WHOLESALE ELECTRICITY SPOT MARKET
RULES CHANGE SUB-COMMITTEE AND TECHNICAL COMMITTEE

Joint Resolution on the Interpretation of Philippine Grid Code (PGC) 2016 GRM 9.2.3.2

WHEREAS, the Philippine Grid Code (PGC) establishes and documents the basic rules, requirements, procedures and standards that govern the operation, maintenance and development of the high-voltage backbone transmission of the Philippines;

WHEREAS, Chapter 9 of PGC on Grid Revenue Metering (GRM) provides standards, requirements and guidelines to ensure accuracy of the measurements/recording of energy delivered/absorbed by the Grid;

WHEREAS, the PGC is intended to be used along with the Market Rules of the Wholesale Electricity Spot Market (WESM) to ensure the safe, reliable and efficient operation of the Grid;

WHEREAS, the WESM Metering Standards and Procedures ("WESM Metering Manual") consolidates the pertinent metering procedures, flowcharts, policies, and standards intended generally for WESM Participants and more particularly for Metering Services Providers (MSP) to be used in the commercial operation of the WESM;

WHEREAS, during the 162nd Rules Change Committee (RCC) Meeting on 13 March 2020, the RCC approved, as amended, the proposed amendments initiated by the Manila Electric Company (MERALCO) to the WESM Manual on Metering Standards and Procedures (Issues 11.0 and 12.0) regarding Current Transformer Requirements which includes a proposal to provide a general application of international standards for current transformers;

WHEREAS, to address NGCP's opposition to MERALCO's proposed amendments, the RCC agreed that clarification should be sought from the ERC regarding the interpretation of GRM 9.2.3.2 of the PGC, specifically on the following requirements:

> *xxx (b) The Accuracy Class for Load metering service shall be in accordance to the **Appendix 2** or better. For Generation Company metering service, the Accuracy Class of the Current Transformers shall be such that the ratio and phase accuracies are certified by factory test reports over the entire operating current range when the Generation Company is both generating and consuming electricity;*

*(c) The total burden of the metering circuit, consisting of the burdens coming from all the connected devices and the secondary cable shall not exceed fifty percent (50%) of the specified burden of the Current Transformer in **Appendix 2**; xxx*

WHEREAS, on 25 March 2020, the PEM Board approved to endorse the proposal to the Department of Energy (DOE) for promulgation, and tasked the RCC and the Technical Committee to clarify the interpretation of GRM 9.2.3.2 as recommended by the RCC;

WHEREAS, on 03 April 2020, the RCC informed the TC on the status of rules change proposals and the PEM Board's directive to clarify the interpretation of PGC GRM 9.2.3.2;

WHEREAS, on 21 April 2020, the TC responded to the RCC with their initial comments and inputs on the matter, as follows:

- PGC GRM 9.2.3.2 is consistent with the WESM Metering Manual but specifying Appendix 2 may lead to strict interpretation;
- PGC GRM 9.2.3.2 including its appendix should be read as a whole and in context, to give consistent, harmonious, and sensible effect to all the parts of said provision, to the extent possible;
- TC fully supports the RCC's approved version of the WESM Metering Manual and is confident that this should not be interpreted contrary to the PGC. However, if some parties perceive any conflict in interpretation, we should seek guidance from the ERC concerning the same; and
- Only the ERC has the authority to resolve, in case there is any perceived conflict in the interpretation between the PGC and the Metering Manual;

WHEREAS, on 24 April 2020, during its 164th Meeting, the RCC agreed that a coordination meeting with TC is necessary to fully discuss the views of NGCP and MERALCO, with the RCC represented by a Sub-Committee composed of one (1) member from each sector;

WHEREAS, on 05 May 2020, during the RCC Sub-committee -TC Coordination Meeting, the NGCP and MERALCO discussed their respective positions, with highlights as follows:

- MERALCO
  - Brief description of their proposal to amend the WESM Metering Manual;
  - Citation of actual current transformers owned by MERALCO and NGCP as examples showing the implication of using instrument transformers with higher burden requirements; and
  - Recommendation to use instrument transformer with higher burden requirement that is compliant with the international standards or its latest provisions.
- NGCP
  - Background and comparison of the PGC 2007 and PGC 2016 versions, for further understanding on the specified burden rating for current transformer under GRM 9.2.3.2;
  - Possible implications of MERALCO's proposed amendments;

- Possible intent of GRM 9.2.3.2 (c) is to limit the total connected burden requirement and locate the revenue meter as close as possible to the current transformers;
- Usage of current transformers with higher rated burden than what is specified on the Appendix 2 of PGC 2016 will result to non-compliance, unless the manufacturer guarantees to have same ratio error; and
- As the WESM Meter Service Provider (WMSP), NGCP requests clarification from the Market Operator (MO) on participants applying for a registration with equipment that are non-compliant with the PGC requirements.

WHEREAS, the RCC Sub-committee and TC fully deliberated on and considered the following points as raised:

- MERALCO's recommendation to use instrument transformer for higher burden (e.g. greater than 5 VA) should be allowed provided that the metering accuracy class is maintained;
- The PGC was intended to provide the minimum requirements and the use of instrument transformers with higher burden rating should not automatically mean non-compliance if the accuracy is maintained. A literal interpretation of the PGC GRM 9.2.3.2 will be impractical and may cause higher costs
- On the other hand, PGC 2016 edition now legally limits the rated burden requirements and using instrument transformers with higher burden requirements will be deemed a non-compliance to the PGC;
- Possible intent of the PGC GRM 9.2.3.2 is to force metering installations to become electronic and ensure higher accuracy;
- NGCP is exerting efforts to be compliant with the PGC requirements under GRM 9.2.3.2 and has filed derogation for the non-compliances of NGCP with the 2016 version;
- On the impact of using different rated burdens on Capital Expenditures (CapEx) and rates, such metering charge components are already considered and subject to public consultations;
- The option to propose changes to the PGC to clarify the provision but this route will be lengthier and better pursued by a dissenting party to the current provision of PGC GRM 9.2.3.2; and
- While the proposed amendments to the WESM Metering Manual may be consistent with the PGC, the latter provides additional conditions that may not be provided in the international standards (i.e. IEEE C57.13 and IEC 61869-2), thus revisions to both the PGC and the Metering Manual to ensure consistency may be proposed;

WHEREAS, following the discussions, the Rules Change Sub-Committee and Technical Committee were not able to reach a common position on the interpretation of Philippine Grid Code (PGC) 2016 GRM 9.2.3.2;

WHEREAS, the Rules Change Sub-Committee and Technical Committee, in considering its next steps, accounted prevailing rules, as follows:

- WESM Rules Clause 1.2.3.4 provides that inconsistencies between the WESM Rules and the PGC may be referred to the Energy Regulatory Commission (ERC) for resolution;
- PGC Section 2.4.2 under the chapter on Grid Management (GM) provides that queries involving the interpretation and/or application of any of the provisions of the PGC may be referred to the Grid Management Committee (GMC) for clarification or comment; and
  The ERC, as the approving authority of the PGC, has the final authority on how the PGC is interpreted since the GMC has been abolished;

NOW THEREFORE, we, the undersigned, on behalf of the sectors we represent, hereby resolve as follows:

RESOLVED, that the WESM Metering Manual should be consistent with the PGC;

RESOLVED, any enhancements to the WESM Metering Manual may be introduced during the public consultation to be conducted by the DOE to ensure consistency with the PGC and to support the interest of the industry;

RESOLVED, that any clarifications and/or proposed enhancements on the PGC should be raised by the concerned entities, stakeholders and other parties to the ERC.

RESOLVED FURTHER that this matter is hereby endorsed to the PEM Board for consideration.

Done this 05 May 2020, Pasig City.

Approved by:	
Rules Change Sub-Committee	
Allan C. Nerves RCC Representative, Independent	**Carlito C. Claudio** RCC Representative, Generation Sector
Ryan S. Morales RCC Representative, Distribution Sector	**Lorreto H. Rivera** RCC Representative, Supply Sector
Ambrocio R. Rosales RCC Representative, System Operator	**Isidro E. Cacho, Jr.** RCC Representative, Market Operator
Technical Committee	
Jordan Rel C. Orillaza Chairperson	**Fortunato C. Leynes** Independent
Jaime V. Mendoza Representative, Distribution Management Committee	**Ermelindo R. Bugaoisan, Jr.** Representative, System Operator