Philippine Electricity Market Corporation

02 July 2014

# MINUTES OF THE 89th MEETING OF THE RULES CHANGE COMMITTEE

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| **Meeting Date & Time:** | 02 July 2014 – 09:00 AM to 2:45 PM |
| **Meeting Venue:** | PEMC, 18th Floor, Board Room Robinsons Equitable Tower, Ortigas Center, Pasig City |

**Attendance List**

| In-Attendance | Not In-Attendance |
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| **Rules Change Committee Members**<br><br>Rowena Cristina L. Guevara --Chairperson/ Independent --UP<br>Francisco L. R. Castro, Jr. --Independent--Tensaiken Consulting<br>Maila Lourdes G. De Castro –Independent<br>Concepcion I. Tanglao --Independent<br>Ambrocio R. Rosales --System Operator --NGCP<br>Joselyn D. Carabuena --Generation -- PSALM<br>Jose Ferlino P. Raymundo --Generation -- SMC Global<br>Theo Cruz Sunico -- Generation -- 1590 EC<br>Ciprinilo C. Meneses --Distribution, MERALCO<br>Jose P. Santos --Distribution –INEC<br>Gilbert A. Pagobo -- Distribution –MECO<br>Lorreto H. Rivera --Supply --TPEC<br>Sulpicio C. Lagarde, Jr. --Distribution –CENECO<br>Isidro E. Cacho, Jr. -- Market Operator --PEMC | |
| **Rules Change Committee Alternate Members**<br>Ernesto N. Padilla, Jr. --TPEC | |
| **PEMC – Market Assessment Group (MAG)**<br>Geraldine A. Rodriguez<br>Romellen C. Salazar<br>Divine Gayle C. Cruz<br>Hiyasminh Aleia D. Dagum | |
| **ERC Observer(s)**<br>Nelson Canlas | |
| **DOE Observer(s)**<br>Ferdinand B. Binondo | |
| **Others Present**<br><br>Jordan Rel C. Orillaza<br>Jaime V. Mendoza | |

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

## 1. Adoption of the Proposed Agenda

The Proposed Agenda for the 88th RCC Meeting was approved as amended, with the inclusion of a presentation from PEMC on the Secondary Price Cap, as well as the Proposed Changes to the Manual on the Management of Procedure for Excess Generation.

Before proceeding with the discussions, Dr. Guevara welcomed Mr. John Padilla, who recently received confirmation on his appointment as the official alternate for TPEC.

## 2. Reading of the Minutes of Meeting

### o Minutes of the 88th RCC Meeting

The RCC reviewed the Minutes of the previous meeting, and upon motion duly made and seconded, approved the same as amended. Below are the amendments made on the subject Minutes of meeting.

- ✓ Page 1: There being a quorum, Chairperson Dr. Rowena Cristina L. Guevara called the meeting to order at 9:0**30** AM.
- ✓ Page 14, line 14: She reminded the RCC that the MRU has specific conditions when it should be used **~~that~~ which** are different from when a plant is dispatched during market suspension.

## 3. Business Arising from the Previous Meeting

### a) Proposed Amendments to the WESM Rules on the Adoption of the Disconnection Policy: Comments from Retail Electricity Suppliers Association (RESA)

The RCC received comments from RESA relative to RCC's invitation to comment on the Proposed Amendments to the WESM Rules on Disconnection Policy. Upon review of RESA's comments, the RCC agreed that the submission made by RESA is already in the nature of a proposal as it recommends for parallel provisions on Disconnection in the Retail Rules. The submission, however, fell short of the requirements of the RCC (i.e RCC forms together with a discussion paper).

Noting the RCC's remarks on the submission of RESA, Ms. Lorreto H. Rivera expressed that she will discuss the matter with RESA. She recalled that in one of the previous RCC meetings when the Generators' proposal on Disconnection was being discussed, she raised the issue on the disconnection of Contestable Customers with multiple Suppliers. She said that what RESA really intended to do was to include an amendment that would address the issue in the same proposal being crafted by the Generators, through the submission of comments on the Generators' proposal. In view however, of the RCC's comments aired in this meeting, that the submission by RESA is actually a proposal rather than mere comments to the proposed amendments to the WESM Rules, and with the RCC's suggestion to convert said comments into a full blown

proposal, Ms. Rivera expressed that she will raise the matter with RESA in order to get a consensus on the way forward on this matter.

Moving forward with the discussion, the RCC reviewed the proposal line by line and made further revisions as reflected below:

| Clause | From | To |
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| Clause 1.3.3 | c) Ensure that the Notice of Power Interruption is served upon notification from or through the Market Operator in writing prior to *Disconnection of a WESM members* that fail to comply with their financial and technical obligations under the OATS Rules, the Grid Code, the Distribution Code, the WESM Rules, their existing contracts with other *WESM members (including bilateral power supply contracts, transmission service agreement, connection agreement, among others)*, and DOE Circulars 2010-05-0006 and 2010-08-0010, as specified in clause 2.9; | c) Ensure that the Notice of Power Interruption is served upon notification from or through the Market Operator in writing prior to *Disconnection of a WESM members* that fail to comply with their financial **~~and technical~~** obligations under the OATS Rules, the Grid Code, the Distribution Code, the WESM Rules, their existing contracts with other *WESM members (including bilateral power supply contracts, transmission service agreement, connection agreement, among others)*, and DOE Circulars 2010-05-0006 and 2010-08-0010, as specified in clause 2.9; |
| Clause 2.7.2.1 | If a *Trading Participant* who is either a *Direct WESM member* or an *Indirect WESM member* receives a suspension notice from the *Market Operator* in accordance with any provision of the *WESM Rules*, that *Trading Participant* is suspended from participation in the *spot market* unless and until the *Market Operator* declares the suspension notice to be revoked in accordance with clause 3.15.7, and shall be disconnected by the NGCP in accordance with clause 2.9. For avoidance of doubt, the effectivity of suspension is upon disconnection of the *WESM member*. | If a *Trading Participant* who is either a *Direct WESM member* or an *Indirect WESM member* receives a suspension notice from the *Market Operator* in accordance with any provision of the *WESM Rules*, that *Trading Participant* is suspended from participation in the *spot market* unless and until the *Market Operator* declares the suspension notice to be revoked in accordance with clause 3.15.7**.**, and shall be disconnected by the **Network Service Provider ~~NGCP~~** in accordance with clause 2.9. For avoidance of doubt, the effectivity of suspension is upon disconnection of the *WESM member*. |
| Clause 2.9.2.1 | The Generation Company, Suppliers or Wholesale Aggregator, as the requesting party, shall:<br><br>xxx | The **Market Operator,** Generation Company, Suppliers or Wholesale Aggregator, as the requesting party, shall:<br><br>xxx |

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| | b) upon receipt of the Notice of Disconnection from the requesting party, the Market Operator shall notify the NGCP in writing within (x) day and not less than seven (7) working days in advance prior to the execution of the said disconnection using the form Appendix [*], with proof of receipt of the *WESM member* of the Notice of Disconnection.<br><br>The Market Operator may also initiate the above disconnection procedure. | b) upon receipt of the Notice of Disconnection from the requesting party, the Market Operator shall notify the **Network Service Provider** ~~NGCP~~ in writing within (x) day and not less than seven (7) working days in advance prior to the execution of the said disconnection using the form Appendix [*], with proof of receipt of the *WESM member* of the Notice of Disconnection.<br><br>The Market Operator may also initiate the above disconnection procedure. |
| Clause 2.9.2.2 | The NGCP shall confirm in writing the issuance of the Notice of Disconnection within five (5) days prior to the actual implementation of the disconnection of service. | The **Network Service Provider** ~~NGCP~~ shall confirm in writing the issuance of the Notice of Disconnection within five (5) days prior to the actual implementation of the disconnection of service. |
| Clause 2.9.2.3 | Within five (5) days after receipt of the confirmation of the Notice of Disconnection the following strictly followed:<br><br>(a) the System Operator shall be responsible for the execution of the disconnection of service of a WESM member: | Within five (5) days after receipt of the confirmation of the Notice of Disconnection the following strictly followed:<br><br>(a) the ~~System Operator~~ **Network Service Provider** shall be responsible for the execution of the disconnection of service of a WESM member: |
| Clause 2.9.2.4 | If the Notice of Disconnection issued by the *Market Operator* was lifted within the five (5) day period prior to the scheduled disconnection date, the *Market Operator* shall immediately notify in writing the NGCP of the lifting of suspension, and the NGCP shall then no longer execute the disconnection. | If the Notice of Disconnection issued by the *Market Operator* was lifted within the five (5) day period prior to the scheduled disconnection date, the *Market Operator* shall immediately notify in writing the **Network Service Provider** ~~NGCP~~ of the lifting of suspension, and the ~~NGCP~~ **Network Service Provider** shall then no longer execute the disconnection. |
| Clause 2.9.4.1 | **xxx** | **xxx** |

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| | b) Recalled Notice of Disconnection by the requesting person or entity as a result of a Special Payment Agreement or Restructuring Agreement entered into by the contracting parties five (5) days prior to the scheduled disconnection date. The requesting party shall immediately inform the Market Operator of the recall using the pro-forma Request for Disconnection Recall in Appendix [*] prior to the scheduled disconnection date in order for the NGCP to defer the execution of such disconnection;<br><br>**xxx**<br><br>d) In the case of the *Market Operator as the requesting party*, the disconnected *Customer* has remedied the default event, or satisfied the margin call or has complied with the membership criteria or requirement that gave rise to its suspension. The *Market Operator*, as the requesting party shall immediately inform NGCP of the registration of such person or entity to the WESM using the pro-forma Request for Disconnection Recall in Appendix [*] prior to the scheduled disconnection date in order for the NGCP to defer the execution of such disconnection. | b) Recalled Notice of Disconnection by the requesting person or entity as a result of a Special Payment Agreement or Restructuring Agreement entered into by the contracting parties five (5) days prior to the scheduled disconnection date. The requesting party shall immediately inform the Market Operator of the recall using the pro-forma Request for Disconnection Recall in Appendix [*] prior to the scheduled disconnection date in order for the **~~Network Service Provider~~ NGCP** to defer the execution of such disconnection;<br><br>**xxx**<br><br>d) In the case of the *Market Operator as the requesting party*, the disconnected *Customer* has remedied the default event, or satisfied the margin call or has complied with the membership criteria or requirement that gave rise to its suspension. The *Market Operator*, as the requesting party shall immediately inform **the ~~NGCP~~ Network Service Provider** of the registration of such person or entity to the WESM using the pro-forma Request for Disconnection Recall in Appendix [*] prior to the scheduled disconnection date in order for the **~~NGCP~~ Network Service Provider** to defer the execution of such disconnection. |
| Clause 2.9.5.2 | Within two (2) days after the receipt of the Notice of Reconnection from the Market Operator, the NGCP shall execute the Reconnection of service. The Market Operator in coordination with the NGCP shall issue Market advisory for such reconnection. | Within two (2) days after the receipt of the Notice of Reconnection from the Market Operator, the **~~NGCP~~ Network Service Provider** shall execute the Reconnection of service. The Market Operator in coordination with the **~~NGCP~~ Network Service Provider** shall issue Market advisory for such reconnection. |
| Clause 2.9.5.6 | In all instances, a reconnection fee | In all instances, a reconnection fee |

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| | shall be paid by the disconnected *Customer* to the NGCP prior to reconnection. | shall be paid by the disconnected *Customer* to the ~~**NGCP**~~ **Network Service Provider** prior to reconnection. |
| Clause 3.14.11.4 | If the default event results in the failure of a *Customer* to comply with its required financial obligations to the *Generation Company*, Independent Power Producer or Wholesale Aggregators, as provided under their existing bilateral contracts, the concerned *Generation Company*, Independent Power Producer or Wholesale Aggregators may initiate disconnection of the *Customer* in accordance with clause 2.9. This remedy shall be available to the affected *Generation Company*, Independent Power Producer or Wholesale Aggregators notwithstanding the inaction of the *Market Operator* to initiate disconnection under clause 3.14.11.2(b) and 3.14.11.3(c). | If the default event results in the failure of a *Customer* to comply with its required financial obligations to the *Generation Company*, ~~**Independent Power Producer**~~ **Suppliers** or Wholesale Aggregators, as provided under their existing bilateral contracts, the concerned *Generation Company*, ~~**Independent Power Producer**~~ **Suppliers** or Wholesale Aggregators may initiate disconnection of the *Customer* in accordance with clause 2.9. This remedy shall be available to the affected *Generation Company*, ~~**Independent Power Producer**~~ **Suppliers** or Wholesale Aggregators notwithstanding the inaction of the *Market Operator* to initiate disconnection under clause 3.14.11.2(b) and 3.14.11.3(c). |
| Clause 2.9.1.1 | The *Market Operator* may issue a Notice of Disconnection to a *Customer*, in case of suspension and deregistration of a *WESM member* under the WESM Rules. | The *Market Operator* may issue a Notice of Disconnection to a *Customer*, in case of suspension ~~**and deregistration**~~ of a *WESM member* under the WESM Rules. |
| Clause 2.9.1.3 | A *Generation Company*, Independent Power Producer or Wholesale Aggregator may issue a Notice of Disconnection to a *Customer* in any of the following circumstances:<br><br>a) Failure of the *Customer* to comply with the required financial and technical to the *Generation Company*, Independent Power Producer or Wholesale Aggregators, as provided under their existing contracts; and<br><br>XXX | A *Generation Company*, ~~**Independent Power Producer**~~ Supplier or Wholesale Aggregator may issue a Notice of Disconnection to a *Customer* in any of the following circumstances:<br><br>a) Failure of the *Customer* to comply with the required financial ~~**and technical**~~ obligations to the *Generation Company*, ~~**Independent Power Producer**~~ **Supplier** or Wholesale Aggregators, as provided under their existing contracts; and |

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| | | XXX |

On the suggested revision under Clause 2.9.2.1, Mr. Isidro Cacho raised that he will have to verify first the number of days within which MO shall notify the Network Service Provider regarding the disconnection. He likewise expressed that he shall consult with PEMC legal whether or not the MO shall be included as requesting party.

The RCC confirmed its concurrence with the rest of the proposed amendments based on previous RCC discussions on the matter.

Following the discussions above, the RCC approved the proposed amendments to the WESM Rules on the Disconnection Procedures as revised, subject to clarifications made by the MO and its endorsement to the PEM Board for its approval.

**b) Comments on the Proposed Amendments to the WESM Rules and WESM Manuals on Offer Price Cap and Price Dampener**

➢ ***Comments from the DOE***

Dr. Guevara requested Mr. Ferdinand B. Binondo to discuss the comments of the DOE on the subject proposal.

Mr. Binondo discussed the comments, highlighting that the DOE does not have any objection to the proposal. However, he stated that the DOE opined that the offer cap should be incorporated in the Price Determination Methodology (PDM) and should be subject to the ERC's approval, since the PDM sets the pricing methodology in the WESM. Mr. Binondo added that as observed by the DOE, the proposed triggers did not consider the off-peak period intervals in the intervals considered as basis for the defined trigger event ("Trigger"), and thus suggested that the RCC further study the effect to WESM prices of including the same.

Dr. Guevara inquired if it is possible for the Market Operator (MO) to conduct a simulation to address the DOE's comments on the Triggers. Mr. Cacho responded that a simulation may no longer be necessary as the WESM already has actual experience on this during the November-December 2013 period. This was duly noted by the RCC.

➢ ***Comments from PEMC***

Dr. Guevara noted that the comments received from PEMC relate to the compliance with the ERC which already issued a secondary price cap mechanism.

Mr. Jose Ferlino Raymundo mentioned the on-going efforts of the Tripartite Committee, composed of the DOE, the ERC and PEMC, on the matter, including the public consultation that will be conducted by the ERC. Thus, he opined that it would be better to await the result of the action of the Tripartite Committee and the result of the public consultation.

Relative to the Secondary Price Cap, Mr. Nelson Canlas stated that the triggers were computed based on the Load Weighted Average Price (LWAP). He noted that since the

computation is based on the load side, resulting values are relatively high. He commented that triggers, should be computed using Generator Weighted Average Price (GWAP). The comments were duly noted by the RCC.

To provide the RCC with the relevant information about the ERC's Order on the Secondary Price Cap and to guide the RCC in its deliberations, PEMC was requested to already advance its presentation on the Secondary Price Cap at this stage of the RCC's discussion.

Below are the discussions which transpired relative to the presentation of Mr. Cacho on the Secondary Price Cap.

- Dr. Guevara inquired from the ERC on the logic for using the average price for the last four (4) years in computing the threshold level. Mr. Canlas responded that the amount was computed this way because the prices used for the period covered already reflect actual prices, based on historical prices for the summer months of April-June 2010-2013.

- Mr. Canlas stated that the 45-day extension in the implementation of the secondary cap is due to the anticipated El Nino phenomenon and the low power supply until November 2014 (based on the power output provided by the DOE), among other things. He likewise mentioned that the ERC directed PEMC to conduct a study and come out with permanent mitigating measures. He noted that the effectivity of the secondary price cap is only until August 9, and will be subject to public consultation on July 23 to provide the stakeholders with an opportunity to comment on the matter. He then stated that the ERC will use as basis for its decision the result of the PEMC study and whatever can be solicited from stakeholders during the public consultation, on whether or not to continue with the mitigating measures.

- Ms. Joselyn Carabuena inquired if the settlement for additional compensation is similar to that of the MRU. Mr. Cacho responded that the settlement for both is the same. Ms. Carabuena additionally raised why the computation of additional compensation is limited to the cost of fuel and variable Operating and Maintenance (O&M) only, stating that if fuel and O&M cost is less than the generation cost, the generator will be on the losing side. A similar concern was raised by Mr. Theo Sunico, who expressed that if oil-based plants will be compensated only for their fuel costs, then Generators will have no source of money for the repair of old plants that frequently break down, stating further that the capacity factor of oil-based plants is only 6-7% in a year. He added that while practices for other jurisdictions have been cited relative to the computation of additional compensation, it can be noted that these other jurisdictions have much higher price caps. He said that he acknowledges that price caps are supposed to mitigate prices to look out for the interest of Consumers, however, he commented that the entire industry's interests should be looked into as a whole, such that price caps imposed would allow the generation business to continue.

- Mr. Sulpicio Lagarde raised his issues regarding line rental payments by the Electric Cooperatives (EC) that are covered by bilateral contracts, inquiring why their contracts were not considered in the computation of the price caps. Mr. Cacho, in response, opined that the regulator, when setting the secondary cap, looked at all sides, including consumers and their contracts. Mr. Lagarde further expressed his concerns about having under generation caused by Generators not offering at their maximum available capacity, which hits the Distibution Utilities (DUs) and Electric

Cooperatives (ECs). Relatively, Mr. Gilbert Pagobo inquired on how possibly the Customers can be fully protected such that only their market exposure would be subject to line rental. In response to the concerns raised, Mr. Canlas stated that as far as the line rental is concerned, the ERC looks only at the actual losses during the trading interval. He added that for DUs and ECs to be protected from line rental, they must ensure that their supply contracts should no longer include losses as payments on this , as this is already included in their WESM bill. He likewise suggested having their IPPs locate their meters at the load side. Mr. Canlas finally stated that if the DUs would consider the flowback amount, a huge chunk of which corresponds to line rental, they will note that the impact of line rental in their bill will be minimal.

- Ms. Carabuena stated that the way she understood the price cap, is that it is aimed at protecting the Consumers. She then inquired on where the market will source the amount that will be paid to the Generators for the additional compensation. Mr. Cacho responded that the amount is recovered from the Consumers, and is applied on a pro-rated basis using MQ.

- Ms. Rivera raised her concern regarding the real-time announcement of breaches, on whether it is something that is final or is still subject for adjustments. Mr. Cacho responded that the real-time breaches being referred to in the context of Secondary Price Caps are only potential or indicative, and are still subject for verification. Ms. Rivera expressed that Suppliers find it challenging to be as such because they are covered by contracts and sometimes they have triggers that are price and situation driven. She added that it is difficult explaining to Customers taking back what they have previously announced as a breach. She commented that while real-time breaches are just potential breaches that may be changed at the end of the billing month, damage has been done to either the Supplier or the Customer once the breach has been announced by the MO. She expressed that the matter will be raised by the Suppliers during the public consultation to be conducted by the ERC.

- Dr. Guevara inquired from the MO on the level of accuracy of estimated prices when it announces a breach, as such would provide a certain level of confidence among Participants. Mr. Cacho responded that the accuracy is probably high, about 95%. However, he expressed that he will have to verify the number using actual data and provide the information to the RCC upon validation.

- Mr. Raymundo inquired as to the price that will be applied during periods when congestion occurs, such as in the Dasmarinas substation, where negative prices are observed. As an initial answer, Mr. Cacho stated that the price substitution methodology (PSM) is applied, but again, he expressed that he would have to verify the information and provide the answer to the RCC later.

Noting the comments on the Secondary Price Cap presentation by Mr. Cacho, the RCC proceeded with the discussion on the comments submitted on the subject proposal.

**Comments of CEBECO II**

The comments of CEBECO II were noted by the RCC. Dr. Guevara likewise stated that on item 2 of the comments - on the recommendation for the separation of the Luzon and Visayas Grids-- the RCC may not be in the position to act on the suggestion of CEBECO II as such is not part of the functions of the RCC and may necessitate some policy directions from the DOE.

**Comments of Dr. Peter Lee U**

The Secretariat clarified that the comments submitted by Dr. U were of his own and not that of the Market Surveillance Committee (MSC). The RCC noted the comments of Dr. U that the proposed Aboitiz dampener will result in higher prices than the ERC dampener but would probably result to lower simulated prices than actual historical prices. He added that it is not clear on how the secondary price cap of P6,245/MWh and the trigger of P8,186/MWh was arrived at.

➢ ***PEMC's Presentation on the Secondary Price Cap***

Mr. Cacho gave a presentation on the Secondary Price Cap of the ERC upon the RCC's request. The presentation covered the background, conceptual framework, parameters, and the operational mechanisms of the Secondary Price Cap.

Following are the highlights of the presentation:

✓ Background
- ❖ Emanated from ERC Resolution No. 08 of 2014, issued on 06 May 2014, with effectivity on 11 May 2014
- ❖ Secondary Cap amounting to P6,245/MWh during supply months of May and June 2014
- ❖ Oil-based plants' entitlement to additional compensation
- ❖ A study on mitigating measures to be conducted by PEMC.

✓ Methodology
- ❖ Metered Quantity multiplied by Ex-post Clearing Price or Stand-by Capacity Price (pay as bid), whichever is higher
- ❖ 72-hour rolling average, updated every hour
- ❖ Implemented at a system level (considers Luzon and Visayas Generator prices)
- ❖ Secondary cap computed using ex-ante (RTD) prices
- ❖ Threshold level set at Php8,186/MWh, monitored using GWAP, and computed using LWAP
- ❖ When the threshold is breached, the secondary cap is applied
- ❖ Imposition - The next immediate interval after determining a breach of the threshold.
  Lifting - Once imposed, hourly monitoring of 72-hour rolling average price shall be conducted for possible lifting of the secondary price cap
- ❖ Additional compensation allowed for oil-based plants equal to the remainder of the total cost of fuel and variable O&M cost, backed up by communication and proof for the processing performed by PEMC.

✓ Operational Mechanisms
- ❖ Monitoring using RTD prices (Rolling average on GWAP)
- ❖ Timing issues with pricing errors
  - Ex – Post (RTX) Results (if valid) occur an hour after
  - Market Re – Run: results available later than RTX
- ❖ To address bullet 2 above, estimation of RTD prices is implemented to facilitate the hourly monitoring
- ❖ RTD prices to be used only for signalling potential breach of Price Threshold to Participants

- ❖ Confirmation by Billing Month-End using corrected prices (recomputation using all valid prices)
- ❖ Requires availability of prices in real time.
- ❖ GWAP is valid for estimation purposes in the case of bad data
- ❖ When Threshold is breached, the MO may announce: a) "Possible imposition of Secondary Cap based on Estimate Rolling Average (price threshold breached), or b) Lifting of secondary cap based on Estimate Rolling Average

With reference to the presentation made by PEMC, Dr. Guevara gave additional comments that the ERC's computation of the Threshold level needs more explanation, particularly on the logic for using the average price for particular months in the years 2010 to 2013. She recognized that the ERC's framework for the four-year average as explained by the ERC was used as proxy in the absence of a better basis for the computation. She noted, however, that prices were changing during the periods used by the ERC for its computation.

Mr. Canlas explained that the ERC in its computation considered actual costs based on available data provided by the DUs in their power supply agreements. Based on this, the ERC arrived at a computation that tries to balance the benefits in investments and the consumer side.

At this point, the RCC proceeded with a review of the Proposed Amendments to the WESM Rules and WESM Manuals on Offer Price Cap and Customer Price Dampener.

Mr. Ambrocio R. Rosales opined that the proposal should be disapproved since the threshold level as proposed by Aboitiz is much higher than the one issued by the ERC.

Mr. Raymundo expressed that the RCC should either disapprove or defer the proposal since there is already an on-going effort at the Tripartite level. He added that PEMC can use the proposal in a parallel study that it is conducting regarding the mitigating measures. The opinion was seconded by Mr. Pagobo, stating that the RCC should wait for the result of the Tripartite Committee's decision on the matter.

Noting the comments and all the discussions regarding the matter, Dr. Guevara consulted the body on whether to approve or defer the RCC's action on the proposal. On motion duly made and seconded, based on its deliberations of the submitted comments and the RCC's own discussions on the merit of the proposal, the RCC, with 14 members present, unanimously voted for the disapproval of the Proposed Amendments to the WESM Rules and WESM Manuals on Offer Cap and Customer Price Dampener.

**c) Proposed Amendments to the WESM Rules on the Approval of the Alterations to the MNM Model--Comments of the DOE**

Mr. Binondo highlighted that the comments of the DOE on this proposal is for Trading Participants to be informed in any modality of the alterations made on the MNM for the purpose of transparency. He reiterated that the DOE does not have any objection to the proposal. It was clarified by Mr. Cacho that Trading Participants are informed of any change made to the MNM through the WESM website. In relation to the modality of publication, Mr. Binondo clarified that the usual publication method on the WESM website is deemed acceptable.

The RCC then proceeded with a review of the proposal, as previously discussed. After discussing the DOE's comments, and after motion duly made and seconded, the RCC approved the Proposed Amendments to the WESM Rules on the Approval of Alterations to the MNM, as previously discussed, and agreed on its endorsement to the PEM Board for its approval.

**d) Proposed Amendments to the WESM Manual on the Management of Net Settlement Surplus (NSS)--Comments of MERALCO**

Mr. Ciprinilo Meneses was requested to discuss the comments submitted by MERALCO on the proposal. He noted that PEMC no longer sets aside NSS given the flowback mechanism for such.

The RCC noted the comments of MERALCO, and proceeded with a review of the proposal as previously discussed.

On Section 2.3 on Interpretation, Dr. Guevara commented that the provision, as stated in the proposal, is confusing and implies that the Manual is not properly numbered and referenced the way this provision was stated under the Section. She then, suggested to delete the proposed provision.

Mr. Cacho inquired from Atty. Maila de Castro whether its deletion will have any legal implications. Atty. De Castro responded that provisions on "Interpretation" are usually added to make references to stated provisions clearer. She commented however that the wording under the proposed section is not clear. She added that such provision is normally added in mother documents such as the WESM Rules, and may not necessarily have to be reflected in the Manuals.

Ms. Geraldine Rodriguez informed the RCC that the Section on Interpretation is part of the new standard format for WESM Manuals being implemented by the PEMC. Mr. Cacho then expressed that if the concern of the RCC is the wording of the section, the RCC may instead consider rephrasing the provision to make it clearer rather than deleting the section. At this point, Ms. Rodriguez showed the wordings in a similar section in the Load Shedding Manual recently amended and approved by the RCC, to read as "Any reference to a section or clause in any Chapter of this *Market Manual* shall refer to the particular section or clause of the same Chapter in which the reference is made, unless otherwise specified or the context provides otherwise." Noting the similar section cited by the Secretariat, the RCC agreed to retain the section but lifting the wordings used in the Load Shedding Manual.

Additional revisions to the proposed amendments were made by the RCC, as follows.

Section 4.2: 1 a) DUs ~~which~~ **that**...
d) Generation Companies ~~which~~ **that** are Direct WESM Members ..
g) Other Parties ~~which~~ **that** have paid line loss and congestion charges ..

On Section 4.2: 1 c) and d) - insert a semi-colon between 4.2: 1 c) and d)

Following the discussions above, the RCC approved the Proposed Amendments to the WESM Manual on the Management of Net Settlement Surplus, and its endorsement to the PEM Board for approval of the proposal.

## 4. New Business

### a) Technical Committee's (TC) Proposed Amendments to the Metering Manual

Dr. Jordan Rel Orrilaza, Jr. TC Chairman, together with TC Member Engr. Jaime Mendoza presented to the RCC the TC's Proposed Changes to the WESM Rules and WESM Metering Manual.

Below are the highlights of the TC's presentation.

✓ Objective
- ❖ To align certain provisions and terminologies with the Philippine Electrical Code (PEC) and the Philippine Grid Code (PGC), including the current amendments to the PGC
- ❖ To revise the diagrams showing the location and arrangement of instrument transformers; Changes were also reflected in the provisions on the location and arrangement of instrument transformer
- ❖ To include new sections and diagrams for grounding system
- ❖ To amend provisions under section 9 on Site Specific Loss Adjustment (SSLA) to make the section systematic and comprehensive.

✓ Baground
- ❖ Part of the Metering Arrangement Review
- ❖ WESM Rules Clause 1.7.2 (d) on the TC's discretion to propose necessary and apropriate amendments to the WESM Rules in relation to Technical Matters in accordance with Chapter 8 of the WESM Rules.

✓ Summary of Proposed Amendments

| Proposal | Rationale | RCC Discussion |
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| *Meter:* A device, which measures and records the consumption or production of electricity. **This refers to the *Revenue Meter* unless specified otherwise.** | To clarify that *Meter* refers to *Revenue Meter* unless specified otherwise. | Dr. Orillaza stated that the purpose of the Metering Manual is to make sure that the Revenue Meter is working well. |
| ***Metering Equipment:*** **The apparatus necessary for measuring electrical real and reactive power and energy, inclusive of a multi-function meter and the necessary instrument potential, current and phase shifting transformers and all wiring and communication devices as provided.** | Adopted from PGC | Dr. Orillaza stated the Metering Equipment already includes other devices. |
| ***Metering Point***: ~~**The point of physical connection of the device measuring the current in the power conductor.**~~ **Location where the Metering Equipment is installed.** | To specify that the *Metering Equipment* is installed at the *Metering Point*.<br><br>Other than current, | • Mr. Meneses commented that the Metering Point in the proposal did not specify/qualify whether it is physical or electrical location, but he pressumed |

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| | other power parameters can also be measured as may be programmed. | that physical location is being referred to in the subject provision.<br>• Engr. Jaime Mendoza stated that the Metering Point measures not only the current, and considers both the high side and the low side. |
| *TRANSCO*: ~~**The corporation that assumed the authority and responsibility of planning, maintaining, constructing, and centrally operating the high-voltage Transmission System, including the construction of Grid interconnections and the provision of Ancillary Services.**~~ **The government-owned and controlled corporation created pursuant to RA 9136 to acquire all transmission assets of the NPC.** | Consistent with the recent working draft to the PGC Amendment 2 | • The RCC noted that the proposal is based on the working draft of proposed amendments to the PGC instead of the existing approved version of the documents. The RCC raised the concern that there is no assurance yet that the proposed PGC amendments will be approved. Dr. Guevara then inquired if the proposed amendments by the TC is consistent with the Law (EPIRA).<br>• Mr. Binondo suggested that the TC's rationale be changed to point out consistency with the Law rather than the PGC amendment, which was duly noted. |
| *WESM Participants*: All Generation Companies, Distribution Utilities, Suppliers, Aggregators, End-Users, the TRANSCO ~~**or its Buyer or Concessionaire**~~, IPP Administrators and other entities authorized by the ERC to participate in the WESM in accordance with ~~**he**~~ **the** Act. | | • The RCC inquired on the rationale for deleting the **"Buyer or Concessionare"** in the provision. Mr. Meneses commented that the TRANSCO is just a passive participant being an owner of the Grid. Thus, it was commented that it should be the **TRANSCO** that should be stricken out in the provision rather that the **"Buyer or Concessionaire."**<br>• The comments were duly noted by Dr. Orillaza. |
| ***Active Energy:*** **As defined in the Philippine Grid Code.** | Adopted from the PGC<br>Def: The integral of the Active Power with respect to time, measured in Watt-hour (Wh) or | |

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| | multiples thereof. Unless otherwise qualified, the term "Energy" refers to Active Energy. | |
| ***Reactive Energy:*** **As defined in the Philippine Grid Code.** | Adopted from the PGC<br>Def: The integral of the reactive power with respect to time, measured in VARh or multiples thereof | |
| ***Grid Operator:*** **The party that is responsible for maintaining adequate Grid capacity in accordance with the provisions of the Grid Code.** | Consistent with the recent working draft of the PGC Amendment 2 | • Engr. Mendoza explained that the revision aims to separate the grid operator from the grid owner, which is also part of the proposed revision in the Grid and Distribution Codes. |
| **2.2 Location of the Metering Point**<br><br>The ~~**location of the**~~ Metering Point ~~**is ideally**~~ **shall be located** at the Market Trading Node and shall be in accordance with the WESM Rules, the Grid Code and the Distribution Code, **unless the installation of the Metering Equipment is physically difficult, uneconomical or not practical.**<br><br>If the Metering Point is not located at the Market Trading Node, an agreed Site Specific Loss Adjustment (SSLA) shall be applied to the meter data representing the energy supplied by the Generator or consumed by the Customer at that Metering Point for determining the quantities to be settled in the WESM. | To require the Metering Point and Market Trading Node to be at the same location unless the installation of the metering equipment is physically difficult, uneconomical or impractical. | • Dr. Orillaza noted that some of the metering points are not exactly in the location of the trading node, thus the additional line in the provisions regarding installation. |
| This standard applies to the following metering equipment, devices and accessories:<br><br>a. Meters;<br>b. ~~**Instrument transformers**~~ **Current transformer (CT);**<br>c. **Voltage transformer (VT);**<br>d. **Data Logger;**<br>e. Meter Enclosure;<br>f. Meter Test Switch/Block;<br>g. Secondary Cabling ~~**for Instrument Transformers**~~ **Metering;**<br>h. Grounding **System;**<br>i. **Rigid Metal** Conduit System;<br>j. Communication Link<br>k. ~~Meter Seals and Padlock~~ **Facility to seal and secure the meter;**<br>l. **Other components for checking the** | To include all components of the metering installation.<br><br>Consistent with the requirements provided in Sec. 4.5.1 (g) and (h) of the Metering Manual, *data logger* is also included. | • Mr. Pagobo commented that item a) should be changed to Revenue Meters to be consistent with the proposed definition previously shown, which was duly noted. |

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| voltage and current; and<br>m. Metering Perimeter<br><br>---xxx--- | | |
| ~~Safety Requirements and Grounding System~~<br>2.5.6 General Requirements for Grounding System | There is no section regarding grounding system for metering installation. Generic principles in grounding were lifted from PEC Part 1 2009 Article 2.50.1.4 (a)1 - 5. | |
| 2.5.6.1. The installation shall be in accordance but not limited to the following provisions of the Philippine Electrical Code (PEC):<br><br>~~a. Philippine Electrical Code; and~~<br><br>a. Electrical system that are *grounded* shall be connected to *earth* in a manner that will limit the voltage imposed by lightning, line surges, or unintentional contact with higher voltages and that will stabilize the voltage to *earth* during normal operation.<br>b. Normally non-current carrying conductive materials enclosing electrical conductors or equipment, or forming part of such equipment, shall be connected to *earth* so as to limit the voltage to *ground* on these materials.<br>c. Normally non-current carrying conductive materials enclosing electrical conductors or equipment, or forming part of such equipment, shall be connected together and to the electrical supply source in a manner that established an effective ground-fault current path.<br>d. Normally non-current carrying conductive materials that are likely to become energized shall be connected together and to the electrical supply source in a manner that establishes an effective ground-fault current path.<br>e. Electrical equipment, wiring, and other electrically conductive material likely to become energized shall be installed in a manner that creates a low-impedance circuit facilitating the operation of the overcurrent device. It shall be capable of safely carrying the maximum *ground* fault-current likely to be imposed on it from any point on the wiring system where a *ground* fault occurs to the electrical supply source. The *earth* shall | There is no section regarding grounding system for metering installation. Generic principles in grounding were lifted from PEC Part 1 2009 Article 2.50.1.4 (a)1 - 5. | • Mr. Raymundo raised that by lifting the articles of the PEC in the the Rules, the latter will have to be amended if revisions are made in the PEC. Engr. Mendoza responded that the PEC will not change because the provisions in the PEC reflects basic principles only. Dr. Guevara stated that in case there are changes in the documents with which the Proposed WESM Rules ar referenced, then the RCC will just have to propose corresponding proposed changes to the WESM Rules or Manuals.<br>• Engr. Mendoza emphasized that the section is critical as it provides for personnel safety.<br>• On the word "stabilize", Mr. Meneses comemented that the same does not imply low grounding resistance. Thus, the phrase "stabilize the voltage" could also mean unsafe high voltage. He opined that the provision must explicitly say that grounding should be 5 ohms to clarify that the word "stabilize" must refer to a voltage that is safely low enough. Engr. Mendoza responded that there are varying acceptable levels from residential to sub-station, and for sub-station it was determined that the acceptable level was 5 |

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| **not be considered as an effective *ground* fault current path.**<br>**f. The minimum size of copper conductor to be used for metering grounding shall be 8 $mm^2$.**<br>**g. Connections to all bonded parts shall be made in accordance to Article 2.50.1.8 of the Philippine Electrical Code 2009 Part 1.** | | ohms. The explanation was duly noted by the RCC. |
| **2.5.6.2 The installation shall likewise conform to ~~The~~ the** IEC or ANSI/IEEE C57.13-1983 IEEE Guide for Grounding of Instrument Transformer Secondary Circuits and Cases **and IEEE Std. 80-2000 or IEEE Guide for Safety in AC Substation Grounding** | Original provision revised to form part of the new subsection. | • Dr. Guevara suggested revising the rationale based on the explanation given previously regarding ground resistance. |
| **2.5.6.3 The ground resistance of the metering grounding system shall not be more than five (5) ohms.** | To specify the ground resistance. | |
| **2.5.9.1. Location of Surge Arrester**<br><br>**The surge arrester shall be located at the line side as close as possible to the instrument transformers in the Metering Point. Refer to Figure 2(a) and 2(b).** | To specify the location of *surge arrester*.<br><br>Surges come from the line side thus the *Surge Arrester* should be located before the instrument transformers for protection. | • Dr. Orillaza explained that the surge arrester in the illustration in the current manual is not properly located. He emphasized that the surge arrester should be on the line side. |
| **Sec. 2.9.1.2 Conduit System**<br>All wiring from the instrument transformers' secondary terminal box to the meter installation enclosure (meter box) shall be placed in a **rigid metal** conduit **~~which is compliant with environmental requirements~~** to ensure that the connections to cabling are secure **and ~~tamper proof~~ more difficult to tamper ~~and compliant with the MO Requirements~~**. Conduit joints (elbow, T-connector) shall be properly sealed and secured. No secondary cabling shall be exposed and accessible to unauthorized personnel. **Rigid metal conduit used for the instrument transformer shall be surface mounted.** See Figure 5. | Only rigid metal conduit (RMC) is recommended to be used for conduit systems for metering. Installation of RMC should be surface-mounted to prevent possible tampering. | • Dr. Guevara commented that the proposed Rules Changes have costs involved, and that any proposal should be feasible. She then inquired if all conduit systems for metering use the Rigid Metal Conduit (RMC), such that changing the Rules will not incur costs on the part of the providers. In response, Engr. Mendoza stated that the use of RMC is a standard practice among meter service providers. This was noted by the RCC.<br>• Mr. Pagobo suggested changing the phrase "difficult to tamper" to "to discourage tampering," which was duly noted. |
| **Sec. 9.4 Loss Factor**<br>There shall be a Site – Specific Loss Factor | Revised for further clarification. SSLF is | |

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| (SSLF) ~~distinct~~ for every Metering Point, and ~~dynamic~~ for every Trading Interval, which represents the adjusted meter data of a Metering Point.<br><br>The SSLF is a unit-less number that shall be multiplied to the original meter data ~~of its~~ corresponding **to the** Trading Interval. The ~~end~~-product of the SSLF and the original meter data is the adjusted power or energy of the Trading Participant as seen from the MTN. | generally distinct for every Metering Point thus stating 'distinct' would be redundant. | |
| **Sec. 9.6 WESM Members Involved in Performing SSLA**<br><br>**The following entities shall be involved in performing Site Specific Loss Adjustment (SSLA):**<br><br>a. Network Service Provider in coordination with Trading Participants;<br>b. Metering Services Provider (MSP); and<br>c. Market Operator | | • Dr.Guevara inquired if the subject section really meant "WESM Members" rather than "WESM Participants," recalling from the previous section the use of the latter. Dr. Guevara noted that WESM member has a wider scope, while WESM participants pertains only to the WESM members that trade in the market.<br>• Dr. Orillaza responded that the proposed subject provision really meant WESM member to cover the MSP, which is not a trading participant. |
| **Sec. 9.7.1.1.1 Conductor Data**<br><br>a. Conductor Size<br>**b. Conductor Type**<br>c. Number of conductors per circuit<br>d. Line Length (km)<br>e. Line Voltage<br>f. **Line Configuration** | | |
| 9.7.1.1.2 Power Transformer Data<br><br>a. Rated kVA<br>b. Core Loss (Open Circuit Test result)<br>c. Full-load Copper Loss (Short-Circuit Test result)<br>d. Percent Impedance (% Z)<br>**e. $\frac{x}{r}$ ratio**<br>~~**f. Equivalent Transformer Resistance (Re)**~~<br>~~**g. Equivalent Transformer Reactance (Xe)**~~<br>~~**h. Equivalent Transformer Impedance (Ze)**~~<br>~~**i. Transformer's Full-Load Output Active Power (kW)**~~<br>~~**j. Transformer's Efficiency (%) at Full-Load Output Active Power**~~<br>~~**k. Transformer's Maximum Efficiency (%)**~~ | Items (f) to (g) were not used in the equation for loss calculation and can just be derived given items (a) to (b), thus the proposed deletion.<br>The inclusion of X/r ratio was proposed instead. | • The RCC requested providing a definition of "x/r" |

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| I. ~~Transformer's Output Active Power (kW) at Maximum Efficiency~~ | | |
| 9.7.4.2 Calculate the loss adjustment in accordance with this procedure **using a suitable computation tool** ~~Microsoft Excel~~. | Minor revision.<br><br>Load flow analysis should be used instead | • Mr. Meneses suggested the deletion of "using a suitable computation tool," which was noted. |
| **Sec. 9.8 Site Specific Loss Factor Calculation**<br><br>**Site Specific Loss Factor Calculation**<br><br>*(Succeeding sections and subsections in section 9.8 are proposed to be deleted. Sample cases are to be included in the Appendix)* | Sample cases are not comprehensive.<br><br>To have a systematic way of presenting the cases, rules should be general and cases should be detailed in the Appendix. | • Dr. Orillaza explained that the Section 9 of the Manual was revised to reflect a couple of articles that describe the process, by way of putting into words the equations that are currently in the Section 9, rather than merely providing computations and examples. He added that the calculations were put out into the Appendix of the Manual.<br>• Mr. Raymundo inquired on the differenc between SSLF and SSLA. Dr. Orillaza explained in response that SSLA refers to the procedure, while SSLF is one of the variables in the procedure being described in SSLA. |
| **Sec. 9.8.1 Energy Aggregation**<br><br>**Active Energy and Reactive Energy 15-minute recordings shall be aggregated to be consistent with the one (1) hour Trading Interval.**<br><br>**In case the Trading Interval is shortened, the frequency of meter recording may have to be adjusted accordingly.** | In case the trading interval is shortened, the section will not have to be amended. | |
| **Sec. 9.8.2 Loss Calculation**<br><br>**Losses across power system components between the Revenue meter(s) and the Market Trading Nodes (MTN) shall be computed using suitable mathematical model for the components and applying basic circuit analysis principles.**<br><br>**This variable shall be referred to as $P_{Loss}$. Sample cases for calculating $P_{Loss}$ are presented in the Appendix.** | | • Atty. De Castro commented that the use of the word "suitable" may pose a problem later on if there are differences in the way WESM members compute the loss, adding further that the proposal, as it is worded, may open up disputes. She suggested avoiding the use of the word "suitable" explaining that what is suitable to one party |

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| | | may not be suitable to another. She opined that it would be better to change it to something that is agreed upon by parties, or something that is already prescribed and acceptable to all participants, to make it more binding to all parties concerned. Dr. Orillaza expressed agreement with the suggestion of Atty. De Castro.<br>• Noting the comments, Dr. Orillaza inquired if it would perhaps be better to rephrase it to something that is "prescribed by the Market Operator as approved by the parties." He pointed out that somebody must have initiated the process, which is the MO, and if there will be changes to it, the MO may prescribe the changes upon consultation and approval of the parties. Dr. Guevara agreed to the suggestion of Dr. Orillaza.<br>• Mr. Cacho clarified that the MO did not specify the process and computations described in the Manual--it was agreed by the parties in the course of the development and approval of the Manual. He expressed that any changes in the computation would have impact in the settlement process.<br>• Noting the discussions, Dr. Guevara requested the TC and the MO to discuss the proper wording for this section to addres the concerns raised.<br>• Mr. Lagarde opined that the the issue on SSLA should be permanently addressed, rather than adressing it through a bandaid solution. He suggested changing the Rules and allowing the provision for Capital Expenditure for the relocation of NGCP's |

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| | | meters in their proper areas. The opininion was seconded by Mr. Meneses, stating that Metring Points and Market Trading Nodes should be located in the same area. He suggested amending the Manual to compel NGCP to eventually convert all its mismatched connections within a presribed period, maybe 5 or 6 years. Relative to the suggestion of the DUs, Engr. Mendoza commented that relocating the meters are physically difficult, uneconomical, and impractical. He stated that the design of the system is vertical, with a single owner. Because of the privatization, the sub-stations now have multiple owners, which restrains the relocation of meters in their proper areas. Mr. Cacho stated that the physical installation is the problem and not the meter. Mr. Pagobo likewise opined that putting a single meter in one node is not possible because of having multiple customers in a node.<br>• Dr. Guevara noted all the comments of the body. Dr. Orillaza expressed that the TC will review and consider the comments given. |
| **9.8.3 Site Specific Loss Factor**<br>**Site Specific Loss Factor (SSLF) shall be computed as follows:**<br><br>$SSLF = 1 + \frac{P_{Loss}}{kW_{meter}}$<br><br>**Where,**<br><br>**SSLF : Site Specific Loss Factor;**<br><br>$P_{Loss}$ : **Total Active Loss (kW) as defined in Section 9.8.2**<br><br>$kW_{meter}$ : **Metered Active Power** | Variable for total active loss ($\mathbf{Total_{kW-Loss}}$) for a metering point is changed to $P_{Loss}$.<br><br>Proposed variable should be reflected in the Appendix for the sample cases. | |
| **9.8.4. Adjusted Active Energy** | The variable for | |

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| **Adjusted Active Energy shall be computed as follows:**<br><br>$kW_{adjusted} = P_{loss} + kW_{meter}$<br>$kW_{adjusted} = SSLF \cdot kW_{meter}$ | adjusted (kW) active power ($Adjusted_{kW}$) was changed to $kW_{adjusted}$.<br><br>Proposed variable should be reflected in the Appendix for the sample cases. | |
| 9.8.5. **Historical Load Share**<br><br>**Historical Load Share (HLS) is the fraction or ratio of a metering point's total energy, against the total energy of all metering points under the same transformer. The HLS for the current billing month shall be based on the energy of the last twelve (12) billing months. (As approved by PEM Board Resolution No. 2010-76 dated 22 November 2010)** | Lifted from Chapter 9.8.3 of the Manual. | |
| 9.8.6. **Loss Sharing**<br><br>**9.8.6.1. In cases where a single transformer supplies power to multiple metering points, the Transformer Load Loss and No-load Loss (e.g. Core loss) shall be shared by all meters proportionately according to:**<br><br>**a. the energy consumed from each metering point, for the No-load Loss.**<br>**b. the accumulated energy as each metering point reaches the Transformer, for the Load Loss.**<br><br>**9.8.6.2. If a meter registers a zero value, Loss Share shall be based on the Historical Load Share.** | | • Mr. Pagobo inquired on the coverage of the Historical Load Share indicated under 9.8.6.2. Dr. Orillaza responded that it covers the last 12 billing months that have existing values.<br>• Atty. De Castro inquired if "Historical Load Share" was used anywhere else in the Manual. If not, she suggested to include its definition in the same Section, which was noted. |
| **9.8.6.3. In cases where a line is shared among multiple metering points, the losses across the line shall be shared by all meters proportionately according to the energy consumed from each metering point plus the accumulated losses of each metering point before the line being shared.** | | |

Noting the presentation made by Dr. Orrillaza, the RCC approved the publication of the Proposed Amendments to the WESM Rules and Metering Manual, as submitted by TC, to solicit comments. The RCC likewise agreed that the body's comments on the proposal during the discussions shall be considered later on when the RCC deliberates on the matter once again.

**b) RCC Semestral Report for January to June 2014**

The RCC noted the comments received from Mr. Rosales and Ms. Concepcion Tanglao on the Semestral Report drafted by the Secretariat. Dr. Guevera made additional revisions on the report.

Upon agreement of the body on the content of the report, the RCC approved the January to June 2014 RCC Semestral Report, and its submission to the PEM Board.

**5. Other Matters**

**a) Update on the Implementation of Approved Urgent Amendments (CVC and DPM)**

With the anticipated expiry of the effectivity of the subject amendments, Mr. Cacho provided the RCC with updates on the Reserve Market. He stated that the amendments on the subject Manuals are hinged on the Commercial Operation of the Reserve Market, which was initially set on 26 March 2014, and later moved to 26 May 2014. He added that the implementation is subject to the ERC's approval of the Price-Cost Recovery Mechanism (PCRM).

It was noted however, that the Commercial Operation of the Reserve Market did not push through as indicated.

Mr. Cacho informed the RCC that PEMC is awaiting directions from the DOE as to the way forward relative to the Reserve Market. He stated, nonetheless, that PEMC intends to re-submit the proposal, in relation to the CVC and DPM, to the RCC as general amendments before the expiry of the effectivity of the amendments in September 2014.

Mr. Rosales indicated that the changes in the CVC priority levels are not only hinged on the reserve market but was revised so as to reflect the proper prioritization of CVCs in the Manual.

The updates were duly noted by the RCC. Dr. Guevara requested PEMC to submit its proposal by August as the 6-month prescriptive period already includes the PEM Board approval of the general amendments, as re-submitted by the Proponent.

**b) Updates on the DOE's Action on the Proposed Amendments to the WESM Rules regarding PEN-MRR**

As a background on the proposed amendments, Ms. Rodriguez informed the RCC that the proposed amendments to the WESM Manual on PEN-MRR was approved by the PEM Board in February 2014 and correspondingly, the proposed WESM Rules changes were endorsed to the DOE. However, in a letter received by PEMC from the DOE, which copy was provided to the RCC through email, said proposed changes to the WESM Rules were disapproved by the DOE. She then clarified with Mr. Binondo, whether the disapproval of the proposed changes to WESM Rules would effectively overrule the PEM Board's approval of the changes in the Manual.

Mr. Binondo responded that logically, the corresponding changes to the Manual on PEN-MRR cannot be effected since these changes are aligned with the proposed changes to the WESM Rules which was disapproved by the DOE. The information was noted by the RCC.

In relation to the discussions on PENs, Dr. Guevara inquired from the MO if the result of the study on the incorporation of the MERALCO network in the MNM is already available, and if the same can be presented to the RCC during the next meeting. Mr. Cacho stated that he will check the non-disclosure confidentiality agreement with MERALCO, to determine if the presentation will have any implications, otherwise, it is okay for PEMC to present the results to the RCC. Dr. Guevara clarified that what the RCC is requesting for is just the result of the study and not the data provided by MERALCO which is bound by the confidentiality clause.

Dr. Guevara requested to include in the PEMC's presentation a comparison of the effect on PENs of a model that has and has no MERALCO network in the MO's model. The request was duly noted by Mr. Cacho.

**c) Updates on the 2014 Work Plan**

The sector representatives in the RCC provided updates on the status of their respective commitments in the 2014 RCC Work Plan.

The RCC Work Plan was updated, with the withdrawal of some items as previously committed by the sector representatives, and the adjustment in the timeline of submission of proposals to the RCC on some of the commitments of the sectors.

Updates made in the Work Plan are as follows:

| Item | Topics/Proposed Rules Change | Responsible Party | Status | Remarks |
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| 1 | Administered Price Determination Methodology Manual in relation to Market Intervention and Suspension | Generation (SMC Global) Sector Representative | Ongoing | Receipt of Proposal from Vivant Corporation on 08 May 2014 |
| 2 | Site Specific Loss Adjustment (SSLA) | DU Sector | | For submission and presentation to RCC in August 2014 |
| 3 | Proposed Amendment to WESM Rules and the Dispatch Protocol Manual in relation to Reserve Market | PEMC-MO / NGCP-SO | Done | PEM Board approved the proposal on 27 Feb 2014. |
| *4* | *Demand-side bidding presentation by the MO* | *PEMC-MO* | *Done* | PEMC made a presentation on the matter during the 83rd RCC Meeting held on 05 February 2014. |
| 5 | Disconnection Policy | Generation / Supply Sector Representatives | Ongoing | Approved for posting in the WESM website on 07 May 2014 during the 87th RCC Meeting for comments of Participants and interested parties<br><br>Comments received from RESA<br><br>Approved by the RCC, for submission to PEM Board, during its 89th meeting held on 02 July 2014 |

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| 6 | Must Run Unit Manual regarding Additional Compensation | Generation Sector Representative (SMC Global) | | SMC Global request to defer to 3rd Quarter; Dependent on the MRU Proposal |
| 7 | Delineation on Responsibilities of IPP Administrator and IPP | Generation Sector Representative (SMC Global) | Withdrawn | SMC Global request to defer to 3rd Quarter |
| 8 | Revision in the Line Rental Formula for the Elimination of BCQ | DU Sector Representative | | For submission and presentation to RCC in August 2014 |
| 9 | Load Shedding: Manual Load Dropping with consideration to Bilateral Contracts in the Implementation of Manual Load Dropping; Corresponding Changes to the Confidentiality Manual | DU Sector Representative | | For submission and presentation to RCC in Sept 2014 |
| 10 | Revisions in WESM Rules Chapter 3 and the Price Determination Methodology Manual; Proposal for the Removal of Marginal Plant that sets the Market Clearing Price | NGCP-SO | | For consolidation with DU proposal and submission to RCC in August 2014 |
| 11 | VAT Issue -- necessary changes to the Billing and Settlement Manual | Generation Sector Representative (PSALM) | Withdrawn | |
| 12 | Demand-side bidding | DU Sector Representative | Withdrawn | |
| 13 | Proposal for changes in the MNM for the inclusion of MERALCO Network Model | NGCP-SO | | Awaiting result of PEMC-MO Simulation; Depends on Presentation<br>·RCC requested PEMC to present the Result of simulation during the RCC meeting scheduled for August 2014. |
| 14 | Metering / MSP Review -- define MSP accountability and consequence for not providing data to RES | Supply Sector Representative | | For submission in September 2014 |
| 15 | Malaya Issues on Pmin | PSALM | Withdrawn | Resolved through DOE Circular 2014-01-0003. |
| 16 | Review on the Must Offer Rule (as per PEM Board directive dated 27 April 2012) | PEMC | | Carry-over from 2013;<br>Awaiting DOE Directives on the matter. |
| 17 | Net Settlement Surplus (NSS) | PEMC | Ongoing | ·PEMC submission of Proposal on 22 April 2014<br>Approved for posting in the WESM website on 07 May 2014 during 87th RCC Meeting; to be discussed again in July 2014 meeting |

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| **18** | Deletion/Revision of provisions on "MDOM Performance Standards" | PEMC | For PEMC review | Carry-over from 2013;<br>Submitted by PEMC on 21 May 2013 RCC, during its 75th Meeting held on 05 June 2013 concluded that proponent should instead develop the MDOM performance standards rather than propose to altogether delete the WESM Rules provision prescribing the publication of the same. |
| **19** | Revisit the rules change process(Amendments to Chapter 8, WESM Rules and Rules Change Manual) | PEMC | | Carry-over from 2013<br>Put on hold to await result of PEMC TWG on the harmonization of rules and manuals (PEMC letter dated 11 March 2013). |
| **20** | *Value of Load Loss (VoLL) Pricing* | *PEMC* | *Awaiting DOE comments on WDS* | Carry-over from the 2012/2013;<br>Included in the IES Study on Pmin and Associated Issues.<br>Market Design Study Report submitted by PEMC to the DOE in January 2014. Awaiting DOE Directives on the matter. |
| ***21*** | Proposed Amendments to Metering Manual | PEMC | | impending submission by PEMC |
| **22** | Provision of Renewable Energy Market in the WESM Rules | PEMC | Deferred | Carry-over from 2013;<br>Necessary Rules Changes included in the WB Technical Assistance Study scheduled to be completed by 1Q 2014.<br><br>Proposed Rules Changes to be initiated by the PEMC pending directives from the Management. |
| **23** | Review of Prudential Requirement (Payment Default Procedure) | RCC / PEMC | Done | Approved by PEM Board on 05 February 2014. |
| **24** | Dispatch Protocol - Harmonization with Proposed Rules Changes on Market Intervention | PEMC | Withdrawn | Focused on the Market Intervention (MI) by PEMC in relation to the DOE Circular 2013-12-0028 Adopting an Interim Criteria for the Declaration of MI in the WESM.<br><br>Overtaken by secondary cap of ERC |
| **25** | Load Forecasting Manual, Load Shedding, Methodology for Determining Pricing Errors and Price Substitution due to Congestion, and WESM MNM Criteria and Procedures | PEMC | Done | Approval by PEM Board on 05 February 2014. |
| **26** | Incorporate policies on the reserves market in the WESM Rules | DOE/PEMC | Pending/ Deferred | Carry-over from 2013;<br>Awaiting approval/directives of the ERC on the PCRM for Reserves |
| **27** | Proposed Amendments to the WESM Manual on Criteria and Guidelines for the Issuance of Pricing Error Notices and Conduct of Market Re-Run | RCC | Done | Approved by the PEM Board |

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| 28 | Proposed Amendments to the WESM Rules and the Manual on the Management of Must Run Units, with corresponding changes to the Dispatch Protocol Manual, Management Procedure on Excess Generation, System Security and Reliability Guidelines, and the Administered Price Determination Methodology Manual | RCC | Ongoing | Approved for posting in the WESM website on 07 May 2014 during 87th RCC Meeting. |

**d) Updates on the 95th PEM Board Meeting**

Ms. Concepcion Tanglao and Mr. Cacho reported to the RCC the result of the presentation of the RCC's report to the PEM Board on its action on the Proposal on Stand-By Capacity.

Mr. Cacho shared that per Secretary Jericho Petilla, he has further questions regarding the matter that he wanted to discuss with the Power Bureau.

Dr. Guevara recalled that the proposal on Stand-by Capacity, which was submitted by the Generators, was elicited by the DOE. She stated that the Generators who proposed it thought that they will behave in a certain manner which will lower prices. During the RCC's deliberations, however, there are from the Committee who believed that it will not happen the way the Generators see it. At this point, Dr. Guevara inquired on what would be the way forward since the RCC is given the task to find alternatives to the proposal.

Mr. Lagarde opined that the best alternative would be the pay-as bid scheme. This was seconded by Mr. Rosales. Mr. Rosales expressed that he will make a presentation during the next RCC meeting on his proposal on the pay-as bid scheme, upon consultation with the EC's in the RCC.

**e) Proposed Amendments to the Manual on the Management Procedure for Excess Generation**

Ms. Rodriguez explained that the Proposed Amendments to the subject Manual is aligned with the proposed changes to the WESM Rules and various Market Manuals relative to MRU. It was noted that the RCC inadvertently used the incorrect version of the Manual during the RCC's formulation of the proposal and subsequent deliberations on the matter. The Secretariat, thus, reflected the RCC's latest discussions in the correct version of the Manual. The proposal is being presented for the RCC's approval of its publication in the website, to solicit comments.

The RCC noted the information. The RCC reviewed the proposal page by page, and made the following revisions as follows:

| Reference | Changes Made |
|---|---|
| Section 1.6 | The WESM Rules require that the MO and SO, in consultation with *WESM Participants*, shall adopt **procedures regarding** ~~to~~ the management of all aspects of dispatch and pricing ..... |

| | |
|---|---|
| Section 5.1.3 | Coordinate with MO for the imposition of over-riding constraint limit for a certain generating unit/s that would be required not to be shutdown since it will be still needed during the peak period in case possible excess generation exists during off-peak period. |
| Section 5.2.4 | Prepare offer based on WESM Merit Order Table (**W**MOT) and submit to SO on an hourly basis. This will be the reference of SO issuance of dispatch instruction whenever the generating unit/s will be constrained-on or if necessary, the SO may opt to shutdown the generators during off-peak condition or whenever there's a loss of large loads that resulted in excess generation. |
| Section 6.1.4 | Prior to the 1600H DAP run, the *Trading Participants* **will shall** consider the projected off-peak system condition and assess their market offers for the periods where imminent and *excess generation* conditions are indicated. Likewise, the **~~Trading Participants~~ Generators**, in coordination with SO, may opt to conduct maintenance activities during the period where excess generation exists as identified by MO. |
| Section 6.2.1 | If excess generation is encountered in the real-time dispatch, then the SO shall issue Dispatch Instructions to generators to constrain-off their MW output based on the WESM Merit-Order Table (**W**MOT) provided by MO if the scheduled regulating reserve has been depleted (i.e. at Pmin) and the grid frequency breached the 60.3Hz. However, if over-frequency exists (i.e. grid frequency is greater than 60.6Hz), the following corrective actions, in the order of priority, shall be followed until the frequency returns to normal;<br><br>a. "Constrain**ed**-off" generator/s with fast ramp rate.<br><br>xxx<br>**f.** Require generator/s to operate on ~~houseload~~ **house load.** |

Following the RCC's discussions above, the RCC approved the publication in the WESM website of the Proposed Amendments to the WESM Manual on the management Procedure for Excess Generation, to solicit comments of Participants and interested parties.

## 6. Next Meeting

The RCC agreed to hold its next meeting on 06 August 2014. Before the meeting was adjourned the Secretariat announced that the PEM Board meeting is set on 24 July, 12:00 noon.

## 7. Adjournment

There being no other matter to be discussed, the meeting was adjourned at around 2:45 PM.

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

| | |
|---|---|
| Approved by:<br>RULES CHANGE COMMITTEE<br>**Rowena Cristina L. Guevara**<br>Chairperson<br>Independent<br>University of the Philippines<br>(UP) | |
| Members: | |
| **Concepcion I. Tanglao**<br>Independent | **Francisco L.R. Castro, Jr.**<br>Independent<br>Tensaiken Consulting |
| **Maila Lourdes G. de Castro**<br>Independent | **Lorreto H. Rivera**<br>Supply Sector<br>TeaM (Philippines) Energy Corporation |
| **Jose P. Santos**<br>Distribution Sector (EC)<br>Ilocos Norte Electric Cooperative, Inc.<br>(INEC) | **Ciprinilo C. Meneses**<br>Distribution Sector (PDU)<br>Manila Electric Company<br>(MERALCO) |
| **Sulpicio C. Lagarde Jr.**<br>Distribution Sector (EC)<br>Central Negros Electric Cooperative, Inc.<br>(CENECO) | **Gilbert A. Pagobo**<br>Distribution Sector<br>Mactan Electric Company<br>(MECO) |
| **Jose Ferlino P. Raymundo**<br>Generation Sector<br>SMC Global | **Joselyn D. Carabuena**<br>Generation Sector<br>Power Sector Assets and Liabilities Management Corporation (PSALM) |
| **Ambrocio R. Rosales**<br>Transmission Sector<br>National Grid Corporation of the Philippines<br>(NGCP) | **Theo C. Sunico**<br>Generation Sector<br>1590 Energy Corporation |
| **Isidro E. Cacho, Jr.**<br>Market Operator<br>Philippine Electricity Market Corporation<br>(PEMC) | |

Attachement/s:

Presentation on Interim Mitigating Measures in the WESM: Secondary Price Cap

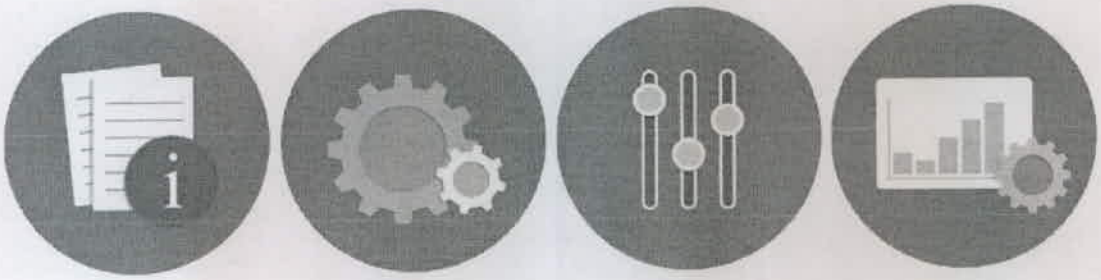
Wholesale Electricity Spot Market

# Interim Mitigating Measure in the WESM

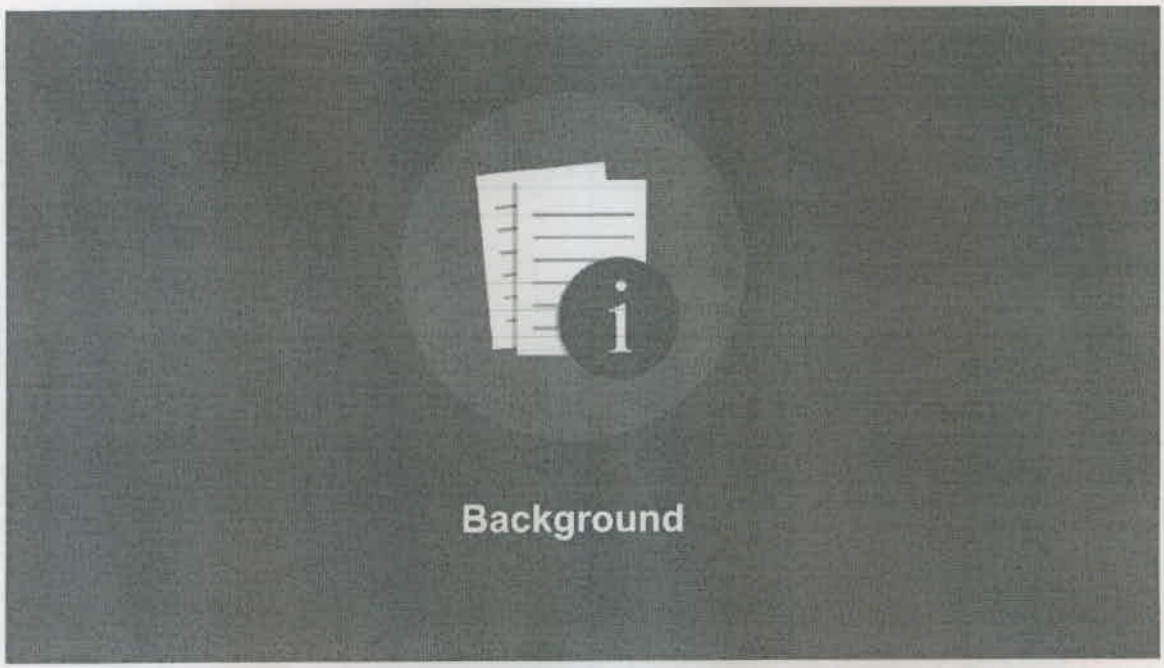
## *Secondary Price Cap Scheme*

9 MAY 2014

## Outline of Presentation



Background | Conceptual Framework | Parameters | Operational Mechanisms




## Background
### ERC Resolution No. 08 of 2014

- An Urgent Resolution Setting an Interim Mitigating Measure in the WESM issued by the ERC on 6 May 2014
- To protect public welfare and thwart the replication of exorbitant and unreasonable high market prices like in Nov. and Dec. 2013, there is a need to mitigate sustained high prices in the WESM on an interim basis

## Background
### Summary of ERC'S Directives

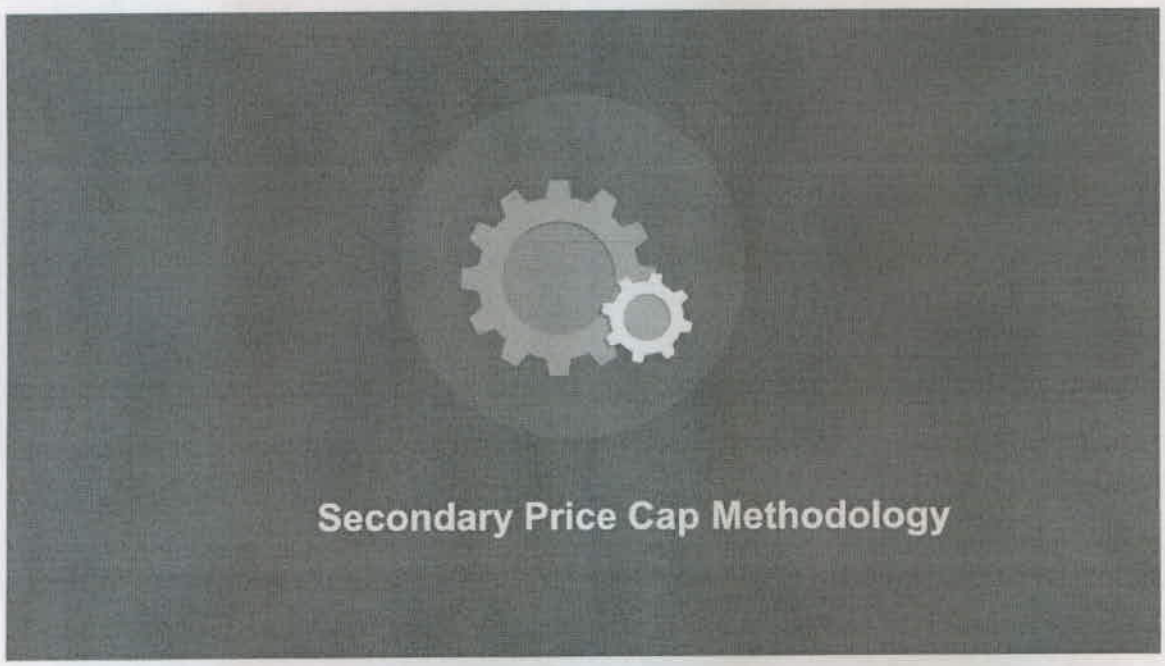
1. Secondary cap amounting to PhP6,245/MWh is set during the supply months of May and June 2014 contingent upon certain conditions;
2. During the period at which secondary cap is in effect, oil-based plants are entitled to cover additional compensation;
3. PEMC is directed to process the claim for additional compensation by oil-based plants of not more than 30 days from receipt of supporting documents;


## Background
### Summary of ERC'S Directives


4. PEMC is directed to inform and educate the WESM Member Generation Companies of the operational mechanisms attendant to the implementation of secondary cap scheme;
5. PEMC is directed to immediately administer trial runs until the effectivity of the resolution; and
6. PEMC is directed to conduct studies on mitigating measures that may be applied to WESM to be submitted to ERC.

## Background
### Summary of ERC'S Directives

- Date of publication of ERC Reso No. 8, series of 2014: **07 May 2014 (Daily Tribune)**
- Date of effectivity: **10 May 2014**



## Secondary Price Cap Methodology Parameters

**Monitoring Parameter:** 72-hour Rolling Average Price

**System**

**Ex - ante**

**Generator - Weighted Average Price**

**Threshold Level:** PhP 8,186/MWh

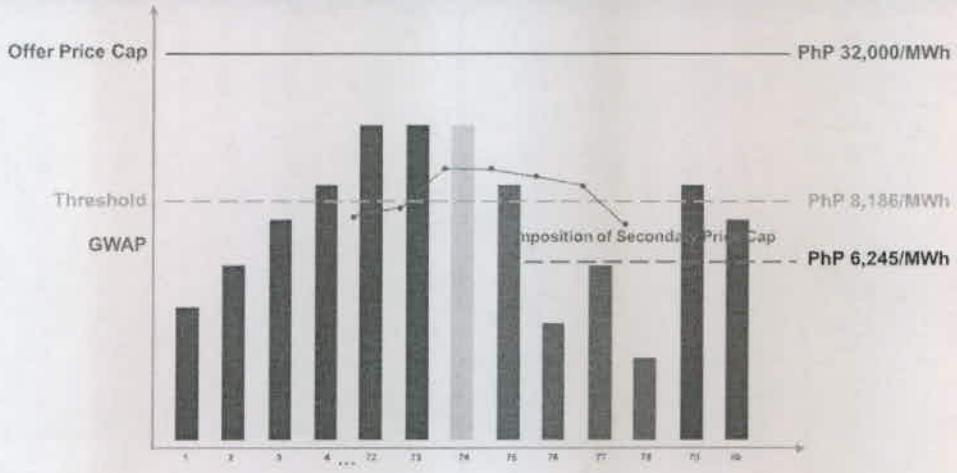
## Secondary Price Cap
**Level, Imposition, and Lifting**

**Secondary Price Cap:** PhP 6,245/MWh

**Imposition:** The next immediate interval after determining a breach of the threshold.

**Lifting:** Once imposed, hourly monitoring of 72-hour rolling average price shall be conducted for possible lifting of the secondary price cap.

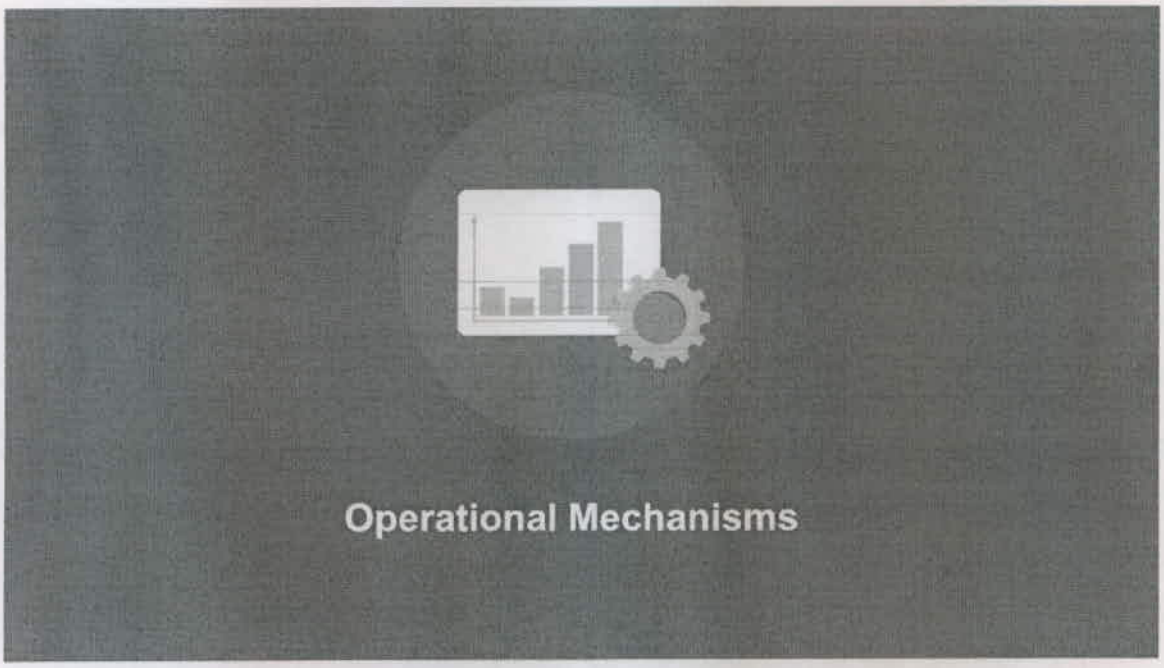
# Secondary Price Cap Methodology Overview




# Other Feature of the Scheme

## Additional Compensation

Oil-based plants are entitled to recover additional compensation equal to the remainder of the total cost of fuel and variable O&M cost.




## Hourly Computation of Rolling Average (Indicative)

**PER ERC RESOLUTION NO. 8, SERIES OF 2014:**

- Occurrence of sustained high prices monitored using RTD Prices **(Rolling Average on GWAP)**
- Timing Issue with Pricing Errors
  - Ex – Post (RTX) Results (if valid) occur an hour after
  - Market Re – Run: results available later than RTX
- Estimation of RTD prices to facilitate by the hour monitoring

## Hourly Computation of Rolling Average (Indicative)

**PER ERC RESOLUTION NO. 8, SERIES OF 2014:**

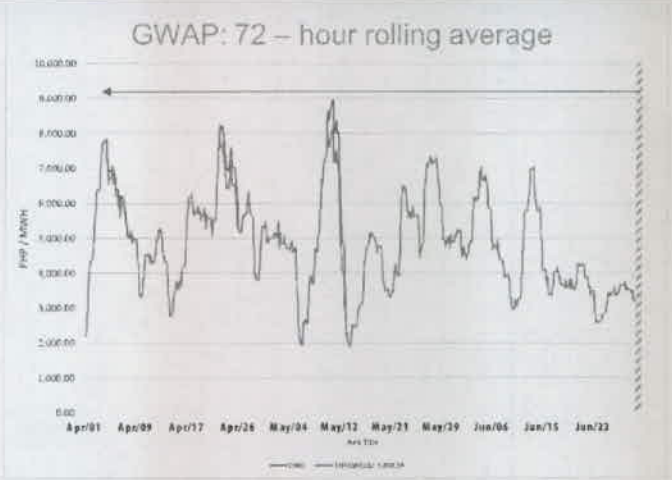
- Would only be used for signalling potential breach of Price Threshold to participants
- Confirmation by Billing Month – End
  - Using Corrected Prices

## Hourly Computation of Rolling Average (Indicative)

GWAP: 72 – hour rolling average


Issue Real – time, INDICATIVE rolling average and breaches of threshold, based on Estimates

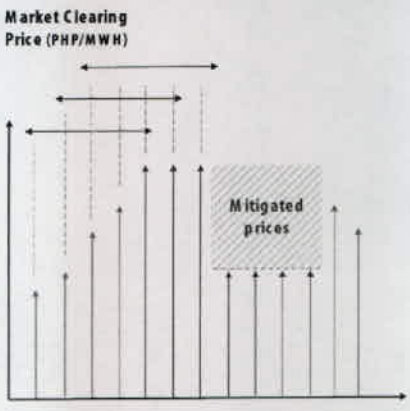
# Hourly Computation of Rolling Average
## (Indicative)




End – Month Confirmation of Secondary Cap Imposition USING CORRECTED PRICES

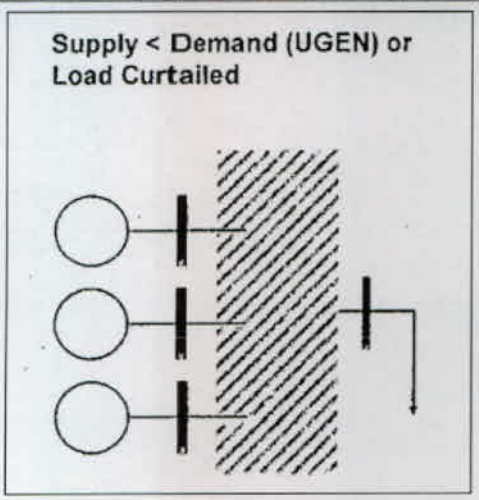
# Hourly Computation of Rolling Average
## (Indicative)

Requires availability of Prices in Real – time:



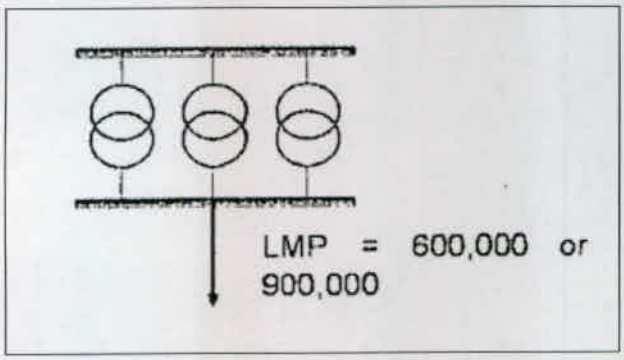

| | |
|---|---|
| OK | - Prices Available |
| PEN | - Needs Estimate |
| PSM | - Prices Available |
| AP | - Prices Available |

## Estimation of RTD prices:
### UGEN / System – Wide VoLL




Estimate MRR Prices to be used:
PhP 21,000.00 / MWh

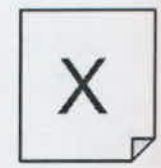
## Estimation of RTD prices:
### Local (load – end) Pricing Errors




**GWAP for interval not affected.**
Can be:

1. Base Case (900,000 CVC)
2. Contingency (600,000 CVC)

# Estimation of RTD prices:
## Bad Data




(Snapshot Error, Sec. Limit, Etc.)

**May not be detected (and corrected in Real – time)**

> So long as prices are not reflective of CVCs (which are captured by other PENs),
**GWAP is valid for estimation purposes.**

# Weighting of Administered
## Prices* with Regular Price

| RTD SCENARIOS | | |
|---|---|---|
| SECONDARY CAP IMPOSED? | LUZON | VISAYAS |
| NO | OK | OK |
| NO | OK | PEN |
| NO | OK | PSM |
| NO | OK | AP |
| NO | PEN | OK |
| NO | PEN | PEN |
| NO | PEN | PSM |
| NO | PEN | AP |
| NO | PSM | OK |
| NO | PSM | PEN |
| NO | PSM | PSM |
| NO | PSM | AP |
| NO | AP | OK |
| NO | AP | PEN |
| NO | AP | PSM |
| NO | AP | AP |

| BASIS FOR GWAP (ROLLING AVERAGE) | |
|---|---|

**AP IS EFFECTIVELY NOT GWAP (ONLY PRICE).**

**TO CORRECTLY COMPUTE FOR GWAP, AP HAS TO HAVE A WEIGHT I.E.**

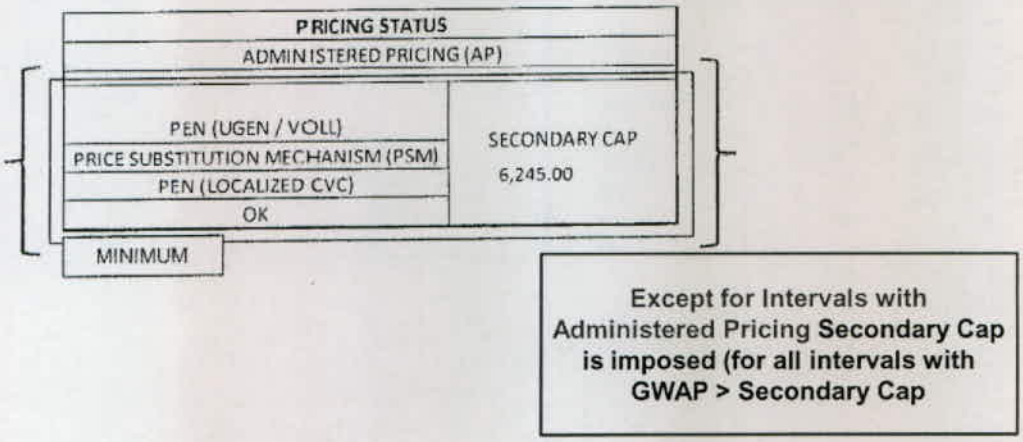
**WEIGHT (REGION WITH AP) * AP PRICE**
**+**
**WEIGHT (REGION WITH NO AP) * ITS GWAP**

1. **WEIGHT FOR LUZ**: HISTORICAL DEMAND / SYSTEM DEMAND
2. **WEIGHT FOR VIS**: HISTORICAL DEMAND / SYSTEM DEMAND

| ADMIN PRICE | RTD | GWAP (L,V) |
|---|---|---|
| ADMIN PRICE | ESTIMATE | GWAP (L,V) |

*** Applicable to PEN (UGEN/ VoII) as well**

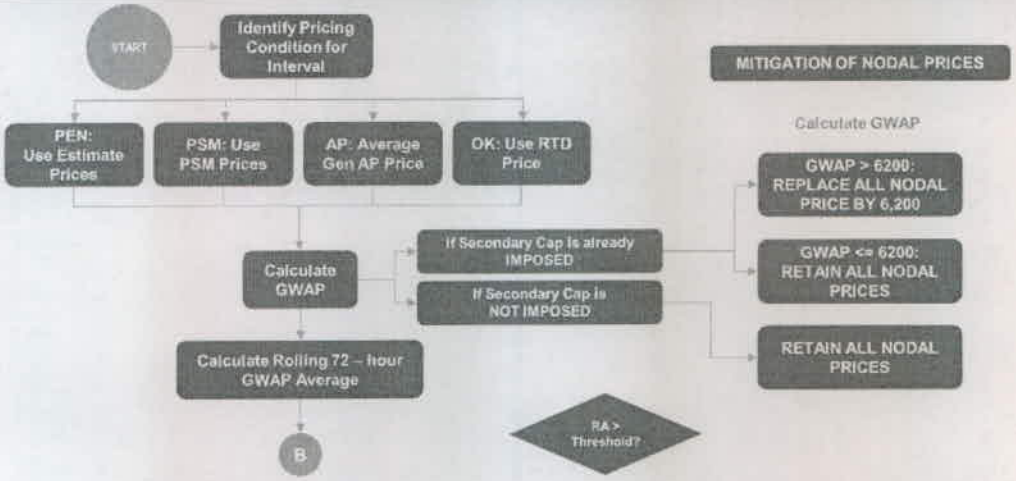
## Hierarchy of Prices when Secondary Cap is in Effect:



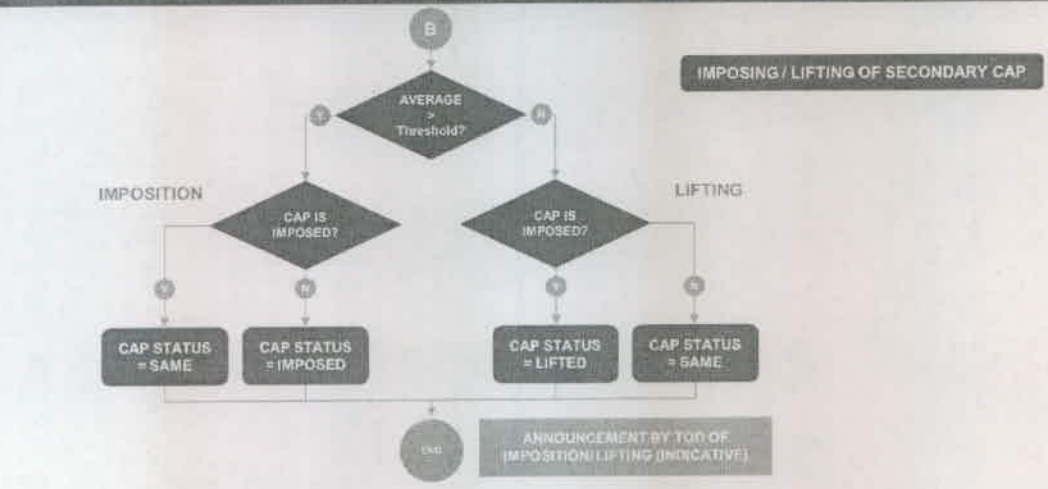

## Notice to Participants when Rolling Average is Breached:

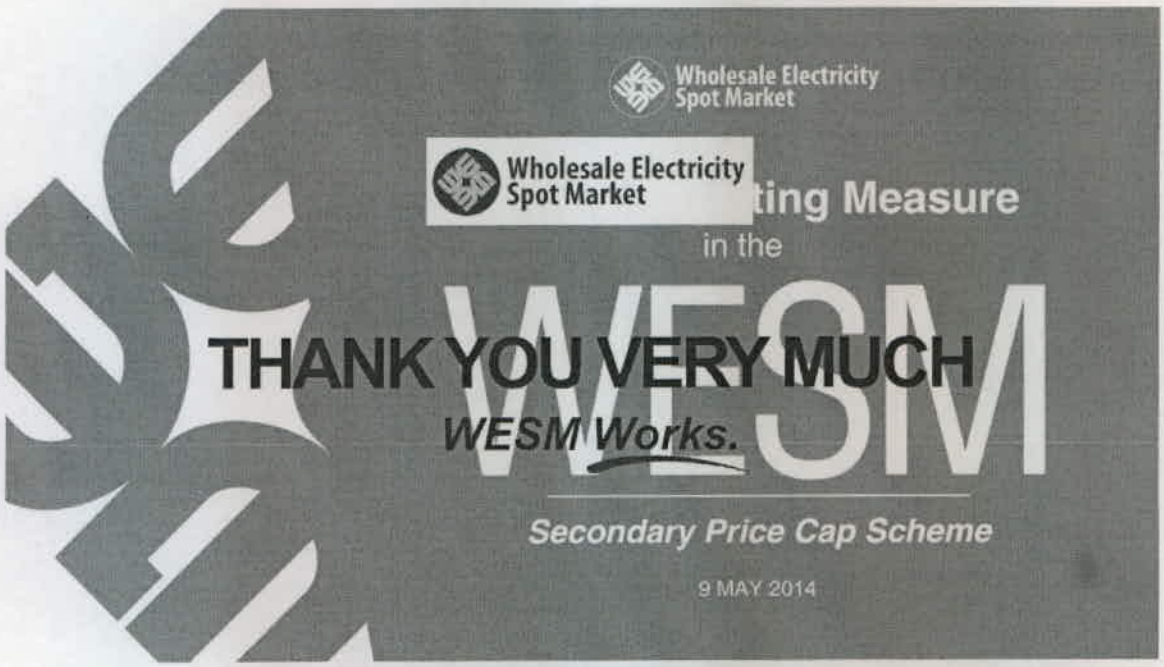
- When Threshold is Breached: the Market Operator may announce:
  - "**Possible imposition of Secondary Cap based on Estimate Rolling Average (price threshold breached**); or
  - **Lifting:** lifting of Secondary Cap based on Estimate Rolling Average.

# Flowchart




# Flowchart




Wholesale Electricity Spot Market
Wholesale Electricity Spot Market
ting Measure
in the
WESM
THANK YOU VERY MUCH
WESM Works.
Secondary Price Cap Scheme
9 MAY 2014