reference for the audit, and specify and publish annually the precise terms of reference for the Market Audit.

The scope of the Market Audit is set out in the "Terms of Reference for the Market Audit SEM-17-038" published on 20 June 2017 (the "Terms of Reference") in accordance with paragraph 2.136 of the SEM TSC. The period covered by the 2017 Market Audit as per the Terms of Reference was expanded by the RAs to include the first nine months of the 2018 calendar year. The scope of the Market Audit for the period of 1 January 2017 to 30 September 2018 of operation of the market focuses on SEMO compliance with the relevant aspects of Part A of the Code and its Agreed Procedures and does not include any aspects of Parts B and C. The scope for SEMO excludes activities undertaken by the System Operators ("SOs"), Meter Data Providers ("MDPs") and other participants as set out in the Code and Agreed Procedures. The scope also excludes the operation of certain components of the MSP Engine covering the operation of the Unit Commitment, Economic Dispatch and calculation of Shadow Prices. The terms of our services in which we act as Market Auditor and the respective areas of responsibility of the Regulatory Authorities, SEMO, other parties and ourselves are set out in an agreement between Deloitte Ireland LLP and the Regulatory Authorities.

Unless otherwise specified, words and expressions used in this Report have the same meaning as defined in the Code.

1. Introduction (Continued)

1.2 Requirement for Market Audit

The requirement for a Market Audit of the Code is set out in section 2 of the Code in paragraphs 2.131 to 2.143. As specified in the Terms of Reference it covers the 21 months from 1 January 2017 to 30 September 2018, including resettlement of previous settlement dates performed within this period.

1.3 Report Structure

Section 2 contains our Market Audit Opinion. The Market Audit Scope was agreed by the Regulatory Authorities in accordance with the Terms of Reference.

It has been agreed with the Regulatory Authorities that materiality should be expressed based on an appropriate percentage level of the estimated annual market value of energy traded in the All-Island Market. The percentage level has been set at 0.25% of estimated annual market value of energy traded in the All-Island Market. Planning materiality for the Market Audit has therefore been set at €6.4m (prior period €3.6m) and it will be for Parties to the Code themselves to evaluate the financial impact of any errors or matters arising on their own businesses.

Section 3 contains our Report of Significant Issues, setting out matters identified during the course of the audit which, while not material in the context of the audit and not resulting in a qualified Audit Opinion, may have a significant impact on Parties to the Code. Where, in our judgement, matters arising may be significant to individual parties such matters have been included in the Significant Issues Report with sufficient detail so as to allow the Regulatory Authorities and Parties to the Code to evaluate the impact of the cause and circumstances of matters reported. Qualitative and quantitative factors were taken into account when determining the significance of an issue. From a quantitative perspective, in line with the prior period, a threshold of one tenth of the annual materiality value has been applied as a general guideline in determining whether a matter should be included in the Significant Issues Report. The resolution response for each of these points was provided by SEMO, other than where specifically noted.

Section 4 contains details of Other Matters Arising which we wish to bring to the attention of the market. They do not represent issues of significant non-compliance and accordingly there is no requirement to report these matters under the terms of the Terms of Reference. However, we include this section as we believe it may assist the Regulatory Authorities and Parties to the Code to judge for themselves the relative significance of all points reported.

Section 5 contains the Follow up on Prior Period Issues, which were brought to your attention in the prior period SEM Independent Market Auditor's Report, some of which have been resolved and where the points have not yet been resolved they have been referenced into sections 3 and 4 with a current year update.

1. Introduction (Continued)

1.4 Market Operator Monthly Reporting

SEMO is obliged under Clause 2.144 of the Code to issue a Market Operator Monthly Report to the Regulatory Authorities on the performance of SEMO and Parties to the Code. The Monthly Report includes details of the type and status of all Code breaches identified by SEMO and whether the breaches represent deadlines that have not been met, system faults or errors, and whether these breaches have been resolved or remain outstanding at the end of each month. The Market Operator Monthly Reports are available on the SEMO website.

SEMO is required to perform a materiality assessment, using set criteria which are described in the Monthly Reports. The materiality threshold applied is significantly lower than materiality defined for Market Audit purposes.

While the breaches reported in the Monthly Reports represent non-compliance with the Code, we have not repeated in this document those which are below the audit materiality threshold.

2. Market Auditor Conclusion

Independent Market Auditor's Assurance Report to the Commission for Regulation of Utilities ("The Commission" or "CRU") and the Utility Regulator ("UR") (together "The Regulatory Authorities")

We have performed assurance work over the extent to which the Single Electricity Market Operator ("SEMO") has complied with Part A of the Trading and Settlement Code ("Code") and relevant Agreed Procedures as defined in the "Terms of Reference for the 2017 Market Audit" published by the Regulatory Authorities on 20 June 2017, during the 21 month period ended 30 September 2018.

This report is made solely for the Regulatory Authorities, as a body, in accordance with paragraph 2.133 of the Code. Our work has been undertaken so that we might state to the Regulatory Authorities those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Regulatory Authorities and the Parties as a body, for our work, for this report, or for the opinions we have formed. Parties to the Code may only rely on this report if they have agreed in writing to be bound by the conditions under which it has been prepared, in line with the engagement letter.

Unless otherwise specified, words and expressions used in this report have the same meaning as defined in the Trading & Settlement Code.

Responsibilities of the Single Electricity Market Operator, Regulatory Authorities and Parties to the Code (together the "Responsible Party")

The Code is a legal agreement which, inter alia, sets out the terms of the trading and settlement arrangements for the sale and purchase of wholesale electricity on the island of Ireland between participating generators and suppliers ("Single Electricity Market"). The Code defines the Rules and Agreed Procedures which are required to be followed by the signatories to the Code ("Parties") who are bound by its provisions.

The functions of the Regulatory Authorities are set out in the Electricity Regulation Act 1999, the Northern Ireland (Miscellaneous Provisions) Act 2006 and in the Code. In the context of the Market Audit, the role of the Regulatory Authorities as the Responsible Party is to appoint the Market Auditor and agree the terms of the Market Auditor's appointment, consult on and issue the Terms of Reference for the Market Audit, and receive Market Audit Reports.

SEMO is responsible for the operation of the Single Electricity Market ("SEM") under the Code as set out in paragraphs 2.117 to 2.125 therein and for complying with the requirements of the Code and Agreed Procedures as listed in appendix d to the Code, insofar as they are applicable to SEMO.

The responsibilities of the Parties in respect of the Market Audit are set out in paragraph 2.139 of the Code, which requires parties to provide without charge to the Market Auditor in a timely manner, subject to any obligations of confidentiality, such information as is reasonably required by the Market Auditor to enable the Market Auditor to comply with the functions and obligations and Terms of Reference for the purposes of conducting the audit and preparing and finalising the Audit Report. A person may only become a Party to the Code in accordance with the terms of the Code and the Framework Agreement.

2. Market Auditor Conclusion (Continued)

Responsibilities of the Market Auditor

The requirements for the Market Audit are set out in paragraphs 2.131 to 2.143 of the Code, in particular paragraph 2.133 of the Code which sets out that “the Market Auditor shall conduct an audit of the Code, its operation and implementation and the operations, trading arrangements, procedures and processes under the Code”. It is our responsibility as Market Auditor to execute the Market Audit as required under the Code and as set out in the Terms of Reference for the 2017 Market Audit. In the context of this engagement the terms ‘Audit’ and ‘Market Audit’ mean a reasonable assurance engagement performed in accordance with the International Standard on Assurance Engagements 3000 (Revised) “Assurance Engagements Other Than Audits or Reviews of Historical Financial Information”.

The Terms of Reference for the 2017 Market Audit expressly excludes operation of certain components of the MSP Engine from the scope of the Market Audit. The excluded components are the operation of Unit Commitment, Economic Dispatch and calculation of Shadow Prices. However, the scope includes certain procedures over the SEMO decision process and approvals for the use of the Mixed Integer Programming (“MIP”) solver in place of Lagrangian Relaxation (“LR”).

The following functions performed by the Regulatory Authorities, Data Providers and other Parties or their agents under the Trading & Settlement Code are also excluded from the scope of the Market Audit including, inter alia:

- Generation metering;
- Dispatch instruction logging;
- Metering and aggregation of eligible and profiled customer demand;
- Provision by Parties of Technical and Commercial Offer Data;
- Loss adjustment factors, generator unit technical characteristics and other data provided by Transmission System Operators / Distribution System Operators; and
- Settlement, capacity and other parameters provided by the Regulatory Authorities.

We draw attention to the Market Operator Monthly Reports which lists all Code breaches identified by SEMO. Other than where the impact of the issue exceeds the audit materiality threshold, we do not repeat the list of breaches in this document. The Market Operator Monthly Reports are issued by SEMO and are available on its website.

2. Market Auditor Conclusion (Continued)

Basis of assurance conclusion

We conducted our assurance work in accordance with the International Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information". That standard requires that we plan and perform our work to obtain appropriate evidence about the subject matter of the engagement sufficient to support an opinion providing reasonable assurance when evaluated against the identified criteria. In the context of the Market Audit the subject matter consists of relevant activities of SEMO which are evaluated against the relevant paragraphs of the Code and applicable Agreed Procedures as set out in the Terms of Reference for the 2017 Market Audit.

Our assurance work included examination, on a test basis, of evidence relevant to the Code and Agreed Procedures including the review of risks, control objectives and controls associated with SEMO's performance of their duties and operation of the settlement arrangements. Our testing of the controls comprised review of documentation, corroborative enquiry with key SEMO staff and, on a sample basis, testing the operation of controls and the validity and accuracy of the calculations underlying settlement output.

We planned and performed our assurance work so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that SEMO have complied with the Code and relevant Agreed Procedures as defined in the Terms of Reference for the 2017 Market Audit.

We comply with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, or equivalent code, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

We apply International Standard on Quality Control 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

For the purpose of our opinion a qualification, in terms of material non-compliance with the Rules and relevant Agreed Procedures of the Code, would arise if we considered the breach to be of such significance that it undermined the robust operation of the settlements process.

We have prepared a Report of Significant Issues which is attached to this opinion setting out matters identified during the course of the audit which, while not material in the context of the audit, may have a significant impact for Parties to the Code. Our opinion should be read in conjunction with the Report of Significant Issues, but is not qualified in respect of matters contained therein.

2. Market Auditor Conclusion (Continued)

Conclusion

On the basis set out above and subject to the exclusions noted in the Responsibilities of the Market Auditor section above, in our opinion, during the period from 1 January 2017 to 30 September 2018 the SEMO has, in all material respects, complied with the Code and relevant Agreed Procedures as set out in the "Terms of Reference for the 2017 Market Audit" published by the Regulatory Authorities on 20 June 2017.

A handwritten signature in black ink, appearing to read 'S. Smith', is written over a faint, circular stamp.

For and on behalf of

Deloitte Ireland LLP

Chartered Accountants

Deloitte & Touche House

29 Earlsfort Terrace

Dublin 2

Date: 3 May 2019

3. Report of Significant Issues

Issue	Effect	SEMO Response
Incorrect Loss of Load Probability table for Capacity Year 2017		
<p>Although the process to update the Loss of Load Probability table for Capacity Year 2017 was performed, the 2016 version of the table was uploaded in error. The incorrect values were used for all capacity settlement calculations performed for January to November 2017 until the error was detected and resolved by SEMO in December 2017 and has subsequently been corrected through scheduled resettlement runs.</p> <p>We were informed by SEMO that a materiality assessment was performed by SEMO as required under the Code. The formal query was shared, together with internal checks to capacity from the settlements team but SEMO was unable to locate the relevant materiality calculation to provide to us.</p>	<p>Loss of load probability values are used to calculate the ex-post capacity payments weighting factor, which then feed into the capacity payment calculation. Given the nature of the Capacity Payment calculations this resulted in an incorrect allocation of capacity payments between participants, although the overall capacity period payment sum was distributed.</p> <p>We have estimated the impact of the error by applying the correct value of loss-load factors for three of the affected capacity periods. The impact on individual participants varies, ranging from 0.04% to 27% of individual participant payments. Overall the misallocation is estimated to be of the order of 0.3% of the total capacity payments, i.e. c. €1.5m for the affected period. This misallocation has been dealt with through the standard resettlement process.</p> <p>Due to the absence of evidence, we were unable to confirm whether a materiality assessment had been performed in accordance with the requirements of the Code.</p>	<p>The issue was recognised by SEMO and updated LOLP values were received within the settlement system. The capacity calculations were re-calculated and re-settled within M+13.</p> <p>SEMO requested a Formal query to be raised on the Issue. SEMO have provided Deloitte evidence of this request.</p> <p>A formal query was processed and the Materiality assessment was deemed to be of "Low Materiality". This was communicated to the raising Participant on resolution of the Formal Query.</p> <p>Upon investigations for the audit, assessment calculations for the determination of Materiality as evidence could not be located and provided to Deloitte.</p> <p>During processing of M+13 Capacity re-settlement, the SEMO settlement team clarified internally that the re-calculated values were correct and continued with publication of re-settlement. Evidence of the internal checks were provided to Deloitte.</p>

4. Other Matters Arising

Issue	Effect	SEMO Response
Agreed Procedure One – Participant and Unit Registration and Deregistration		
1. Party Registration – Accession Deed not issued within prescribed timeline		
<p>On receipt of all required information, and provided the Applicant fulfils the conditions for accession, the Market Operator should provide the Applicant with a blank Accession Deed within 10 working days of final receipt of all required information.</p> <p>We identified that for one applicant, a blank Accession Deed was not provided to the Applicant within the prescribed 10 working days.</p>	<p>The delay in providing the blank Accession Deed represents non-compliance with relevant Agreed Procedure.</p>	<p>SEMO accepts that the blank accession deed was not issued within the prescribed timeline. SEMO noted that the delay between drafting the Accession Deed & hard copy forms to the Accession Deed being issued to the Participant for signing was due to a short delay in the legal quality assessment (QA) check performed on the draft Accession Deed.</p>
2. Unit Registration – Deviations from timelines and meeting Code requirements		
<p>The following deviations from the Code requirements had been identified during our review:</p> <ul style="list-style-type: none"> (a) For two unit registrations, the Market Operator did not issue a confirmation of receipt of application to the relevant applicants within the prescribed two working day timeline; (b) For three unit registrations, the Market Operator did not issue the Initial Credit Cover Requirement (ICCR) and Banking Details Confirmation Letter (BDCL) to the relevant applicants within the prescribed two working day timeline; (c) For six unit registrations, there was no evidence of an initial unit registration meeting being held during their registration process; (d) For three unit registrations, it was noted that the confirmation of final effective date was not sent to the relevant applicants within five working days prior to the effective dates; (e) For three unit registrations, the commencement notice was issued less than four working days prior to the agreed effective date. 	<p>The deviations identified represents non-compliance with the relevant Agreed Procedure.</p>	<ul style="list-style-type: none"> (a) SEMO accepts that a confirmation of receipt of application was not issued within two working days in both instances. However SEMO noted that in practice the confirmation of the receipt of application is usually not sent until after all elements of the registration pack is received and validated, including but not limited to, fee receipt and confirmation of legal acceptance of (Letters of Consent &) Forms of Authority for Intermediaries’; (b) SEMO accepts that the ICCR was not issued within the prescribed two working days, but that in both instances the ICCR had been issued subsequent to the generation of the required ID’s and receipt of the relevant fee; (c) SEMO agreed that an initial meeting was not held for the six units within the sample, but noted that the units only became effective once an effective date was agreed by all impacted parties. In many of the cases this occurred over e-mail; (d) SEMO noted that on occasion the parties can agree an effective date at short notice provided

Issue	Effect	SEMO Response
Agreed Procedure One – Participant and Unit Registration and Deregistration		
		<p>all pre-requisites have been met and the system set up can be handled in time for the effective date;</p> <p>(e) In both instances the impacted parties agreed to an effective date within a short timeframe and as such the commencement notice was issued in less than the prescribed four working days.</p>
3. Unit Deregistration: Deviations from timelines and meeting Code requirements		
<p>The following deviations from the Code requirements had been identified during our review:</p> <p>(a) For two unit deregistration's, it was noted that the appropriate deregistration details were not submitted to the relevant parties within five working days of receipt of the deregistration forms;</p> <p>(b) For one of the samples selected there was no evidence to support that a deregistration consent order was issued to all relevant parties. Additional evidence was provided to verify that the Interconnector Administrator was notified of the deregistration via e-mail on 15/03/2018.</p>	<p>The deviations identified represents non-compliance with the relevant Agreed Procedure.</p>	<p>(a) SEMO agreed that for the two units within the sample, deregistration details were not submitted within the prescribed five working days. In one instance the deregistration form (which was received on 13/12/2016) was not circulated until the new year due to a "registration freeze" over the Christmas period (Market Operator and System Operator systems are unable to register or deregister units during this period).</p> <p>(c) SEMO accepts that, apart from the email notification issued to the Interconnector Administrator, a deregistration consent order was not issued to the other parties for the sample unit selected.</p>

Issue	Effect	SEMO Response
Agreed Procedure Four – Transaction Submission and Validation		
4. Cancellation of Unit under Test (UUT) – No evidence of confirmation sent to the System Operator		
<p>In accordance with procedural step 1.9, the Market Operator is required to confirm that the cancellation of a Unit under Test (UUT) was approved to the e-mails neartime@eirgrid.com and / or Grid OpsDBE@eirgrid.com.</p> <p>In three instances of UUT samples, there was no evidence that the Market Operator had sent an e-mail to the System Operator confirming that the cancellation of the UUT had been approved.</p>	<p>Failure to send an e-mail to the System Operator confirming that the cancellation of the UUT had been approved represents non-compliance with the relevant Agreed Procedure.</p>	<p>SEMO accepts that there is no e-mail evidence within the Market Operator mailbox confirming the approval to the System Operator.</p> <p>The UUT cancellations were approved by the Market Operator within the MOI system.</p>
Agreed Procedure Five – Data Storage and IT Security		
5. System and Application Access Control		
<p>In the review of SEMO active directory and database accounts, we have identified the following:</p> <ul style="list-style-type: none"> (a) Two user account passwords were not changed for more than 45 days and their accounts were not disabled after more than 60 days of inactivity. (b) One leaver account was still enabled in SEMO AD at the time of review. The employee left the company on 3 September 2018. (c) 10 leavers' access have not been removed from Oracle DB. 	<p>This represents deviation from the requirements of Agreed Procedure 5, which require that the access to Market Systems is restricted according to user's level of authority and access requirements:</p> <ul style="list-style-type: none"> • 2.2.5 System and Application Access Control; and • 2.2.6 Monitoring and System Access 	<p>(a) These two accounts were deleted and the actions were recorded in the meeting minutes.</p> <p>(b) The leaver's account was disabled after 60 days of no logon, this can be seen in the November 2018 Audit document. Then after 120 days of no logon as per procedure the account was deleted, this was on the 29th December and can be seen in the January audit document.</p> <p>Access to the SEMO CRM application is granted through the use of two accounts which includes Eirgrid/SONI and Citrix.</p> <p>Soon after the below users left the company both their EirGrid / SONI accounts and Citrix accounts were disabled. As a result of this the User was unable to carry out the initial steps in the logon process to the SEMO CRM application. However, regardless of this the CRM accounts for these users have now been disabled. All accounts were locked in the database as of 29/01/2019.</p>

Issue	Effect	SEMO Response
6. Data Storage		
<p>It is required that the Market Operator maintains the availability of information processing and communication services data.</p> <p>It was identified that there is no periodic restoration of backup tapes to confirm data recovery.</p> <p>Although backups are scheduled and monitored, periodic restoration tests provide additional confidence that data can be recovered fully from the backup tapes.</p>	<p>Inadequate maintenance of the availability of information processing and communication services data represents non-compliance with the relevant Agreed Procedure.</p>	<p>SEMO noted that reports are generated daily to show the integrity of the data and the system is checked daily for failures.</p> <p>The integrity of data is further verified by the Commvault software which indicates a success or failure in the backups.</p>
Agreed Procedure Nine – Management of Credit Cover and Credit Default		
7. Credit Cover Management – ICCR not calculated and notified to the participant within the prescribed timeline		
<p>The required credit cover is calculated for purposes of identifying the appropriate collateral to be posted as a guarantee against a participant’s credit risk in the SEM. This calculation should be performed by utilising the forecast data supplied within two working days.</p> <p>For three unit registrations during the 21 month review period, the ICCR was issued after two working days from receipt of the registration pack.</p>	<p>The delay in calculating the required credit cover represents non-compliance with the relevant Agreed Procedure requirement.</p>	<p>SEMO accepts that the required credit cover was not calculated within the prescribed two working days.</p> <p>Having experienced the registration process in practice, the Registration team will consider the two working days timeline in our review of Agreed Procedures to address this point.</p> <p>Additionally, SEMO noted that units are not set effective in the market without the appropriate credit cover being in place.</p>
8. Credit Cover Management – Termination Orders		
<p>In accordance with paragraph 2.2.59 and 2.26 of the Code respectively, the credit cover required to be maintained as well as the time and date at which the termination shall take effect should be documented on the Termination order. Through our review we have noted the following deviations to this requirement:</p>	<p>The deviations identified represents non-compliance with the requirements of the Code.</p>	<p>(a) SEMO accepts that the amounts were not included in the two termination orders, but noted that they did make reference to the Trading and Settlement Clauses within the Code regarding credit cover conditions in each Termination Notice issued;</p> <p>(b) All changes made in the Market Participant Interface for an effective date are valid from</p>

Issue	Effect	SEMO Response
<p>(a) For two termination orders issued within our sample, we have noted that the amount of required credit cover was not included; and</p> <p>(b) For two termination orders within our sample, the termination order issued did not include the time from which the termination will take effect.</p>		<p>06:00, therefore the units were deregistered from 06:00 on the date stated on the Termination Order although the Termination Order for Open Electric did not include the specific time.</p>
<p>9. Credit Cover Management – Units / Party incorrectly listed as registered on the SEMO website</p>		
<p>In accordance with paragraph 2.268 of the Code, when a Party is terminated then the Market Operator shall deregister all of that Party's units.</p> <p>Through review of the SEMO website we have noted that one party and the units for another party who were terminated at the time was still incorrectly listed as "registered".</p>	<p>Failure to update the status of the party / units once that Party has been terminated represents non-compliance with the requirements of the Code.</p>	<p>SEMO accepts that the lists on the websites were not updated in time. However the Party and Units were deregistered in the Market Systems.</p> <p>SEMO has now republished the list of Registered Units for the one party on the legacy SEMO website which have now been set to a status of "deregistered".</p>

Issue	Effect	SEMO Response
<p>10. Credit Cover Management – Deviations from timelines and meeting Code requirement in relation to payment</p>		
<p>The following deviations from the Code requirements had been identified during our review:</p> <ul style="list-style-type: none"> (a) By 12:00 one working day before the payment due date, the Market Operator should issue a confirmation stating that the request for payment of the relevant invoice using cash collateral had been approved. In one instance there was no evidence to support compliance with this requirement and in another instance the confirmation was issued on the payment due date. (b) By 17:00 on the invoice payment due date, the Market Operator is required to reply to the Participant confirming that the drawdown had taken place. In six instances within our sample no response was provided to the Participant; (c) In the event that a Participant wishes to pay invoices using excess cash collateral, the Market Operator is required to review that the Participant meets the conditions set out in the Agreed Procedure. In two instances within our sample there was no evidence that the Market Operator had issued and approved a standing request to the Participant to validate that the conditions had been met. (d) In three instances there were no evidence that the Market Operator issued a reply to the Participant confirming approval of the standing request within two working days after the request had been submitted. 	<p>The deviations identified represents non-compliance with the requirements of the Code.</p>	<ul style="list-style-type: none"> (a) SEMO accepts that the Agreed Procedure requirements had not been met in this instance and has reviewed its procedures to address this point. (b) SEMO accepts that the Agreed Procedure requirements had not been met in this instance and has reviewed its procedures to address this point. (c) SEMO has reviewed its procedures regarding Standing Requests to address this point. (d) SEMO has reviewed its procedures regarding Standing Requests to address this point. A note has also been added to the MasterData sheet to remind Controllers to send confirmation / an acceptance email when the Agreement is recorded in same.

Issue	Effect	SEMO Response
11. Credit Cover Management – Calculation of Required Credit cover not performed within prescribed timeline		
<p>In accordance with section C6.3 of Agreed Procedure 9, the Market Operator should calculate and notify the required credit cover for the new / adjusted participant within two working days of receipt of their application.</p> <p>In three instances the credit cover was calculated and notified to the participant after the required two working days.</p>	<p>Not calculating and notifying the participant of the required credit cover within the prescribed timeframe represents non-compliance with the requirements of the Code.</p>	<p>SEMO accepts that the required credit cover was not calculated and notified to the participants within the required two working days.</p> <p>SEMO noted that having experienced the registration process to date, the Registration team will consider the two working days timeline in our of Agreed Procedures to address this point. SEMO further noted that units are never set effective in the market without appropriate credit cover being placed. There was no risk to the market with the delay in issuing ICCRs to new Participants, the Participants were all obliged to have credit cover on place prior to their go live date in the market.</p>
Agreed Procedure Eleven – Market System Operation, Testing, Upgrading and Support		
12. Authorisation Process		
<p>In accordance with section 2.5.3, the Market Operator is required to issue an annual authorised person confirmation in January of every year.</p> <p>This confirmation was not completed in 2018.</p>	<p>Not completing the confirmation represents non-compliance with the relevant Agreed Procedure.</p>	<p>In January 2018, SEMO was undergoing the Authorised Persons set up for the new market which was scheduled to go live in May 2018. At the time it was considered that, to complete a review of the current market in parallel, had the potential to cause confusion for Participants and potentially delay the setup of Authorised Persons for I-SEM. The intention instead was to complete the review post Go Live. However, when the go live date was moved from May to October, a number of other priorities took precedence.</p> <p>The annual authorised person confirmation is currently underway and scheduled to be completed by May 2019.</p>

5. Follow up on Prior Period Issues

Prior Period Issue	Update	2017/18 Classification	Previous Classification
1. Netting Generator Unit Registration	The affected unit was reregistered but no due to the magnitude of error no further resettlement was performed.	Closed	2016: Other
2. Treatment of Dispatch Instructions with same Instruction Time and Type	An updated Dispatch Instruction was provided by the system operator and the issue resolved via scheduled resettlement.	Closed	2016: Other
3. Calculation of Ex-Post Capacity Weighting Factor	The process which caused this error was updated prior to issuance of the 2016 Market Audit report. No further examples of this issue were noted in our testing in the current period.	Closed	2016: Other
4. Erroneous Supply Unit Deregistration	The supply unit registration details were corrected and the issue resolved via scheduled resettlement runs.	Closed	2016: Other
5. Organising Unit Registration Meeting	It was previously identified that SEMO did not track the dates of when the review and valuation process has been completed. A registration checklist has subsequently been introduced by the Market Operator for the purpose of tracking the dates at which each stage of the procedure is complete.	Closed	2016: Other
6. Initial Credit Cover Requirement	<p>During our 2017/18 review, we identified two similar instances to those identified in the 2016 review whereby the initial credit cover requirement was issued outside of the two working day timeline. As such the issue remains open.</p> <p>Refer to issue 11, Section 4.</p>	Open; additional instances identified within audit period	2016: Other
7. Accession Deed to be sent by registered post	During our 2017/18 review, for our samples selected we had noted that hard copies of the Accession Deed was issued by registered post. No issues were noted.	Closed	2016: Other
8. System and Application Access Control	<p>a) Previously it was noted that the user access review of Oracle users (market systems access from the database layer) have not been performed completed since 2015. In addition it was identified that for one account, access to the market systems was not required as it belonged to an employee who moved to a different department.</p> <p>Subsequently, the DBA team was added to the Starters; Movers and Leavers e-mailing list in January 2017 to remove the access applicable to them and the CRM accounts for the noted user account was disabled in CRM and was locked in the database as of 21/01/2019.</p>	Closed	2016: Other

Prior Period Issue	Update	2017/18 Classification	Previous Classification
	<p>b) It was previously identified that quarterly reports, which provides details of user activities such as failed logins, were not run from Oracle Audit Vault in the said year.</p> <p>As of February 2019, SEMO have scheduled calendar events to perform the audit and email the results out to the team for review.</p>	Addressed subsequent to Deloitte's follow up review; Other	2016: Other
	<p>c) It was identified that access to the server room is reviewed on a monthly basis. However this review, although initiated, was not completed as management did not sign off on the lists as evidence of performing the review.</p> <p>A process is now in place whereby the reviewers respond to the Facilities Manager for changes required on the list. This is then forwarded to the Facilities and Security Teams for action.</p>	Closed	2016: Other
<p>9. Variable Market Operator Charge</p>	<p>As noted in the response provided on the 2016 Market Audit Report SEMO did not intend to resolve this issue in the Market Systems given the costs involved and expected benefit. SEMO continued to monitor the scale of the error over the course of the SEM.</p>	Ongoing during audit period	2016: Other



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