MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 1 of 80

Philippine Electricity Market Corporation

ATTENDEES

	Name	Designation/Position	Department/ Company
1	Concepcion I. Tanglao	Chairperson, Independent	RCC
2	Jesusito G. Morallos	Member, Independent	RCC
3	Fernando Martin Y. Roxas	Member, Independent	RCC
4	Jose Roderick F. Fernando	Member, Independent	RCC
5	Dixie Anthony R. Banzon	Member, Generation Sector	RCC
6	Cherry A. Javier	Member, Generation Sector	RCC
7	Carlito C. Claudio	Member, Generation Sector	RCC
8	Jessie Victorio	Member (Alternate), Generation Sector	RCC
9	Mark D. Habana	Member, Generation Sector	RCC
10	Michelle S. Tuazon	Member (Alternate), Generation Sector	RCC
11	Ryan S. Morales	Member, Distribution Sector	RCC
12	Manuel Luis N. Zagala	Member (Alternate), Distribution Sector	RCC
13	Nelson M. Dela Cruz	Member, Distribution Sector	RCC
14	Virgilio C. Fortich, Jr.	Member, Distribution Sector	RCC
15	Ricardo G. Gumalal	Member, Distribution Sector	RCC
16	Lorreto H. Rivera	Member, Supply Sector	RCC
17	Ambrocio R. Rosales	Member, System Operator	RCC
18	Henry V. Dela Cruz	Member (Alternate), System Operator	RCC
19	Isidro E. Cacho, Jr.	Member, Market Operator	RCC
20	Elvin Hayes E. Nidea	Chief Governance Officer	PEMC
21	Mario R. Pangilinan	Technical Committee	PEMC
22	Clares Loren C. Jalocon	Corporate Planning and Communications	PEMC
23	Kevin John Y. Dela Cuesta	Corporate Planning and Communications	PEMC
24	Aldrin W. Reyes	Corporate Planning and Communications	PEMC
25	Bienvenido C. Mendoza	Market Assessment Group	PEMC
26	Hiyasminh Aleia D. Dagum	Market Assessment Group	PEMC
27	John Mark S. Catriz	RCC Secretariat	PEMC
28	Karen A. Varquez	RCC Secretariat	PEMC
29	Divine Gayle C. Cruz	RCC Secretariat	PEMC
30	Dianne L. De Guzman	RCC Secretariat	PEMC
31	Kathleen R. Estigoy	RCC Secretariat	PEMC
32	Melanie Papa	Observer	DOE
33	Mari Josephine C. Enriquez	Observer	DOE
34	Marvin Jay A. Masanda	Observer	DOE
35	Jhannelyn D. Marasigan	Observer	DOE
36	Ma. Keisha Z. Pentecostes	Observer	ERC

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 2 of 80

Philippine Electricity Market Corporation

ATTENDEES

	Name	Designation/Position	Department/ Company
37	Sherrie Mae Lago	Observer	ERC
38	Sheryll M. Dy	Proponent	IEMOP
39	Edward I. Olmedo	Proponent	IEMOP
40	Lilibeth Grace L. Vetus	Proponent	IEMOP
41	Jenny I. Jalandoni	Proponent	IEMOP
42	Karen Anne H. Siruma	Proponent	IEMOP
43	John Paul S. Grayda	Proponent	IEMOP
44	Leo E. Bugarin	Proponent	NGCP
45	Ermelindo R. Bugaoisan, Jr.	Proponent	NGCP
46	June C. Pascual	Proponent	NGCP
47	Glenn T. Peña	Proponent	NGCP
48	Anna Lalaine C. Dela Cruz	Proponent	NGCP
49	Arnold S. Salvador	Proponent	NGCP
50	Francis George T. Lomaad	Proponent	NGCP
51	Honorio Jr. F. Estravez	Proponent	NGCP
52	Josephine S. Quiaem	Proponent	NGCP
53	Christian J. Del Rosario	Proponent	NGCP
54	Joselito C. Quilala	Proponent	NGCP
55	Ryan Jaspher M. Villadiego	Proponent	NGCP
56	Perez, Mikaela Victoria	Proponent	NGCP
57	Antonio O. Mercado	Commenter	MEI/PEI
58	Richard O. Arcenal	Commenter	SPC/SPIC
59	John Paulo P. Bolivar	Commenter	SPC/SPIC
60	Laudy Lyn Oropesa Calde	Commenter	SPC/SPIC
61	Krizzia Alyanna G. Angeles	Commenter	SPC/SPIC
62	Jacqueline Kate S. Tamayo	Commenter	Global Power
63	Christian D. Calonzo	Commenter	Global Power
64	Herbert Alexander A. Tipace	Commenter	Global Power
65	Rhovel Flores	Commenter	APC
66	Jayson Francisco	Commenter	APC
67	Bryan Albert Castro	Commenter	APC
68	Jesus I. Santiago Jr.	Commenter	MERALCO
69	Ma. Leticia L. Sapina	Commenter	MERALCO

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 3 of 80

Agenda	Agreements / Action Taken / Action Required
I. Call to Order	a. The meeting was conducted via Microsoft Teams and was called to order at 09:08 AM. b. The meeting was presided by Ms. Concepcion I. Tanglao (Chairperson/Independent).
II. Determination of Quorum	All principal members and 3 alternate members were present. Ms. Tanglao welcomed the newly appointed independent members of the RCC, Mr. Fernando Martin Y. Roxas and Mr. Jose Roderick F Fernando[1]. She also informed the body that her designation as the Chairperson will only be until 30 October 2022 or upon expiry of her term, and that the PEM Board has already approved the assumption of Atty. Jesusito G. Morallos to the Chairmanship upon her term expiry. She requested Atty. Morallos to jointly manage the RCC proceedings for smooth transition.
III. Adoption of Agenda	Presenter: Ms. Dianne L. De Guzman (Secretariat) Action Requested: For approval Proceedings: Ms. De Guzman informed the RCC that the 190th Special Meeting Minutes will be submitted in the next RCC meeting. She also said that as consulted with the Chairperson, the discussion of the Proposed Amendments on Implementation of the Green Energy Option Program is requested to be deferred to the next meeting due to the number of comments received and the volume of rules and manuals affected by the proposed revisions. The body agreed to defer the discussion of GEOP Proposal to the next scheduled RCC Special Meeting. Resolution: The agenda of meeting was approved and adopted by the body, as revised.
IV. Approval of Minutes of Previous Meeting - 191st Regular Meeting, 18 February 2022	The RCC approved the minutes, as revised, and authorized to affix their e-signature thereto.

[1] The Secretariat provided the new members with a briefing on the RCC roles and responsibilities prior to the RCC meeting.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 4 of 80

Agenda	Agreements / Action Taken / Action Required
	The RCC requested that the draft minutes of the 190th Special Meeting be submitted prior the special RCC Meeting on 25 March 2022.
V. Matters Arising from Previous Meeting	
5.1. *RCC Resolution No. 2022-03:* Revisions to RCC Resolutions No. 2020-07 and 2020-15 regarding Proposed Amendments to the Guidelines Governing the Constitution of the PEM Board Committees	Presenter: Kathleen R. Estigoy (Secretariat) Action Requested: For endorsement to the PEM Board and approval to affix e-signature Material/s: Annex A – Summary of Revision to the GDL Proposal Proceedings: Ms. Kathleen R. Estigoy informed the RCC that pursuant to DOE's letter dated 24 February 2022, the DOE directed the PEM Board and the RCC to undertake the necessary action to harmonize/consolidate the following: a. Proposed amendments to the WESM Rules, Retail Rules, and various Market Manuals for the implementation of enhancements to provisions related to audit and performance monitoring pursuant to PEM Board Resolution No. 2021-41-01; and b. Proposed amendments to the WESM Manual Governing the Constitution of the PEM Board Committees in light of the pending resolution of the recommendations made by the DOE through their letter dated 21 April 2021 (independent membership in the WESM Governance Committee). Upon review of the said proposals, the Secretariat recommended the following revisions to the GDL Manual: 1. Under Recital, Section 1, and Definition of Terms - For adoption of PEMC's proposed revisions, as provided in the resubmitted proposal on 17 February 2022, which was approved by the RCC during its 191st RCC Regular Meeting on 18 February 2022; and 2. Under Section 5.04 (Responsibilities of the PEM Audit Committee) - For inclusion of changes in the WGC proposal (lifted from RCC Resolution No. 2021-16 – PAC Proposal)

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 5 of 80

Agenda	Agreements / Action Taken / Action Required
	The RCC approved to adopt the Secretariat's recommendations. The Secretariat also discussed, for the RCC's approval, the additional proposed amendments, as follows: • *On the Rewording of Term of Office Provision* Ms. Estigoy explained that proposal was initiated by Atty. Elvin Hayes E. Nidea (Chief Governance Officer (CGO)/PEMC), which will affect WESM-GDL Sections 5.5, 6.5, 7.5, 8.5, 9.5, and 10.5. The same is proposed to clarify the provision and to provide uniformity in the term of office across all WGCs. Below is the proposed rewording: *"The members of the (name of the WGC) may be eligible for reappointment but in no case shall a member serve for more than three (3) consecutive terms.* *Service by a member for less than one year shall not be considered one term."* Having no further question, the RCC approved the additional changes. • *On the Compliance Committee (CC) Membership* Ms. Estigoy said that CGO Nidea also proposed for the qualification that at least one (1) member of the committee shall be a lawyer considering that its main responsibility is the oversight on compliance monitoring and investigation, which may, at times, require application of pertinent rules (e.g. legal remedies, due process, etc.) and knowledge on possible legal implications of certain action/s, extensive experience in interviewing, fact-finding and practice of law in general. She further stated that as proposed in Section 10.6 (Conduct of Business, Voting and Procedure), the lack of a lawyer among the remaining members shall not affect the existence of a quorum for the purpose of allowing the Committee to continue to function in the interim; provided further that, the vacancy shall be filled within the timeline prescribed in the WESM-GDL.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 6 of 80

Agenda	Agreements / Action Taken / Action Required
	Ms. Estigoy also informed the RCC that the CC thru the Enforcement and Compliance Office (ECO), the CC Secretariat, concurred and provided inputs to the proposal. Ms. Tanglao asked if the absence of the lawyer would not affect the quorum of the CC, to which Ms. Estigoy replied that it was the intention of the additional proviso in Section 10.6. Ms. Cherry Javier (Generation) asked about the difference between the functions of the Compliance Committee and the Market Surveillance Committee (MSC), to which Ms. Estigoy responded that per DOE DC 2021-08-0026 dated 30 July 2021, the responsibility to conduct investigations on possible non-compliances, upon request of ECO, was removed from MSC's responsibilities and transferred to CC. The responsibility of CC is further defined in GDL Section 10.4 of the proposal as follows: *The Compliance Committee shall from time to time, as necessary, and as appropriate, or whenever the PEM Board directs:* *a) Review reports of investigation of breaches of the WESM Rules and Market Manuals carried out by the Enforcement and Compliance Office and, based on the results of such investigation, decide on the outcomes of the investigation and recommend imposition of sanctions or penalties if warranted;* *b) Review and monitor the compliance of Enforcement and Compliance Office with the reportorial requirements pursuant to the WESM Rules, Market Manuals, and other applicable laws, rules, regulations, or issuances;* *c) Review and monitor the compliance by the Market Operator and the System Operator with their obligations pursuant to the WESM Rules and Market Manuals, or any coordinating or operating agreements, or protocols which may be established governing the performance of their functions and obligations under the WESM Rules and Market Manuals;* *d) Propose amendments to the WESM Rules or Market Manuals in accordance with Chapter 8 with a view of: (i) Improving the efficiency and the effectiveness of the operation of the WESM; and (ii) Improving or enhancing the prospects for the achievement of the WESM objectives;*

Agenda	Agreements / Action Taken / Action Required
	(e) Assist the Rules Change Committee in relation to its assessment of proposals to amend the WESM Rules or Market Manuals under Chapter 8; and *(f) Perform such other functions as may be required by relevant Market Manuals.* Ms. Karen A. Varquez (RCC Secretariat) also noted via MS Teams chat WESM Rules Clause 1.4.6 (b) and (f) which provided for MSC's and CC's responsibilities as follows: *(b) A Market Surveillance Committee to monitor and report on activities in the spot market in accordance with clause 1.6;* *xxx* *(f) A Compliance Committee to monitor compliance to and oversee the investigation of breach of the WESM Rules and Market Manuals by WESM Members, the System Operator and the Market Operator, and to perform the functions set out in Clause 1.8.* Having no further question, the RCC approved the additional changes. • *On the Technical Committee Membership* Considering the even number (6) of TC membership as approved by the RCC last meeting, Ms. Tanglao asked if it would be possible to change the number of power industry experts from two (2) to three (3), to make the membership odd (7), to which Atty. Nidea responded that he supports changing the number of members from 6 to 7. He emphasized that the power industry experts should be composed of the generation, distribution, and other sector of the industry for it to become a balanced committee as far as the point of view is concerned. He explained that to satisfy the independence requirement of the DOE, the power industry experts may be formerly connected with the generation or distribution sectors. Ms. Javier expressed her support to the suggestion of Atty. Nidea stating that the perspectives of the generation and distribution sectors are needed in the TC according to studies. Mr. Carlito Claudio (Generation) suggested to indicate that the power industry experts should come from the generation,

Agenda	Agreements / Action Taken / Action Required
	distribution sector and transmission operation, which is different from the system operator. Mr. Ambrocio Rosales (SO) commented that the addition of members coming from different sectors may be questioned by the PEM Board considering that technical matters are being tackled in the TC, which does not necessarily require representation from all the sectors, and the TC's responsibilities can be performed by at least five (5) members as currently designated. He opined those seven (7) members is quite a large membership and that the body should also consider the extent of TC's function whether it is tackling all technical matters in the WESM, including that of the proposals lodged before the RCC. Atty. Nidea opined that a pool of experts has a better appreciation of issues at hand. For instance, in the practice of law, he would defer to other lawyers the legal issues other than tax since his field of expertise is taxation. The same would also be true in the power industry where deference to experts in the field of generation or distribution is a must to produce a balanced view of the market. Mr. Ricardo G. Gumalal (Distribution) suggested to the body to consider setting the number of members between five (5) or seven (7) as this has been the subject of many revisions, considering Mr. Rosales' comment and weighing the view of Atty. Nidea. Mr. Morallos suggested indicating the following as qualification to TC membership: *"3 - power industry experts covering both generation and distribution sub-sectors"* Mr. Isidro E. Cacho, Jr. (MO) opined that it would be better if there would be more TC members considering that the upcoming market developments (e.g. reserve market, derivatives market) and system enhancements and interconnections are progressing through the years, which necessitate more technical expertise. Mr. Dixie Anthony R. Banzon (Generation) inquired if it is necessary that the membership of the TC is an odd number given that the subject matter of their discussion should not be subject to vote as it is a technical matter. Atty. Nidea shared that per TC Chairperson Jordan C. Orillaza, there was no instance yet that they had to divide the house to arrive at a decision and that their decision had always been collegial. Further, he said his inclination is towards balance where all sectors are represented. Mr. Mario R. Pangilinan (TC Member) confirmed the statement of Atty. Nidea. He opined that it is the quality of the membership that allows the TC to provide quality work, and that he prefers having an on-call experts as the need arises.

Agenda	Agreements / Action Taken / Action Required
	Considering the foregoing discussion, the RCC agreed to retain the six (6) membership, with the following composition: • Four (4) independent members composed of one (1) economist, one (1) Information Technology expert and two (2) power industry experts covering generation and distribution operation • One (1) member from the System Operator • One (1) member from the Market Operator The draft RCC Resolution No. 2022-03 entitled *Revision to RCC Resolutions Nos. 2020-07, 2020-15 and 2021-16 on the Proposed Amendments to the Guidelines Governing the Constitution of PEM Board Committees, Issue 4.0* was presented by Ms. Estigoy during the afternoon session. Ms. Lorreto H. Rivera (Supply) moved for its approval, which was duly seconded by Mr. Rosales and was adopted by the body. Resolution: The RCC approved the endorsement of the proposal to the PEM Board and authorized to affix their e-signature on the resolution.
5.2. *RCC Resolution No. 2022-04:* Addendum to RCC Resolution 2021-23 on Proposed Amendments to the WESM Rules, WESM Manual and Retail Manual on Validation Timeline Adjustment in Metering and Billing	Presenter: Dianne L. De Guzman (Secretariat) Materials: Annex B – Updates to the Validation Timeline Adjustment in Metering and Billing proposal Action Requested: For endorsement to the PEM Board and approval to affix e-signature Proceedings: Ms. Dianne L. De Guzman presented the background of the proposal, including the timeline of activities, and discussions/agreements during the coordination meetings held by the Secretariat with the DOE and IEMOP. She discussed the additional changes to the proposal as consulted with NGCP and the DU-RCC members. Highlights of the discussion are as follows: • On the daily Meter Trouble Reports (MTRs), Mr. Jenny Jalandoni (IEMOP) clarified that the daily meter quantity (MQ) validation would only be for three (3) hours, not three (3) days and the MTR is sent before lunch. If the MQ is erroneous, the MSP has the time to correct it for two (2) days and submit the

Agenda	Agreements / Action Taken / Action Required
	validated MQ to the MO before the deadline on the 25th of the month, to be used in the preliminary statement. If the resolution of MTRs would be within seven (7) business days, the same will be late for preliminary bill issuance. • Ms. De Guzman asked if there is a possibility of issuing a monthly MTR after the preliminary bill has been issued, to which Mr. Jalandoni replied that if that is the case, the MTR will be considered instead in the final bill considering the timeline for issuing the preliminary bill and the seven (7) business days correction of the monthly MTR. • Mr. Anna Lalaine C. Dela Cruz (NGCP) noted that the two (2) business days is not sufficient for the NGCP to close the daily MTRs because of the geographical location and the quantity of some of their metering facilities (e.g. MTR with "No Data" must be visited in the metering facility to restore communication link which are dependent on locations, mode of transportation that can be by land and/or sea, clearance to enter the facility and vehicle and manpower availability). • Mr. Morales inquired if there is a record on how the Retail Metering Service Providers (RMSP) respond to the submission of daily MTRs, to which Mr. Jalandoni responded that RMSP's performance on the submission is being assessed by PEMC. Mr. Jalandoni said that the proposal was merely to document the current practice for submitting correct metering data within two (2) business days from the issuance of the MTR. For the WESM Metering Service Provider (WMSP), Ms. Dela Cruz noted that the current practice is ten (10) business days in WESM-BSM Issue 13 and was reduced to seven (7) business days in WESM-BSM Issue 14. Considering the logistical requirements and the COVID-19 pandemic restrictions, Ms. Dela Cruz noted that it will be difficult for NGCP as the WMSP to comply with the timeline for resolving the daily MTRs. She further explained that previously, the two (2) business day period was only meant to respond to the MTR queries and not to resolve it. Ms. Karen Anne H. Siruma (IEMOP) responded that the basis of the proposal was the DOE DC2021-07-0021.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 11 of 80

Agenda	Agreements / Action Taken / Action Required
	Mr. Rosales commented that the proposal would just make NGCP consistently non-compliant with the submission timeline and asked NGCP Representatives about the statistics of erroneous meters, to which Mr. Arnold S. Salvador (NGCP) said that out of 1,500 metering facilities for Luzon, about 300 to 500 meters are having troubles daily. Mr. Morales asked if the two (2) business days timeline to submit corrected MQ to address daily MTRs will also be applicable to RMSPs, to which Ms. De Guzman replied that the RMSPs are currently following the said timeline for resolving daily MTRs. • Mr. Fortich, Jr. asked whether the error in the meter is caused by human intervention or a defect in the device, to which Ms. Dela Cruz replied that it is a combination of problems (e.g. communication link problems due to typhoons, unsynchronized time clock). • In deciding on the applicable timeline, Mr. Cacho, Jr. suggested that the body should consider the impact of erroneous meter data to the customers and in their bilateral contract quantity (BCQ) declaration besides the WMSP's or RMSP's performance against PEMC's monitoring standards. • Mr. Bienvenido C. Mendoza, Jr. (PEMC) clarified that the MSP performance is being measured against the 10 calendar days timeline based on WESM BSM Issue 13 Section 9.4.1.2 (Timeliness and Percentage Resolution to the Daily Meter Trouble Report). Ms. De Guzman noted that Section 7.3.1 (Timeline - 2 business days to submit the corrected MTR) and Section 9.4.1.2 (10 calendar days to submit resolved or corrected MTR) are not harmonized. • Mr. Rosales commented that the timeline is impractical considering that the country is often hit by typhoons and the geographical locations of the metering sites. Ms. Tanglao also opined that there should be flexibility in the timeline for force majeure events while also considering the accuracy of meter data. Thus, she suggested that in terms of performance monitoring, a reasonable timeline may be prescribed for force majeure events. Ms. De Guzman added that as confirmed with MAG-Market Performance Division (MPD), which is the group

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 12 of 80

Agenda	Agreements / Action Taken / Action Required
	in PEMC that monitors MSP performance, typhoons and other valid reasons are excluded from performance measures and the result of monitoring is submitted for review to the respective MSPs. • Ms. Dela Cruz asked about the impact of non-submission of meter data within the timeline to the BCQ, to which Mr. Jalandoni responded that unlike the MQ, the BCQ could no longer be adjusted once submitted by the participant. Meanwhile, Ms. Javier inquired about NGCP's action in case erroneous or missing meter data became recurring. Ms. Dela Cruz responded that they try to resolve the problem as soon as possible. • Mr. Morales clarified if the foregoing discussion means that the WMSP is not compliant with the timelines on submitting corrected daily MTRs, while the RMSPs are, although the RMSPs have more metering sites than the WMSP. Ms. Tanglao surmised that the situation as stated by Mr. Morales might be true. • On the performance monitoring, Mr. Mendoza informed the body that they will conduct a study regarding the performance of MSPs, which will cover the concern of NGCP on late submission of corrected MTRs. Ms. Tanglao requested for the inclusion of the geographical locations and force majeure events as considerations in the study. • Ms. Dela Cruz also requested if the Central Registration and Settlement System (CRSS) can accommodate a portion where a remark that the metering site needs to be physically inspected can be indicated. Mr. Jalandoni that the same cannot be done since the dropdown menu of the CRSS is only based and limited to what the Registration Manual requires. • Mr. Morallos suggested to add the provision below in Sections 7.3.1.a (Timeline) and 9.4.1 (Delivery) to address the concerns as discussed above: *"provided that advance notification is immediately made for events that are either continuing or requiring an ocular or on-site investigation"*

Agenda	Agreements / Action Taken / Action Required
	Moreover, he explained that for the case as stated by Ms. Javier where there is a recurring meter trouble, the same should not fall under the exception as proposed but should be treated under the general rule that it should be resolved within two (2) business days. • Mr. Morales asked regarding the process for approving the subject proposal. Ms. Melanie Papa (DOE) responded that it will undergo the usual process for general amendment proposal of public consultation prior to circularization by the DOE. Further, he noted that the standards in harmonizing timelines and requirements for retail and wholesale are not consistent based on their previous experiences and the proposal at hand. Having no further questions, Mr. Fortich, Jr. moved for the approval of additional changes to the proposal, which was duly seconded by Mr. Cacho and was adopted by the body. The draft RCC Resolution No. 2022-04 entitled *Revisions to RCC Resolution No. 2021-23 on the Proposed Amendments to the WESM Rules, WESM Manual and Retail Manual on Validation Timeline Adjustment in Metering and Billing* was presented by Ms. De Guzman during the afternoon session. Mr. Cacho, Jr. moved for its approval, which was duly seconded by Mr. Claudio and was adopted by the body. <u>Resolution:</u> The RCC approved the endorsement of the proposal to the PEM Board and authorized to affix their e-signature on the resolution.
5.3. Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market (ORCP-WR-WM-21-13) - Deliberation of Comments and Proponent's Response	<u>Presenter:</u> Ryan Jaspher M. Villadiego (NGCP) <u>Materials</u>: Annex C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market <u>Action Requested:</u> For discussion and approval <u>Proceedings:</u> Mr. Ryan Jaspher M. Villadiego discussed the proposal, the comments received, and NGCP's corresponding responses, for

Agenda	Agreements / Action Taken / Action Required
	consideration/approval of the RCC. Highlights of the deliberation are as follows: • Ms. Tanglao noted the IEMOP's comment that the definitions be referred to the Philippine Grid Code (PGC) and therefore asked the common standards in reflecting the same in the manuals. The Secretariat confirmed that there is no hard and fast rule in the manner of reflecting the terms. Mr. Edward Olmedo (IEMOP, Commenter) said that their comment on referring defined terms under the PGC from the manual would avoid the scenario of always amending the definition of terms in the manual if the PGC would be changed, although rarely. Mr. Ambrocio Rosales (System Operator) posited to reflect the definition of terms in the manual for easy reference given that the purpose of the proposal is to align it with the definitions provided under the PGC. In this way, the reader would not need to go the PGC to look for the definition. Mr. Fernando Martin Y. Roxas (Independent) said that it would be handy for other readers who are not engineers that the definition of terms are found in the manual. He noted that when there is doubt on the definition, the PGC needs to be used as reference. Mr. Virgilio Fortich, Jr. (Distribution) suggested to indicate the phrase *"consistent with the Philippine Grid Code"* at the end of the sentence to refer to the PGC should there be new changes in the PGC. The body adopted the suggestion of Mr. Fortich, Jr. to apply to all definition of terms lifted from the PGC. • Ms. Tanglao asked if there is anything in the PGC that are not applicable in the WESM, to which Mr. Claudio replied that upon the directive of ERC or any relevant government agency, a provision in the PGC may be suspended, like in the case of reserves where the DOE effectively suspended the use of the new nomenclature for reserve categories. • On the Technical Committee's (TC) comment that repeating PGC provisions increases the length of the manual and sacrifices readability, the body ruled to reflect the definition of the PGC in the manual.

Agenda	Agreements / Action Taken / Action Required
	• On the definition of Automatic Load Dropping (ALD), Mr. Jesus L. Santiago, Jr. (MERALCO, Commenter) said that Under Voltage Load Shedding (UVLS •) would not be applicable to MERALCO since their power transformers are equipped with on-load tap changer and it is site-specific, and they cannot foresee how it would be operationalized in their looped system. Hence, they are suggesting adopting their existing practice of coordinating with SO should there be a need for load dropping. Mr. Rosales confirmed that UVLS is being adopted and site-specific, and it is used to avoid possible severe undervoltage occurrence during faulted condition in the system. He explained that its use would require simulation studies and needs ERC approval before it would be operationalized. He also clarified that it is not applied in transformers but through under voltage relays. With this explanation, Ms. Tanglao asked if the definition would not necessarily require MERALCO to use UVLS, to which Mr. Rosales confirmed. The body adopted the ALD definition with UVLS. • On the definition of contingency reserve, Mr. Rosales disagreed with the proposed revision of term by SPC Island Power Corporation (SPC) from "synchronized *generated* capacity" to "synchronized *generation* capacity". He explained that it is different from the NGCP's proposal of "synchronized *generating* capacity" as the designation of reserves is particular to a generating unit. Generation can consist of several generating units, while reserve is scheduled per unit per type of reserve. Thus, he suggested to retain "synchronized *generating* capacity". Ms. Tanglao asked the DOE representatives to clarify "synchronized *generation* capacity" based on DC2021-03-0009, to which Ms. Melanie Papa confirmed that it should be "synchronized *generation* capacity" as proposed by SPC. • On the definition of critical loading, Mr. Claudio confirmed that the term "continuous rating" is not defined in the PGC, but the term "operational thermal limit capacity" is provided therein which can be interchangeably used with continuous rating per the NGCP. Mr. Rosales opined that continuous rating is the derated capacity of the line, which is not fluctuating, while the operational thermal limit capacity is subject to hotspot, which can have a higher or lower limit susceptible to tripping. He

Agenda	Agreements / Action Taken / Action Required
	agreed with the TC's comment on defining "continuous rating" but noted that it has no basis from the PGC. Thus, he does not agree that "continuous rating" and "operational thermal limit capacity" are synonymous. Mr. Claudio said that "continuous rating" is defined in other jurisdiction as the rating of a component or equipment which defines the substantially constant conditions which can be tolerated for an indefinite time without significant reduction of service life. Mr. Santiago, Jr. shared that as practiced in MERALCO, the continuous rating is the manufacturer's specification. For instance, a conductor is rated as 900 amperes (continuous rating) and the operational limit is expressed as the percentage of the continuous rating (or 80% of the continuous rating). Thorough maintenance is regularly performed and any defect is being corrected immediately to maintain the continuous rating. Mr. Rosales added that the 900 amperes is considered as the rated capacity, to which the instrument is allowed to be used. The body adopted to add the term critical loading as proposed by NGCP. • On the definition of island grid, Mr. Claudio opined that "island" is the better term to avoid misinterpretation with "island grid" that is referred to Palawan or Mindoro, which are portions of the grid which are isolated. On the other hand, Mr. Rosales said that those mentioned islands are called "off-grid". But as used in the proposed definition, it is a smaller island connected through several power plants that can maintain the stability of the grid, which is not connected to the whole system. He opined that the term "island" is not a technical term, thus, he suggested to use the term "island grid". Mr. Claudio explained that the term "island" was taken by the Grid Management Committee (GMC) from the North American Electric Reliability Corporation (NERC) and European Network of Transmission System Operator of Europe (ENTSO-E). The ENTSO-E defined "island" as representing a portion of a power system or of several power systems that is electrically separated from the main interconnected system (e.g. separation resulting

Agenda	Agreements / Action Taken / Action Required
	from the disconnection or failure of transmission system elements). Hence, if used in the manual, there would be no issue as it is a technical term. The NERC defined “island” as a portion of a power system or several power systems that is electrically separated from the interconnection due to the disconnection of transmission system elements. Mr. Fortich, Jr. asked if the “island grid” is synonymous with “off-grid”, to which Mr. Rosales answered that it should be. He explained that in NGCP’s Transmission Development Plan, submarine cables are to be installed in “off-grid” islands. Ms. Tanglao asked Mr. Claudio if using the term “island grid” would be inconsistent with the definition of the PGC, to which Mr. Carlito replied that the previous version of PGC used “island grid” which was replaced with “island” as used in other jurisdiction in the PGC 2016. He said that he was a member of the GMC which revised this definition. Ms. Javier asked if the usage of term island or island grid is significant in the manual, to which Mr. Rosales replied that it is significant especially in the Visayas as the market dispatch optimization model (MDOM) is able to generate an RTD in an island grid. For instance, if the Negros-Panay interconnection trips, it can run an RTD for Panay as an island grid. Mr. Morallos noted in the MS Teams chat that under the Grid Code, it may just be "island"; but in the WESM Rules, it should be clarified as "island grid". To him, the usages are contextual, thus, there is no problem in adding "grid" to "island" if in the WESM Rules, for a clarification. Mr. Jose Roderick Fernando (Independent) also noted in the MS Teams chat that "island" is being defined so it is not taken to mean as the regular meaning of island. Ms. Tanglao and Mr. Fortich, Jr. agreed that there is no conflict in using the term “island grid” in the PGC, to which Mr. Morallos also concurred via MS Teams chat.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 18 of 80

Agenda	Agreements / Action Taken / Action Required
	The body initially agreed to put into vote the term that will be used (island or island grid) but later agreed in adopting "Island or also known as Island Grid". • On the definition of regulating reserve, Ms. Papa confirmed that the term to be used should be "unpredicted" as used in the DOE DC 2021-03-0009. • On net operating margin, Mr. Claudio commented that it is a new term and not defined in PGC. Mr. Rosales asked NGCP's representatives why the term is being proposed to be defined, to which Mr. Ermelindo Bugaoisan, Jr. answered that it is meant to define the capacity that is available for dispatch as energy should be net of the regulating reserve, which is also in accordance with the Constraint Violation Coefficient (CVC) hierarchy which states that the regulating reserve is prioritized over energy. Further, Mr. Rosales asked if the SO can still regulate the supply and demand if the capacity of the regulating reserve has already been exhausted, to which Mr. Bugaoisan, Jr. responded that it is no longer possible, and that manual load dropping should be implemented to allocate the regulating reserve requirement. Therefore, Mr. Rosales explained that SO's purpose in introducing the net operating margin is for purposes of ensuring that the supply and demand will be adequately managed, and it will be used as their reference in issuing alert notices. Mr. Claudio opined that the NGCP should first seek approval from the ERC in introducing the term net operating margin as it may not have legal basis. He added that the PGC has the force and effect of law which must be followed by the grid operator. Meanwhile, Mr. Rosales disagreed with seeking approval from the ERC as the term is only intended to clarify the concept of net and gross, such that the gross capacity will be exhausted first before using the net capacity. He expounded that gross capacity means total capacity less demand, while net capacity means total capacity less regulating reserve and demand. The regulating reserve is deducted from the net to ensure the maintenance of frequency at 60 hertz to maintain the power quality. He emphasized that the concept is not new and the same is likewise explained with the DOE. Mr. Bugaoisan, Jr.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 19 of 80

Agenda	Agreements / Action Taken / Action Required
	also said that it is merely a clarification of SO's current practice, and it is not in conflict with the PGC. Mr. Claudio clarified that he has no opposition on the concept of the net operating margin, but only on the inclusion of the dispatchable reserve when the grid shall be in the normal state as worded in Section 5.1 (b) of the proposal. Mr. Claudio quoted PGC GO 6.2.2.1 (b), which he emphasized that the dispatchable reserve (tertiary reserve) is not being mentioned: *"The Primary and Secondary Reserves are in accordance with the values established in the Ancillary Service Procurement Plan for these types of Reserves."* Ms. Tanglao requested the Secretariat and the DOE Representative to check the provision of the DOE DC2021-03-009 which was the basis of the NGCP for proposing the said section. • Considering that the 5-minutes dispatch interval is being implemented, Mr. Rosales inquired why 1200H is still being used as reference for the day-ahead projection, to which Mr. Bugaoisan, Jr. replied that it is used as basis to declare the reserve requirement, but for the following day, it is on a per interval basis. Also, to answer TC's query on why only the regulating requirement is being considered in the net operating margin, Mr. Bugaoisan, Jr. said that it is the order of priority in the CVC, unless otherwise mandated by the DOE to carve out the three (3) types of reserves or if the RCC would like to indicate the same in the proposal. Mr. Rosales opined that the implementation of manual load dropping would be problematic if all the reserve requirements will be included. • Responding to TC's comment on the definition of security to retain the original provision in the WESM Rules, Mr. Bugaoisan, Jr. posited that the NGCP is bound by the PGC. Mr. Rosales also explained that NGCP's proposal is for SO's provision of additional steps in ensuring the reliability of the grid to avoid system collapse. Further, Mr. Claudio expounded that NGCP's proposed definition has already been included in the 2007 PGC version and may have been overlooked in the 2016 PGC version as the intent of the GMC before was to harmonize the definitions of security, reliability, and dependability with those of NERC and ENTSO-E.

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 20 of 80

Agenda	Agreements / Action Taken / Action Required
	• On the definition of System Integrity Protection Scheme (SIPS), Mr. Claudio said that MERALCO's proposal add the sentence *"It shall only be used on a temporary basis to address N-1 conditions."* is no longer necessary as it is actually used for N-1 and it is temporary in nature. However, there are SIPSs in the system that are installed to address N-2 contingency events. These SIPSs are not temporary because transmission upgrading to resolve N-2 issues would be very expensive and would result in high transmission charges. • On provision regarding Normal State Operation, the loading levels are proposed to be below 90% of the operational thermal limit capacity to avoid re-dispatching and line congestion. Mr. Leo Bugarin (NGCP) clarified that PGC provides for 100% loading level in the normal state and that the proposal would address conflicting interpretations in alert state, where the critical loading is pegged as 90% to 100%. Mr. Claudio agreed on harmonizing the normal state and alert state loading level to below 90% of the operational thermal limit capacity, however, the concept of operational thermal limit and continuous rating must also be harmonized. He proposed the definition of continuous rating as: "*The rating of a component or equipment which defines the substantially constant conditions which can be tolerated for an indefinite time without significant reduction of service life. It is also the maximum constant load that can be carried by a piece of electric equipment without exceeding a designated temperature rise."* The body adopted the definition of continuous rating as proposed by Mr. Claudio. Consequently, the body also adopted to revise the provision to *"below 90% of continuous rating of phase conductors"*. • On Section 5.4 (Single Outage (N-1) Contingency Criterion), Mr. Santiago, Jr. said that MERALCO is also submitting its planned activity to MO, which is still subject for SO's approval, for compliance in the PGC. Mr. Rosales added that the SO furnishes MO the planned activity after approval for it to be reflected in the system. • On Section 5.5 (Grid Operation Notices), Mr. Claudio commented that NGCP's proposal is not in accordance with

Agenda	Agreements / Action Taken / Action Required
	2016 PGC, which uses Primary Reserve (Contingency Reserve) and Secondary Reserve (Regulating Reserve) as basis for declaring alerts. The proposal refers to the net operating margin in declaring alerts. He suggested for NGCP to seek approval of its derogation from PGC with the ERC. Mr. Rosales stated that he agrees with Mr. Claudio, however, the proper basis for the issuance of yellow alert or red alert is the net operating margin. Mr. Bugaoisan, Jr. noted that DOE DC2019-12-0018 mandates the use of the 2007 PGC in ancillary services. Mr. Claudio clarified that the said DC only suspends the PGC provisions related to reserve, but it did not suspend the provisions related to issuance of alert notices. Mr. Bugarin said that the confusion stemmed from the definition of contingency reserve which is composed of the spinning and back-up reserve as defined in the 2007 PGC, to which Mr. Claudio replied that the definition under 2016 PGC should be followed as it defines contingency reserve as the largest generating unit online. Mr. Rosales agreed with Mr. Claudio and advised Mr. Bugarin to treat Primary Reserve as Contingency Reserve, Secondary Reserve as Regulating Reserve, and Tertiary Reserve as Dispatchable Reserve. He said that the matter regarding derogation request will be consulted with NGCP-Legal, which was agreed to by Mr. Bugaoisan, Jr. • Ms. Javier noted in the MS Teams chat that the derogation has already lapsed, quoting TP 10.2.1.6 of the PGC below: *"Any non-compliance of the Grid Users to the requirements set forth in the PGC 2016 Edition, shall apply for derogation to the ERC within sixty (60) days from the effectivity of this Code."* The body agreed to refer the matter of derogation request to ERC Observer for comment and to suspend the discussion of the proposal due to time constraint. • Mr. Rosales said that the proposed provision of MEI/PEI on Grid Operation Notices, stating that Yellow Alert Notices shall be issued when either the contingency reserve or regulating reserve is less than the requirement will cause an hourly issuance of such notice, which may cause panic. Mr. Claudio acknowledged that the lack of contingency reserve is not NGCP's fault as it has been a perennial problem even during

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams

Agenda	Agreements / Action Taken / Action Required
	National Power Corporation's (NPC) time, which can be addressed by the Reserve Market. Resolution: The RCC will continue the deliberation of the proposal and the comments received in the next RCC meeting.
5.4 Proposed Amendments to the WESM Manuals to Include Pricing Error Notice Event as Pricing Condition Category for Claiming Additional Compensation (ORCP-WM-22-01) - Deliberation of Comments and Proponent's Response	Presenter: Secretariat and Proponent Action Requested: For discussion and approval Proceedings: Due to time constraint, the Secretariat suggested to defer the discussion of the proposal. Resolution: The RCC adopted to defer the deliberation to the next RCC Regular Meeting.
5.5. Proposed Amendments on Implementation of the Green Energy Option Program (ORCP-WR-RR-WM-RM-22-02) - GEOP Assessment - Deliberation of Comments and Proponent's Response	Presenter: Secretariat Action Requested: For approval for deferment Proceedings: Due to time constraint, the Secretariat suggested to defer the discussion of the proposal. Resolution: The RCC adopted to defer the deliberation due to time constraint. A special meeting on 25 March 2022 will be conducted to discuss the proposal.
VI. Other Matters	
6.1 DOE Updates	Presenter: DOE Representatives Action Requested: For information Resolution: The RCC adopted to defer the item to the next regular meeting due to time constraint.
V. Schedule of Next Meetings	Presenter: Ms. Dianne L. De Guzman (Secretariat) Action Requested: For information

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams

Agenda	Agreements / Action Taken / Action Required
	The RCC noted the following schedules: • RCC Regular Meetings o 25 March 2022 (Special) o 22 April 2022 o 20 May 2022 o 17 June 2022 • BRC Meeting o 21 March 2022 • PEM Board Meeting o 30 March 2022
IX. Adjournment	Mr. Claudio moved to adjourn the meeting, which was duly seconded by Mr. Rosales and was adopted by the body. The meeting was adjourned at 05:30 PM.

Prepared by:

KATHLEEN R. ESTIGOY
Specialist, Rules Review Division
Market Assessment Group

Reviewed by:

KAREN A. VARQUEZ
Manager, Rules Review Division
Market Assessment Group

Noted by:

JOHN MARK S. CATRIZ
Head, Market Assessment Group

Approved by:

CONCEPCION I. TANGLAO
Chairman, Independent

JESUSITO G. MORALLOS
Member, Independent

MEETING MINUTES

Subject/Purpose : 192nd Rules Change Committee (Regular) Meeting
Date & Time : 18 March 2022, 09:00 AM
Venue : Online via Microsoft Teams
Page : 24 of 80

FERNANDO MARTIN Y. ROXAS
Member, Independent

JOSE RODERICK F. FERNANDO
Member, Independent

DIXIE ANTHONY R. BANZON
Member, Generation Sector
Masinloc Power Partners Co. Ltd. (MPPCL)

CHERRY A. JAVIER
Member, Generation Sector
Aboitiz Power Corp. (APC)

CARLITO C. CLAUDIO
Member, Generation Sector
Millennium Energy, Inc. / Panasia Energy, Inc. (MEI/PEI)

MARK D. HABANA
Member, Generation Sector
Vivant Corporation – Philippines (Vivant)

RYAN S. MORALES
Member, Distribution Sector
Manila Electric Company (MERALCO)

VIRGILIO C. FORTICH, JR.
Member, Distribution Sector
Cebu III Electric Cooperative, Inc. (CEBECO III)

RICARDO G. GUMALAL
Member, Distribution Sector
Iligan Light and Power, Inc. (ILPI)

NELSON M. DELA CRUZ
Member, Distribution Sector
Nueva Ecija II Area 1 Electric Cooperative, Inc. (NEECO II – Area I)

LORRETO H. RIVERA
Member, Supply Sector
TeaM (Philippines) Energy Corporation (TPEC)

ISIDRO E. CACHO, JR.
Member, Market Operator
Independent Electricity Market Operator of the Philippines (IEMOP)

AMBROCIO R. ROSALES
Member, System Operator
National Grid Corporation of the Philippines (NGCP)

ANNEX A - Summary of Revision to the GDL Proposal

ADDITIONAL CHANGES

WGC Manual Proposal

Changes	Provisions
1. Harmonization with DOE Letter dated 24 Feb 2022 (in relation to PAC Manual Proposal)	Recital and Section 1 Definition of Terms Section 5.04
2. Rewording of Term of Office Provisions	Sections 5.5, 6.5, 7.5, 8.5, 9.5, 10.5
3. Compliance Committee Membership	Section 10.1 Section 10.6
4. Technical Committee Membership	For discussion per 191st Meeting Highlights/Minutes

2 Philippine Electricity Market Corporation

1. HARMONIZATION WITH DOE LETTER

Provision	Secretariat's Recommendation
Recital and Section 1 Definition of Terms	For adoption of PEMC's proposed revisions, as provided in the resubmitted proposal on 17 February 2022, which was approved by the RCC during its 191st RCC Regular Meeting on 18 February 2022
Section 5.04	For inclusion of changes in the WGC proposal (lifted from RCC Resolution No. 2021-16 – PAC Proposal)

3 Philippine Electricity Market Corporation

ANNEX A - Summary of Revision to the GDL Proposal

~~Section 5.04~~ 5.4 Responsibilities The PAC ~~headed by the PEM Auditor conducts audit of the operation of the spot market and of the Market Operator in accordance with the following~~ shall: (a) Be responsible for the ~~C~~conduct ~~annual~~ of audits of the ~~Market Operator and the settlement system and any other~~ procedures, persons, systems of the Market Operator and the Metering Services Providers as they are ~~or other matters~~ relevant to the ~~Spot Market~~ spot market or as may be deemed necessary by the PAC; (b) Test and check any enhancements or updates in the market infrastructure including any new items or version of software provided by the Market Operator for use by WESM Members; (c) Review any procedures and practices which are covered by the WESM Rules ~~including but not limited to procedures mentioned in WESM Rule 5.2.6.2~~ at the direction of the PEM Board; (d) Recommend changes to the WESM Rules, Retail Rules and relevant Market Manuals where the PAC ~~detects~~ identified deficiencies as a consequence of an audit, review, test, check or other form of review; (e) Review the security arrangements and requirement of metering installations ~~annually~~ in consultation with the Market Operator and Metering Service Providers; ~~(f) Prepare a report on the result of the spot market audits and publish on the Market Information Website the results of any audit findings and recommendations~~ Publish on the PEMC website the results of any findings and recommendations under this Section; and ~~The PAC shall perform~~ Perform all other functions and duties referred to in the WESM Rules and in accordance with applicable laws and rules.	• For DOE: lifted from the proposal under PEM Board Resolution No. 2021-41-01 / Resolution No. 2021-16 • For item e: Frequency of audit already specified in WESM Rules and PEM Audit Manual.

4 Philippine Electricity Market Corporation

2. REWORDING OF TERM OF OFFICE PROVISIONS

Provision	Rationale
Sections 5.5, 6.5, 7.5, 8.5, 9.5, 10.5 The members of the ***(name of the WGC)*** may be eligible for reappointment but in no case shall ~~his reappointment be made~~ **a member serve** for more than ~~two~~ **three (3)** consecutive terms. **Service by a member for less than one year shall not be considered one term.**	Rewording for clarity Uniform provision for all WGCs

5 Philippine Electricity Market Corporation

2. REWORDING OF TERM OF OFFICE PROVISIONS

Provision	Rationale
Sections 5.5, 6.5, 7.5, 8.5, 9.5, 10.5 The members of the ***(name of the WGC)*** may be eligible for reappointment but in no case shall ~~his reappointment be made~~ **a member serve** for more than ~~two~~ **three (3)** consecutive terms. **Service by a member for less than one year shall not be considered one term.**	Rewording for clarity Uniform provision for all WGCs

6 Philippine Electricity Market Corporation

ANNEX A - Summary of Revision to the GDL Proposal

3. COMPLIANCE COMMITTEE MEMBERSHIP

Provision	Rationale
10.1 Composition. The *Compliance Committee* shall consist of three (3) members. The members of the Compliance Committee shall all be independent. At least one (1) member of the committee shall be a lawyer.	Per WESM Rules 1.8.1, all members are supposed to be independent and as may be deemed by the PEM Board in terms of number A member should be a lawyer since one of the CC's main responsibilities is the oversight on compliance monitoring and investigation, which may, at times, require application of pertinent rules (e.g. legal remedies, due process, etc.) and knowledge on possible legal implications of certain action/s, extensive experience in interviewing, fact-finding and practice of law in general.

7 Philippine Electricity Market Corporation

3. COMPLIANCE COMMITTEE MEMBERSHIP

Provision	Rationale
10.6 Conduct of Business, Voting and Procedure. **xxx** **(c) In case of a vacancy, the remaining members shall continue to perform its functions and duties provided that there is a quorum; provided that, the lack of a lawyer among the remaining members shall not affect the existence of a quorum for the purpose of allowing the Committee to continue to function in the interim; provided further that, the vacancy shall be filled within the timeline prescribed in this Manual.**	To clarify the conduct of business in case the lawyer-member vacates the membership

8 Philippine Electricity Market Corporation

4. TECHNICAL COMMITTEE MEMBERSHIP

RECAP	
1. DOE's Reason for Remanding the Proposal	For PEM Board and RCC to consider the **independence criteria** as major consideration in the WGC composition to ensure consumer protection, enhance the competitive operation of the WESM, and promote investor confidence.
2. BRC's Reason for Remanding the Proposal	To reduce the numbers of independent members due to ERC's decision to reduce PEMC's MTF providing for budgetary requirements of WGCs.
3. Discussion for the inclusion of IT and economics experts	IT expert – WESM Rules 1.7.2 (c)(1) Economics expert – as recommended by TC

9 Philippine Electricity Market Corporation

ANNEX A - Summary of Revision to the GDL Proposal

4. TECHNICAL COMMITTEE MEMBERSHIP

Current Manual	Previous RCC Proposal*	Revised RCC Proposal**	Latest RCC Proposal***	PEMC PROPOSAL	RCC PROPOSAL *192nd RCC Meeting*
At least 5 members: • 2 - independent • 1 - SO • 1 - GMC • 1 - DMC	• 5 - independent 1 - Gen • 1 - DU • 1 - SO • 1 – MO	• 3 - independent 1 - Gen • 1 - DU • 1 - SO • 1 - MO	• 1 - independent • 1 - Gen • 1 - DU • 1 - SO • 1 - MO	• 4 independent members 1 - Economist 1 - IT expert 2 - Electricity market operations expert • 1 – System Operator	• 4 independent members 1 - Economist 1 - IT expert 2 - power industry expert **(covers the market and power systems)** • 1 – System Operator • 1 – Market Operator

**Deliberated by the PEM Board on 27 May 2020*
***RCC Meeting on 17 July 2020*
****BRC Recommendation (July 22) - Reduction of the numbers of independent members due to ERC's decision to reduce PEMC's MTF providing for budgetary requirements of WGCs.*

12

Philippine Electricity Market Corporation

ANNEX B – Updates to the Validation Timeline Adjustment in Metering and Billing proposal

Philippine Electricity Market Corporation

UPDATES TO THE VALIDATION TIMELINE ADJUSTMENT IN METERING AND BILLING PROPOSAL

(RCC Resolution No. 2022-04: Addendum to RCC Resolution 2021-23)

18 March 2022 | via Teams Meeting

BACKGROUND

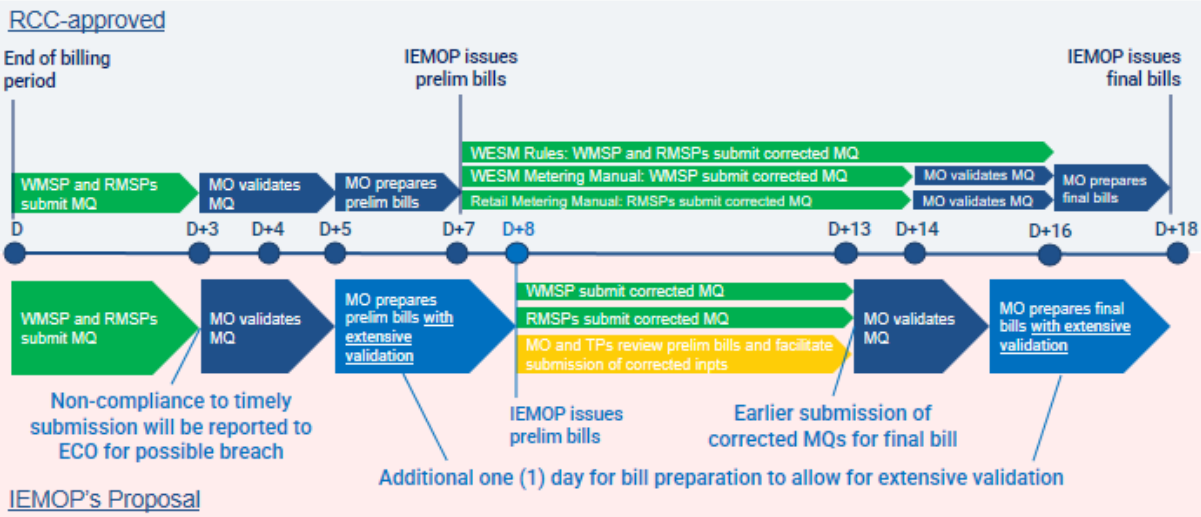
14-Feb-2022
- DOE-IEMOP-PEMC conducted coordination meeting to:
  - ❑ harmonize DOE DC2021-07-0021 and RCC Resolution 2021-23
  - ❑ discuss PEMC's implementation of MSP performance monitoring related to DOE DC

18-Feb-2022
- Secretariat presented the updates of the meeting and requested RCC's approval to request comments from NGCP (WMSP) and DUs (RMSPs).
- RCC approved the request giving consideration that their inputs are significant

18-Mar-2022
- Deliberation of comments
- Finalization of RCC Resolution 2022-04: Addendum to RCC Resolution 2021-23

Philippine Electricity Market Corporation

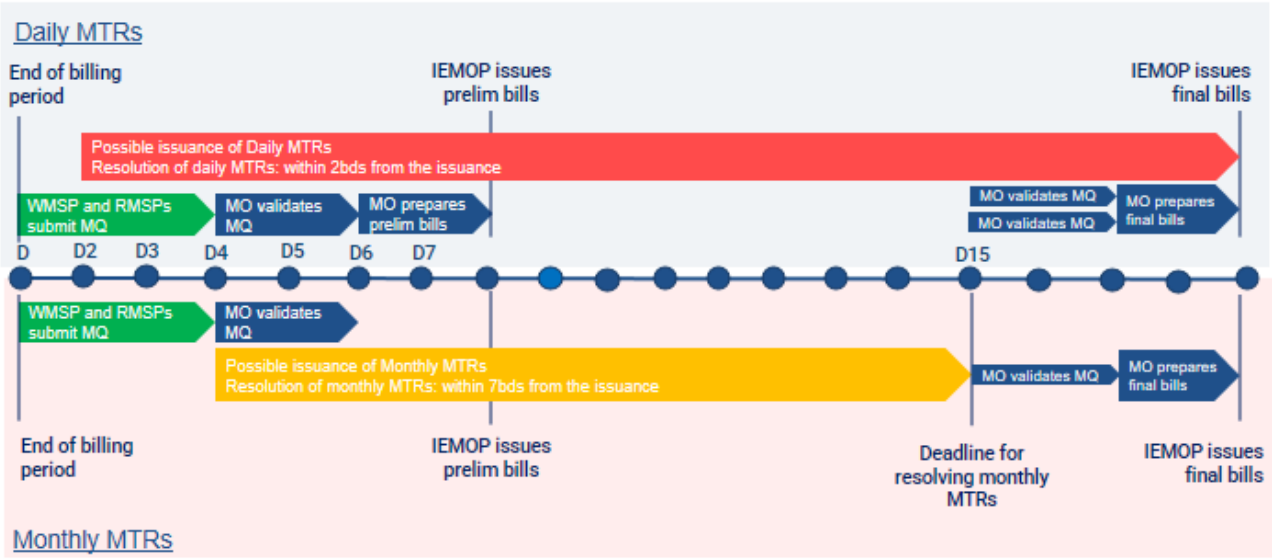
RCC RESOLUTION 2021-23



Philippine Electricity Market Corporation

ANNEX B – Updates to the Validation Timeline Adjustment in Metering and Billing proposal

RCC 2022-04: PROPOSED ADDENDUM TO RCC RESO 2021-23



Philippine Electricity Market Corporation

COMMENTS RECEIVED

WMSP (NGCP)	RMSP (DUs)
For Daily MTRs, NGCP concurs with DOE's 7 business days in the conditions that not all MTRs can be resolved within 2 business days. (ex. MTR with "No Data" must be visited in the metering facility to restore communication link which are dependent on locations, mode of transportation (by land and/or sea), clearance to enter the facility and vehicle and manpower availability. In addition, the scope of the WESM MSP, in terms of quantity and geographical area, is significantly larger compared to RMSP	None (as of today)

Philippine Electricity Market Corporation

ANNEX B – Updates to the Validation Timeline Adjustment in Metering and Billing proposal

FOR RCC'S CONSIDERATION DURING DELIBERATION

- Impact of timeline in the CRSS and IEMOP's process
- PEMC is having a study (2Q of 2023) will focus on the impact of poor rating results and the establishment of criteria for endorsing them to further investigation; and the transfer of investigation (governance) functions as regards metering inaccuracy matters from Market Operator to Governance Arm

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

A. WESM Manual on System Security and Reliability Guidelines Issue 1.0

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
Definition of Terms	Section2	Automatic Generation Control (AGC). The regulation of the power output of generating units within a prescribed area in response to a change in system frequency, tie-line loading, or the relation of these to each other, so as to maintain the system frequency or the established interchange with other areas within the predetermined limits or both.	Propose to revise as follows: "Automatic Generation Control (AGC). **It is an equipment that automatically adjusts the generation to maintain its generation dispatch, interchange schedule plus its share of frequency regulation. AGC is a combination of secondary control for a control area /control block and real-time operation of the generation dispatch function (based on generation scheduling). secondary control is operated by the System Operator while generation scheduling is operated by the respective generation companies.** ~~The regulation of the power output of generating units within a prescribed area in response to a change in system frequency, tie-line loading, or the relation of these to each other, so as to maintain the system frequency or the established interchange with other areas within the predetermined limits or both.~~"	For consistency with the definition in the PGC 2016 Edition.	**(1) IEMOP:** We note that this definition is based on the PGC. We advise that the definition of the AGC just be referred to the PGC. **(2) MERALCO:** Minor typographical error	**(1) IEMOP:** Automatic Generation Control (AGC). ~~The regulation of the power output of generating units within a prescribed area in response to a change in system frequency, tie-line loading, or the relation of these to each other, so as to maintain the system frequency or the established interchange with other areas within the predetermined limits or both.~~ **As defined in the Philippine Grid Code.** **(2) MERALCO:** **Automatic Generation Control (AGC)**. It is an	(1) We reflected what is defined in the PGC 2016 Ed. We refer the decision to the RCC. (2) Agree with MERALCO's comment.	Approved to reflect the definition of terms in the manual Approved: **Automatic Generation Control (AGC)**. It is an equipment that automatically adjusts DOE the generation to maintain its generation dispatch, interchange schedule plus its share of frequency regulation. AGC is a combination of secondary control for a control area /control block and real-time operation of the generation dispatch function (based on generation scheduling). Secondary control is operated by the System Operator while generation scheduling is

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					TC: 1) Review PGC provisions versus the proposed SSRG for consistency. If	equipment that automatically adjusts the generation to maintain its generation dispatch, interchange schedule plus its share of frequency regulation. AGC is a combination of secondary control for a control area /control block and real-time operation of the generation dispatch function (based on generation scheduling). Secondary control is operated by the System Operator while generation scheduling is operated by the respective generation companies.		operated by the respective generation companies, ***"consistent with the Philippine Grid Code."***

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					there is anything in the PGC that does not apply in the WESM, then we can propose new definitions in the WESM Rules. We may also consider revisiting the PGC to update such definitions. 2) Keep PGC/PDC provisions only as reference in SSGR not copied entirely so that any relevant PGC/PDC changes will not always trigger SSGR revision. Other general comments: 1.The proposal is made in the pre-text of enhancement for the Reserve			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Market but a lot of changes are not relevant to Reserve Market 2.Repeating PGC provisions – for clarity and consistency have increased the length of the SSGR Manual sacrificing readability 3.Repetitious Definitions – some definitions are too lengthy and repetitious even from the PGC sacrificing readability. 4.Propagation of Changes – some errors or misconceptions in the PGC can be propagated to the SSGR, WESM Rules and Dispatch			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Protocol. Revising PGC before SSGR or WESM Rules - PGC by default takes precedence over WESM Rules and SSGR. *We have no comment on the proposed definition of AGC.*			
		Automatic Load Dropping (ALD). The process of automatically and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system.	Propose to revise as: "Automatic Load Dropping (ALD). The process of automatically and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system. **It can be classified as: Under-Frequency Load Shedding (UFLS); and Under-Voltage Load Shedding (UVLS).**"	For consistency with the definition on PGC2016 and Dispatch Protocol Issue 16.0.	**(3) IEMOP:** We note that this definition is based on the PGC. We advise that the definition just be referred to the PGC.	**(3) IEMOP:** Automatic Load Dropping (ALD). ~~The process of automatically and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system.~~ **As defined in the Philippine Grid Code.**	(3) Same comment as above (Comment 1)	Retained the proposal with revision insert phrase - ***"consistent with the Philippine Grid Code."***

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					(4) MERALCO: We would like to seek clarification on how UVLS will be implemented. It should be noted that ALD is actuated to restore system frequency to acceptable levels when there are generation and/or transmission outages in the grid. Low voltage, on the other hand, is site-specific and DU transformers have automatic voltage regulators. We would also like to seek clarification if low voltages requiring UVLS implementation will occur under	**(4) MERALCO:** **Automatic Load Dropping (ALD)**. The process of automatically and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system. It can be classified as Under-Frequency Load Shedding (UFLS)~~;~~ ~~**and Under-Voltage Load Shedding (UVLS)**~~	(4) Suggest to retain the proposal for consistency with the PGC 2016 Ed. definition. However, implementation of UVLS is still pending. For Visayas, there is a proposal to implement UVLS, for voltage stability during N-1.	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					N-0 or N-1 conditions. It should be noted that low voltage under N-0 condition should not result in load dropping. Thus, it is suggested to remove UVLS in the ALD classification.			
		Backup Reserve (also called cold standby reserve). Refers to a generating unit that has fast start capability and can synchronize with the grid to provide its declared capacity for a minimum period of eight (8) hours.	Propose to delete.	This reserve classification is no longer used in PGC 2016 edition.				Approved
		Contingency. The unexpected failure or outage of a system component, such as a generator, transmission line, power transformer, bus, circuit breaker, or other electrical element. A contingency may also include multiple components, which are related by situations leading to simultaneous component outages.	Propose to revise as follows: "Contingency. **The outage of a single component of the grid that cannot be predicted in advance but which excludes scheduled maintenance.** ~~The unexpected failure or outage of a system component, such as a generator, transmission line, power transformer, bus, circuit breaker, or other electrical element. A contingency may also include~~	For consistency with the definition in the PGC 2016.	**(5)IEMOP:** We advise that the definition just be referred to the PGC.	**(5)IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(5) Same as above	Approved

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			~~multiple components, which are related by situations leading to simultaneous component outages.~~"					
		Contingency Reserve. The generating capacity that is intended to take care of the loss of the largest synchronized generating unit or the power import from a single grid interconnection, whichever is larger. Contingency reserve includes spinning reserve and backup reserve.	Propose to revise as: "Contingency Reserve. The **synchronized** generating capacity **from qualified generating units and qualified interruptible loads allocated to cover** ~~that is intended to take care of~~ the loss **or failure** of ~~the largest~~ synchronized **a** generating unit or **a transmission element or the power import from a circuit interconnection** ~~the power import from a single grid interconnection, whichever is larger. Contingency reserve includes spinning reserve and backup reserve~~."	For consistency with the definition of Contingency Reserve based on DOE DC2021-03-0009.	**(6)SPC:** Minor edit, verbatim adoption from the DC, 1. Revised the word of generating to generation. 2. Interchange the words from "synchronized **a to a** synchronized". **(7) MERALCO:** Misplaced "a". It should be before "synchronized".	**(6) SPC:** **"**Contingency Reserve. The **synchronized** generation capacity **from qualified generating units and qualified interruptible loads allocated to cover** ~~that is intended to take care of~~ the loss **or failure** of ~~the largest~~ **a** synchronized generating unit or **a transmission element or the power import from a circuit interconnection** ~~the power import from a single grid interconnection, whichever is larger. Contingency reserve includes spinning reserve and backup reserve~~."	(6) Agree to adopt the verbatim wording. We refer the decision to the RCC. (7) Agree with MERALCO's comment. We refer the decision to the RCC.	Adopted DOE DC's definition

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
						(7)MERALCO: **Contingency Reserve**. The synchronized generating capacity from qualified generating units and qualified interruptible loads allocated to cover the loss or failure of **a** synchronized ~~**a**~~ generating unit or a transmission element or the power import from a circuit interconnection.		
		NEW	Propose to add: "**Critical Loading. This refers to the condition where the loading of transmission lines or substation equipment is between 90 percent and 100 percent of the continuous rating.**"	For consistency with PGC2016 and in reference to the usage in Section 5.2 (d).	**(8) IEMOP:** We advise that the definition just be referred to the PGC. **TC:** 1. This may be referring to SSRG 5.2 (b) instead of (d). 2. **Continuous rating** should be defined for clarity	**(8) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(8) Same as above	Adopted IEMOP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					since it has been used frequently for the NSP to commit on. This will also serve as reference on what should be observed by the MO and SO for dispatch and pricing. 3. This proposal is made in the pre-text of enhancement for the Reserve Market but this proposed amendment is not relevant to Reserve Market.			
		NEW	Propose to add: "**Demand Control. The reduction in demand for the control of the frequency, when the grid is in an emergency state. This includes automatic load dropping, manual load dropping, demand reduction upon instruction by the System Operator and voluntary demand managament.**"	For consistency with PGC2016 and in reference to the usage in Section 5.	**(9) PEMC:** Change "voluntary demand management" to "voluntary load management" for consistency with PGC 2016.		(9) Our proposal reflects the definition used in the PGC. Suggest to retain our proposal.	Adopted NGCP's definition

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					(10) IEMOP: We advise that the definition just be referred to the PGC. **(11) MERALCO:** We would like to seek clarification if Demand Control also covers non-frequency constraints, such as transmission and equipment overloading.	**(10) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(10) Same as above responses (11) Demand control is implemented during transmission and equipment overloading as last resort.	
		NEW	Propose to add: "**Dispatchable Reserve. Generating capacity that are readily available for dispatch in order to replenish the Contingency Reserves whenever a generating unit trips or a loss of a single transmission interconnection occurs**."	For consistency with DC2021-03-009 and in reference to the usage in Section 5.				Approved
		NEW	Propose to add: "**Imminent Overloading. The condition when the loading of transmission lines or substation**	For consistency with PGC2016 and in	**(12) PEMC:** The proposed term "imminent overloading" is		(12) The proposal reflects what is being defined in the PGC. Suggest to	Adopted NGCP's definition

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			Equipment is above 100 percent up to 110 percent of the continuous rating."	reference to the usage in Section 5.2 (d).	not defined in PGC 2016, but is mentioned in the definition of "red alert". Suggest changing the rationale. **(13) IEMOP:** We advise that the definition just be referred to the PGC. **TC:** This may be referring to SSRG 5.2 (b) instead of (d).	**(13) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	retain our proposal. (13) Same as above responses	
		Island Grid. A portion of a power system or several power systems that is electrically separated from the interconnection due to the disconnection of transmission system elements.	Propose to revise: "Island ~~Grid~~. A **generating plant** ~~portion of a power system~~ or **a group of generating plants and its associated load, which is isolated from the rest of the grid but is capable of generating and maintaining a stable supply of electricity to customers within an isolated area** ~~several power systems that is electrically separated from the interconnection~~	For consistency with PGC2016 and in reference to its usage in Section 5.11.	**(14) IEMOP:** We advise that the definition just be referred to the PGC. **(15) MERALCO:** It is suggested to retain "Grid" for better technical term.	**(14) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(15) MERALCO:** **Island Grid**. A generating plant or a group of generating plants and its associated load, which is isolated from	(14) Same as above Responses (15) The proposal is consistent with the PGC 2016 Ed. definition. Suggest to retain the proposal for consistency with	Approved as revised: Island (also known as Island Grid)

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			~~due to the disconnection of transmission system elements~~.		**TC:** 1. The term "Island Grid" maybe confused with "Small Island Grids". 2. Suggest to define "**Islanding"** which is the isolation event and **"Island Operation"** which is the outcome of the event or part of the restoration process.	the rest of the grid but is capable of generating and maintaining a stable supply of electricity to customers within an isolated area.	the PGC 2016 Ed. or we add also known as "Island Grid"	
		NEW	Propose to add: "**Islanding Operation. The isolated operation of certain portions of the grid as a result of forced outages or contingency action by the System Operator.**"	For consistency with PGC2016 and in reference to its usage in Sections 5.9 and 5.11.	**(16) PEMC:** The proposed term "islanding operation" is not defined in PGC 2016 but is mentioned under Section 4.5.9.1 of PGC 2016 (Protection		(16) The proposal reflects what is being defined in the PGC 2016 Ed. Chapter 1 GC 1.7 Definitions.	Adopted NGCP's Proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Arrangements). Suggest changing the rationale. **(17) IEMOP:** We advise that the definition just be referred to the PGC. **(18) SPC:** During Grid Islanding Operation (i.e. Bohol Islanding), we suggest that NGCP's ASPA will not be cancelled/suspended since the Grid Islanding Operation still needs Ancillary Services for its system reliability. Likewise, the Reserve Market should not be cancelled during Grid Islanding Operation.	**(17) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(18) SPC:** **Islanding Operation. The isolated operation of certain portions of the grid as a result of forced outages or contingency action by the System Operator. Although on islanding operation, the NGCP's ASPA and Reserve Market will continue to be operational since Grid Islanding Operation still needs Ancillary Services for its system reliability.**	17) Same as above responses (18) Suggest to retain our proposal for consistency with the PGC 2016 Ed. provision. If an Ancillary Service Provider is scheduled within the isolated island operation, they are still dispatched, particularly if in Governor Control Mode, provided there are still available monitoring and data for compliance	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					(19) MERALCO: For clarity, it is suggested to cite specific "forced outages" envisioned in the context of the proposed definition. **TC:** Island Operation can also be employed as an emergency procedure or restoration measure by SO.		monitoring, as provided by the plant. (19) No need to cite examples in this Manual.	
		Load Following and Frequency Regulating (LFFR) Reserve. The amount of generating capacity that provides for following the moment-to-moment variations in demand or supply in a power system and for maintaining acceptable system frequency.	Propose to revise as: ~~Load Following and Frequency~~ Regulating ~~(LFFR)~~ Reserve. ~~The amount of generating capacity that provides for following the moment-to-moment variations in demand or supply in a power system and for maintaining acceptable system frequency.~~ **These are readily available and dispatchable generating capacity that is allocated exclusively to correct deviations from the acceptable**	For consistency with the Regulating Reserve definition of the DOE DC2021-03-0009.	**(20) MERALCO:** For clarity, it is suggested to replace "unpredicted" with "**unpredictable".**	**(20) MERALCO: Regulating Reserve**. These are readily available and dispatchable generating capacity that is allocated exclusively to correct deviations from the acceptable nominal frequency caused by **unpredictable** ~~**unpredicted**~~	(20) Definition should be consistent with the DOE DC. Suggest to retain our proposal.	NGCP's proposal retained

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			nominal frequency caused by unpredicted variations in demand or generation output.			variations in demand or generation output.		
		Manual Load Dropping (MLD). The process of manually and deliberately removing preselected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system.	Propose to revise as: "Manual Load Dropping (MLD). The process of manually and deliberately removing preselected loads from a power system in response to an abnormal condition in order to maintain the integrity of the **power** system.	For consistency with PGC 2016 definition.	**(21) PEMC:** Clerical edit for the term "Manual Load Dropping (MLD)" – "preselected" to "pre-selected" **(22) IEMOP:** We advise that the definition just be referred to the PGC.	**(22) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(21) We refer the decision to the RCC (22) Same response as above	Approved.
		Multiple Outage Contingency. An event caused by the failure of two (2) or more components of the grid including generating units, transmission lines, and transformers.	Propose to revise as follows: Multiple Outage Contingency. An event caused by the failure of two (2) or more components of the grid ~~including generating units, transmission lines, and transformers~~.	For consistency with the definition in PGC 2016.	**(23) IEMOP:** We advise that the definition just be referred to the PGC. **(24) MERALCO:** Outage Contingency" is redundant with the definition of *Contingency: The **outage** of a single component of the grid that cannot be*	**(23) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(24) MERALCO:** **Multiple ~~Outage~~ Contingency**. An event caused by the failure of two (2) or more components of the grid.	(23) Same response as above (24) This is as defined in the PGC 2016 Ed. Suggest to retain our proposal for consistency with the PGC 2016 Ed. definition.	Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					predicted in advance but which excludes scheduled maintenance. Thus, it is suggested to delete "Outage".			
		Operating Margin. The margin of generation over the total demand plus losses that is necessary for ensuring power quality and the security of the grid. Operating margin is the sum of the load following and frequency regulating reserve and the contingency reserve.	Propose to revise as follows: "Operating Margin. ~~The margin of generation over the total demand plus losses that is necessary for ensuring power quality and the security of the grid. Operating margin is the sum of the load following and frequency regulating reserve, and the contingency reserve~~**The available generating capacity in excess of the sum of the system demand plus losses within a specified period of time.**."	For consistency with the definition of operating margin in PGC 2016.	**(25) IEMOP:** We advise that the definition just be referred to the PGC. **TC:** For Clarity, the TC suggests to: 1. Introduce "Gross Operating Margin" as the net available generating capacity in excess of demand plus losses. 2. Differentiate "Net" and "Gross" generating capacities where -	**(25) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **TC:** "Operating Margin **also known as Gross Operating Margin**. **The available generating capacity in excess of the sum of the system demand plus losses within a specified period of time.**."	(25) Same response as above	Adopted TC's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					• Gross Available Capacity is the total generating capacity declared as available by generators to SO. • Net Available Generating Capacity is declared by SO based on reliability assessment, variability, parasitic loads unit testing etc...			
		NEW	Propose to add: "**Net Operating Margin** **The available generating capacity in excess of the sum of the system demand plus losses and regulating reserve within a specified period of time.**"	Introduced in reference to its use in Section 5.2 (a).	**(26) MEI/PEI:** Net Operating Margin is a term not defined nor used in PGC 2016. Hence, this term and its intended use in Section 5.5 (a)		(26) Noted. (27) Agree with IEMOP's	Approved as revised: "Net Operating Margin The available generating capacity in excess of the sum of the system demand plus losses and regulating reserve

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					are extra-PGC requirements. **(27) IEMOP:** We note that the Net Operating Margin looks like it took off from the definition of the Operating Margin in the PGC, but just added regulating reserve. However, please be clear on what type of measure should be used: regulating reserve schedule or regulating reserve requirement. We suppose it is regulating reserve requirement. **TC:** Why consider regulating requirement only?	**(27) IEMOP:** **Net Operating Margin** **The available generating capacity in excess of the sum of the system demand plus losses and regulating reserve requirement within a specified period of time.**	comment. We suggest to further revise the provision as follows: "Net Operating Margin The available generating capacity in excess of the sum of the system demand plus losses and regulating reserve requirement within a specified period of time based on the 1200H day-ahead projection of the Market Operator." **TC:** "Net Operating Margin The available **net** generating	requirement within a specified period of time based on the 1200H day-ahead projection of the Market Operator."

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					It should **include all reserve requirements.**		capacity in excess of the sum of the system demand plus losses and ~~regulating reserve~~ **total reserve requirement** within a specified period of time."	
		Security. The ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements.	Proposed to revise as follows: "**Security. The continuous operation of a power system in the normal state, ensuring safe and adequate supply of power to end-users, even when some parts or components of the system are on outage**~~The ability of the electric system to withstand sudden disturbances such as electric short circuits or unanticipated loss of system elements~~."	For consistency with the definition used in PGC 2016 Edition.	**(28) IEMOP:** We advise that the definition just be referred to the PGC. **(29) MERALCO** Inserting the word "some" introduces qualification in the definition. It is suggested to delete "some" since the definition can still stand without it. We would also like to seek	**(28) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(29) MERALCO** **Security**. The continuous operation of a power system in the normal state, ensuring safe and adequate supply of power to end-users, even when ~~some~~ parts or components of the system are on outage	(28) Same with responses above (29) Suggest to retain our proposal for consistency with the PGC 2016 Ed. definition	Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					clarification if the proposed definition excludes the impact of transient disturbances, such as overvoltage. **TC:** Retain the original provision in the WESM Rules. Please see below justifications: i. Security is defined in the PGC as an operation in the normal state like it is an action or process while the SSGR defines is as an ability or capability. The latter seems more logical.			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					ii. By PGC definition in GO6.2.2 the grid is already in the alert state if N-1 requirement is not met and in the emergency state if N-1 event occurs. If the grid is not in a normal state it implies absence of "Security". iii. The Grid Operating States are just descriptions of security conditions when threats or contingencies exists whether internal or external.			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					iv. Security is the ability or capability of the grid to withstand or mitigate the threats and contingencies described in the grid operating states. v. Following this logic, it would be unrealistic to remain in the normal state because threats and contingencies are unavoidable. In addition, this proposal is made in the pre-text of enhancement for the Reserve Market but this proposed amendment is			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					not relevant to Reserve Market			
		Single Outage (N-1) Contingency. An event caused by the failure of one component of the grid including a generating unit, transmission line, or transformer.	Propose to revise as: "Single Outage ~~(N-1)~~ Contingency **(N-1)**. An event caused by the ~~failure~~ **outage** of one component of the grid including**:** ~~a generating unit, transmission line, or transformer."~~ **(a) Loss of a single-circuit transmission line, except those radial circuits which connect Loads using a single line or cable;** **(b) Loss of one circuit of a double-circuit transmission line including the point-to-point connection of a Generating Plant to the Grid;** **(c) Loss of submarine cable;** **(d) Loss of a single Transformer, except those which connect Loads using a single radial Transformer;** **(e) Loss of a Generating Unit; and** **(f) Loss of compensating devices, i.e., Capacitor/Reactor/SVC**	For consistency with the definition and Section 6.2.1.1 of the PGC 2016.	**(30) IEMOP:** We advise that the definition just be referred to the PGC. **(31) MERALCO** "Outage Contingency" is redundant with the definition of *Contingency*: *The **outage** of a single component of the grid that cannot be predicted in advance but which excludes scheduled maintenance.* Thus, it is suggested to delete "Outage".	**(30) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(31) MERALCO** **Single ~~Outage~~ Contingency (N-1)**. An event caused by the outage of one component of the grid including: xxx	30) Same with responses above (31) This is as defined in the PGC 2016 Ed. Suggest to retain our proposal for consistency with the PGC 2016 Ed. definition.	Adopted NGCP's proposal
		Spinning Reserve (also called hot standby reserve). The component of contingency reserve which is synchronized to the grid and ready to take on load.	Propose to delete.	This reserve type is no longer used in PGC 2016 edition.	**(32) IEMOP:** We advise that the definition just be referred to the PGC.	**(32) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(32) This was proposed to be deleted. This is no longer defined in the	Approved to delete

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
							PGC 2016 Ed. and there is nothing to refer it with.	
		System Integrity Protection Scheme (SIPS). A protection system that is designed to detect abnormal or predetermined system conditions, and take automatic corrective actions.	Revise as follows: "System Integrity Protection Scheme (SIPS). A protection system that is designed to detect abnormal or predetermined system conditions, and take automatic corrective actions **other than and/or in addition to the isolation of faulted components in order to preserve the integrity of the power system or strategic portions thereof.**"	For consistency with the definition under the PGC 2016.	**(33) IEMOP:** We advise that the definition just be referred to the PGC. **(34) MERALCO** The transmission grid should be N-1 compliant. As provided in ERC Resolution No. 16, Series of 2015 entitled "A Resolution Adopting the Grid Management Committee's Proposed Amendments to Annex "A" of ERC Resolution No. 21, Series of 2014", in case an element/s of the existing network lacks N-1 security, a	**(33) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.* **(34) MERALCO** **System Integrity Protection Scheme (SIPS)**. A protection system that is designed to detect abnormal **parameters** or predetermined system conditions, and take automatic corrective actions other than and/or in addition to the isolation of faulted components in order to preserve the integrity of the power system or strategic portions thereof. **It shall only be used on a temporary**	(33) Same response as above (34) Suggest to retain our proposal to be consistent with the PGC 2016 Ed. definition.	Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					temporary measure, such as SIPS, should be made available for the time being that a permanent network improvement is still pending. Thus, if SIPS is needed to protect the system for N-1 conditions, it should be temporary only. It is also suggested to add "parameters" for clarity.	**basis to address N-1 conditions.**		
		Voltage Control. The control of transmission voltages through adjustments in generator reactive output and transformer taps and by switching capacitor and reactors on the transmission and distribution systems.	Propose to revise as: "Voltage Control. ~~The control of transmission voltages through adjustments in generator reactive output and transformer taps and by switching capacitor and reactors on the transmission and distribution systems.~~ **Any actions undertaken by the System Operator or user to maintain the voltage of the Grid within the limits prescribed**	For consistency with the definition on the PGC2016.	**(35) IEMOP:** We advise that the definition just be referred to the PGC.	**(35) IEMOP:** *Same proposed approach as previous proposed revision for PGC references.*	(35) Same with responses above.	Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			by the Philippine Grid Code such as, but not limited to, adjustment of generator reactive output, adjustment in transformer taps or switching of capacitors or reactors."					
OBJECTIVE	Section 3	Preservation of system reliability and security is the primary objective of these guidelines and is the responsibility of the System Operator. This mandate is clearly vested under Clause 3.8.2.1 (b) of the WESM Rules which stipulates that, during each trading interval, the System Operator shall use its reasonable endeavors to maintain system security consistent with the requirements of the Grid Code. Minimization of customer service interruptions and quick restoration of the power system to the normal state are secondary objectives of these guidelines. This document prescribes general guidelines that must be followed by all WESM Participants to maintain the security and reliability of the Luzon, Visayas and Mindanao power systems. These	Propose to revise as: "Preservation of system reliability and security is the primary objective of these guidelines and is the responsibility of the System Operator. This mandate is clearly vested under Clause 3.8.2.1 (~~b~~**c**) of the WESM Rules which stipulates that, during each ~~trading~~ **dispatch** interval, the System Operator shall use its reasonable endeavors to maintain system security consistent with the requirements of the Grid Code. Minimization of customer service interruptions and quick restoration of the power system to the normal state are secondary objectives of these guidelines. xxx"	For consistency with the provisions of the WESM Rules.				Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		guidelines are based on existing practices and the Grid Code and Distribution Code requirements and developed in accordance with Clause 6.6.1.1 of the WESM Rules which states that the System Operator, in consultation with WESM Participants and the Market Operator, shall develop and periodically update system security and reliability guidelines, subject to approval of the PEM Board. These guidelines provide supplementary provisions for the improvement of WESM operations in ensuring the security and reliability of the grid. However, in case of conflict in the achievement of the objectives of the Grid Code, the provisions of the Grid Code shall prevail.						
Normal State Operation	5.1	The grid shall be operated so that it remains in the normal state, i.e.: (a) The operating margin is sufficient.	Propose to revise as follows: "5.1 Normal State Operation The Grid shall be **considered to be in the Normal State when** ~~operated so that it remains in the normal state, i.e.~~:	For consistency with PGC2016	**(36) MEI/PEI:** MEI and PEI would like to clarify from the proponent if operational thermal limit capacity is the		(36) Yes. As declared, it is the same.	Adopted NGCP's proposal with revisions (e) ~~The grid configuration is such that any potential fault current can be~~

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		(b) The grid frequency is within the limits as set forth in the Grid Code. (c) Voltages at all connection points are within the limits of 0.95 and 1.05 of the nominal value. (d) The loading levels of all transmission lines and transformers are below the limit as set forth in the Grid Code. (e) The grid configuration is such that any potential fault current can be interrupted and the faulted equipment can be isolated from the grid. (f) The static and dynamic stability of the power system is maintained. (g) The single outage contingency (N-1) criterion is met.	(a) ~~The operating margin is sufficient.~~ **The Single Outage Contingency (N-1) Criterion is met;** (b) ~~The grid frequency is within the limits as set forth in the Grid Code.~~ **The Regulating, Contingency and Dispatchable Reserves are in accordance with the values established in the Ancillary Service Procurement Plan for these types of Reserves;** (c) ~~Voltages at all connection points are within the limits of 0.95 and 1.05 of the nominal value.~~ **The Grid Frequency is within the +/- 0.3 Hz limits.** (d) ~~The loading levels of all transmission lines and transformers are below the limit as set forth in the Grid Code.~~ **The voltages at all transmission substations are within 95% to 105% of the nominal voltage limits.** (e) ~~The grid configuration is such that any potential fault current can~~	provisions regarding normal state on GO 6.2.2.1. For consistency with PGC 2016 6.2.21 (b). Revised PR and SR to RR CR, and included DR, for consistency with DC2021-03-009. For consistency with PGC2016 PST 3.2.2 and GCR 6.2.2.1(c). For consistency with PGC2016 PST 3.2.2 and GCR 6.2.2.1(d).	same as continuous rating. Operational thermal limit is defined in PGC 2016 as the maximum capacity of transmission facilities determined and declared by the System Operator and Transmission Network Provider which is submitted to GMC for validation annually. It is our understanding that the operational thermal limit capacity is the confidence level given by the Transmission Network Provider to a particular transmission				~~interrupted and the faulted equipment can be isolated from the grid.~~ **The loading levels of all transmission lines and substation equipment are below 90% of continuous rating of phase conductors and transformers as certified and submitted by the Transmission Network Provider; and**

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			~~be interrupted and the faulted equipment can be isolated from the grid.~~ **The loading levels of all transmission lines and substation equipment are below 90% of the operational thermal limit capacity of phase conductors and transformers as certified and submitted by the Transmission Network Provider; and** (f) ~~The static and dynamic stability of the power system is maintained.~~ **The grid configuration is such that any potential fault current can be interrupted and the faulted equipment can be isolated from the grid.** ~~(g) The single outage contingency (N-1) criterion is met.~~"	In reference to PGC2016, GO 6.2.2.1 (e), originally 100% loading level, per PGC 2016. Proposed to be lowered to 90% to address conflicting interpretations in Alert State (Critical Loading = 90% to 100% loading). For consistency with PGC2016, GO 6.2.2.1 (f).	facility based on operational experience and practice, which is not necessarily equivalent to the designed continuous rating of the said facility. **(37) IEMOP:** Item (b) includes dispatchable reserves, however, PGC2016 clause 6.2.2.1 (b) only takes note of Primary and Secondary reserves, which we think are equivalent to Contingency and Regulating reserve. Please clarify the difference in this proposal.		(37) On item (b), Normal conditions is not dependent on availability of reserves but on the Net Operating Margin, further suggest to revise 5.1(b): **"The Net Operating Margin must be above the highest plant online."**	**"The Net Operating Margin must be equivalent to highest generating unit online."** – (approved, but deleted during 195th RCC Meeting for further discussion)

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Also, if there is insufficient reserves scheduled to meet the requirement, then it means the different grids are always not in Normal State? For item (e), there is no defined value for Operational Thermal Limit Capacity. It is only defined as *the maximum capacity of transmission facilities determined and declared by the System Operator and Transmission Network Provider which is submitted to GMC for validation annually*. We		On item (e), we would like to request for IEMOP's further elaboration of the query.	Approved: Continuous Rating The rating of a component or equipment which defines the substantially constant conditions which can be tolerated for an indefinite time without significant reduction of service life. It is also the maximum constant load that can be carried by a piece of electric equipment without exceeding a designated temperature rise.

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					suggest instead to define Operational Thermal Limit Capacity, then state that it shall be based on Critical Loading. **(38) MERALCO** "Outage Contingency" is redundant with the definition of *Contingency*: *The **outage** of a single component of the grid that cannot be predicted in advance but which excludes scheduled maintenance.* Thus, it is suggested to delete "Outage". **TC:** For item 5.1 (e)	**(38) MERALCO** xxx (a)The Single ~~**Outage**~~ Contingency (N-1) Criterion is met; xxx	(38) Suggest to retain "Outage" for consistency with the PGC 2016 Ed.	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					1. In GO6.2.2.1(e) lowering the loading level from 100% to 90% for normal state is like relaxing the performance requirement for NSP. In reference to PGC2016, GO 6.2.2.1 (e), originally 100% loading level, per PGC 2016. Proposed to be lowered to 90% to address conflicting interpretations in Alert State (Critical Loading = 90% to 100% loading). 2. These may have implications on MI and LMP in WESM.			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Request for the **MO's clarification on the impact** of this proposed amendment in the WESM.			
Alert State	5.2	The Grid shall be considered to be in the alert state when any one of the following conditions exists: (a) The voltages at the connection points are outside the limits of -5% and +5% but within the limits of -10% and +10% of the nominal value; (b) There is critical loading or imminent overloading of transmission lines or substation equipment; (c) A weather disturbance has entered the Philippine area of responsibility, which may affect grid operations; (d) Peace and order problems exist, which may pose a threat to grid operations;	Propose to revise as follows: "5.2 Alert State The Grid shall be considered to be in the alert state when any one of the following conditions exists: (a) ~~The voltages at the connection points are outside the limits of -5% and +5% but within the limits of -10% and +10% of the nominal value;~~ **The Single Outage Contingency (N-1) Criterion is not met;** (b) ~~There is critical loading or imminent overloading of transmission lines or substation equipment;~~ **The Regulating and Contingency Reserves are less than the values required to stabilize Frequency within the limits of 59.4 Hz and 60.6 Hz;**	For consistency with PGC2016 GO 6.2.2.2. For consistency with PGC2016 GO 6.2.2.2 (a). For consistency with 6.2.2.2 (b). Revised Secondary and Primary Reserves to Regulating and Contingency Reserves , for	**(39) IEMOP:** There should be a criteria on establishing item (b). To elaborate, how do you establish the level where such reserves are not enough to arrest the said frequency limits? **(40) MERALCO** It should be noted that the system should not be in Alert State during N-0. Conditions in 5.2(c) and 5.2(d) should not occur during N-0 conditions. In addition, "Outage	**(40) MERALCO** xxx (a) The Single ~~Outage~~ Contingency (N-1) Criterion is not met; xxx	(39) On practice, alert state is not dependent on availability of reserves but on the Net Operating Margin, further suggest to revise 5.2(b): "The Net Operating Margin is less than the highest plant online." (40) Suggest to retain our proposal to be consistent with the PGC 2016.	39 – "The Net Operating Margin is less than the highest **unit** online." – approved as revised 40 – approved NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		(e) The operating margin is not sufficient to replenish the sudden loss of the largest generating unit capacity synchronized to the grid; and (f) The grid frequency is beyond the limits of 59.7 Hz and 60.3 Hz but within the thresholds of 59.4 Hz and 60.6 Hz.	(c) ~~A weather disturbance has entered the Philippine area of responsibility, which may affect grid operations;~~ **The voltages at the Connection Points are outside the limits of 0.95 pu and 1.05 pu of the nominal value during N-0 conditions but within the limits of 0.90 pu and 1.10 pu of the nominal value;** (d) ~~Peace and order problems exist, which may pose a threat to grid operations;~~ **There is Critical Loading or Imminent Overloading of transmission lines or substation Equipment;** (e) ~~The operating margin is not sufficient to replenish the sudden loss of the largest generating unit capacity synchronized to the grid; and~~ **A weather disturbance has entered the Philippine area of responsibility, which may affect grid operations; or**	consistency with DC2021-03-0009. For consistency with PGC2016 GO 6.2.2.2 (c). For consistency with PGC2016 GO 6.2.2.2 (d). For consistency with PGC2016 GO 6.2.2.2 (e). For consistency with PGC2016 GO 6.2.2.2 (f).	Contingency" is redundant with the definition of *Contingency*: *The **outage** of a single component of the grid that cannot be predicted in advance but which excludes scheduled maintenance.* Thus, it is suggested to delete "Outage".			

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
			(f) ~~The grid frequency is beyond the limits of 59.7 Hz and 60.3 Hz but within the thresholds of 59.4 Hz and 60.6 Hz.~~ **Peace and order problems exist, which may pose a threat to Grid operations.**"					
Emergency State	5.3	The grid shall be considered in the emergency state when: (a) Single outage contingency (N-1) criterion is not met. Imminent threat in system security would exist should a credible n-1 contingency occur that would result in the cascading outages of lines and equipment if not corrected immediately; (b) There is generation deficiency or operating margin is zero; (c) Grid transmission voltage is outside the limits of -10% or +10% of the nominal value; (d) The loading levels of all transmission lines and substation equipment are beyond the threshold as set by the Grid Code; and	Propose to revise as follows: "5.3 Emergency State The grid shall be considered in the emergency state when **either a Single Outage Contingency or a Multiple Outage Contingency has occurred without resulting in Total System Blackout, but any one of the following conditions exists:** (a) ~~Single outage contingency (N-1) criterion is not met. Imminent threat in system security would exist should a credible n-1 contingency occur that would result in the cascading outages of lines and equipment if not corrected immediately;~~ **There is generation deficiency or Operating Margin is zero;**	For consistency with PGC2016 GO 6.2.2.3 For consistency with PGC2016 GO 6.2.2.3 (a). For consistency with PGC2016 GO 6.2.2.3 (b).	**(41) MERALCO** "Outage Contingency" is redundant with the definition of *Contingency*: *The **outage** of a single component of the grid that cannot be predicted in advance but which excludes scheduled maintenance.* Thus, it is suggested to delete "Outage". It is also suggested to replace "but" with "and" to clarify further the provision.	**(41) MERALCO** The grid shall be considered in the emergency state when either a Single ~~**Outage**~~ Contingency or a Multiple ~~**Outage**~~ Contingency has occurred without resulting in Total System Blackout, ~~**but**~~ **and** any one of the following conditions exists: xxx	(41) Suggest to retain "Outage" for consistency with the PGC 2016 Ed. and to adopt "and".	Adopted NGCP's proposal

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		(e) The grid frequency is beyond the limits of 59.4 Hz and 60.6 Hz.	(b) ~~There is generation deficiency or operating margin is zero;~~ **The grid transmission voltage is outside the limits of 0.90 or 1.10 pu of the nominal value; or** (c) ~~Grid transmission voltage is outside the limits of -10% or +10% of the nominal value;~~ **The loading level of any transmission line or substation Equipment is above 115% of its Operational Thermal Limit Capacity.** ~~(d) The loading levels of all transmission lines and substation equipment are beyond the threshold as set by the Grid Code; and~~ ~~(e) The grid frequency is beyond the limits of 59.4 Hz and 60.6 Hz.~~"	For consistency with PGC2016 GO 6.2.2.3 (c).				
Single Outage (N-1) Contingency Criterion	5.4	Single Outage (N-1) Contingency Criterion (a) The security and reliability of the grid shall be based on the single outage contingency (N-1) criterion. This criterion specifies that the grid shall continue to operate in the normal state	Propose to revise as: "5.4 Single Outage ~~(N-1)~~ Contingency **(N-1)** Criterion" xxx (b) Credible single outage contingency (N-1) ~~contingencies~~	For consistency with PGC2016 provisions. For consistency	**(42) MEI/PEI:** Section GO 6.4.1.3 of PGC 2016 requires that the Planned Activity Notice shall also be issued by the grid user to the Transmission	**(42) MEI/PEI:** (f) A planned activity notice or request for shutdown shall be issued by a grid user to the System Operator, **Transmission Network Provider, and Market Operator** for any	(42) We **agree** with the inclusion of TNP for consistency with the PGC 2016 Ed.	Adopted with revision from MEI/PE

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		following the loss of one generating unit, transmission line, or transformer. (b) Credible single outage contingency (N-1) contingencies The N-1 Criterion is related to one of the following contingencies: (i) Loss of a single-circuit transmission line, except those radial circuits which connect loads using a single line or cable; (ii) Loss of one circuit of a double-circuit transmission line; (iii) Loss of submarine cable; (iv) Loss of a single transformer, except those which connect loads using a single radial transformer; (v) Loss of a generating unit, whether grid-connected or embedded; and (vi) Loss of compensating devices, i.e., capacitor / reactor / SVC (c) In the event of a credible N-1 contingency, the system or any part thereof shall be operated up to its operational thermal limit	The N-1 Criterion is related to one of the following contingencies: (i) Loss of a single-circuit transmission line, except those radial circuits which connect loads using a single line or cable; (ii) Loss of one circuit of a double-circuit transmission line~~;~~ **, including point-to-point connection of a generating plant to the grid**; (iii) Loss of submarine cable; (iv) Loss of a single transformer, except those which connect loads using a single radial transformer; (v) Loss of a generating unit, ~~whether grid-connected or embedded~~; and (vi) Loss of compensating devices, i.e., capacitor / reactor / SVC xxx (d) The power system shall be operated at all times in such a manner that system instability, islanding **operation**, cascading outages, or voltage collapse will not occur as a result of the most severe single contingency. A single contingency may generally be assumed to mean the loss of a single system element; however,	with PGC2016 GO 6.2.1 For consistency with the use of "islanding operations" in PGC 2016. For consistency with the use of "islanding operations" in PGC 2016. For consistency with	Network Provider. **(43) SNAP:** What will be the role of MO? Will the MO also directly communicate with plant O&M regarding the activity request? Submission of an unapproved planned activity	planned activity such as a planned shutdown or scheduled maintenance of its equipment at least seven (7) days prior to the actual shutdown or maintenance. This is to allow the System Operator sufficient time to evaluate if the planned outage can be accommodated by the power system and to coordinate the outage with other affected grid users. The System Operator shall notify the user, **Transmission Network Provider, and the Market Operator** of its approval or disapproval of the user's request at least five (5) days before the actual work commences.	(43) The proposal to include the Market Operator is for consistency with the PGC 2016 Ed. provisions.	43- Adopted NGCP's proposal I

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		capacity, beyond which the System Operator shall intercept to restore system stability. For the avoidance of doubt, manual corrective interventions shall not be imposed to delimit the power transfer capabilities of equipment/transmission lines in anticipation of a secondary outage (N-1-1). However, if a significant threat to system security exists following the occurrence of a credible N-1 contingency the System Operator may intervene and shall make the necessary manual corrective actions as required, to protect the integrity of the grid. (d) The power system shall be operated at all times in such a manner that system instability, islanding, cascading outages, or voltage collapse will not occur as a result of the most severe single contingency. A single contingency may generally be assumed to mean the loss of a single system element;	the outage of multiple system elements should be treated as a single contingency if caused by a single event of sufficiently high likelihood. (e) Multiple contingency outages of a credible nature shall be examined, and the system shall be operated to protect against system instability, islanding **operation** or cascading outages for these contingencies. (f) A planned activity notice or request for shutdown shall be issued by a grid user to the System Operator **and Market Operator** for any planned activity such as a planned shutdown or scheduled maintenance of its equipment at least seven (7) days prior to the actual shutdown or maintenance. This is to allow the System Operator sufficient time to evaluate if the planned outage can be accommodated by the power system and to coordinate the outage with other affected grid users. The System Operator shall notify the user **and the Market Operator** of its approval or disapproval of the user's request at	PGC2016 GO 6.4.1.3.	request to MO is **unnecessary.** The SO should be the one to notify MO of the **approved** activity. Sending an activity request from a grid user to MO that is not approved by SO may only create confusion. But since stated in the PGC 2016, the specific MO group should be identified. **(44) IEMOP:** The request from the Grid User is advised to be sent only to the System Operator. We take note that information passed to the SO shall then be submitted by SO		(44) The proposal to include the Market Operator is for consistency with the PGC 2016 Ed. provisions. (45) We would like to refer this to IEMOP on possible	45 – Adopted MERALCO'S revision

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		however, the outage of multiple system elements should be treated as a single contingency if caused by a single event of sufficiently high likelihood. (e) Multiple contingency outages of a credible nature shall be examined, and the system shall be operated to protect against system instability, islanding or cascading outages for these contingencies. (f) A planned activity notice or request for shutdown shall be issued by a grid user to the System Operator for any planned activity such as a planned shutdown or scheduled maintenance of its equipment at least seven (7) days prior to the actual shutdown or maintenance. This is to allow the System Operator sufficient time to evaluate if the planned outage can be accommodated by the power system and to coordinate the outage with other affected grid users. The System Operator shall notify the user of its approval or disapproval of the user's request at least five (5)	least five (5) days before the actual work commences."		to MO. IEMOP's assumption is that all requests needs further assessment from SO, and only SO-approved requests shall be sent to MO. **(45) MERALCO** It should be noted that in 5.4(d), the phrase "*outage of multiple system elements should be treated as a single contingency if caused by a single event of sufficiently high likelihood*" will already include the multiple outages of transmission lines on a single pole. If TNP/SO will treat this as such, then their	**(45) MERALCO** xxx (f) A planned activity notice or request for shutdown shall be issued by a grid user to the System Operator and Market Operator for any planned activity such as a planned shutdown or scheduled maintenance of its equipment at least seven (7) days prior to the actual shutdown or maintenance. This is to allow the System Operator sufficient time to evaluate if the planned outage can	implications of MERALCO's comment. May we also clarify the "affected grid users"?	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		days before the actual work commences.			planning and design criterion should also incorporate this. In 5.4(f), as stated in the provision, the requirement for submission by the grid user of a planned activity notice or request for shutdown to SO and MO at least 7 days before the actual shutdown or maintenance is to provide SO sufficient time to evaluate the notice or request and coordinate with other affected grid users. Thus, it is suggested that affected grid users be also informed by SO of its approval of the user's	be accommodated by the power system and to coordinate the outage with other affected grid users. The System Operator shall notify the user and the Market Operator of its approval or disapproval, **and affected grid users of its approval** of the user's request at least five (5) days before the actual work commences.		

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					request at least 5 days before actual work commences.			
Grid Operation Notices	5.5	The following notices shall be issued, without delay, by the System Operator to notify all grid users of an existing alert state: (a) Yellow alert when the contingency reserve is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher; (b) Red alert when the contingency reserve is zero or generation deficiency exists or if there is critical loading or imminent overloading of transmission lines or equipment; For clarity, when the operating margin net of the regulating reserve capacity is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher, the System Operator	Propose to revise as: "5.5 xxx (a) Yellow alert when the contingency reserve is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher; **For clarity, when the net operating margin is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher, the System Operator shall issue yellow alert notice.** (b) Red alert when the contingency reserve is zero or generation deficiency exists or if there is critical loading or imminent overloading of transmission lines or equipment; ~~For clarity, when the operating margin net of the regulating reserve capacity is less than the capacity of the largest synchronized generating unit or power import from a single~~	Propose to revise wording for consistency and clarity with the description of Yellow and Red Alert states.	**(46) MEI/PEI:** Section 6.4.1.1 (a) of PGC 2016 mandates the System Operator to issue a Yellow Alert notice when either the primary reserve (contingency reserve) or secondary reserve (regulating reserve) is less than the requirement. MEI and PEI suggest the revision of the proposal for the SSRG to be consistent with PGC 2016. When the so-called "net operating margin" is less than the capacity of the largest	**(46) MEI/PEI:** **(a) Yellow Alert when either the contingency reserve or regulating reserve is less than the requirement.** **(b) Red alert when any of the following conditions exists:** **i. The contingency reserve is zero;** **ii. The operating margin is less than the load of the largest synchronized generating unit;**	(46) We suggest to adopt our original proposal, as it is the current practice. The PGC 2016 Ed. consideration of the Alerts was based on Primary Reserves and Secondary Reserves.	Parked item: **(a) Yellow Alert when either the contingency reserve or regulating reserve is less than the requirement.** **For clarity, when the net operating margin is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher, the System Operator shall issue yellow alert notice.** **-End of 192nd deliberation**

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
		shall issue yellow alert notice. Likewise, if the operating margin less the regulating reserve capacity becomes zero, the System Operator shall issue red alert notice. (c) Weather disturbance alert when a weather disturbance has entered the Philippine area of responsibility; (d) Blue alert when a tropical disturbance is expected to make a landfall within twenty-four (24) hours; and (e) Security red alert when peace and order problem exist, which may affect the grid operations.	~~interconnection, whichever is higher, the System Operator shall issue yellow alert notice.~~ ~~Likewise~~**Further**, if the operating margin less the regulating reserve capacity becomes zero, the System Operator shall issue red alert notice. (c)xxx (d)xxx (e)xxx"		synchronized generating unit or the power import from a single circuit interconnection, it means that the contingency reserve requirement is not satisfied, which is already covered by Section 6.4.1.1 (a) of PGC 2016. Further, MEI and PEI are of the opinion that a new criterion for the declaration of Yellow Alert (or Red Alert for that matter) cannot be introduced without the necessary amendment of PGC 2016. Section 6.4.1.1 (b) of PGC 2016 mandates the System Operator to issue a Red	**iii. The available capacity is less than the demand; or** **iv. There is critical loading or imminent overloading of transmission lines or equipment.**		

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					Alert notice when any of the following conditions exists: (a) The primary reserve (contingency reserve) is zero; (b) The operating margin is less than the load of the largest synchronized generating unit; (c) The available capacity is less than the demand; or (d) There is critical loading or imminent overloading of transmission lines or equipment.		(47) We agree to adopt SNAP's comment.	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					MEI and PEI suggest the revision of the proposal for the SSRG to be consistent with PGC 2016. **(47) SNAP:** Revised to Net Operating Margin as defined in page 11, and consistent with proposed amendment to item 5.5 (a).	**(47) SNAP:** Propose to revise as: "5.5 xxx (a) Yellow alert when the contingency reserve is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher; **<u>For clarity, when the net operating margin is less than the capacity of the largest synchronized generating unit or power import from</u>**	(48) Suggest not to adopt MERALCO's comment as NGCP's declaration is on the actual day.	

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
						a single interconnection, whichever is higher, the System Operator shall issue yellow alert notice. (b) Red alert when the contingency reserve is zero or generation deficiency exists or if there is critical loading or imminent overloading of transmission lines or equipment; ~~For clarity, when the operating margin net of the regulating reserve capacity is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher, the System Operator shall issue yellow alert notice.~~		

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
						~~Likewise~~**Further**, if the **net** operating margin ~~**less the regulating reserve capacity**~~ becomes zero, the System Operator shall issue **a** red alert notice. (c)xxx (d)xxx (e)xxx"		
					(48) MERALCO GO 6.4.1.1 of the 2016 Philippine Grid Code states that grid operation notices shall be issued without delay to notify all grid users of an alert state. Thus, it is suggested that the provision also include when and to whom the	**(48) MERALCO** xxx (a) Yellow alert when the contingency reserve is less than the capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher; For clarity, when the net operating margin is less than the		

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					notices will be issued. Moreover, sufficient advance information on Yellow and Red Alerts are needed to efficiently implement the Interruptible Load Program under ERC Resolution No. 8, series of 2010 (and as later amended by succeeding resolutions). Thus, it is suggested that Yellow and Red Alert notices be issued to affected grid users by 1600H, a day ahead.	capacity of the largest synchronized generating unit or power import from a single interconnection, whichever is higher, the System Operator shall issue yellow alert notice **to all affected grid users by 1600H, a day ahead.** (b) Red alert when the contingency reserve is zero or generation deficiency exists or if there is critical loading or imminent overloading of transmission lines or equipment; Further, if the operating margin less the regulating reserve capacity becomes zero, the System Operator shall issue red alert notice **to all affected grid users by 1600H, a day ahead.**		

ANNEX C – Proposed Amendments to the WESM Rules and WESM Manuals on System Security and Reliability and Dispatch Protocol for the Implementation of the Reserve Market

Title	Clause	Provision	Proposed Amendment	Rationale	Comments	Proposed Wording based on Comments	NGCP-SO's Response	RCC Agreement
					TC: See previous comments on operating margin.			