



Republic of the Philippines
DEPARTMENT OF ENERGY
(Kagawaran ng Enerhiya)

Department Circular No. DC2021 - 06-0013 *jr*

ADOPTING A GENERAL FRAMEWORK GOVERNING THE TEST AND COMMISSIONING OF GENERATION FACILITIES FOR ENSURING READINESS TO DELIVER ENERGY TO THE GRID OR DISTRIBUTION NETWORK

WHEREAS, Section 2 of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001 (EPIRA), declared as the policy of the State to ensure the quality, reliability, security and affordability of the supply of electric power;

WHEREAS, Section 37 of the EPIRA further mandates the Department of Energy (DOE) to supervise the restructuring of the electricity industry, and in addition thereto, to a) *ensure the reliability, quality and security of supply of electric power*, b) *jointly with the electric power industry participants, establish the wholesale electricity spot market and formulate the detailed rules governing the operations thereof*, and c) *monitor private sector activities relative to energy projects in order to attain the goals of the restructuring, privatization, and modernization of the electric power sector as provided for under existing laws*;

WHEREAS, Republic Act No. 11234, otherwise known as the Energy Virtual One-Stop Shop Act ("EVOSS") and its Implementing Rules and Regulations, provides for specific time frame for mother agencies and its attached bureaus to act upon all applications involving power generation, transmission or distribution projects, upon submission of complete documentary evidence, and imposes corresponding penalties for non-compliance thereof;

WHEREAS, Section 6 of the EPIRA states that a Generation Company shall, before it operates, secure from the Energy Regulatory Commission (ERC) a Certificate of Compliance (COC);

WHEREAS, Article I, Section 2 (iii) of the 2014 Revised Rules for the Issuance of Certificates of Compliance (COCs) for Generation Companies and Entities with Generation Facilities prescribed a maximum period of two (2) months for the conduct of Test and Commissioning for new Generation Facilities;

WHEREAS, generating units under regulatory and commercial testing are scheduled and dispatched in the Wholesale Electricity Spot Market (WESM) through imposition of overriding constraints and are considered price takers, pursuant to Section 7.6 of the WESM Dispatch Protocol Manual Issue 12.0;

WHEREAS, in 2018, the Philippine Electricity Market Corporation flagged to the DOE that several Variable Renewable Energy plants were recorded to have exceeded the two-month Test and Commissioning period as part of its presentation on the 2017 annual forecast accuracy performance of must-dispatch generating units;

WHEREAS, the Market Surveillance Committee, in its various reports, reported that there were considerable instances of imposition of overriding constraints in the WESM that can be attributed to test and commissioning of generating units;

WHEREAS, based on data provided by the Independent Electricity Market Operator of the Philippines, thirty-eight (38) plants were recorded to be on Test and Commissioning status in the WESM for more than 2 months, the longest period being 5 years, as of 01 April 2020;

WHEREAS, the extended Test and Commissioning of generation facilities pose material effect to WESM outcomes particularly in displacing scheduled generators affecting competitiveness in the WESM while being exempted with the mandatory requirements submitting offers or projected outputs;

WHEREAS, in view of the aforementioned issue, the DOE recognized that determining the definite status of power plants intending to transition to commercial operations is crucial information achieving competitive market outcomes and in planning for short and medium-term supply security and reliability;

WHEREAS, there is a need among various agencies involved in the processing of requirements for commercial operations of Generation Companies to harmonize their procedures and monitoring activities;

WHEREAS, the DOE, reviewed all relevant policies and guidelines to address identified policy gaps and to ensure the optimal utilization of available capacities in the Grid and drafted a Circular which was subjected to focus group discussions and virtual public consultations on various dates as follows:

Activity	Leg	Date	Venue/Platform
Focus Group Discussion	Luzon	11 November 2019	Metro Manila
	Visayas	14 November 2019	Cebu City
	Mindanao	21 November 2019	Davao City
Public Consultation	Luzon	29 June 2020	Microsoft Teams
	Visayas	01 July 2020	
	Mindanao	03 July 2020	

NOW, THEREFORE, pursuant to its authority and mandate under the EPIRA and its Implementing Rules and Regulations (IRR), and after due consideration of the inputs from various stakeholders, the DOE hereby issues, adopts and promulgates the following:

Section 1. General Principles

- 1.1 No Generation Company and its Generation Facility/ies shall commercially operate and participate in the WESM unless it has secured a Certificate of Compliance (COC) from the ERC;
- 1.2 All Generation Companies intending to conduct Test and Commissioning of their Generation Facility/ies shall comply with the requirements provided under

this Circular and the applicable ERC guidelines for the issuance of the COC or any equivalent documents;

- 1.3 Successful completion of Test and Commissioning duly certified by the Transmission Network Provider, the Distribution Utility in the case of Embedded Generators, or any other third-party testing entity as may be allowed by the ERC, shall serve as a basis in determining the readiness of a new or existing Generation Facility to deliver energy to the Grid or distribution network in accordance with its declared capacity and capabilities. As such, an existing Generation Facility which has been modified resulting to change in its declared capacity and capabilities pursuant to its existing COC shall be subject to Test and Commissioning;
- 1.4 The conduct of Test and Commissioning shall not adversely affect the security and reliability of the grid operations as well as the accuracy, transparency and competitiveness of market outcomes; and
- 1.5 Processing of applications submitted to relevant agencies or entities relative to the implementation of this policy shall not exceed the timeframes as prescribed in applicable guidelines adopted pursuant EVOSS Act and its Implementing Rules and Regulations and shall adhere to the principles and procedures embodied therein.

Section 2. Scope. This Circular shall cover the following:

- a) Generation Companies intending to operate new Generation Facilities including:
 - i. Grid-connected Generation Facilities; and
 - ii. Embedded Generators mandated to register to the WESM pursuant to Department Circular No. DC2019-02-0003;
- b) Generation companies with existing Generation Facilities which are subject of expansion, upgrading, rehabilitation and similar treatment that may materially change the technical specifications and capability thereof. These include:
 - i. Grid-connected Generation Facilities; and
 - ii. Embedded Generators mandated to register to the WESM pursuant to Department Circular No. DC2019-02-0003;
- c) System Operator (SO);
- d) Market Operator (MO);
- e) WESM Governance Arm; and
- f) Network Service Providers (NSPs) including the Transmission Network Provider (TNP) and Distribution Utilities (DUs).

Entities operating Self-Generation Facilities are excluded from the scope of this Circular.

Section 3. Definition of Terms. The terms as used in this Circular shall have their respective meanings as follows:

- a) **“Certificate of Compliance” or “COC”** refers to a license issued by

the ERC in favor of a person or entity to operate a power plant or other facilities used in the generation of electricity pursuant to Section 6 of R.A. 9136 and Section 4 of the Implementing Rules and Regulations of R.A.9136.

- b) **“Commercial Operations”** refer to the generation of electricity for sale or disposition upon achievement by the generation facility of operational and capability criteria in accordance with standard engineering practice for Generation Facilities.
- c) **“Electromechanical Completion”** shall mean that the generating unit including all substation and other facilities for grid or distribution system connections are in place but not yet connected and the generating unit is ready for test and commissioning, and upon completion thereof, can immediately proceed to commercial operations.
- d) **“Embedded Generator”** refers to generating units that are indirectly connected to the Grid through the distribution system that supplies power to its host DU or the Grid.
- e) **“Final Certificate of Approval to Connect” or “Final CATC”** refers to the certification issued by the TNP or DU to a Generation Company attesting that its Generation Facility/ies is ready to deliver energy to Grid or distribution network in accordance with the Philippine Grid Code (PGC), Philippine Distribution Code (PDC) and other relevant guidelines and specifications.
- f) **“Generation Company”** refers to any person or entity authorized by ERC to operate Generation Facilities.
- g) **“Generation Facility”** refers to a facility for the production of electricity.
- h) **“Provisional Certificate of Approval to Connect” or “Provisional CATC”** refers to the certification issued by the TNP or DU to a Generation Company, allowing the conduct of Test and Commissioning with respect to its Generation Facility/ies.
- i) **“Test and Commissioning”** refers to the conduct of procedures to determine and certify that a generating unit was connected to the grid in accordance with the Philippine Grid Code (PGC), Philippine Distribution Code (PDC) and other relevant guidelines and specifications and to determine readiness to deliver energy to Grid or distribution network for the purpose of securing a COC from the ERC.

For the purpose of this policy, Test and Commissioning includes the conduct of capability tests as specified in the PGC, PDC and other relevant issuances such as the Grid Compliance Test and Ancillary Services Capability Test and all other activities which require synchronization to the Grid or distribution network.

All other terms used but not defined in this Circular shall have the same meaning as defined in the EPIRA, its IRR, PGC, PDC, WESM Rules and its Market Manuals, and other DOE and ERC issuances.

Section 4. General Test and Commissioning Procedures. The following procedures are designed to achieve an orderly and expedient Test and Commissioning for all types of Generation Facilities as illustrated in the flowcharts in Annex A for grid-connected Generation Facilities and Annex B for Embedded Generators.

4.1 Conditions and Timeline for Test and Commissioning

4.1.1 The maximum period for Generation Facilities identified under Section 2 to conduct Test and Commissioning for the purpose of securing a COC from the ERC shall be no more than two (2) months from the approved schedule by the TNP or DU. The same maximum period shall also apply to Generation Facilities applying for Feed-in-Tariff (FIT) COC.

4.1.2 The Test and Commissioning period of two (2) months shall commence on the date indicated in the Provisional CATC issued by the TNP or DU. Provided that prior to the commencement of the Test and Commissioning, the Generation Company already attained Electromechanical Completion of its Generation Facility.

4.2 Procedures Before Test and Commissioning

4.2.1 The Generation Company shall submit its application for the conduct of Test and Commissioning at least three (3) months before its target date thereof to the following:

4.2.1.1 The SO and the TNP with respect to a grid-connected Generation Facility; and

4.2.1.2 The SO, the TNP, and the DU with respect to an Embedded Generator.

4.2.2 The actual schedule of Test and Commissioning shall be subject to confirmation of the TNP or DU, provided, that the commencement of Test and Commissioning shall not be later than three (3) months from the requested schedule by the Generation Company. In scheduling the Test and Commissioning, the TNP or the DU shall take into consideration the resource availability for Variable Renewable Energy (VRE) Generation Facilities, based on evidences or submissions by the concerned Generation Company, to ensure favorable conditions are present to attain declared capacity and capabilities during conduct of Test and Commissioning.

4.2.3 The following shall serve as certifications to commence Test and Commissioning:

4.2.3.1 For grid-connected Generation Facilities, a Provisional CATC issued by the TNP.

4.2.3.2 For Embedded Generators:

- a) Provisional CATC issued by the DU; and
- b) Clearance to Energize from the TNP.

A Clearance to Energize shall be secured in accordance with the processes of the TNP.

4.2.4 Within twenty (20) calendar days from the submission of complete requirements, the TNP or DU shall issue a Provisional CATC indicating the start and end date of Test and Commissioning not exceeding the maximum period specified in Section 4.1.2 of this Circular. The requirements shall include the following:

- 4.2.4.1 Scheduled date of Test and Commissioning, as coordinated by the Generation Company with the following:
 - 4.2.4.1.1 TNP and SO for grid-connected Generation Facilities;
 - 4.2.4.1.2 TNP, SO and DU for Embedded Generators;
- 4.2.4.2 For Generation Facilities not applying under the FIT system: Certification under oath that Electromechanical Completion has been achieved by the Generation Company;
- 4.2.4.3 For Generation Facilities applying under the FIT system: Endorsement by the DOE confirming Electromechanical Completion in accordance with Department Circular No. DC2013-05-0009;
- 4.2.4.4 Proof of WESM Registration for the conduct of Test and Commissioning issued by the MO; and
- 4.2.4.5 Other requirements as may be determined by the TNP or the DU pursuant to their respective guidelines.

To this end, the Generation Company shall be responsible to ensure timely application for obtaining the above requirements to ensure the scheduled date of Test and Commissioning will not be compromised. Likewise, concerned agencies or entities shall ensure timely issuance of above requirements to the Generation Company in accordance with their applicable guidelines.

4.2.5 Within three (3) working days upon receipt, the Generation Company shall furnish a copy of the Provisional CATC to the following:

- 4.2.5.1 The MO and SO with respect to a grid-connected Generation Facility;
- 4.2.5.2 The MO, SO and the TNP with respect to an Embedded Generator.

4.2.6 For the conduct of Test and Commissioning, no injection to the Grid or distribution network shall be allowed without a valid Provisional CATC.

4.2.7 The Generation Company shall be responsible in coordinating with the TNP or the DU as applicable or third-party testing entity that will conduct Test and Commissioning, to ensure the foregoing's availability for the duration of the Test and Commissioning period indicated in the Provisional CATC.

4.3 ***Procedures During Test and Commissioning***

4.3.1 For the duration of the validity of the Provisional CATC:

4.3.1.1 The TNP and SO shall witness the Test and Commissioning activities of grid-connected Generation Facilities to be undertaken by a third-party testing entity. The TNP may also conduct the Test and Commissioning activities in the event that a third-party testing entity is not available.

4.3.1.2 The TNP, SO and the concerned DU shall witness the Test and Commissioning activities of Embedded Generators to be undertaken by a third-party testing entity. The DU or TNP may also conduct the Test and Commissioning activities in the event that a third-party testing entity is not available.

The DU shall coordinate with the SO in case of any Test and Commissioning activity, within its network, that may result in material impact to Grid operations.

4.3.1.3 Ancillary Service Capability Test. The SO shall witness the conduct of Ancillary Service Capability Test of grid-connected Generation Facilities and the SO, TNP and host DU in the case of Embedded Generators. The SO may also conduct the procedure in the event that a third-party testing entity is not available.

4.3.1.4 The SO shall submit to the MO over-riding constraints with respect to energy injections of Generation Facilities undergoing Test and Commissioning for inclusion in the Market Dispatch Optimization Model (MDOM).

In the case of Embedded Generators, the Embedded Generators shall coordinate with the host DU to determine the readiness of the distribution system in terms of the dispatching of the Embedded Generator. The Embedded Generator shall likewise coordinate with the SO on over-riding constraints, incorporating the inputs from the host DU.

4.3.1.5 Any injected or withdrawn energy during Test and Commissioning of a Generation Facility, less any energy offtake from a bilateral contract counterparty, if any, shall be settled at WESM prices.

4.3.1.6 The Generation Company shall, to the extent practicable, comply with its dispatch schedule/instruction in accordance with the WESM Rules.

4.3.1.7 On a weekly basis, The TNP or the DU shall submit status of the test and commissioning being conducted to the MO, WESM Governance Arm, ERC and the DOE.

- 4.3.1.8 In the case of test and commissioning conducted by a third-party testing entity, the Generation Company shall submit the status on a weekly basis to the MO, WESM Governance Arm, ERC and the DOE.
- 4.3.2 The MO shall notify the Generation Company, copy furnished the SO, of the expiration of its Provisional CATC fifteen (15) calendar days prior to the date of expiry.
- 4.3.3 Immediately upon expiry of the Provisional CATC or upon certification that the Generation Facility has completed the conduct of Test and Commissioning, the following shall be observed:
- a) The SO shall cease submission of over-riding constraints to the MO to prevent continuous injection of the Generation Facility while awaiting approval to commence Commercial Operations.
 - b) Should energy injections still be recorded from the Generation Facility, the Generation Company shall not be allowed to declare any bilateral contract quantity and shall not be entitled to any WESM payments for any injected energy but shall be charged for any energy withdrawn from the grid or distribution network. The TNP or the DU in case of Embedded Generator shall immediately cause the disconnection of the Generation Company to prevent further injection in the grid or distribution network.

4.4 *Procedures After Test and Commissioning*

- 4.4.1 Within fourteen (14) calendar days, after completion of the conduct of Test and Commissioning, the TNP, DU or third-party testing entity shall evaluate the results and validate the readiness of the Generation Facility to deliver energy to the Grid or distribution network.
- 4.4.2 Within fourteen (14) calendar days after the complete evaluation of the results and validation that the Generation Facility is ready to deliver energy to the Grid or distribution network, and has completed submission of the pertinent requirements of the TNP or the DU, the following shall issue the Final CATC to the Generation Company which signifies successful conduct of Test and Commissioning and that the Generation Facility can operate in accordance with applicable parameters of the PGC or PDC:
- 4.4.2.1 the TNP for a grid-connected Generation Facility;
 - 4.4.2.2 the DU for an Embedded Generator.
- 4.4.3 The TNP or the DU, shall issue the Final CATC regardless if the Generation Facility has passed the Ancillary Service Capability Test or not. The SO shall issue a separate certification to Generation Facilities that are tested to have Ancillary Service capabilities.
- 4.4.4 The TNP or DU shall furnish a copy of the Final CATC to ERC and the MO within three (3) calendar days from the issuance of the same to the Generation Company.

- 4.4.5 The ERC, within sixty (60) calendar days upon receipt of the final CATC and satisfaction of other applicable requirements, shall issue the COC to the Generation Company with respect to its Generation Facility. The ERC shall furnish a copy of the same to the MO and publish a list thereof in the ERC website on a monthly basis.
- 4.4.6 The Generation Company shall, within three (3) working days, immediately submit the COC issued by the ERC to the MO and submit its WESM registration application for Commercial Operations.
- 4.4.7 Within fifteen (15) calendar days upon receipt of the COC issued by the ERC and subject to full compliance to other WESM registration requirements, the MO shall approve and grant full access to the Market Participant Interface (MPI) and reflect WESM registration of the Generation Company with respect to its Generation Facility as under Commercial Operations status. The effectivity of the new WESM registration in the MPI shall be within eight (8) calendar days from approval.

4.5 ***Procedures for Failed Test and Commissioning***

- 4.5.1 If during the 2-month validity of the Provisional CATC, the third-party testing entity, TNP or the DU attested that the Generation Facility failed to satisfy the grid connectivity parameters required by the PGC or PDC, the third-party testing entity, TNP or the DU shall advise the Generation Company and the MO on the results thereof and shall immediately suspend the validity of the Provisional CATC.
- 4.5.2 If the 2-month validity of the Provisional CATC has not lapsed, the Generation Company may seek the approval of the TNP or DU for its extension to continue the conduct of Test and Commissioning. The TNP or DU may allow the extension for a period not exceeding one (1) month from the expiration of the Provisional CATC in accordance Section 4.7.1.
- 4.5.3 If upon the evaluation of the results of the conduct of Test and Commissioning, the third-party testing entity, TNP or the DU attested that the Generation Facility failed to satisfy the grid connectivity parameters required by the PGC or PDC, and the readiness to deliver energy to the Grid or distribution network, the TNP or DU may allow the extension for a period not exceeding one (1) month from the issuance of the results in accordance with Section 4.7.2.
- 4.5.4 If the validity of the Provisional CATC has lapsed, including the extended period of validity duly approved by the TNP or DU, and the Generation Facility failed to satisfy the grid connectivity parameters required by the PGC or PDC, the process for the conduct of Test and Commissioning shall be reset.

4.6 ***Extension of Provisional CATC Validity due to Reasons Beyond the Control of the Generation Facility, TNP or the DU***

- 4.6.1 The TNP or the DU may extend the validity of the Provisional CATC up to one (1) month from expiry thereof on the following grounds:

- a) Test and commissioning procedures cannot be done due to various grid or distribution network conditions resulting from:
 - i. Alerts or emergency state; or
 - ii. Transmission or distribution line congestion or limitation.
 - b) Force majeure events.
- 4.6.2 The TNP or the DU shall issue the revised Provisional CATC to the Generation Company, prior to original date of expiry of the Provisional CATC. The Generation Company shall immediately furnish a copy of the same to the SO and the MO.
- 4.6.3 Unless the revised Provisional CATC was submitted by the Generation Company to the SO and the MO before the original date of expiry of the Provisional CATC, Section 4.3.3 shall still apply.
- 4.7 ***Extension of Provisional CATC Validity due to Technical or Other Issues Related to the Generation Facility***
- 4.7.1 *Technical Issues Identified During the Conduct of Test and Commissioning*
- 4.7.1.1 In cases technical issues internal to the Generation Facility, identified during the conduct of Test and Commissioning, the TNP or the DU may extend the validity of the Provisional CATC for a period of not more than one (1) month from the expiry thereof, subject to availability of a Test and Commissioning schedule, as confirmed by the TNP or DU.
- 4.7.1.2 During the extended period of Test and Commissioning, the Generation Company shall undertake corrective measures and necessary modifications to address the technical issues.
- 4.7.1.3 If there is an available Test and Commissioning schedule within the 1-month period immediately after the expiry of the Provisional CATC, the TNP or the DU shall extend the validity of the Provisional CATC originally issued to the Generation Company and furnish a copy of the same to the SO and the MO.
- 4.7.1.4 If there is no available Test and Commissioning schedule within the 1-month period after the expiry of the Provisional CATC:
- 4.7.1.4.1 The Provisional CATC shall be deemed on suspended status and the validity of the extended Provisional CATC shall remain the same.
 - 4.7.1.4.2 Immediately upon the suspension of the Provisional CATC the following shall be observed:
 - a) The SO shall cease to submit over-riding

constraints to the MO - to prevent continuous injection of the Generation Facility while awaiting approval to commence Commercial Operations.

- b) Should energy injections still be recorded from the Generation Facility, the Generation Company shall not be allowed to declare any bilateral contract quantity and shall not be entitled to any WESM payments for any injected energy but shall be charged for any energy withdrawn from the grid or distribution network. The TNP or the DU in case of Embedded Generator shall immediately cause the disconnection of the Generation Company to prevent further injection in the grid.

4.7.1.4.3 The TNP or the DU shall immediately inform the MO and the SO that the Test and Commissioning was not completed within the prescribed period.

4.7.1.4.4 The Generation Company shall secure a new schedule for Test and Commissioning at least fifteen (15) calendar days before the target date of reactivation of the Provisional CATC.

4.7.1.4.5 The Generation Company shall apply for the reactivation of the Provisional CATC.

4.7.1.5 Reactivation of Provisional CATC. The TNP or DU shall reactivate the Provisional CATC on the following conditions:

4.7.1.5.1 The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.

4.7.1.5.2 The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.

4.7.1.5.3 The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.1.1.

4.7.2 *Unsatisfactory Test and Commissioning Results Upon Evaluation*

4.7.2.1 In case of unsatisfactory Test and Commissioning results arising from technical issues internal to the Generation Facility, the TNP or the DU may extend the validity of the Provisional CATC for a period of not more than one (1) month from the evaluation of the results, subject to availability of a Test and Commissioning schedule, as confirmed by the TNP or DU.

- 4.7.2.2 During the extended period of Test and Commissioning, the Generation Company shall undertake corrective measures and necessary modifications to address the technical issues.
- 4.7.2.3 The Generation Company shall secure a new schedule for Test and Commissioning at least fifteen (15) calendar days before the target date of extension of the Provisional CATC.
- 4.7.2.4 Extension of the Provisional CATC Validity. The TNP or DU shall extend the Provisional CATC validity on the following conditions:
 - 4.7.2.4.1 The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.
 - 4.7.2.4.2 The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.
 - 4.7.2.4.3 The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.2.1.

Section 5. Additional Responsibilities of the System Operator. The SO shall:

- 5.1 Submit, as necessary, revised process flow to the EVOSS Steering Committee to consider changes that may be brought by the implementation of this Circular;
- 5.2 Ensure timely processing of applications and issuance of permits and certificates in relation to Test and Commissioning;
- 5.3 Ensure reliability of grid operations during conduct Test and Commissioning of Generation Facilities;
- 5.4 Recommend to the Rules Change Committee, as necessary, changes to the WESM Dispatch Protocol for efficient real-time scheduling and dispatch of Generation Facilities on Test and Commissioning;
- 5.5 Develop or update existing procedures for witnessing or conducting Test and Commissioning for grid-connected Generation Facilities in line with the policies provided herein;
- 5.6 Notify the DOE, ERC, WESM Governance Arm and the Generation Company, in a timely manner, any instances when the conduct of Test and Commissioning has adverse impact to grid security; and
- 5.7 In consultation with the ERC, the MO, the WESM Governance Arm and the electric power industry participants, review the effectiveness and applicability

of the maximum allowable period of time for the conduct of Test and Commissioning for each type of technology, and recommend to the DOE revisions on the same, as necessary. The review shall consider factors such as resource, technical and procedural limitations as may be encountered during the implementation of this Circular.

Section 6. Additional Responsibilities of the Transmission Network Provider. The TNP shall:

- 6.1 Submit, as necessary, revised process flow to the EVOSS Steering Committee and ensure timely processing of applications and issuance of permits and certificates in relation to Test and Commissioning;
- 6.2 Ensure timely processing of applications and issuance of permits and certificates in relation to Test and Commissioning;
- 6.3 Closely coordinate with Distribution Utilities and SO with respect to Test and Commissioning of Embedded Generators; and
- 6.4 Ensure adherence to the maximum allowable period for Test and Commissioning and report to the DOE, ERC, WESM Governance Arm and the Generation Company, in a timely manner, any instances of violation by Generation Facilities.

Section 7. Additional Responsibilities of the DUs. The DUs shall:

- 7.1 Ensure timely processing of applications and issuance of permits and certificates in relation to Test and Commissioning of Embedded Generators;
- 7.2 Develop or update existing procedures for witnessing or conducting Test and Commissioning for Embedded Generators in line with the policies provided herein;
- 7.3 Report to the MO any Embedded Generator within its franchise area that are mandated to register in the WESM and assist the same in registering in the WESM;
- 7.4 Closely coordinate with the Embedded Generators within its franchise area, with respect to Test and Commissioning; and
- 7.5 Ensure adherence to the Maximum Allowable Period for Test and Commissioning and report to the DOE, ERC, WESM Governance Arm and the Generation Company, in a timely manner, any instances of violation by Generation Facilities.

Section 8. Additional Responsibilities of the Market Operator. The MO shall:

- 8.1 Prepare and submit to the Rules Change Committee proposed changes to the WESM Rules and relevant Market Manuals, as necessary, for the effective implementation of the policies provided herein;

- 8.2 Submit, as necessary, revised process flow to the EVOSS Steering Committee to consider changes that may be brought by the implementation of this Circular;
- 8.3 Ensure timely processing of applications for registration and issuance of permits and certificates in relation to Test and Commissioning; and
- 8.4 Closely coordinate with the ERC, SO, NSPs, WESM Governance Arm and Generation Companies to reflect the actual status of Generation Facilities in the WESM registered capacity list for regular submission to the DOE and for the proper implementation of this circular.

Section 9. Additional Responsibilities of the WESM Governance Arm. The WESM Governance Arm shall:

- 9.1 Prepare and submit to the Rules Change Committee proposed changes to the WESM Rules and relevant Market Manuals in accordance with the enforcement and compliance to the policy provided herein as necessary;
- 9.2 Ensure adherence to the maximum allowable period for Test and Commissioning and report in a timely manner to the DOE, ERC and the Generation Company, in a timely manner, any instances of violation by Generation Facilities; and
- 9.3 Review and recommend to the DOE and ERC possible sanctions and other measures that will promote compliance of concerned stakeholders to the policies stated herein.

Section 10. Regulatory Support. The ERC shall:

- 10.1 Review, update and harmonize, as necessary, all pertinent resolutions and regulations relevant to the implementation of the policies stated under this Circular and promulgate guidelines on the same, which shall include, but not limited to:
 - 10.1.1 Rules for Issuance of COC;
 - 10.1.2 Guidelines for the Recovery of Costs for the Generation Component of the Distribution Utilities' Rates with respect to transactions during Test and Commissioning; and
 - 10.1.3 Accreditation Guidelines for Third-Party Testing Entities.
- 10.2 Closely monitor and maintain an updated inventory of Generation Facilities undergoing Test and Commissioning; and
- 10.3 Implement enforcement and penalty mechanisms in cases of non-compliance with this Circular by any electric power industry participant identified herein.

Section 11. Transitory Provisions. Generation Companies already on Test and Commissioning upon the effectivity of this Circular may continue to conduct Test and Commissioning for a maximum of two (2) months after the effectivity date.

Thereafter, the MO, SO, TNP and DU shall immediately implement measures provided under Section 4.3.3, 4.4, 4.5, 4.6 and 4.7 of this Circular

Section 12. Separability Clause. If for any reason, any section or provision of this Circular is declared unconstitutional or invalid, such parts not affected shall remain valid and subsisting.

Section 13. Repealing Clause. Any department circular or issuance, contrary to or inconsistent with this Circular is hereby repealed, modified or amended accordingly.

Section 14. Effectivity. This Circular shall take effect fifteen (15) days after publication in at least two (2) newspapers of general circulation. Let a copy of this Circular be furnished to the University of the Philippines Law Center - Office of National Administrative Register (UPLC-ONAR).

Issued this JUN 03 2021 at the DOE, Energy Center, Rizal Drive, Bonifacio Global City, Taguig City, Metro Manila.


ALFONSO G. CUSI
Secretary



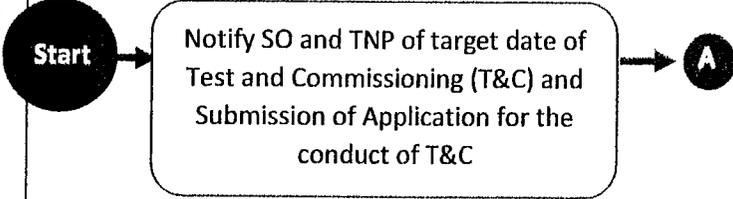
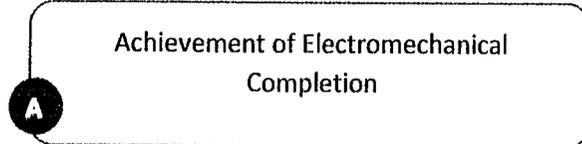
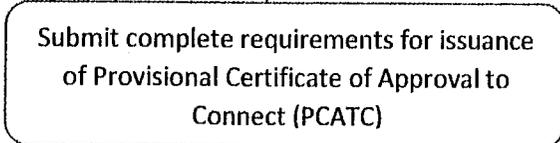
Republic of the Philippines
DEPARTMENT OF ENERGY
IN REPLYING PLS. CITE:

DOE-AGC-21003302



ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

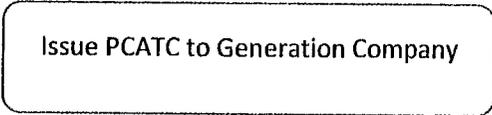
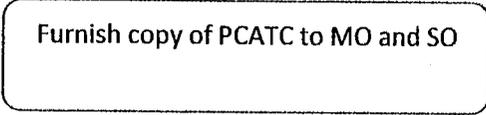
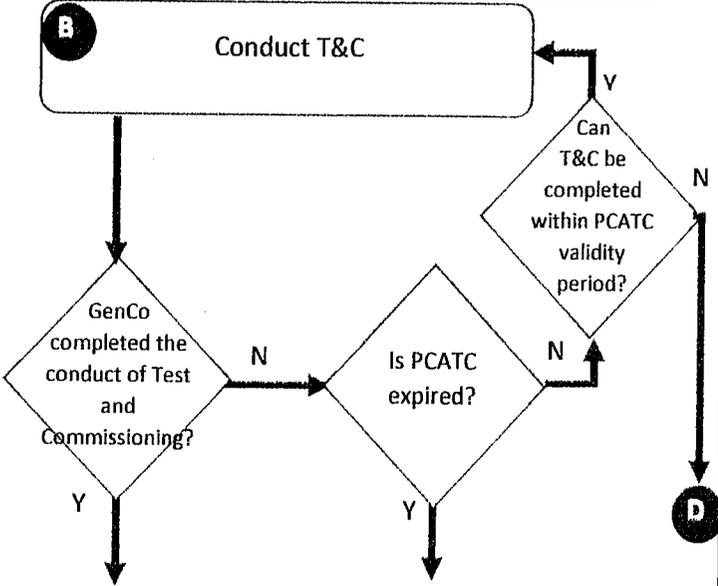
Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
Generation Company	 <pre> graph TD Start((Start)) --> Step1[Notify SO and TNP of target date of Test and Commissioning (T&C) and Submission of Application for the conduct of T&C] Step1 --> A((A)) </pre>	3 months prior to target date of Test and Commissioning	Actual schedule of Test and Commissioning shall be subject to confirmation of the TNP. Resource availability for VRE resources should be considered.
Generation Company	 <pre> graph TD A((A)) --> Step2[Achievement of Electromechanical Completion] </pre>	Prior the application for PCATC	
Generation Company	 <pre> graph TD Step2 --> Step3[Submit complete requirements for issuance of Provisional Certificate of Approval to Connect (PCATC)] </pre>	at least 23 days before the conduct of Test and Commissioning Schedule	<ol style="list-style-type: none"> 1. Scheduled date of Test and Commissioning, as coordinated with TNP and SO¹ 2. Certification attesting Electromechanical Completion² 3. Other Proof of WESM Registration issued by the MO 4. requirements as may be determined by the TNP

¹ Generation Company shall be responsible to ensure timely application for obtaining the above requirements to ensure scheduled date of T&C will not be compromised.

² For Generation Facilities not applying under the FIT system: Certification under oath that Electromechanical Completion has been achieved by the Generation Company
 For Generation Facilities applying under the FIT system: Endorsement by the DOE confirming Electromechanical Completion in accordance with Department Circular No. DC2013-05-0009

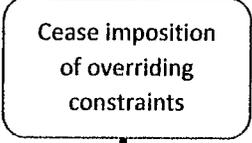
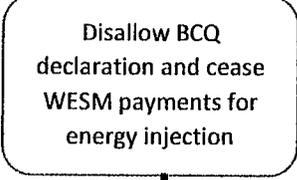
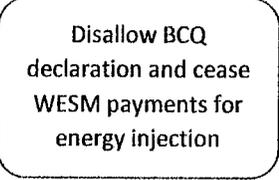
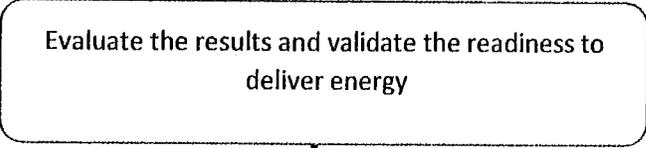
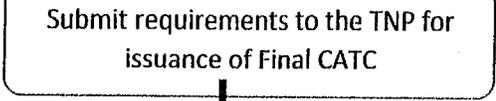
ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
TNP		within 20 calendar days from submission of complete requirements	
Generation Company		within 3 working days upon receipt of the PCATC	
Testing Entity + TNP + SO (witness)		2 months (initial conduct) 1 month (extension)	For the conduct of Test and Commissioning, no injection to the Grid or distribution network shall be allowed without a valid Provisional CATC. For duration of T&C: *SO shall submit over-riding constraints *Any injected or withdrawn energy during T&C of a Generation Facility, less any energy offtake from a bilateral contract counterparty, shall be settled at WESM prices. The MO shall notify the Generation Company fifteen (15) calendar days prior the date of expiry of the PCATC. TNP may conduct T&C if no third-party testing entity is available.

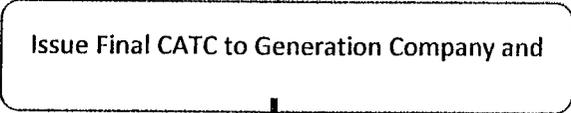
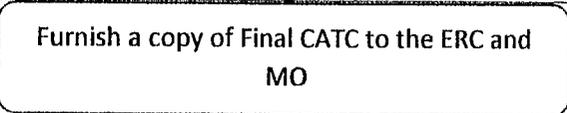
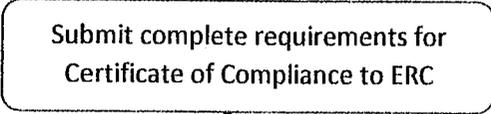
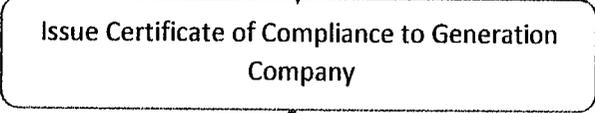
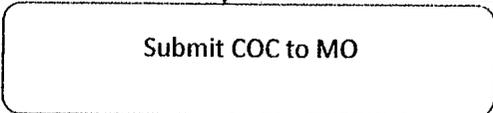
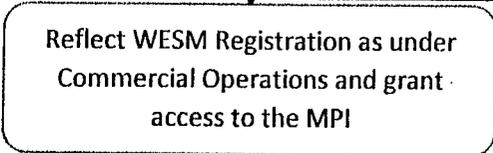
ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
SO		Immediately	
MO	 	Immediately	
TNP and/or Third-party testing entity		Within 14 calendar days after completion of the conduct of T&C	
TNP			
Generation Company		N/A	As may be required by TNP

ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
TNP		within 14 calendar days from the satisfactory evaluation of the results and GenCo's complete submission of requirements	
TNP		within 3 calendar days from the issuance to the GenCo	
Generation Company		N/A	As may be required by ERC
ERC		Within 60 calendar days	
Generation Company		Within 3 working days	
MO		Within 15 calendar days	Effectivity of the new WESM registration in the MPI shall be within eight (8) calendar days from approval.

ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
MO	<pre> graph TD Start(()) --> A[Effectivity of new WESM Registration in the MPI] A --> B((End)) </pre>	Within 8 calendar days	
Generation Company	<pre> graph TD D{Granted an extended PCATC already?} D -- Y --> R[Reset process] D -- N --> E{Reason for non-completion of T&C?} </pre>		
Generation Company	<pre> graph TD E{Reason for non-completion of T&C?} E -- External --> E1((E)) E -- Internal --> F1((F)) </pre>	N/A	External Reasons a) Grid network conditions b) Force majeure events Internal Reasons a) Technical issues within Generation Facility
TNP	<pre> graph TD E1((E)) --> A[Issue extended PCATC to Generation Company] </pre>	Immediately	
Generation Company	<pre> graph TD A[Furnish MO, SO with the extended PCATC] --> B((B)) </pre>	Immediately	

ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
TNP or third-party testing entity	<pre> graph TD F((F)) --> Eval(Evaluation of results) Eval --> G((G)) F --> Issues(Issues identified during T&C conduct) </pre>		
TNP	<pre> graph TD Q{Available T&C schedule within 1 month from expiry of PCATC?} Q -- Y --> E((E)) Q -- N --> Susp(Suspend validity of the PCATC) </pre>		
TNP	<pre> graph TD Susp(Suspend validity of the PCATC) </pre>	Immediately	

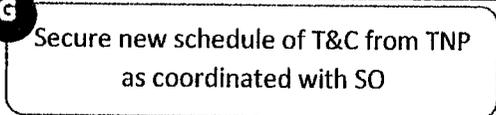
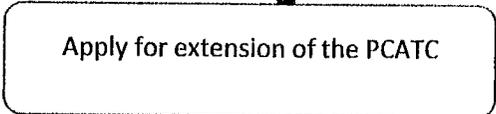
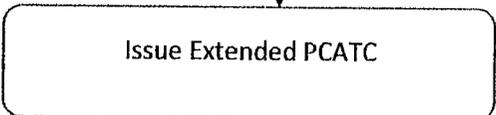
ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
SO	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Cease imposition of overriding constraints</div> <p style="text-align: center;">↓</p>	Immediately	
MO	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Disallow BCQ declaration and cease WESM payments for energy injection</div> <p style="text-align: center;">↓</p>	Immediately	
TNP	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Inform MO and SO that T&C was not completed within prescribed period</div> <p style="text-align: center;">↓</p>	Immediately	
Generation Company	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Secure new schedule of T&C from TNP as coordinated with SO</div> <p style="text-align: center;">↓</p>	at least 15 calendar days before the target date of reactivation of PCATC	
Generation Company	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Apply for reactivation of the PCATC</div> <p style="text-align: center;">↓</p>	at least 15 calendar days before the target date of reactivation of PCATC	
TNP	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Issue Reactivated PCATC</div> <p style="text-align: center;">→ B</p>	Immediately	Subject to the following conditions: The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.

ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
			<p>The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.</p> <p>The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.1.1</p>
Generation Company	 <p>G Secure new schedule of T&C from TNP as coordinated with SO</p>	at least 15 calendar days before the target date of extension of PCATC	
Generation Company	 <p>Apply for extension of the PCATC</p>	at least 15 calendar days before the target date of reactivation of PCATC	
TNP	 <p>Issue Extended PCATC</p>  <p>B</p>	Immediately	<p>Subject to the following conditions:</p> <p>The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.</p> <p>The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.</p>

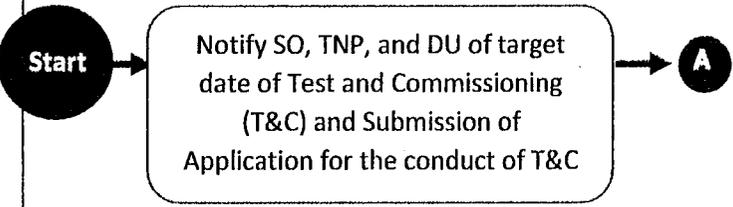
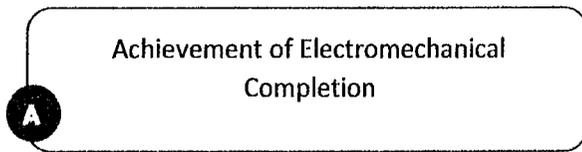
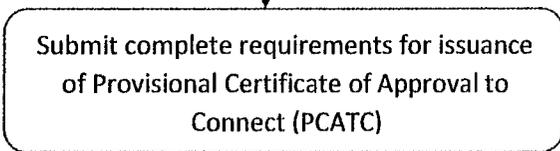
ANNEX A

FLOWCHART FOR GRID-CONNECTED GENERATION FACILITIES

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
			The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.2.1

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

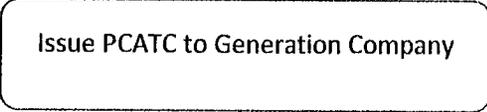
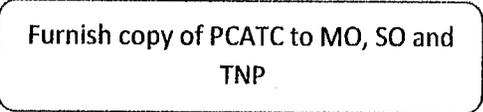
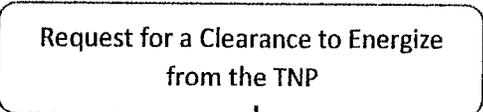
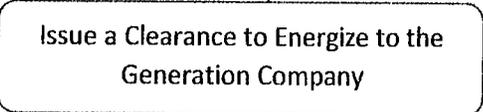
Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
Generation Company	 <pre> graph TD Start((Start)) --> Step1[Notify SO, TNP, and DU of target date of Test and Commissioning (T&C) and Submission of Application for the conduct of T&C] Step1 --> A((A)) </pre>	3 months prior to target date of Test and Commissioning	Actual schedule of Test and Commissioning shall be subject to confirmation of the TNP. Resource availability for VRE resources should be considered.
Generation Company	 <pre> graph TD A((A)) --> Step2[Achievement of Electromechanical Completion] </pre>	Prior the application for PCATC	
Generation Company	 <pre> graph TD Step2 --> Step3[Submit complete requirements for issuance of Provisional Certificate of Approval to Connect (PCATC)] </pre>	at least 23 days before the conduct of Test and Commissioning Schedule	<ol style="list-style-type: none"> 1. Scheduled date of Test and Commissioning, as coordinated with the DU, TNP and SO¹ 2. Certification attesting Electromechanical Completion² 3. Other Proof of WESM Registration issued by the MO 4. requirements as may be determined by the DU

¹ Generation Company shall be responsible to ensure timely application for obtaining the above requirements to ensure scheduled date of T&C will not be compromised.

² For Generation Facilities not applying under the FIT system: Certification under oath that Electromechanical Completion has been achieved by the Generation Company
 For Generation Facilities applying under the FIT system: Endorsement by the DOE confirming Electromechanical Completion in accordance with Department Circular No. DC2013-05-0009

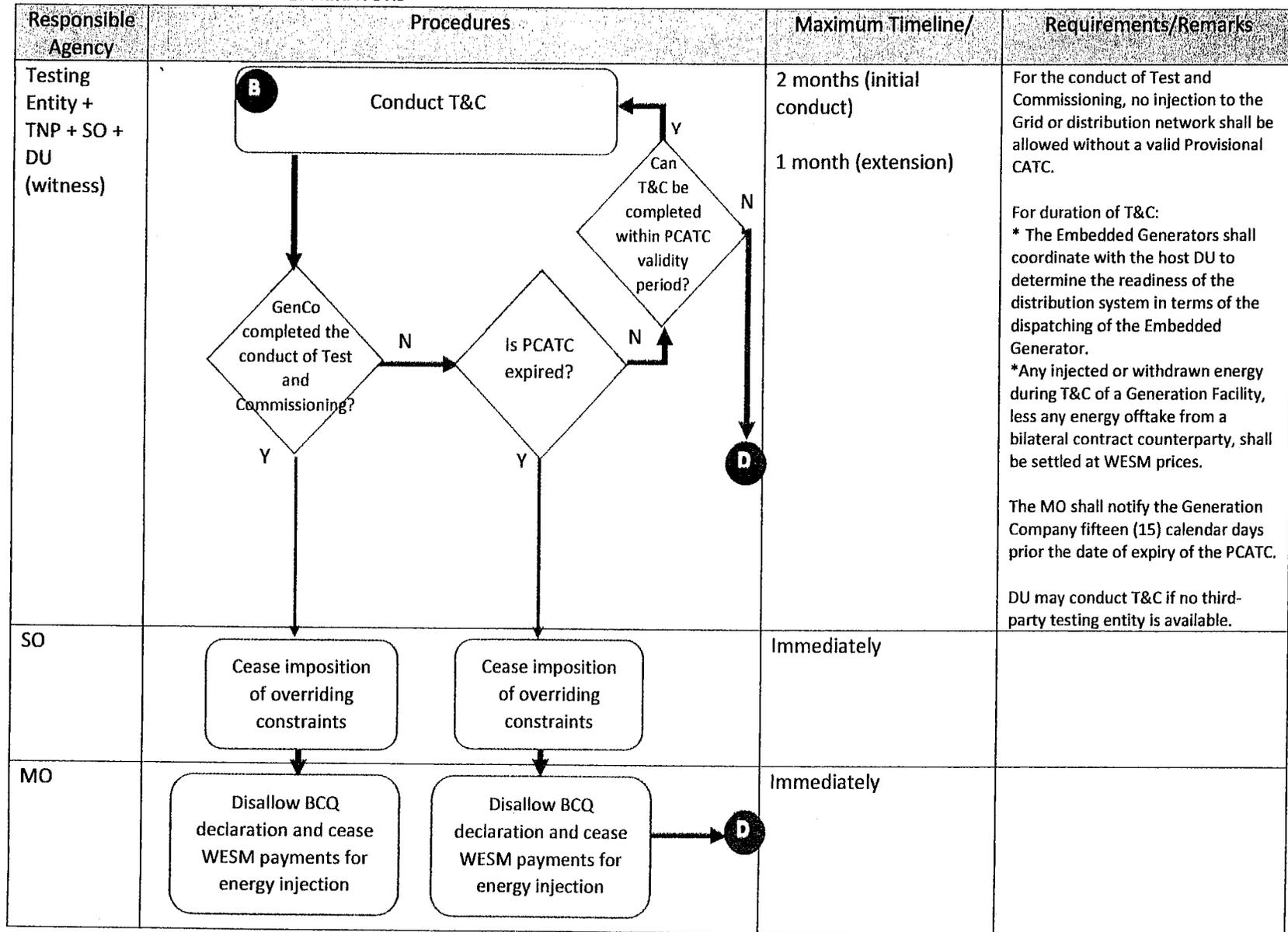
ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
DU		within 20 calendar days from submission of complete requirements	
Generation Company		within 3 working days upon receipt of the PCATC	
Generation Company		Prior the conduct of Test and Commissioning	
TNP	 	Prior the conduct of Test and Commissioning	

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS



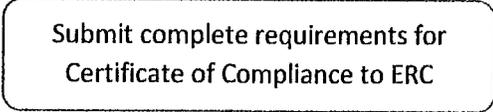
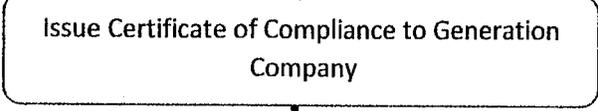
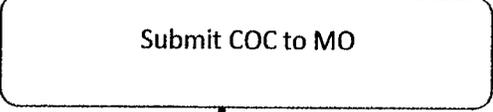
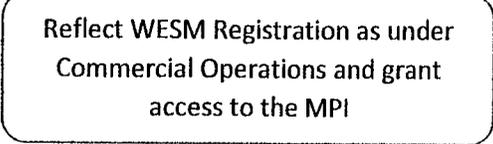
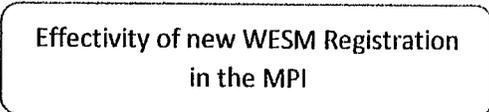
ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
TNP, DU and/or Third-party testing entity	<pre> graph TD Start(()) --> Eval(Evaluate the results and validate the readiness to deliver energy to the Grid and/or Distribution Network, as applicable) </pre>	Within 14 calendar days after completion of the conduct of T&C	
TNP and/or DU, as applicable	<pre> graph TD Eval --> Dec{GenCo ready to deliver energy?} Dec -- N --> D((D)) Dec -- Y --> Next[] </pre>		
Generation Company	<pre> graph TD Next --> Submit(Submit requirements to the DU for issuance of Final CATC) </pre>	N/A	As may be required by DU
DU	<pre> graph TD Submit --> Issue(Issue Final CATC to Generation Company and) </pre>	within 14 calendar days from the satisfactory evaluation of the results and GenCo's complete submission of requirements	

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
Generation Company		N/A	As may be required by ERC
ERC		Within 60 calendar days	
Generation Company		Within 3 working days	
MO		Within 15 calendar days	Effectivity of the new WESM registration in the MPI shall be within eight (8) calendar days from approval.
MO	 	Within 8 calendar days	

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
Generation Company			
Generation Company		N/A	External Reasons a) Grid network conditions b) Force majeure events Internal Reasons a) Technical issues within Generation Facility
DU		Immediately	
Generation Company		Immediately	

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
TNP or third-party testing entity	<pre> graph TD F((F)) --> Eval(Evaluation of results) Eval --> G((G)) F --> Issues(Issues identified during T&C conduct) </pre>		
DU	<pre> graph TD Q{Available T&C schedule within 1 month from expiry of PCATC?} Q -- Y --> E((E)) Q -- N --> Susp(Suspend validity of the PCATC) </pre>		
DU	<pre> graph TD Susp(Suspend validity of the PCATC) </pre>	Immediately	

ANNEX B

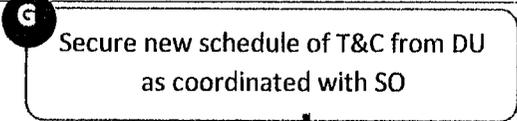
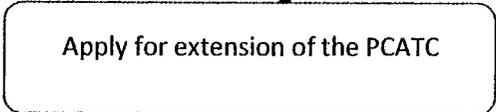
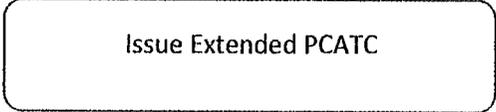
FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
SO	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Cease imposition of overriding constraints</div>	Immediately	
MO	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Disallow BCQ declaration and cease WESM payments for energy injection</div>	Immediately	
DU	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Inform MO and SO that T&C was not completed within prescribed period</div>	Immediately	
Generation Company	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Secure new schedule of T&C from DU as coordinated with SO</div>	at least 15 calendar days before the target date of reactivation of PCATC	
Generation Company	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Apply for reactivation of the PCATC</div>	at least 15 calendar days before the target date of reactivation of PCATC	
DU	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; text-align: center;">Issue Reactivated PCATC</div>	Immediately	Subject to the following conditions: The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.

B

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
			<p>The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.</p> <p>The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.1.1</p>
Generation Company	 <p>G Secure new schedule of T&C from DU as coordinated with SO</p>	at least 15 calendar days before the target date of extension of PCATC	
Generation Company	 <p>Apply for extension of the PCATC</p>	at least 15 calendar days before the target date of reactivation of PCATC	
DU	 <p>Issue Extended PCATC B</p>	Immediately	<p>Subject to the following conditions:</p> <p>The Generation Company shall disclose to the TNP, SO, MO and DU (for Embedded Generators) of any changes in capacity and capabilities of its Generation Facility.</p> <p>The Generation Company shall secure proof of Electromechanical Completion in accordance with Section 4.2.4.2 or 4.2.4.3 reflecting the completion of the modifications undertaken to the Generation Facility and submit the same to the TNP or DU.</p>

ANNEX B

FLOWCHART FOR EMBEDDED GENERATORS

Responsible Agency	Procedures	Maximum Timeline/	Requirements/Remarks
			The validity of the reactivated Provisional CATC shall be in accordance with Section 4.7.2.1