



ORCP-WR-26-02 27-Mar-2026 (Revised)
Date Received by Secretariat: 07-Apr-2026 (Revised-Signed)

REQUEST FOR MARKET RULES AND MANUALS AMENDMENTS

Proposals made only under this prescribed form shall be accepted and considered as submitted.

This request for amendments should be submitted to:

Rules Change Committee
Attention: WESM Governance Committee Secretariat
Philippine Electricity Market Corporation
18/F Robinsons Equitable Tower
ADB Avenue, Ortigas Center
Pasig City, 1605 Philippines
Email address: mag_rrd@wesm.ph

[In accomplishing and submitting this form, you give your consent for PEMC to collect, record, organize, and update your personal data as herein provided as part of your information for purposes of rules change process.]

I. Proponent’s Information

Name	[REDACTED]
Designation	[REDACTED]
Companies	SN Aboitiz Power-Magat, Inc. and SN Aboitiz Power-Benguet, Inc. (Collectively “SNAP Group”)
Company Addresses	[REDACTED] [REDACTED]
Telephone No.	[REDACTED]
Email Address	[REDACTED]

II. Amendment Information

Proposed Amendments to the (please tick the box):

WESM Rules Retail Rules

██████████ Market Ancillary Services Monitoring Manual Issue 1.2
Manual:

Topic:

Proposed Classification of Amendments (please tick the box):

General Minor Urgent

If Urgent, reason for urgency:

The timely implementation of the proposed rule change is critical to improving the technical accuracy of Frequency Driven Event (FDE) qualification under the Ancillary Services Monitoring Manual Issue (ASMM) 1.2. As the Reserve Market (RM) evolves, it is essential that compliance assessments align with operational realities including inherent physical limitations and frequency measurement variances.

Our internal analysis of 2025 data from our facilities indicates that the proposed enhancement could reduce daily Non Compliance (NC) tagging by up to 50%. This translates to a significant reduction in the manpower hours currently spent by the Enforcement Compliance Office (ECO) in evaluating multiple FDE NC events. It also lowers the substantial manpower hours incurred by Ancillary Service Providers (ASPs) in evaluating and validating these events which improves overall operational efficiency for both the ECO and ASPs.

The urgency of this request is further reinforced by its direct impact on the objective of the Reserve Market which aims to provide competitive market-driven prices for reserves through co-optimization. We note that ASPs face significant financial penalties for failing to comply with the RCS even during occurrences of Multiple FDE. Thus market competition may be negatively affected by this compliance risk. ASPs that are penalty-averse due to strict RCS requirements are likely to prioritize markets where they have high confidence in meeting technical standards while avoiding markets that are more volatile or carry a higher risk of incurring penalties. Unjustified NC tagging can potentially distort market participation and reduce overall competition as risk averse ASPs may raise RM offer prices to cover potential penalties or be discouraged from active participation in the RM. Reduced market competition may consequently increase market prices.

Reputational risk further underscores the urgency. Penalties exceeding Php 50,000 for RCS breaches are reported to the Philippine Stock Exchange (PSE) for publicly-listed ASPs. Frequent breaches arising from strict RCS rules that are not yet aligned with operational realities including inherent physical limitations of the plants can negatively impact the reputation of participating ASPs. Such negative perceptions can undermine market credibility and reduce the willingness of other providers to engage actively in the RM.

Moreover the proposed change will enable ASPs to offer Regulating Reserve (RR) with more confidence and fewer concerns regarding potential unjustified NC tagging driven by FDE anomalies. Addressing this matter at this stage will strengthen performance monitoring and encourage broader ASP participation and competition. This will reinforce trust in the market's compliance and evaluation framework and will likely lead to more competitive RM prices.

III. SUMMARY OF THE PROPOSED RULES CHANGE

This proposal seeks to amend Section 5.6.2 of the Ancillary Services Monitoring Manual (ASMM) 1.2 by introducing an additional qualification criterion for identifying a Frequency-Driven Event (FDE), which will apply to all Ancillary Service Providers (ASPs), including conventional generating plants and Battery Energy Storage Systems (BESS).

Under the current rule, an event will qualify as FDE if:

- a. the event lasts for more than five (5) seconds; and
- b. The frequency deviation exceeds the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage systems.

These provisions currently determine the **start** of an FDE. The proposed amendment complements these provisions by introducing additional conditions to determine the **end** of an FDE. This addresses a current gap that often leads to multiple or overlapping events being tagged for non-compliance:

c. The frequency deviation normalizes below the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage

d. The frequency deviation normalizes below the threshold for at least 25 seconds

For clarity, item (a) and item (b) determine the start of a FDE, while item (c) and item (d) determine the end of a FDE.

This rule change provides Reserve Facilities with additional tolerance for FDE qualification, taking into account the following key considerations:

- Introduces a buffer threshold of +0.02 Hz above 59.84 Hz (i.e., 59.86 Hz) that must be reached before a new FDE is registered. This ensures that the system frequency has sufficiently recovered before another event is qualified and prevents premature triggering of multiple FDEs caused by short-lived or oscillatory frequency deviations around the threshold.
- Accounts for discrepancies between unit-level (plant-level) and Enforcement Compliance Office (ECO) readings when determining the start and qualification of an FDE. A tolerance of ± 0.02 Hz is incorporated to align plant-level and system-level frequency measurements, ensuring that units are not unfairly penalized due to inherent differences in frequency sensing or measurement points.

By incorporating these changes, the rule provides additional tolerance in FDE qualification, acknowledging the physical limitations of Reserve Facility responses (e.g., inherent inertia delay in conventional power plants) and variances between facility-level measurements and system frequency. This alignment of the monitoring framework with actual Reserve Facility behavior reduces the incidence of multiple or overlapping FDEs, provides ASPs with reasonable time to normalize their load once the frequency stabilizes, and ultimately promotes more technically feasible compliance monitoring. In turn, these improvements enhance the operational flexibility of ASPs in the Reserve Market (RM) and support a more robust and reliable grid.

IV. BACKGROUND

Template version: 25 April 2024

The ASMM 1.2 provides the governing framework for evaluating the performance of ASPs participating in the RM of the Wholesale Electricity Spot Market (WESM). Section 5.6.2 of the ASMM outlines the criteria for identifying FDEs, which serve as the basis for assessing the reserve response of generating units operating under Governor Control Mode (GCM), for both conventional generators and BESS.

Under the existing provision, an event qualifies as an FDE if:

- it lasts for more than five (5) seconds; and
- The frequency deviation exceeds a defined deadband threshold (0.02 Hz for conventional units and 0.01 Hz for BESS).

These criteria were originally designed to ensure that ASPs respond adequately during significant frequency disturbances, thereby supporting overall system reliability. However, operational experience has revealed limitations in the current definition, particularly in how FDEs are identified and evaluated under actual grid conditions.

In certain cases, the frequency hovers closely around the 59.84 Hz threshold, leading to what we call “multiple FDEs” being registered in quick succession. While the first FDE in this succession elicits a proper response from the unit, responding units are not able to react ideally to subsequent FDEs in these certain cases, as these units are still stabilizing back to their respective set points. Using the existing criteria therefore for Reserve Conformance Standards (RCS) are not appropriate for measuring ASP’s performance for Multiple FDEs, due the reasons mentioned.

In another scenario, a unit may still record frequency at 59.83 Hz, indicating it is within an ongoing FDE and still actively responding. However, the ECO may already register the frequency as 59.841 Hz (above the deadband). When this ECO reading dips below 59.84 Hz again, a new FDE is incorrectly qualified, even though the unit never exited the initial response state. This discrepancy causes inaccurate computation of the “Actual MW prior to FDE” and leads to an unfair evaluation of response timing and magnitude.

These conditions create challenges for ASPs, which may not have sufficient time to react before the event ends or may detect a different frequency value compared to the system frequency due to facility frequency variances. This has led to an increased number of non-compliant (NC) taggings, including instances where the facilities were technically unable to respond or were penalized due to measurement discrepancies beyond their control.

To address these gaps, the proposed amendment introduces an additional criterion to identify an FDE which is that the event or the frequency deviation normalizes below the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage. These provisions determine the Start of an FDE. The proposed amendment complements this by introducing the following conditions that determine the End of an FDE.

V. THE PROPOSED RULES CHANGE

SN Aboitiz Power-Benguet, Inc. and SN Aboitiz Power-Magat, Inc. (collectively referred to as “SNAP Group”) is proposing an amendment to Section 5.6.2 of the ASMM by introducing a third condition for an event to qualify as a FDE.

Currently, an FDE is determined based on the following two criteria:

- a. the event lasts for more than five (5) seconds; and

b. The frequency deviation exceeds the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage systems.

To strengthen the technical robustness of FDE qualification, a third condition is proposed:

c. The frequency deviation normalizes below the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage

d. The frequency deviation normalizes below the threshold for at least 25 seconds

For clarity, item (a) and item (b) determine the start of a FDE, while item (c) and item (d) determine the end of a FDE.

This rule change seeks to provide Reserve Facilities with an additional tolerance for FDE qualification, with the following key considerations:

- Introduce a buffer "normalization threshold" of +/-0.02 Hz above 59.84 Hz (i.e., 59.86 Hz) that must be reached before a new FDE is qualified. Thus, multiple oscillatory FDE around the threshold (multiple FDEs) will be excluded from the measurement of RCS.
- It prevents premature classification of short-lived or oscillatory frequency dips as FDE. Thus, response of ASPs to the same will not be unfairly measured.
- This ensures that the system frequency has sufficiently recovered, marking the end of the previous FDE, before registering a new event.
- Account for frequency discrepancies between the Unit (plant-level) and the ECO readings when classifying an event FDE, by incorporating a tolerance of ± 0.02 Hz to align plant-level and system-level frequency measurements.
- This proposal ensures that units are not unfairly penalized due to inherent differences in frequency sensing, or measurement points.

These proposed additions introduce important tolerance mechanisms to the FDE qualification process. By requiring that a frequency deviation cycle must be completed first, (i.e., the system frequency returns within the defined deadband), the rule ensures that only material full-cycle disturbances are classified as FDEs. Hence, inconsequential and momentary frequency events will no longer be classified as FDEs and response to the same will no longer be measured against RCS. This proposal recognizes the critical grid support that ASPs provide but are still being unfairly penalized for non-compliances due to the inherent physical response delays of Reserve Facilities and the natural variances between the plant-level frequency and the System Frequency.

For the appreciation of the Rules Change Committee (RCC), the technical and contractual rationale for this proposal is as follows:

Sustained Response Obligation: Contingency and Regulating Reserve providers are required to maintain their response for the full 25 seconds following an initial frequency event. The generator's control system, boiler, and turbine are already committed to this sustained action as part of the Reserve schedule. Treating a second event within this 25-second window as a new, distinct occurrence would contradict the fundamental obligation to sustain the initial response. The generator cannot be expected to simultaneously respond to two separate events when its resources are already fully engaged.

Physical and Control System Limitations: From a control system and engineering perspective, a large generator cannot instantly "reset" its response to the initial disturbance simply because a new frequency event is detected within the 25-second

period. The governor action and steam system are part of a continuous, dynamic process. The turbine's inertia, boiler or combustion system time constants, and overall plant dynamics are all engaged in sustaining the initial response. Any subsequent frequency event during this period is effectively part of the ongoing grid instability that the generator is already addressing.

Technical Intent of the 25-Second Sustain: The proposed Rules Change ensures a robust and enduring contribution to grid stability following a disturbance. A second frequency event within this window should not be used to re-evaluate or penalize the generator. Instead, it should be recognized as a continuation of the initial event, which the generator is actively mitigating. This interpretation ensures the rules are applied in a technically sound and fair manner, consistent with the physical capabilities and contractual obligations of the ASPs.

ASMM Compliance: The ASMM mandates that Contingency and Regulating Reserve providers must respond within 5 seconds and sustain that response for at least 25 seconds to arrest frequency decline and restore grid balance. A subsequent frequency event occurring within this 25-second window must therefore be considered part of the initial event, not a separate occurrence. This ensures compliance with both technical requirements and operational realities.

The proposal will provide ASPs with a more realistic and operationally efficient response window to normalize their output after a frequency event. It reduces the likelihood of multiple fragmented FDEs being triggered by a single disturbance, thereby enhancing the integrity of compliance tagging, reducing unnecessary non-compliance flaggings, and avoiding unwarranted Reserve Trading Amount (RTA) deductions and penalties.

Impacts and Benefits

The proposed rule change is expected to significantly enhance the technical feasibility of compliance monitoring, while promoting more efficient market operations and grid reliability.

Based on operational data from 2025, SNAP Group projects that implementation of this proposal could lead to approximately a 50% reduction in daily NC taggings and Reserve Market breaches.

- Allows generating units sufficient time to fully recover to their base or scheduled load before being assessed for a new FDE.
- Improves accuracy and fairness in the computation of the "Actual MW prior to FDE."
- Minimizes the occurrence of false-positive or overlapping FDEs caused by minor frequency fluctuations near the deadband.
- Enhances coordination between Unit SCADA systems and ECO monitoring, recognizing the small but impactful differences in frequency data sources.
- Supports a more technically sound and reliable evaluation of unit response compliance within the required 5-second reaction window.

Importantly, this proposed amendment does not compromise the reliability or integrity of the frequency control. On the contrary, it strengthens the compliance framework by ensuring that only complete frequency disturbances trigger compliance monitoring. The result is a more transparent, consistent, and technically sound monitoring system that reinforces confidence among market participants.

VI.BACKGROUND AND DESCRIPTION OF THE PROPONENT

SN Aboitiz Power-Magat, Inc. and SN Aboitiz Power-Benguet, Inc. (collectively, the “SNAP Group”) are registered members and trading participants of the Wholesale Electricity Spot Market (WESM). The SNAP Group owns and operates four hydroelectric power plants and one battery energy storage system, all located in North Luzon.

VII.CONCLUSIONS AND RECOMMENDATIONS

In light of the above, SNAP Group respectfully recommends the adoption of the proposed amendment to Section 5.6.2 of the ASMM 1.2. This change introduces a technically sound and operationally fair enhancement to the qualification criteria for FDEs. It ensures that ASPs are assessed based on complete and accurate event information and protects against unjustified compliance penalties.

We respectfully submit this proposal to the Rules Change Committee (RCC) of the Philippine Electricity Market Corporation (PEMC) for review, evaluation, and approval.

VIII.REFERENCES

- Ancillary Services Monitoring Manual 1.2

Proposed Amendment To The Ancillary Services Monitoring Manual

(The following tables are to be used as applicable to the proposal.)

[Ancillary Services Monitoring Manual, Issue No. 1.2]				
Title	Section	Provision	Proposed Amendment	Rationale
Section 5.6 Measuring Reserve Response Compliance of Generators on	5.6.2.	<p>The event will qualify as Frequency-Driven Event, for this purpose, if:</p> <p>a. the event lasts for more than five (5) seconds; and</p> <p>b. the frequency deviation exceeds the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage systems</p>	<p>The event will qualify as Frequency-Driven Event, for this purpose, if:</p> <p>a. the event lasts for more than five (5) seconds; and</p> <p>b. the frequency deviation exceeds the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage systems;</p> <p><i>c. The frequency deviation normalizes below the deadband setting by 0.02 Hz for conventional generating units and 0.01 Hz for battery energy storage</i></p> <p><i>d. The frequency deviation normalizes below the threshold for at least 25 seconds</i></p> <p><i>For clarity, item (a) and item (b) determine the start of a FDE, while item (c) and item (d) determine the end of a FDE.</i></p>	<p>To provide the Reserve Facilities an additional tolerance with the following considerations:</p> <p>a. Give ample time for the Reserve Facility to normalize its loading near the Unit setpoint, which is the initial reference of the Unit governor in computing the desired response.</p> <p>b. Variances from the Reserve Facility's Frequency Reference compared to the</p>

[Ancillary Services Monitoring Manual, Issue No. 1.2]				
Title	Section	Provision	Proposed Amendment	Rationale
				<p>System Frequency</p> <p>c. Reduction of multiple Frequency Driven Events occurrences</p> <p>The additional provisions aim to combine the evaluation of multiple FDEs, and not exclude any FDE.</p> <p>This ensures that the system frequency has sufficiently recovered before registering a new event.</p> <p>It prevents premature triggering of multiple FDEs caused by short-lived or</p>

[Ancillary Services Monitoring Manual, Issue No. 1.2]				
Title	Section	Provision	Proposed Amendment	Rationale
				oscillatory frequency dips around the threshold.

Note: For convenience, please underline and put in bold letters the proposed additions and strikethrough the proposed deletions.

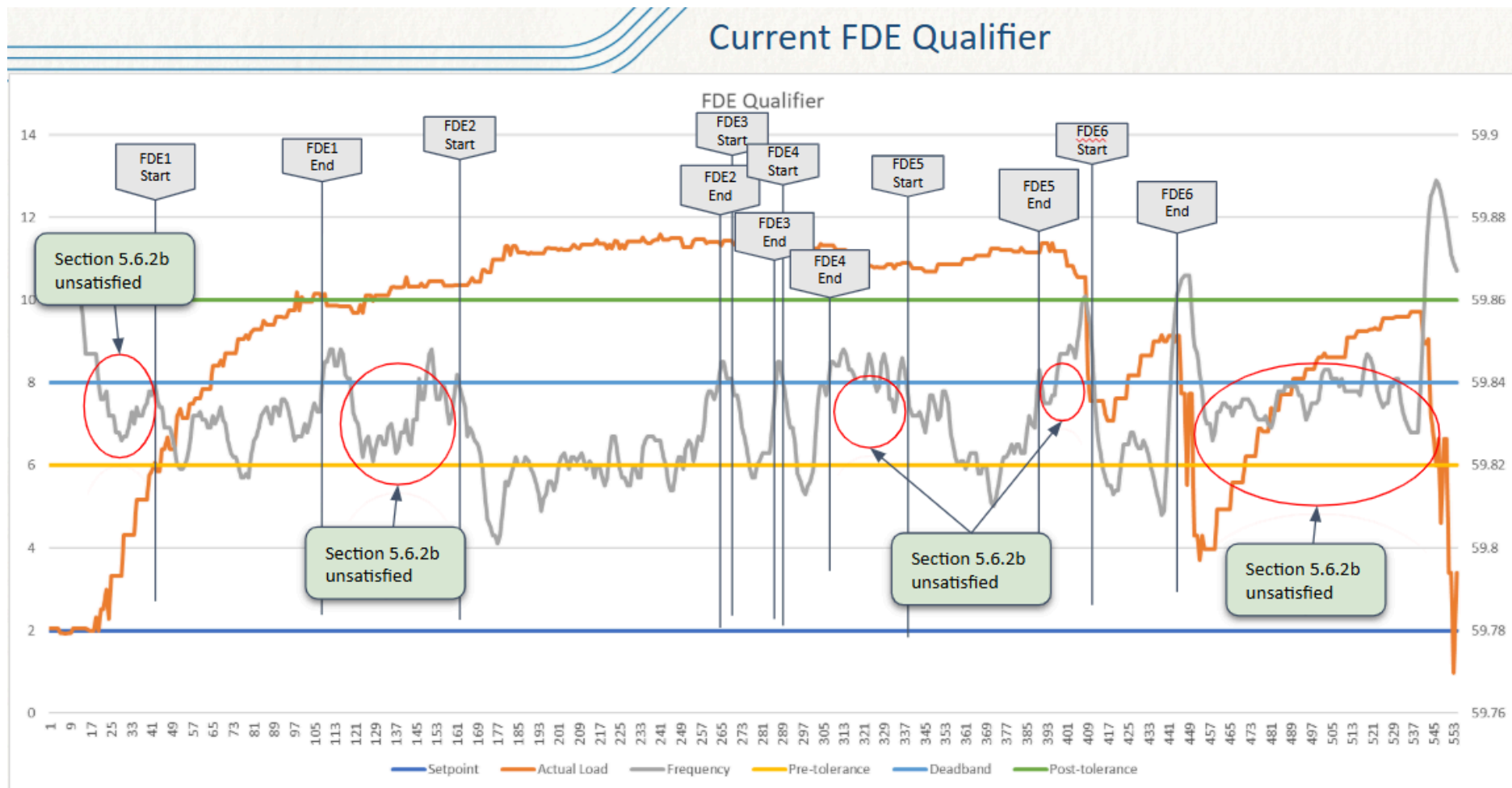


Figure 1: Illustration of current Frequency Driven Event Qualifier in which Unit load is on the process of arresting the abnormal frequency and the response is not assessed on fairly mannered . Schedule Mode of Operation is CR. Deadband setting is 0.16Hz

During the first frequency deviation, when the frequency falls beyond the deadband setting, a generating unit with CR provision responds by increasing its generation from Pmin. Consistent with the ASMM definition of an FDE, the 1st Frequency Driven Event (FDE) started once i.) the event lasted for more than five (5) seconds; and ii.) the frequency deviation exceeded the deadband setting by 0.02 Hz. The FDE will then end when the frequency goes back within the deadband setting.

Ideally, the loading of the generating unit should also return to Pmin as the frequency stabilizes within the deadband setting. However due to physical constraints such as mechanical limitations and inherent inertia, as well as discrepancies between the system and plant frequency measurement, there is a slight delay in normalizing the loading back to Pmin.

The issue arises when the frequency quickly falls beyond the deadband setting while the generating unit is still normalizing back to Pmin. In this situation, the generating unit postpones its normalization and will prioritize providing support to the grid. This has been observed multiple times, as shown in the chart, where frequency deviations oscillated around deadband settings, triggering multiple short-lived FDEs up to six (6) times in a single event.

In this scenario, the ASP which continuously supported the grid throughout these intermittent frequency deviations and multiple FDEs within a short period, was penalized several times without accounting for its physical constraints and frequency discrepancies (system vs. plant frequency measurement).

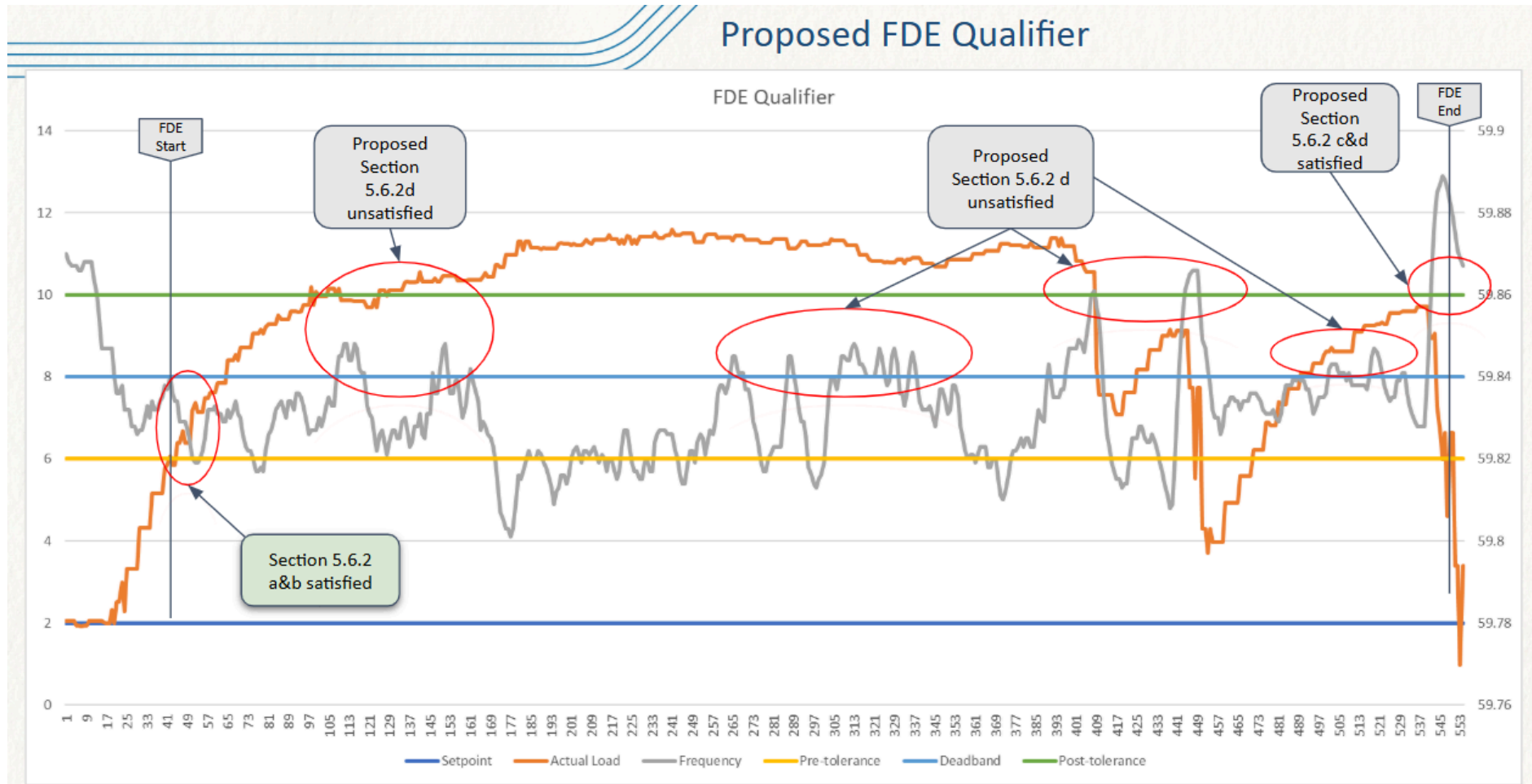


Figure 2: Illustration of proposed Frequency Driven Event Qualifier in which Unit load is on the process of arresting the abnormal frequency and the response is assessed on fairly mannered. Schedule Mode of Operation is CR. Deadband setting is 0.16Hz

During the first frequency deviation, when the frequency falls below the deadband, a generating unit with CR provision responds by increasing its generation from Pmin. Consistent with the ASMM definition of an FDE, the first Frequency Driven- Event (FDE) started once i.) the event lasted for more than five (5) seconds; and ii.) the frequency deviation exceeded the deadband setting by 0.02 Hz. Since frequency deviations can be intermittent, frequently crossing above and below the deadband, the generating unit continues providing support to the grid, and such intermittent activity should be considered part of the current FDE.

We propose that the FDE should end when both of the following conditions are met i.) the frequency deviation normalizes below the deadband setting by 0.02 Hz; and ii.) the frequency deviation normalizes below the threshold for at least 25 seconds.

These proposed end conditions ensure that the frequency has fully returned to the frequency level of 60Hz and is sustained. As seen in the chart, there are instances where the frequency briefly returns within the deadband setting of 0.02Hz but then quickly deviates again, indicating that the grid has not fully stabilized. The 25-seconds sustained period ensures that the generating unit continues to cover the disturbance in the grid until the system normalizes back.

Implementing this proposal will enhance the operational flexibility of the ASP, allowing them to support a more robust and reliable grid while accounting for their physical constraints and system and plant frequency discrepancies. It also prevents premature triggering of multiple FDEs caused by short-lived or oscillatory frequency deviations around the threshold.