

MINUTES OF THE 79th MEETING OF THE RULES CHANGE COMMITTEE

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| Meeting Date & Time: | 02 October 2013 – 09:00 AM to 3:45 PM | | |
| Meeting Venue: | PEMC Board Room, 9 ^h Floor Training Rooms 2&3, Robinsons Equitable Tower, Ortigas Center, Pasig City | | |
| Attendance List | | | |
| In-Attendance | | Not In-Attendance | |
| Rules Change Committee Members Rowena Cristina L. Guevara --Chairperson/ Independent --UP Francisco L. R. Castro, Jr. --Independent--Tensaiken Consulting Maila Lourdes G. De Castro --Independent Concepcion I. Tanglao --Independent Joselyn D. Carabuena --Generation -- PSALM Jose Ferlino P. Raymundo --Generation -- SMC Global Ciprinilo C. Meneses--MERALCO Gilbert A. Pagobo --Distribution --MECO Jose P. Santos --Distribution --INEC Sulpicio C. Lagarde, Jr. --Distribution --CENECO Lorreto H. Rivera --Supply --TeaM (Philippines) Energy Corporation Isidro E. Cacho, Jr. -- Market Operator --PEMC Ambrocio R. Rosales --System Operator --NGCP Theo Cruz Sunico --Generation -- 1590 EC | | | |
| Rules Change Committee Alternate Members | | | |
| PEMC – Market Assessment Group (MAG) Geraldine A. Rodriguez Romellen C. Salazar | | | |
| PEMC – Legal Caryl Miriam Y. Lopez-Mateo Maria Lourdes Sabundayo San Andres | | | |
| PEMC – Finance Marissa P. Gandia | | | |
| PEMC – TOD Marcial Brummel J. Jimenez | | | |
| ERC Observer(s) Isabelo Joseph P. Tomas | | | |

member

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| DOE Observer(s) Ferdinand B. Binondo |
| Others Present Raycell Baldovino --NGCP |

There being a quorum, Chairperson Dr. Rowena Cristina L. Guevara called the meeting to order at around 9:00 AM.

1. Adoption of the Proposed Agenda

The Proposed Agenda for the 79th RCC Meeting was approved, as presented.

2. Review, Correction, and Approval of the Minutes of the 78th RCC Meeting

The Minutes of the 78th RCC Meeting was approved, as amended. Corrections made are as follows:

- On page 10, line 7:
"...MERALCO has a dedicated Regulatory Officer..."
- On page 11, line 9:
"...5 nearest trading nodes based on the Transmission Loss Factor (TLF)."
- On page 17, line 22:
"...the SO may intervene when the grid frequency breaches 59.47Hz and 60.63Hz..."
- On page 18, line 37:
"Dr. Guevara also commented..."
- On page 20, line 38:
"...the Philippine Grid Code does not specify any ancillary type that supports the use of constrain-on and constrain off, and MRU for the contingency requirement of the grid criteria."
- On page 26, line 1:
"Ms. Lorreto Hilario-Rivera added that the issues..."
- On page 1, attendance list:

"Lorreto H. Rivera"

Following the RCC's review of the subject Minutes and noting the corrections made on the same, the Minutes of the 78th RCC Meeting held on 04 September 2013 was approved, as amended.

Before proceeding with the discussion of the Agenda items, the body did a round of introductions noting the presence of the ERC Representative, Atty. Isabelo Joseph P. Tomas, who is attending the RCC meeting for the first time since the new members of the RCC have been appointed.

3. Business Arising from the Previous Meeting

o PEM Board Update

➤ Result of Presentations to the Board Review Committee (BRC) and the PEM Board on the RCC Proposed Amendments to the WESM Rules and the Billing and Settlement Manual on Prudential Requirement

Atty. Maila De Castro provided updates on the result of the Board Review Committee (BRC) Meeting. She cited the two issues that were flagged by the BRC during the meeting, as follows:

- i. Meaning of the term "disputed bill:" Atty. De Castro clarified with the BRC that "disputed bill" refers to a contested bill and does not necessarily mean that it has been brought to the level of Dispute Resolution. The BRC agreed to let the term stay with no revisions suggested at that time, although it was flagged for further review by the RCC.
- ii. Requiring the generators as net buyers to pre-pay the corresponding amount due from them as net buyers.

Similarly, Mr. Francisco Castro apprised the RCC on the result of the PEM Board Meeting held on 30 September 2013, relative to the RCC's proposal on Prudential Requirement. Following are the highlights of the PEM Board presentation and the PEM Board's comments on the RCC proposal:

- ❖ Inclusion of the definition of the term "disputed bill." Mr. Castro stated that no one of the PEM Board Directors presented any objection with the use of the term disputed bill. However, the RCC was flagged that it should be able to include a definition for the term in the proposal. Mr. Castro shared having explained to the PEM Board that the term disputed bill pertains to an outlier or a bill that has an outlier data, or something that is not within the normal range of consumption in the WESM.
- ❖ As regards the sanction to be imposed on delinquent members, the PEM Board suggested including in the revision of the WESM Rules and the Billing and Settlement Manual a notice to the National Electrification Administration (NEA) and the Energy Regulatory Commission regarding the suspension of WESM members who are delinquent in paying their dues and/or unable to raise their required level of Prudential Requirement.

- ❖ As regards the generators that become net buyers, the RCC was asked by the PEM Board to consider proposing a provision in the WESM Rules requiring the net buyer generators to pre-pay the amount due as an offshoot of their purchase from the WESM or put up a Prudential Requirement, when necessary.

Mr. Castro stated that his understanding of the reason for suggesting to notify the NEA and the ERC of the names of suspended WESM members is in order for them to likewise inform the other parties that may be affected by the delinquent WESM members. Relatedly, Ms. Marissa Gandia of PEMC-Finance mentioned that in the latest findings in the market audit, it was highlighted that although WESM members are already suspended, they continue to draw power from the grid. They only cease drawing power when they are already disconnected from the grid. For this reason, suspension is viewed to have no "teeth." She added that the reason for suggesting to notify NEA, in particular, of such suspension is for NEA to consider the suspension in its assessment of an electric cooperative's performance.

Mr. Sulpicio C. Lagarde shared that currently, NEA exercises what is called the step-in right, which allows NEA to intervene and manage the operations of an ailing electric cooperative, provided that such cooperative qualifies per the criteria set to be considered as an ailing cooperative. He added that as a proactive move, NEA is currently conducting training programs regarding financial Key Performance Indicators (KPIs). Further, he shared that the suspension of a WESM member can be counted as one of the financial KPIs, because once an electric cooperative is suspended in the WESM, it cannot pass one of the criteria in the KPI pertaining to being current in payment. In such case, it cannot qualify as an AAA cooperative. On the other hand, Mr. Gilbert Pagobo mentioned that with regard to the suspended distribution utilities, suspension is not tied up with the performance of the DUs under the Performance Based Regulation (PBR).

On the issue raised regarding the confidentiality of the suspension of WESM members, Atty. Caryl Lopez-Mateo explained that such is a non-issue since the suspension of WESM members is published in the newspapers anyway.

Mr. Pagobo raised one of the possible effects of disconnection to a Customer. By way of an example, he cited the case of a Customer duly paying its bilateral contract, but which fails to pay the WESM component of its bill. He expressed his concern that once that Customer is disconnected from the grid, it will have a problem with the other party with whom it has a bilateral contract. He therefore suggested as follows: for the electric cooperatives, that NEA intervention should take place; for non-cooperatives, to double up the Prudential Requirement to cover the periods that a particular Customer should have settled its obligations.

In response to the remarks of Mr. Pagobo, Mr. Castro stated that the Rules should be applied equally to all WESM members, in this case, the 35-day PR that was directed by the PEM Board. Thus, the suggestion made by Mr. Pagobo may not be feasible.

At this point, Dr. Guevara solicited for comments on what kind of "teeth" is needed to make the suspension more effective. Majority of the RCC members concurred that the only answer is disconnection.

1 Mr. Lagarde, on the other hand, expressed a different view. He cited for instance, a
2 WESM member that has a bilateral component of about 80%. During such period
3 that said WESM member is suspended, he countered that the MO or the SO can
4 perhaps find a way so that the 80% capacity could still be delivered even if the same
5 was not traded through the WESM. He commented that disconnection may not be
6 the proper way of addressing the issue particularly for those WESM members that
7 have existing bilateral contracts. In the same manner, doubling the PR may not be
8 feasible for the very reason that the WESM member is already having a problem
9 with meeting even the 35-day PR, more so when the PR is doubled.

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11 In response to the first suggestion of Mr. Lagarde, Dr. Guevara opined that the
12 WESM members should be able to realize the interplay in the market, the
13 corresponding effect on prices, and the costs involved in being a member of the
14 WESM. She suggested that the matter be discussed among the WESM members
15 particularly in Visayas, for their appreciation.

16
17 Noting that disconnection and doubling of the PR requirement are not feasible
18 options considering the existing bilateral contracts of some WESM members, and the
19 increased difficulty of complying with the PR if the same is doubled, the RCC agreed
20 on the initial suggestion to simply inform the NEA and the ERC of the suspension of
21 delinquent WESM members.

22
23 Moving forward with the discussion, Mr. Castro shared that the rather contentious
24 issue raised by the PEM Board was the treatment of Generators who have become
25 net buyers. He recalled that during the previous deliberations of the RCC on the PR
26 matter, it was raised that even when a generator becomes a net buyer and does not
27 have a PR posted, it is always possible to subsequently offset the amount it needed
28 to pay from its bills/receivables the following month. He noted however that during
29 those discussions, the RCC had no information on the instances that generators
30 have become net buyers in some billing periods. He shared that during the PEM
31 Board meeting, the PEMC gave some statistics on the Generators that became net
32 buyers from January to September 2013. Specifically, the PEM Board was informed
33 during said meeting that there were 21 out of 46 Generators that became net buyers
34 for that period. Given this reality, the RCC's previous agreement on offsetting and its
35 decision to no longer require the net buyer generators to post security deposit was
36 found not acceptable by the PEM Board.

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38 Below are the discussions which ensued following the updates on the PEM Board
39 comments relative to the matter on net buyer generators.

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41 ➤ Ms. Joselyn Carabuena expressed that PSALM will be hit the most by the
42 proposal to either pre-pay or post a prudential security, stating that any
43 WESM member that is not identified with a generator, customers in particular,
44 becomes PSALM's customer. She explained that these customers were
45 previously NPC's, and which were subsequently attached with the generators
46 that bought some of the NPC's assets. She added that those who were not
47 able to get contracts with other Generators but continue to draw from the
48 WESM are automatically attached with PSALM. Ms. Carabuena then stated
49 that it may not be appropriate and perhaps unfair for PSALM to end up being
50 the one in default and consequently be required to post a PR given such
51 situation. In response to PSALM's concern, Atty. Lopez-Mateo recalled a
52 DOE circular which already resolves the issue on PSALM being charged for

1 such case. On this note, Ms. Carabuena said that she will verify whether or
2 not the same is still currently happening.

- 3 ➤ Mr. Jose Ferlino P. Raymundo stated that a generator becoming a net buyer
4 has something to do with its bilateral contract. He explained that on such
5 instances when a generator is on shut down, it draws power from the WESM
6 in order for it to serve its customers. He cited for instance the case of Sual
7 which experiences a scheduled shut down for 30 days every year, during
8 which period, it becomes a net buyer, but for the rest of the year, it is a net
9 seller. Dr. Guevara commented that the case of a scheduled shut down is
10 different because during such case, the generator could potentially pay in
11 advance. She further commented that pre-payment is perhaps a better option
12 than posting a prudential security because pre-payment is done only in cases
13 when a generator anticipates that it will become a net buyer.

- 14 ➤ Mr. Castro shared that during the PEM Board meeting when the PR matter
15 was being discussed, he sensed that the private generators can either pre-
16 pay or put up a prudential security. He recalled, however, somebody raising
17 that the case is different for government generators. Atty. De Castro recalled
18 that during the previous RCC discussions on the matter, one of the issues
19 raised was that government generators are not allowed by the Commission
20 on Audit (COA) to make pre-payment. Nonetheless, it was clear from the
21 PEM Board's comments and instructions that the RCC should be able to have
22 something solid in terms of provisions in the Rules and the Manual on what to
23 do with net buyer generators, whether to make them pre-pay or put up a
24 prudential security.

- 25 ➤ Ms. Gandia stated that normally, when a generator becomes a net buyer, it is
26 unable to pay the amount due on that same billing month and instead, offsets
27 the amount in the generator's bill the following billing month. As a result of
28 such shortfall, other generators share from the default amount or any shortfall
29 in the amount that the MO is unable to collect.

- 30 ➤ Noting the information from Ms. Gandia, Dr. Guevara requested the generator
31 representatives to raise the matter with the generation sector, to include the
32 members and non-members of the PIPPA, and inform them of the 21
33 generators which became net buyers for the year as mentioned by the PEMC.
34 Dr. Guevara further requested that the generator representatives inform the
35 members of their sector that the effect of non-payment of net buyer
36 generators on due date would be a shortfall in the MO's collection and
37 consequently, in the payment to generators. The Secretariat was asked to
38 provide the generator representatives in the RCC with the contact information
39 of the 46 generators.

- 40 ➤ Moving forward with the discussion, Ms. Gandia pointed to the following
41 existing provisions under the WESM Rules:

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43 3.15.2.1: "Subject to clause 3.15.2.2, a Trading Participant wishing to
44 participate in market transactions shall provide and maintain a security
45 complying with the requirements of this clause 3.15.2."

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47 3.15.2.2: "The Market Operator may exempt WESM members from the
48 requirement to provide a security under clause 3.15.2.1, if:

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50 a) the Market Operator believes it is unlikely that the amount payable by the
51 Market Operator to that WESM member under the WESM Rules will not

consistently exceed the amount payable to the Market Operator by that WESM member under the WESM Rules in respect of that period; or
b) the Market Operator believes it is unlikely that the WESM member will be required to pay any amounts to the Market Operator; xxx

- Ms. Gandia explained that the exemption of generators is covered under Section 3.15.2.2. She emphasized, however, that clauses 3.15.2.2 a and b must be satisfied in order for a generator to enjoy such exemption. She stated that if in any billing month the generator becomes a net buyer, it is clear that the exemption can be cancelled. When such exemption is cancelled, she stated that the generator shall be required to provide a security deposit. Further, Ms. Gandia emphasized that if PEMC is to strictly implement the above provisions, a revision in the WESM Rules may no longer be necessary because generators are not unconditionally exempt from the provision of prudential security based on section 3.15.2. Ms. Gandia then recalled the previous PEMC proposal on the pre-payment of net buyer generators instead of prudential security, which was disapproved by the RCC. She expressed that such gives more flexibility in recognition that generators by nature are not net buyers.
- Mr. Castro inquired whether at the onset, PEMC informs the WESM members that they are exempt from posting the prudential security, and whether such information is put in writing. Atty. Lopez-Mateo responded that such is included in the registration process where an intending WESM member is assessed to determine its required level of prudential security. Mr. Castro clarified that an exemption can only be revoked if the same is given such as in the form of writing. Otherwise, there is nothing to revoke. Atty. Lopez-Mateo responded that it is already stipulated under the conditions for registration, and as such, a WESM member is registered only after meeting the requirements. She emphasized, however, that the requirements should be continuing and should not be just in the registration.
- Dr. Guevara inquired why the MO does not exercise its power to require the generators to post a security deposit when such is provided under the WESM Rules. Mr. Castro opined that probably, there is no fixed mechanism for doing such, even the determination of how to qualify as "...consistently exceed the amount payable..." as stipulated in the WESM Rules 3.15.2.2. Ms. Gandia added that during the PEM Board meeting, a query that was raised by one of the members was how to compute for the Maximum Exposure of the generators that have become net buyers.
- In relation to the above, Mr. Theo Cruz Sunico inquired on the following: a) what is meant by "consistently" under Clause 3.15.2.2; and b) what would be the qualifier for being consistently a net seller. He opined that these terms should be clearly defined before the relevant WESM Rules can be effectively implemented. Ms. Gandia responded that the definition being clarified is currently not in the WESM Rules. She opined that the term consistently means there should be no negative amount or has never been a net buyer.
- Ms. Gandia presented the data showing the amounts corresponding to the 21 generators which became net buyers from January to September 2013, but without the names of the generators. She mentioned that these net buyer generators do not pay the amount due but rather, offset the amount in their bill the following billing month.

Following the discussions above, a sub-committee on Prudential Requirement was formed composed of Atty. De Castro as Chairman and with members as follows: Mr. Raymundo, Mr. Sunico, Ms. Carabuena, and Ms. Rivera. Having noted the comments and issues raised during the BRC and PEM Board meetings, as well as the result of the RCC's deliberations on the matter, Atty. De Castro recommended revisiting the provisions on exemption and bringing back the discussion on PEMC's previous proposal regarding pre-payment. On the question relative to the computation of the Maximum Exposure (ME), she recalled having discussed the same with Ms. Gandia and noted the provision which states a 10% pre-payment or minimum prudential requirement, which basis of the determination is the EPIRA. The sub-committee agreed to meet on 09 October 2013 at 10:00am to 3:00pm. Below are the issues that the sub-committee needs to resolve: 1) meaning of disputed bill, 2) provisions regarding notification to NEA and the ERC; 3) pre-payment or posting of prudential security by the net buyer generators, and 4) definition of "consistently" under 3.15.2 of the WESM Rules.

Before the discussion on the matter was ended, Dr. Guevara reminded the generator representatives of their duty to provide regular updates to the members of their sector, whether or not they are members of PIPPA, with the issues being tackled at the RCC, and that would include all the 46 generators mentioned by PEMC, in order to keep them informed. On this note, Mr. Raymundo requested the PEMC/Secretariat to provide them with the contact details of all 46 generators so that the RCC matters can be coordinated with them.

o Updates on the RCC Action Plan re the DOE Directives on the MRU

Atty De Castro stated that the proposed amendment to the Philippine Grid Code (PGC) was already approved by the RCC during its last meeting. The same is being presented again with the instruction for the sub-committee to provide the rationale for the proposed revisions in the PGC. Below are the rationale discussed by Atty. De Castro as crafted by the MRU sub-committee.

Presentation of Rationale of the RCC-Approved Proposal on the Amendments to PGC

CHAPTER 1 GRID CODE GENERAL CONDITIONS

| Proponent | Original Text or New Provision | RCC-Proposed Revision | Rationale |
|------------------------|---|---|--|
| 1.6 Definitions | | | |
| RCC | Inclusion of New Definition to PGC of "Must Run Unit (MRU)" | <u>Must-Run Unit (MRU) –a generating unit identified and instructed by the System Operator (SO) to come on-line, on real-time or scheduled basis on a particular Trading Interval but the dispatch is said to be Out of Merit to augment the Ancillary Services and maintain the System Security requirements of the Grid. For clarity, MRU shall be utilized only after the System Operator has exhausted all available Ancillary Services.</u> | <p>There is no definition of MRU in the PGC. In order to harmonize the use of this term and the conditions upon which is it used within the WESM operations, it is necessary to include this definition in the PGC.</p> <p>A MRU is a generator instructed by the SO on real time basis or scheduled basis, not in accordance with the Merit Order Table (MOT), to augment the</p> |



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| | | <p>a. <u>Scheduled MRU – MRU designated by the System Operator before the trading interval and included in the RTD schedule through the imposition of Security Limit as defined in the WESM Dispatch Protocol Manual.</u></p> <p>b. <u>Real Time MRU – MRU designated by the System Operator within a trading interval.</u></p> | <p>ancillary reserve requirements whenever such services were already exhausted. This is necessary for the SO to address system security related matters.</p> |
| RCC | Inclusion of New Definition to PGC for "Must Stop Unit (MSU)" | <p><u>Must-Stop Unit (MSU) – a generating unit identified and instructed by the System Operator to reduce the provision of energy due to its non-compliance of the Dispatch Schedule to address or prevent possible threat to the System Security requirements of the Grid.</u></p> | <p>There is no definition of MSU in the PGC. In order to harmonize the use of this term and the conditions upon which it is used within the WESM operations, it is necessary to include this definition in the PGC.</p> <p>The definition of a MSU (previously discussed and approved by the RCC), as a generating unit that is instructed to stop/reduce output, is proposed to be refined and replaced by this definition instead, so as to take into account other measures available prior to a MSU instruction, such as the provisions on the use of "constrain on" and "constrain off" in the WESM Rules and as is currently practiced by the SO.</p> <p>Under this proposed refinement of the definition, a MSU is a generator that fails to comply with the SO's dispatch instruction to "constrain off" or reduce its output, after the SO has taken into consideration the presence of a threat to system security.</p> <p>The System Operator shall tag such generator as MSU and shall immediately report the same to the MO, MSC, and GMC for failure to comply.</p> |
| | New (Lifted from WESM Dispatch Protocol Manual with minor revision) | <p><u>Security Limits –reflect system stability limits imposed on the output of generating units whenever there are constraints in the grid (i.e. generator operating limits and transmission branch group limits), as defined in the WESM Dispatch Protocol Manual, and which may vary under different system conditions.</u></p> | <p>Security limits are imposed by the SO to limit the output of a generating unit(s) whenever there are constraints in the grid.</p> <p>These limits also apply to the capacity of a certain transmission line/s or equipment.</p> |

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| | New (lifted from MRU Manual with minor revisions) | <u>Out of Merit Dispatch – the dispatch of a generating unit outside or not in accordance with the WESM Merit Order Table to address threats in System Security.</u> | Ideally, the MOT is to be used in issuing dispatch instructions. However, the SO is empowered to issue dispatch instructions to a generator not in accordance with the MOT to immediately address a threat to system security. |
| RCC | Inclusion of New Definition to PGC of "Constrain-On" as defined in the WESM rules | <u>Constrain-on. In respect of a generating unit, the output of that generating unit is limited above the level to which it would otherwise have been dispatched by the Market Operator on the basis of its energy offer.</u> | The term "constrain-on" is used in the WESM Rules and is now proposed to be adopted in the PGC. The term "constrain-on" means that the SO shall instruct a generating unit(s) to increase its output. The instruction shall be based on the MOT (specifically in accordance with the order or stacking of generators with offers but not dispatched) to address any imbalance in the supply and demand brought about by high intra-hour demand requirements. |
| RCC | Inclusion of New Definition to PGC of "Constrain-Off" as defined in the WESM rules | <u>Constrain-off. In respect of a generating unit the output of that generating unit is limited below the level to which it would otherwise have been dispatched by the Market Operator on the basis of its energy offer.</u> | The term "constrain-off" is used in the WESM Rules and is now proposed to be adopted in the PGC. The term "constrain-off" means that the SO shall instruct a generating unit(s) to decrease its output. The instruction shall be based on the MOT (specifically in accordance with the order or stacking of generators with offers but not dispatched) whenever there's any imbalance in the supply and demand brought about by the low intra-hour demand requirements. |
| RCC | Inclusion of the definition of "Constraint" as defined in the WESM rules | <u>Constraint. A limitation on the capability of any combination of network elements, loads, generating units or Ancillary Service Providers such that it is, or is deemed by the System operator to be, unacceptable to adopt the pattern of transfer, consumption, generation or production of electrical power or other services that would be most desirable if the limitation were removed.</u> | The term "constraint" is used in the WESM Rules and is now proposed to be adopted in the PGC. |
| | Inclusion of the definition of Market Intervention as defined in the WESM rules with minor revisions | <u>Intervention. A measure taken by the System Operator when the grid is in the emergency state condition as established in the Grid Code arising from a threat to system security, force majeure or emergency brought about by multiple tripping of lines/equipment.</u> | The provision is to define the parameters where market intervention by the SO will take place. In such cases, the SO may take all the necessary actions in order |

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| | | <u>During such event, the administered price cap shall be used for settlements.</u> | to mitigate the effect of the disturbance and restore the grid to its normal state. This provision amends the phrase "extreme state" to "emergency state" since the condition of extreme state means that there is already a failure of the SO to implement corrective measures. |
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CHAPTER 3 PERFORMANCE STANDARDS FOR TRANSMISSION

| Prop. | Original Text or New Provision | RCC-Proposed Revision | Rationale |
|-----------------------------------|--|---|--|
| 3.2.2 Frequency Variations | | | |
| RCC | 3.2.2.2 The control of system frequency shall be the responsibility of the System Operator. The System Operator shall maintain the fundamental frequency within the limits of 59.4Hz and 60.6 Hz during normal conditions. However the System Operator shall intervene when the frequency limits of 59.7Hz and 60.3 Hz are breached. | 3.2.2.2 The control of system frequency shall be the responsibility of the System Operator. The System Operator shall maintain the fundamental frequency within the limits of 59.4Hz and 60.6Hz during normal conditions. However, the System Operator shall intervene when the frequency limits of 59.7Hz and 60.3Hz are breached. <u>For this purpose, the System Operator shall constrain-on or constrain-off, or make use of MRU, if all immediately available Regulating Reserves, Contingency Reserves, and/or Dispatchable Reserves have been exhausted in order to normalize the frequency of the grid.</u> | The System Operator is mandated to operate and control the grid frequency within the normal range, with due consideration to power quality. Whenever all Ancillary Services are already depleted or exhausted and the grid frequency has breached the 59.7Hz and 60.3 Hz threshold, the SO shall constrain-on or constrain-off the generators in the MOT and shall make use of the MRU mechanism, when necessary to ensure supply and demand is balance at all times. |

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CHAPTER 6 GRID OPERATIONS

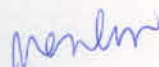
| Prop. | Original Text or New Provision | RCC-Proposed Revision | Rationale |
|--------------------------------------|---|---|---|
| 6.2.2 Grid Operating Criteria | | | |
| RCC | 6.2.2.3. The Security and Reliability of the Grid shall be based on the Single Outage Contingency criterion. This criterion specifies that the Grid shall continue to operate in the Normal State following the loss of one Generating Unit, transmission line, or transformer. | 6.2.2.3. The Security and Reliability of the Grid shall be based on the Single Outage Contingency criterion. This criterion specifies that the Grid shall continue to operate in the Normal State following the loss of one Generating Unit, transmission line, or transformer. <u>However, the System Operator shall take the necessary actions whenever there is already a threat or an impending threat in system security as a result of non-compliance to single outage contingency criterion, through constrain-on/constrain-off of generating units or the use of MRUs if Contingency Reserves and/or Dispatchable Reserves are not applicable, to ensure the security</u> | The additional provision is meant to specify clearly that whenever there's non-compliance to the single outage contingency criterion, as a result of tripping of line or equipment, the SO may make use of MRU mechanism or constrain-on, constrain-off generating units to address the N-1 requirement |

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| | | <u>and reliability of the grid.</u> | |
| RCC | 6.2.2.4. The Grid Frequency shall be controlled by the Frequency Regulating Reserve during normal conditions and by the timely use of Contingency Reserve and Demand Control during emergency conditions. | 6.2.2.4. The Grid Frequency shall be controlled by the Frequency Regulating Reserve during normal conditions, and by the timely use of <u>Contingency Reserve and Demand Control during emergency conditions all applicable Ancillary Services. However, the System Operator shall constrain-on/constrain-off or make use of MRUs whenever the grid frequency breaches the 60.3Hz or 59.7Hz threshold as stated in Section 3.2.2.2. During emergency conditions, the System Operator shall implement demand control as a last resort in order to ensure the reliability and security of the grid.</u> | <p>This provision emphasizes that the SO would implement manual Load dropping only as a last resort during emergency conditions, in order to ensure the integrity of the grid.</p> <p>This situation would only materialize if all Ancillary Services have been exhausted and other corrective actions such as constrain-on/off or make use of MRUs were already applied and was still insufficient to restore grid integrity.</p> |
| RCC | 6.2.2.9 New Operating Criteria | <p><u>6.2.2.9 In an event where all Ancillary Services are exhausted to address the threat in system security, the System Operator shall make use of the MRUs to augment the exhausted reserves and ensure the reliability and security of the grid. The following operating criteria for MRUs shall be observed:</u></p> <ol style="list-style-type: none"> <u>1. System Voltage Requirement – this refers to the required voltage control and reactive power which the System Operator may need to take into account for the reliability of the Grid.</u> <u>2. Thermal Limits of Transmission Line and Power Equipment – this refers to the dispatch limitations of generators affected by the actual condition of the transmission lines and/or power equipment.</u> <u>3. Real-power Balancing and Frequency Control – this refers to the energy requirement to maintain supply-demand balance.</u> | <p>The criteria as specified are necessary to categorize the various factors that would influence the use of MRUs.</p> <ul style="list-style-type: none"> •The use of MRU can be applied for voltage correction since the reactive power component of a certain generator would further improve the system voltage when operating within the allowable level. •The use of MRU to address the thermal limit is necessary whenever the single outage contingency criterion is applied. •The use of MRU for Real-power Balancing and Frequency control is necessary whenever all Ancillary reserves have been exhausted. Use of MRU would alleviate or improve the level of reserve requirements. |
| 6.3.1 Operational Responsibilities of the System Operator | | | |
| | 6.3.1.3. The System Operator is responsible for ensuring that Load-generation balance is maintained during emergency conditions and for directing Grid recovery efforts following these emergency conditions. | 6.3.1.3. The System Operator is responsible for ensuring that Load-generation balance is maintained during <u>normal and</u> emergency conditions <u>in accordance with Sections 3.2.2.2 and 6.2.2.4, respectively and following an emergency condition, the System Operator is also responsible</u> for directing Grid recovery efforts. | The amendment underscores the importance of SO's responsibility to ensure load-generation balance at all times and for grid recovery efforts. |

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| | | <u>following these emergency conditions.</u> | |
| | 6.3.1.4. The System Operator is responsible for controlling Grid Voltage Variations during emergency conditions through a combination of direct control and timely instructions to Generators and other Grid Users. | 6.3.1.4. The System Operator is responsible for <u>controlling Grid Voltage Variations during emergency conditions through a combination of direct control and timely instructions to Generators and other Grid Users, ensuring that the Grid Voltage is maintained within the normal limits at all times and shall take the necessary actions to the best of its judgement whenever the grid voltage of +/- 5% of the nominal voltage are breached and even during emergency conditions through a combination of direct control and timely use of MRUs as required by the System Operator.</u> | Same rationale as above but with respect to grid voltage. |
| 6.3.3 Operational Responsibilities of Generators | | | |
| RCC | 6.3.3.4. The Generators is responsible for executing the instructions of the System Operator during emergency conditions. | 6.3.3.4. The Generators <u>are</u> is responsible for immediately executing the <u>dispatch</u> instructions of the System Operator <u>during emergency conditions at all times.</u> | The amendment underscores the importance of Generator's responsibility to comply with SO's dispatch instructions. |

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| CHAPTER 7 SCHEDULING AND DISPATCH | | | |
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| Prop. | Original Text | RCC-Proposed Revision | Rationale |
| 7.2.2 Responsibilities of the System Operator | | | |
| RCC | 7.2.2.1. The System Operator shall be responsible for the issuance of Dispatch Instructions for all the Scheduled Generating Units and for all the Generating Units providing Ancillary Services, following the Dispatch Schedule prepared by the Market Operator. | 7.2.2.1. The System Operator shall be responsible for the issuance of Dispatch Instructions for all the Scheduled Generating Units and for all the Generating Units providing Ancillary Services, following the Dispatch Schedule prepared by the Market Operator. <u>However, the System Operator may schedule or issue dispatch instructions to generators to constrain-on, constrain-off, or may make use of MRUs with due consideration to reliability and security of the grid.</u> | The amendment underscores the SO's responsibility to issue dispatch instructions using the constrain-on, constrain-off, MRU, and MSU processes to maintain grid security and reliability. |
| 7.2.4 Responsibilities of the Generators | | | |
| RCC | 7.2.4.3. The Generator with a Scheduled Generating Unit shall be responsible for ensuring that all Dispatch Instructions from the System Operator are implemented within the Dispatch Tolerances. | 7.2.4.3. The Generator with a Scheduled Generating Unit shall be responsible for ensuring that all Dispatch Instructions from the System Operator are implemented <u>within the in accordance with the Dispatch Schedule Tolerances issued by the Market Operator. However, the Generator shall follow the dispatch instructions issued by the System Operator without delay whenever required to constrain-on/constrain-off or to function as</u> | The amendment underscores the responsibility of the Generators to follow SO's out of merit dispatch instructions. |



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| | | MRUs to ensure the reliability and security of the grid. | |
| 7.3.2 Dispatch Scheduling | | | |
| RCC | 7.3.2.4. New provision | <u>7.3.2.4. In the event that the Dispatch Schedule issued by the Market Operator is not feasible to implement after being subjected to the final security screening by the System Operator, the System Operator shall declare Market Intervention in coordination with the Market Operator.</u> | This new provision seeks to take into account a situation where the dispatch schedule issued by the MO cannot be implemented due to grid security reasons, then the SO, in coordination with the MO, is empowered to declare market intervention at such time. |
| 7.3.3 Dispatch Implementation | | | |
| RCC | 7.3.3.3. The following information shall be provided by the System Operator to the Market Operator in the implementation of the dispatch: (a) Status of the Generating Units, transmission lines and substation facilities (b) Planned and forced outages (c) Reserve requirements and allocations (d) Security constraints and contingency (e) System emergencies | 7.3.3.3. The System Operator shall ensure that the following information shall be provided to the Market Operator to come up with a security constrained economic dispatch schedule prior to the implementation of the dispatch schedules: a. <u>Status of the Real time snapshots to determine the status of the generating units,</u> transmission lines and substation facilities b. <u>Planned and forced outages of generating units, transmission lines, and other equipment</u> c. <u>Ancillary Services based on</u> reserve requirements and <u>its</u> allocations d. <u>Imposition of security constraints and contingency</u> e. <u>List of contingencies for single outage contingency System emergencies</u> | This proposed revision clearly specifies the required information that the SO is required to provide the MO to come up with a security-constrained dispatch schedule. |
| RCC | 7.3.3.5. The System Operator shall continuously monitor the Grid to ensure compliance with Dispatch Instructions by industry participants. All noncompliance to Dispatch Instructions shall be reported by the System Operator to the Market Operator and the Grid Management Committee. | 7.3.3.5. The System Operator shall continuously monitor the Grid to ensure compliance with Dispatch Instructions by <u>industry participants the Generators.</u> All non-compliance to Dispatch Instructions shall be reported by the System Operator <u>to, in coordination with</u> the Market Operator, to the Market Surveillance Committee (MSC) and to the Grid Management Committee (GMC). <u>The Generators who failed to comply with the dispatch instruction with the System Operator may be penalized in accordance with the WESM Rules and Manuals.</u> | This proposed change would provide a clear picture with regard to the protocol being established between the Market Operator and the System Operator. Likewise, this provision would also specify that whenever the Generator/s failed to comply with the dispatch instructions by the Generators, a corresponding penalty shall be imposed to the said generator. |

Dr. Guevara requested to be provided with information on the status of the previous proposal on the amendments to the MRU Manual, noting that some of the provisions regarding the RCC-submitted proposal have been changed by the RCC recently. Ms. Rodriguez replied that the same was brought up only at the level of the BRC and not yet with the PEM Board. Thus, there is no need to recall the same in view of the



Mr. Rosales clarified that the third criteria for calling an MRU may also be for cases of islanding. Relatively, Mr. Cacho added that the sub-committee is proposing to retain local calamities and emergencies as criteria for MRU. Further, Mr. Rosales clarified that such is included but should be under Other Considerations rather than Security-related MRU. Further to the matter on MRU, Mr. Cacho stated that said generators can be called as MRU but in the settlement process that was approved by the ERC, only the volume that is not covered by the BCQ shall be settled as MRU.

Proposed Revisions to the WESM Rules on MRU

Mr. Cacho presented to the RCC the discussion paper for the proposed amendments to the WESM Rules and Manuals on MRU. The following summarizes the content of the discussion paper.

I. Background

- Original Proposed Amendments
- DOE Directives to RCC
- RCC Action Plan
- Guiding Principles
 - MRU is used to address System Security and Reliability
 - Dispatch of MRU should be done only after the A/S or Reserves are exhausted.
 - MRU mechanism is not really for Commissioning/Testing of Plants
 - Fuel/energy cost of plant commissioning/testing is part of plant commissioning/testing cost
 - MRU is different from MOT Redispatch (Constrain-on/off)
 - ☐ MRU from Offline
 - ☐ Constrain on/off – synchronized to the grid
 - MOT re-dispatch (either constrained-on or off) in accordance with WESM MOT should not be compensated
 - MRU/Constrained-on needs compensation due to additional energy provided.
 - Constrained-off generator due to another generator not complying with schedule or not complying with linear ramping considerations as set under the WESM Rules should be compensated by the non-complying generator
 - Non-complying generators to their schedule or linear ramping considerations shall be identified and called as Must-Stop Unit (MSU).
 - Generators located in the part of the grid that has become isolated from the system and therefore cannot be scheduled by the Market Operator or due to a localized emergency that can result to infrastructure damage or threaten the security of people in the surrounding area, and upon assessment by the System Operator, may also be dispatched as MRUs and be settled based on MRU compensation mechanism.
- MRU Criteria

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| System Voltage Requirement | Proposed to be retained as this is distinct and is localized in nature and be settled based on MRU mechanism |
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| Thermal Limits of Transmission Line and Power Equipment | Proposed to be retained as this addresses the operational requirements of the grid and be settled based on MRU mechanism |
| Systems Tests of TransCo | Proposed to be deleted as per System Operator recommendation |
| Under-generation due to insufficient supply capacity offers from generators | Upon analysis, these three items focus on maintaining the demand and supply balance in the grid which is mainly done thru the frequency control strategy of the System Operator. As such it is recommended that these be simplified to Real-power Balancing and Frequency Control and be settled based on MRU mechanism |
| Inadequate reserve levels to meet security and reliability requirements of the Grid | |
| Excess Generation Capacity in the System | |
| Regulatory Requirements | To minimize uncertainty of scheduling, it is deemed that generating plants undergoing regulatory testing or commercial operation testing should still be scheduled thru the security limit facility of the System Operator. In which case they are recommended to be retained. However, as these are deemed part of costs associated with the generator's testing it is also proposed that they be excluded from the settlement mechanism of MRUs – that is, these generators undergoing test should not be compensated. As agreed within RCC, however, an exemption to this is a generator who is already a trading participant and the tests are associated with his increase in maximum capacity (i.e. increase in Pmax) |
| Commercial Operation | |
| Local Calamities and Emergencies | Proposed to be retained under MRU criteria and compensation mechanism |

➤ Proposed changes to the Philippine Grid Code

II. Proposed Rules and Manuals Changes

➤ Changes are proposed in the following WESM Rules

1. 3.5.13 Over-riding Constraints
2. 3.8.2 Responsibilities of the System operator
3. 3.8.2.2



4. 3.8.6 Deviations from the Ramp Rate
5. 3.8.8 Sanctions of Trading Participants
6. 3.9.8 Management Procedures for Excess Generation
7. New Provision - 3.9.8.3

- Changes are proposed in the following Manuals
1. Management of Must Run Units Manual
 2. Dispatch Protocol Manual
 3. Management of Excess Generation
 4. System Security and Reliability Manual.

Atty. De Castro inquired whether the Regulatory and Commercial Operations criteria are already taken into account in the PGC. Mr. Rosales responded that the same is not included, and recommended that the same no longer be tagged as MRU.

In relation to the constrain off of plants, Mr. Lagarde inquired on the primary considerations of the System Operator in constraining off a plant, and whether the same has to do with the cost of running the plant. Mr. Rosales responded that the SO's primary consideration is the ramp rate of the plant. He added that when the grid frequency deviates from the normal range, the SO should be able to choose the plant that has the fastest ramp up or ramp down rate in order to immediately address any threat in the security of the grid.

Mr. Ferdinand B. Binondo inquired whether the sub-committee is proposing to include local calamity as one of the criteria for MRU in the PGC. Mr. Cacho replied that the same was not proposed for inclusion in the Philippine Grid Code since the grid code is concerned only on technical aspects. However, the same is being proposed for the inclusion in the Manual.

Mr. Binondo opined that such is no longer necessary to be considered as one of the criteria for MRU under the PGC. Mr. Cacho explained that one of the considerations for the proposed inclusion of local emergency as criteria for the MRU in the Manual is the case of isolation from the grid. In such case, the area where isolation occurred will have no schedule, resulting in the System Operator giving dispatch instructions without schedules. Mr. Binondo commented that in such case, the dispatch of the generator/s in that area will not necessarily have to be through an MRU. To clarify the matter being proposed, Mr. Rosales inquired on how to treat for instance a local emergency which caused a generator to be isolated from the grid but continues to supply for the local load. He stated that a declaration of emergency may not be necessary in this case since there is no threat in the grid security. He opined that if a generator in that area is identified to be capable of supplying the required energy in that local area, the only probable way of making that generator agree to provide supply is for it to be compensated as MRU. He further expressed that it would be possible that an unscheduled generator that is capable of supplying may not agree to run if it will not be paid as MRU. Mr. Binondo agreed that the generator can be called as must run in this case. He clarified however that his only issue is on the pricing and recovery of the cost. Mr. Binondo further commented that the criteria "Local calamities and emergencies" is very broad.

Following the discussion on the local calamities and emergencies, the RCC agreed not to include the same as criteria for MRU in the PGC. Mr. Rosales then suggested that the same be included instead under intervention instead of criteria for MRU.



1 Likewise, the settlement for the same shall be tackled in the Manual. Mr. Cacho also
2 clarified that given this development, the administered price methodology shall
3 likewise be revised. With regard to islanding, it was agreed that the same shall fall
4 under Real Power Balancing.

5
6 In relation to islanding, Dr. Guevara commented that the proposed Rules changes
7 should no longer touch on the same since WESM Rules will not be applicable to the
8 local area affected during islanding. Mr. Rosales clarified however that islanding is
9 similar to the System Operator declaring a market intervention where an
10 administered price is applied and which settlement is still done at the WESM. He
11 explained that during islanding, the generator has no schedule in the market but the
12 settlement of generation is still done in the WESM.

13
14 Below are the summary of agreements relative to the matter on local calamities and
15 emergencies, and the islanding:

- 16
17 i. to treat islanding as a separate criteria from the local calamities and
18 emergencies
19 ii. to take out local calamities and emergencies from the MRU Manual since the
20 settlement of the same should not be as MRU.
21 iii. settlement of islanding is still included in the WESM

22
23 Dr. Guevara requested for clarification on the process with regard to the submission
24 of the proposed revision of PGC to the GMC. Mr. Binondo responded that the
25 proposal can be submitted through DOE, and the DOE will endorse the same to the
26 GMC. Having noted the information, Dr. Guevara instructed the Secretariat to publish
27 the proposal in the WESM public information website, with the intention of informing
28 the participants that the same was already submitted to the DOE for its consideration
29 and endorsement to the GMC.

30
31 Mr. Pagobo mentioned that the provisions for loss of DUs are clearly specified under
32 the distribution code. However, the loss due to transmission is not specified under
33 the grid code. He then inquired if the same can be discussed and included in the
34 proposed changes to the PGC being tackled by the RCC. Dr. Guevara clarified that
35 the proposed revisions being discussed by the RCC relates only to the MRU as
36 directed by the DOE. She suggested, therefore, for the DUs to draft a separate
37 proposal on the same and bring it formally to the table for the RCC's discussion,
38 which was duly noted.

39
40 Moving forward, Mr. Cacho presented the specific proposed revisions to the WESM
41 Rules relative to MRU, explaining that the same is being done to harmonize it with
42 the revisions made in the PGC.

43
44 Following are the comments given on the proposed changes to the WESM Rules
45 relative to the MRU:

- 46
47 ➤ Capitalize "Operator" in "System operator"
48 ➤ Rephrase "shall develop criteria" to "will introduce changes"
49 ➤ Consistency in the sentence structure for "constrain on, constrain-off, or
50 MRU..." in the provisions
51 ➤ Mr. Binondo stated that if the MRU is to be included as part of the
52 ancillary service and become part of the ASPP, the ASPP can be modified

- such that the procurement of ancillary service can either be through contracting or through MRU.
- Dr. Guevara commented that her reading of the DOE directives relative to MRU is to consider the same as a type of ancillary. She added that the DOE directive is not necessarily the inclusion of the MRU as part of the ASPP. As long as the SO calls an MRU, it should be paid by the SO as ancillary. She clarified that when a generator is declared as MRU, it will be paid based on the MRU compensation, but the same shall be accounted as ancillary service of the transmission in order to correctly reflect the true cost of transmission.
 - Mr. Rosales expressed that his understanding of the DOE directives is for the MRU to be taken out of the WESM Price settlement and instead be included in the SO settlement process. He stated however that the MRU is not currently incorporated in the ASPP. He added that for the same to be included as part of the ASPP, it has to undergo the ERC approval. He stated that while including the MRU as part of ASPP is possible, he warned that the cost of the same will subsequently be passed on to Customers through increased transmission charges.
 - Mr. Binondo stated that the primary objective of the DOE directives is to achieve transparency in the WESM Prices. He noted that high WESM Prices are sometimes attributed to MRU. Thus, if these can be segregated, there will be more transparency in the prices.
 - Mr. Rosales expressed that the high prices of the MRU is due to the inclusion in the settlement of the non-security related MRUs. He noted that the MRU settlement accounts for 80% non-security related and only 20% security related MRUs.
 - Mr. Sunico shared that the issue on the generators being called to run as MRU due to the SO's lack of or insufficient ancillary has been taken up in the PIPPA. He noted that based on the ranking in the MOT, MRU should be called only when all ancillary reserve have been exhausted. Since there is insufficient ancillary reserve, generators continue to be called as MRUs. He then concurred with the opinion of Dr. Guevara that the intent of the DOE directives is to consider as ancillary all MRUs when the SO calls a generator to run as MRU.
 - Mr. Rosales clarified that a generator must be a certified ancillary service provider by the ERC, after passing some testing, before it gets to be considered as ancillary.
 - Following the discussions, Mr. Rosales expressed that it will submit a formal letter to PEMC and RCC stating the NGCP's position on the issue of the incorporation of the MRU as part of NGCP's ancillary service.
 - In relation to the compensation of MRUs, Mr. Cacho stated that the settlement of the same is done on a monthly basis. Atty. Tomas said that a validation of supporting documents to support the additional payment requires sufficient time. For the additional compensation being filed by generators relative to MRU, the ERC directed that the same should be paid on a staggered basis due to the huge amounts involved.
 - To revise Section 3.8.6 of the WESM Rules, as follows: **"If any Trading Participant exceeds the maximum or goes below the minimum registered ramp rate in any trading interval, then the Market Operator or the System Operator shall report the generator to the Market Surveillance Committee."**

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At this point, the RCC agreed to defer further discussion on the matter noting that the RCC did not have the opportunity to review in full the materials prior to the discussion. Dr. Guevara noted that there are three Market Manuals affected by the proposed changes to the PGC and the WESM Rules needing the review of the body, as follows: Dispatch Protocol, Management of Excess Generation, and System Security and Reliability Guidelines. Dr. Guevara divided the assignment on the review of the Manuals, as follows:

- i. Dispatch Protocol: Mr. Raymundo, Ms. Rivera, Ms. Carabuena, Atty. De Castro, and Mr. Sunico
- ii. Management of Excess Generation: Ms. Tanglao, Mr. Meneses, Mr. Lagarde, and Dr. Guevara
- iii. System Security and Reliability Guidelines: Mr. Pagobo, Mr. Santos, Mr. Rosales, and Mr. Castro

Dr. Guevara requested the RCC members to review the Manuals assigned to them and to comment on the same, and submit their inputs to the Secretariat two weeks after the meeting, for consolidation.

o **Updates on the RCC Action Plan re the DOE Directives on the Proposed Changes to the WESM Rules and the PEN Manual**

Mr. Marcial Jimenez of PEMC-TOD presented to the RCC the draft proposed amendments to the WESM Rules 3.10.5 and the PEN Manual. Below are the highlights of the presentation and the discussions which followed.

Proposed Amendments to the WESM Rules

- Mr. Jimenez presented the following proposed changes to Clause 3.10.5 of the WESM Rules.

3.5.1 In the event where no *ex-ante prices* can be determined or communicated within the timeframe specified by the *timetable*, or the calculated prices are believed to be in error, as a result of *load shedding*, occurrence of *constraints violation coefficients*, or for any other reason:

(a) The Market Operator may, ~~as soon as possible after the end of a trading interval~~, issue a pricing error notice, in which case, the *ex-post quantities* and the *ex post prices* determined according to clause 3.10.7 shall also serve as *ex-ante quantities* and *ex-ante prices*. If no *ex-post prices* can be determined or the calculated prices are believed to be in error as a result of the imposition or relaxation of constraints pursuant to clause 3.5.13.1, the Market Operator shall re-run the *Market Dispatch Optimization Model*. However, if the pricing error is due to the occurrence of a constraint violation on load-end equipment in the Market Network Model, or if the pricing error is due to network congestion resulting to extreme nodal price separations, the Market Operator, in consultation with the WESM Members, may develop a price substitution mechanism to determine the appropriate ex-ante or ex-post price.

The Market Operator, in consultation with the WESM Members and subject to the approval of the PEM Board, ERC, and DOE, shall develop and publish the procedures for the determination of the market re-run prices and substitute prices. Such procedures shall provide the criteria and conditions for the market re-run and the application of substitute prices including the timetable for implementation.

(b) If a pricing error is determined but no pricing error notice is issued within the time specified in the foregoing paragraph, the Market Operator shall issue the pricing error notice prior to the issuance of the preliminary settlement for the relevant billing period. The *ex-post* prices and quantities shall serve as *ex-ante* prices and quantities and shall stand irrespective of the outcome of any subsequent investigations or resolutions of any dispute.

(c) Should the pricing error also include reserves, the reserve quantity and price determined in the *ex-post* run shall serve as the reserve quantity and prices.

- Mr. Jimenez explained that the above proposal was crafted such that it will be compliant with the relevant provisions of the price substitution methodology (PSM).
- He clarified that under item a, the "constraint violation on load-end equipment" deals with the local PEN, while "network congestion" deals with the PSM.
- Mr. Cacho commented that since the PSM Manual is already existing, there may be a need to revise "shall develop and publish procedures for the determination of the market re-run prices..." under a) above. He further suggested to reword the second paragraph under item a, as follows: "The Market Operator, in consultation with the WESM Members and subject to the approval of the PEM Board, ERC, and DOE, shall develop..." He clarified that the MO's authority relative to this provision, is based on the approval by the PEM Board, ERC, and DOE. Lastly, he suggested the deletion of "...to determine the appropriate ex-ante or ex-post price..."
- Mr. Jimenez clarified that the PSM already provides for the development and publication of procedures for the determination of the market re-run prices. Likewise, the PSM that was approved by the PEM Board was also incorporated under item b of the proposal being presented. For the criteria and guidelines, the proposal provides for a hierarchy on how to declare a pricing error, explaining further that the local PEN affects a single node, while the PSM has a wider effect and thus, it will be prioritized more than the local PEN. He stated that the same provides more details in the Manual.

Proposed Amendments to the PEN Manual

After the presentation on the proposed changes to the WESM Rules, Mr. Jimenez proceeded with the presentation of changes to the PEN Manual. Following are the highlights of the presentation.

- To further study the proposal on Section 6.1.1 relative to the "step-up transformer in a generating plant." The RCC gave the general comment that a



transformer is designed such that it can hold up to the maximum generating capacity of the generator where that transformer is connected. Further, a generator cannot be dispatched such that it will cause overloading to that transformer. Mr. Cacho stated that such cases have happened in the past, particularly for the aggregated units. The RCC concurred that this may not be electrically correct since the plant will not be able to generate more than what can pass through the transformer. Mr. Binondo expressed that if such happens, the MMS should be able to recognize it since the snapshot will indicate that the transformer is no longer sufficient to hold up the capacity of the generator. Thus, the model should be able to limit the generation capacity. The RCC also commented that when the software detects that there is a problem in one of the transformers, then the generation of the plant will be revised and the Pmin of the generator should be reduced.

- In relation to the previous bullet, Mr. Cacho reiterated that such a case has already happened in the past. Mr. Cacho mentioned that the current WESM Rules allow for the aggregate registration of units. He opined that in order to address such, a per unit registration by generators should be required. On this note, Dr. Guevara stated that correction should be made on the COC and not the provisions that is subject of the discussion.
- Mr. Jimenez stated that the proposal seeks to apply the PSM for the congestion pricing error. He added that the term "localized" was added to refer to the localized congestion pricing error. Mr. Cacho clarified that any changes from the proposal being presented will effectively result in the revision to the PSM Manual as part of the harmonization of the Rules and Manuals.

The RCC thereafter agreed to defer further discussions on the matter and review the proposal crafted by the PEMC.

o **Proposed Changes to Chapter 6 of the WESM Rules re the Business Continuity Plan and Disaster Recovery Procedures of the Market Operator**

Mr. Cacho stated that comments were received from the Aboitiz Power Corporation (APC) and the WESM Technical Committee (TC) relative to PEMC's proposal on the amendments to Chapter 6 of the WESM Rules regarding the Market Operator's Business Continuity Plan and Disaster Recovery Procedures. He likewise informed the RCC that the PEMC drafted a reply to these comments, which reply was submitted to the RCC through the Secretariat. After which, the RCC discussed and went through each of the comments received and PEMC's reply thereto. Below are the highlights of the discussion on the matter.

- On 6.2.1.3, the APC commented that there should be intervention only upon actual interruptions and thus, proposed rewording the Clause, as follows: **"Intervention may be warranted if there are interruptions in the operations of market software used by the Market Operator to support various processes in the WESM upon the simulation of the business continuity plan and disaster recovery procedures of the Market Operator developed under Clause 6.8.8.1."** PEMC replied that for the existing MMS, market intervention will happen if the BCP simulation includes full DRP simulation, which involves transfer of MMS server operation to the EBS. Other than this scenario, market intervention is not anticipated to occur.

Further, with the new MMS, it is expected that the market intervention will be eliminated or at worse kept to a minimum. Hence, PEMC stated that the proposed APC rewording is acceptable.

- On the Glossary, TC suggested the inclusion of the definition of disaster. In response, PEMC drafted the following definition: **"A natural or man-made event that results in physical damage, destruction of property, or loss of life. Disasters shall include, but are not limited to, earthquakes, typhoons, floods, electrical storms, fires, bomb threats, terrorism, sabotage, power system blackouts, or civil disturbances."** Based on the RCC's deliberations, the RCC agreed to revise the definition of disaster, as follows: **"Refers to natural or man-made event that results in physical damage, destruction of property, or loss of life. Disasters shall include, but are not limited to earthquakes, typhoons, floods, storms, fires, bomb threats, acts of terrorism or sabotage, power system blackouts, or civil disturbances."**
- After due deliberation, the RCC agreed to retain the provisions as proposed by PEMC, with exceptions to 6.2.1.3 having noted the comment of APC and the additional definition on disaster as proposed by the TC.
- Ms. Joselyn Carabuena inquired whether the approval of the ERC is required every time the MO or the SO declares a market intervention. Mr. Cacho clarified in response that intervention is declared by the SO, in coordination with the MO, when the MO is unable to produce RTD schedules or when the RTD schedules cannot be implemented due to system security issues. He added that the ERC is involved only during market suspension, being the one that declares such.
- Ms. Rivera commented that the market intervention as a result of the MO's drill may affect prices. In such case, since there will be no RTD schedules, the generators are forced to get paid at the administered price, while the Customers are forced to pay that administered price whatever that is. Dr. Guevara responded, however, that if the MO is to simulate the breakdown, it has to happen anytime without prior announcement. It is something that cannot be scheduled. Mr. Castro related this to a fire drill that is not supposed to be scheduled. Otherwise, if for instance, there has been an announcement prior that the fire drill takes place at 3:00pm, it can be expected that everyone else has vacated the building at 2:50pm. That is the idea of the simulation being proposed by the MO as exemplified by Mr. Castro.
- Atty. De Castro inquired from the MO on who will conduct the evaluation of simulation exercise. Mr. Cacho responded that there is an internal committee, the BCP Committee, which was created for such purpose. As for the external party to validate the BCP's audit, Atty. Mateo explained that the BCP is part of the MO's compliance with the ISMS, so effectively, the audit of the BCP is part of the ISO. She stated further that the proposal is in fact a result of the audit that the MO has not been testing the DRP.
- The RCC commented that the MO can probably consider finding another provider for its communication link which could give more than the 8MBPS

1 that the current vendor can provide. The RCC said there are several vendors
2 in the market which could actually provide lower rates.

3
4 Following the discussions, the RCC approved the proposed amendments to Chapter
5 6 of the WESM Rules regarding the MO's business continuity plan and disaster
6 recovery procedures, as discussed and revised.

7
8
9 On this note, the RCC summarized the agreements made relative to its discussions
10 on the Agenda items, as follows:

- 11
12 ➤ For the PR sub-committee to make necessary revisions on the proposed
13 WESM Rules and BS Manual changes following the PEM Board's comments
14 on the matter;
15 ➤ For the MRU sub-groups to review and to post their comments and suggested
16 revisions on the proposal for the 3 affected Manuals, as crafted by the MRU
17 sub-committee;
18 ➤ For the Secretariat to submit to the DOE the proposed changes to the PGC,
19 and for the same to be posted in the public information website for information
20 of the participants;
21 ➤ For the review of the PEN proposal and the finalization of the same, for
22 presentation in the next meeting and its posting in the WESM website;
23 ➤ For the submission of the Proposed Changes to Chapter 6 of the WESM
24 Rules relative to the MO's Business Continuity Plan and Disaster Recovery
25 Procedure, with the incorporation of comments received from the APC and
26 TC;
27 ➤ For the NGCP to submit its position on the inclusion as part of the ASPP of
28 the MRU, as discussed by the RCC;
29 ➤ For Mr. Pagobo to draft the proposal for changes to the PGC relative to the
30 maximum system loss.

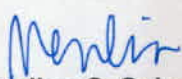
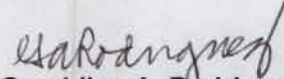

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33 **4. Next Meeting**


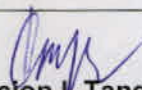
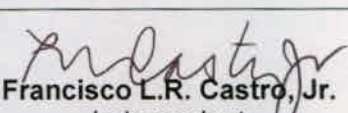
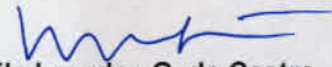
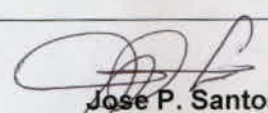
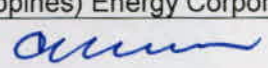

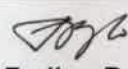
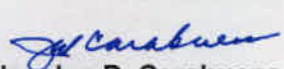
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35 The RCC members were reminded of the dates of succeeding meetings, as follows:

- 36
37 • 06 November 2013, 9AM
38 • 04 December 2013, 9AM

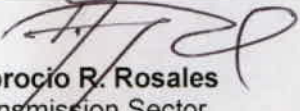
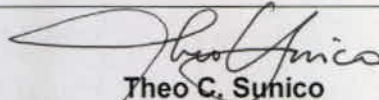

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41 **5. Adjournment**

42
43 There being no other matter to be discussed, the meeting was adjourned at around
44 3:45 PM.

| Prepared By: | Reviewed By: | Noted By: |
|---|--|--|
|  Romellen C. Salazar Analyst – Market Governance Administration Unit Market Assessment Group |  Geraldine A. Rodriguez Assistant Manager – Market Governance Administration Unit Market Assessment Group |  Elaine D. Gonzales Manager – Market Data and Analysis Division Market Assessment Group |

| | |
|--|---|
| <p>Approved by:</p> <p>RULES CHANGE COMMITTEE</p> <p> Rowena Cristina L. Guevara Chairperson Independent University of the Philippines (UP)</p> | |
| Members: | |
|  Concepcion L. Tanglao Independent |  Francisco L.R. Castro, Jr. Independent Tensaiken Consulting |
|  Maila Lourdes G. de Castro Independent | Lorreto H. Rivera Supply Sector Team (Philippines) Energy Corporation |
|  Jose P. Santos Distribution Sector (EC) Ilocos Norte Electric Cooperative, Inc. (INEC) |  Ciprinilo C. Meneses Distribution Sector (PDU) Manila Electric Company (MERALCO) |
| Sulpicio C. Lagarde Jr. Distribution Sector (EC) Central Negros Electric Cooperative, Inc. (CENECO) |  Gilbert A. Pagobo Distribution Sector Mactan Electric Company (MECO) |
|  Jose Ferlino P. Raymundo Generation Sector SMC Global |  Joselyn D. Carabuen Generation Sector Power Sector Assets and Liabilities Management Corporation (PSALM) |



| | |
|--|---|
|  Ambrocio R. Rosales Transmission Sector National Grid Corporation of the Philippines (NGCP) |  Theo C. Sunico Generation Sector 1590 Energy Corporation |
|  Isidro E. Cacho, Jr. Market Operator Philippine Electricity Market Corporation (PEMC) | |

