

**MINUTES OF THE RULES CHANGE PANEL
149th MEETING
HELD ON THURSDAY, 18 SEPTEMBER 2025 AT 10.00AM
AT ENERGY MARKET CO. PTE LTD
4 SHENTON WAY #03-01
SGX CENTRE 2, SINGAPORE 068807**

Present:	Toh Seong Wah (Chairman) Sherman Toh Teo Chin Hau Fong Yeng Keong Cheong Zhen Siong	Andrew Tan Dallon Kay Wong Yew Chung Dr Toh Mun Heng
Absent with Apologies:	Soh Yap Choon Calvin Quek Matthijs Jan Guichelaar	Henry Gan Teo Swee Teng
In Attendance: (EMC)	Poa Tiong Siaw Alicia Poh Vincent Wise	Li Zhenhui Alfred Toh Candice Tia

	Minutes of 149th RCP Meeting – 18 September 2025	Action
1.	Notice of Meeting The Chairman called the meeting to order at 10.08am. The Notice and Agenda of the meeting were taken as read.	
2.	Confirmation of Minutes of the 148th Rules Change Panel Meeting The Minutes of the 148 th Rules Change Panel (“RCP”) meeting, held on 15 May 2025 were approved by the RCP.	
3.	Update of Monitoring List, Summary of Outstanding Rules Change Submissions, and RCP Work Plan Status Update Mr Li Zhenhui presented the Update of Monitoring List, Rule Change Submission, and RCP Work Plan Status Update.	
4.	RC394: Exemption from AFPS for deviating GRFs on Free Governor Control	
4.1	Mr Alfred Toh presented the background to the paper, covering an introduction to the Automatic Financial Penalty Scheme (AFPS) and its exemptions, and on governor mechanisms. Mr Toh shared that this paper specifically looks at the AFPS exemption for generation registered facilities (GRFs) operating under Free Governor Control and is responding positively to a power system disturbance, as found in Section 3.7.3.8 of Chapter 5 of the Market Rules.	

	<p>Mr Toh continued to present EMC’s analysis on broadening the AFPS exemption, to exempt GRFs that respond positively to frequency changes in the power system while on free governor control, particularly when its operating mode is on local control, and not on automatic governor control (AGC) where the PSO will have more control over the facility. This is provided the GRF and governor complies with the Transmission Code, even beyond a power system disturbance.</p>	
4.2	<p>Mr Wong Yew Chung and Mr Cheong Zhen Siong sought to clarify the conditions of the current exemption and EMC’s proposed changes.</p> <p>Mr Toh clarified that the current exemption requires two things: the GRF to be responding positively to frequency changes and to do so amidst a power system disturbance event. The proposal seeks to remove the requirement that the deviation from schedule must happen during a power system disturbance event, provided its response contributes to system stability and complies with other regulatory documents such as the Transmission Code.</p> <p>Mr Dallon Kay asked if having this exemption modified as proposed would allow such GRFs to be exempted early instead of having to appeal ex-post, which makes the process more efficient. Mr Toh affirmed his understanding.</p>	
4.3	<p>Mr Kay asked if the term “power system disturbance” is defined, or if a range of conditions a power system disturbance entails is stated in the Market Rules or other market document.</p> <p>Mr Teo Chin Hau and Mr Poa Tiong Siaw responded that within current market documents, there are no written guidelines. The PSO declares such an event according to its assessment. Mr Li Zhenhui added that power system disturbance events typically involves outages of large generation plants, where the response from other resources activated via reserves or regulation may exceed 10MW. However, with increased solar intermittency today, GRFs may be pulsed upwards or downwards by more than 10MW, beyond the tolerance threshold of the AFPS, even in the absence of a power system disturbance event.</p>	
4.4	<p>Mr Fong Yeng Keong asked if the free governor control operating mode works independently in the absence of power system disturbance. Mr Alfred Toh responded that the understanding is correct.</p> <p>Given Mr Toh’s explanation of the difference between AGC and local control, Mr Fong Yeng Keong asked if a GRF can always be on AGC, and if not, what would require a GRF to be on local control instead.</p>	

	<p>Mr Teo shared that instances requiring GRFs to be on local control can be the performance of a fuel changeover or maintenance. In such situations, the GRF operator coordinates the switching of modes from being on AGC to local control with the PSO. Otherwise, GRFs are typically on AGC. Mr Teo further shared that free governor control, as part of a GRF's equipment, involves the GRF automatically responding to frequency changes in the power system, and not from any manual human intervention.</p>	
4.5	<p>Mr Fong asked if there may be any impact from amending this exemption on consumers. Mr Teo responded that this is unlikely, given market prices are determined ex-ante, and is not influenced by GRFs being pulsed up or down in response to system frequency fluctuations.</p>	
4.6	<p>Mr Kay clarified what qualifies as a positive response to frequency fluctuations. Mr Teo noted that a positive response can either be a GRF increasing or decreasing its output, depending on the prevailing system frequency.</p>	
4.7	<p>Mr Sherman Toh queried on the party determining whether the AFPS should apply (in instances when there is a deviation between dispatch schedule and actual output). Mr Poa responded that this party is the PSO, who will send AFPS files to EMC when they determine the AFPS would apply for a particular GRF/IRF.</p>	
4.8	<p>Mr Toh continued to present EMC's proposed market rule modifications and comments arising from industry consultation.</p> <p>On EMC's drafting of the rule changes, Mr Cheong asked if it was necessary for the rules to include compliance with the Transmission Code as a requirement for the exemption, as generators are required to comply with the Transmission Code anyway.</p> <p>Mr Teo replied that it provides additional clarity for market participants on whether they can expect to qualify for the said AFPS exemption. Mr Toh added that the PSO had also been consulted on the rule drafting specifically; and the PSO supported the change.</p>	
4.9	<p>Mr Kay asked if there is any merit to some monitoring of the events or instances that are addressed by rule change, should it be approved. This is because the exemption could potentially apply for multiple periods without a clear upper limit, therefore resulting in a wide range of outcomes.</p> <p>Mr Poa responded that given it is the PSO who monitors this, this ought to be discussed with PSO.</p>	
4.10	<p>Mr Toh gave concluding remarks and reiterated EMC's proposal to broaden the AFPS exemption found in Section 3.7.3.8 of Chapter 5 of the Market Rules to remove its</p>	

	<p>dependency on the occurrence of a power system disturbance event, provided the GRF responds positively to frequency changes in the power system and complies with the relevant Transmission Code requirements.</p> <p>Mr Toh laid out EMC’s recommendations that the RCP:</p> <ul style="list-style-type: none"> a) Support the proposed modifications as set out in Annex 3 of the rule change paper; and a) Recommend that the EMC Board adopts the proposed modifications as set out in Annex 3 of the rule change paper. 	
4.11	Chairman called for a vote and the RCP unanimously supported the EMC’s recommendations listed in 4.10.	
5.	RC377: Regulation Cost Allocation to Generation Settlement Facilities above 10MW	
5.1	Mr Vincent Wise presented the background and analysis for this paper, which proposes to allocate regulation costs to a Generation Settlement Facility’s (GSF) entire metered generation.	
5.2	<p>Mr Wong Yew Chung asked what are these regulation costs. Mr Dallan Kay clarified that these are costs recovered from the market.</p> <p>Mr Poa Tiong Siaw further added that the regulation costs are payments made to regulation providers who help maintain grid stability. These costs are largely recovered from consumers through charges on load consumption.</p>	
5.3	<p>Mr Kay sought clarification on whether the proposed solution on the allocation of regulation cost is applied uniformly regardless of cost contribution, such as higher intermittency in floating solar than non-solar GSFs. Mr Kay noted that no differential treatment exists beyond the registration schemes.</p> <p>Mr Wise clarified that the current proposal does not differentiate based on technology, but on the market registration schemes which may comprise of different kinds of technologies such as solar and non-solar.</p>	
5.4	<p>Mr Wise continued to present on implementation of the proposed solution. Mr Wise shared that EMC proposes to defer implementation as it would only be cost effective to do this alongside another major system update.</p> <p>Mr Cheong Zhen Siong raised a concern on the high ballpark cost estimate of implementation. He noted that even with a significant increase in the number of GSFs, their potential under-allocation may not warrant the projected implementation cost.</p> <p>Mr Wise clarified that any ballpark cost estimate represents hypothetical estimates of the cost incurred should EMC</p>	

	<p>implement this change on its own, hence the suggestion to combine it with a broader system update.</p>	
5.5	<p>Mr Kay asked if there is a defined security cap on the total GSF capacity that can be registered within the system.</p> <p>Mr Wise clarified that EMC is currently not aware of any such security cap.</p>	
5.6	<p>Mr Kay asked if there was scope in this paper to review the regulation cost allocation for loads. Applying the causer pay principle, allocating the same unit rate of regulation costs to loads with high variability and loads that are more stable may be inappropriate.</p> <p>Mr Wise responded that this could represent a significant undertaking and suggested for this to be looked at in a separate proposal for better focus.</p>	
5.7	<p>Mr Fong Yeng Keong sought clarification on whether, in scenarios where GSFs pay lesser regulation costs, the resulting shortfall would be recovered from consumers.</p> <p>Mr Poa Tiong Siaw re-iterated that regulation costs are allocated to liable parties under the current cost recovery mechanism, which consist mainly of consumers. If GSFs are allocated a lower share, then consumers consequently pay a higher share. There is also no “shortfall” to speak of. GSFs are currently just, in our opinion, allocated a lower-than-desired share of regulation costs.</p>	
5.8	<p>Mr Kay noted that the proposal reviews the regulation cost allocation within the current facility registration framework. He asked if it is possible to expand the scope of the analysis by also reviewing whether the abovementioned framework remains robust and effective.</p> <p>Chairman responded that this be part of a holistic review which requires PSO input as it would involve a review of the dispatchability threshold. Chairman suggested to take incremental steps to address the cost allocation issue, revisiting it as and when appropriate should the registration framework change.</p>	
5.9	<p>Mr Wise continued to present on the proposed modifications, comments from the industry arising from industry consultation and the conclusion and recommendation of this proposal. Mr Wise emphasised that EMC is seeking RCP’s conceptual endorsement of the proposal, and will report back to the RCP with more details on implementation when a suitable window arises.</p> <p>Mr Teo Chin Hau raised a concern with respect to the Intermittent Pricing Mechanism (IPM), which may affect the regulation and/or potentially reserve cost framework for solar</p>	

	<p>facilities. Mr Teo reiterated the need to ensure that any change to the regulation cost allocation to GSFs will have to be consistent with changes from the IPM to prevent double or under charging. Therefore, he proposed that any subsequent update on this paper should not only include implementation details such as costs, but also on whether the proposed changes would work consistently with the IPM.</p> <p>Mr Wise notes Mr Teo's points above.</p>	
5.10	<p>Chairman gave concluding remarks and reiterated that EMC was seeking the panel's endorsement of the proposal at a conceptual level, noting that EMC will provide an update before implementation, aligning it with a major system upgrade for cost synergy.</p> <p>Chairman proceeded to call for a vote in support of the proposal at a conceptual level. The following RCP members supported EMC's recommendation:</p> <ol style="list-style-type: none"> 1. Mr Teo Chin Hau (Representative of Generation Licensee) 2. Mr Sherman Toh (Representative of Transmission Licensee) 3. Mr Andrew Tan (Representative of Retail Electricity Licensee) 4. Mr Fong Yeng Keong (Representative of Consumers of Electricity in Singapore) 5. Dr Toh Mun Heng (Representative of Consumers of Electricity in Singapore) 6. Mr Wong Yew Chung (Person experienced in Financial Matters in Singapore) <p>The following RCP members did not support EMC's recommendation:</p> <ol style="list-style-type: none"> 1. Mr Cheong Zhen Siong (Representative of Wholesaler Electricity Market Trader) 2. Mr Dallon Kay (Representative of Retail Electricity Licensee) 	EMC
6.	<p>Update on CP95: Holistic Review of the Market Rules Related to Cessation of Business, Liquidation, and Insolvency</p>	
6.1	<p>Mr Vincent Wise provided an update on the current status of the CP95: Holistic Review of the Market Rules related to Cessation of Business, Liquidation and Insolvency.</p> <p>Mr Wise shared that following the RCP's endorsement of an automatic suspension framework as raised in CP95 at its 138th meeting, EMC re-engaged the external legal counsel for assistance with rule drafting. Then, concerns were raised that the automatic suspension framework risked being draconian and disproportionate if applied to the events of default as they are drafted in the market rules today. To ensure the robustness of any eventual framework, EMC is seeking broader legal advice, which may involve a review of the currently drafted</p>	

	<p>events of default and adjustments to the automatic suspension framework.</p> <p>EMC will endeavour to provide pertinent updates to the RCP as and when they become available.</p>	
6.2	<p>Mr Dallon Kay queried on who will bear the shortfalls associated with the payment defaults of an insolvent market participant. Mr Wise explained that as a last resort, EMC shall pro-rate all payments due to market creditors. Mr Wise added that the proposal's priority remains to safeguard the market's financial integrity, but as there are legal elements involved, sufficient care on the legality and fairness of any eventual framework is also important.</p> <p>Mr Kay asked if a similar legislative carve-out found in the Competition Act can be applied here to make clear that suspension hearings conducted by the MSCP will be carved out from the Insolvency, Restructuring and Dissolution Act (IRDA). Mr Poa responded that this was previously explored with the EMA, but an outcome did not materialise.</p>	
6.3	<p>Mr Cheong Zhen Siong clarified that the current wordings in the Market Rules were drafted and designed to support the existing suspension procedure which involves the Market Surveillance and Compliance Panel (MSCP). If a new framework for automatic suspension is introduced, how events of default are defined in the market rules will need to be revisited and revised accordingly.</p> <p>Mr Poa Tiong Siaw agreed with Mr Cheong's point. He further explained that ideally, all suspension cases should be handled via the current suspension process, which remains robust. However, the MSCP has opined that suspension hearings involving an insolvent market participant to be inconsistent with the IRDA. The automatic suspension framework EMC proposed in CP95 is intended to provide an avenue to handle such insolvent market participants. To ensure this framework is robust, Mr Poa agrees with Mr Cheong that the definitions of the events of default require careful review.</p>	
6.4	<p>Chairman concluded and emphasised that the review of the Market Rules ensures that the market and its operator will not be exposed and unprotected if such default events occur.</p>	

There being no other matters, the meeting ended at 11.49 a.m.

Toh Seong Wah
Chairman

Minutes taken by:

Ivy Leong
Legal, Compliance & Corporate Secretarial Executive