RETAIL ENERGY CODE

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NON-CONFIDENTIAL CONSOLIDATED CONSULTATION RESPONSES

R0096 – CSS MESSAGE REGENERATION FUNCTIONALITY

On 19 December 2025, the Code Manager issued a consultation to industry to seek feedback on the Change Report (For Consultation) for R0096 – CSS Message Regeneration Functionality.

The purpose of this document is to consolidate the responses and for the Code Manager to answer any questions raised within those responses.

DOCUMENT VERSION	V2.0
RESPONSE TYPE	Non-Confidential
DATE ISSUED	28 January 2026
RESPONSIBLE COMMITTEE	Technical Expert Panel
LEAD ANALYST	Bela Ashworth, Finn Deacon

DATE CONSULTATION ISSUED	17 December 2025
RESPONSE DEADLINE	12 January 2026

Question 1:	Do you agree with the proposed solution? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	Yes, we believe given the impact that 'unsent' messages can have on industry participants that this change is appropriate.	Thank you for your comments.
National Grid Electricity Distribution (Distribution Network Operator)	Yes, we agree.	Thank you for your comments.
ScottishPower Energy Retail Limited (Energy Supplier)	Yes, we agree with the proposed solution.	Thank you for your comments.
British Gas (Energy Supplier)	The design of the proposed Recovery Point System (RPS) is considered a relatively heavyweight solution—high assurance, but high cost and operational impact – and involves enhancement at the core of CSS over the entire (considerably large) scope. Intrusive development of this nature can be seen as risk amplified in the context of the volume and complexity of parallel running CSS change and enhancement. Therefore, it is reasonable to propose that simpler checkpointing/transaction-journal patterns may sometimes deliver an acceptable (though lower) resilience level at a much lower risk-to-cost ratio. They may not directly address the Blob replication issue but may be justifiably performant to be approved instead as risk mitigation.	Thank you for your comments. Whilst the nature of the proposed Recovery Point System (RPS) may be considered as 'heavyweight', it is seen as the most appropriate solution which addresses the current vulnerability within the CSS should an outage occur. There have been consultations with Microsoft to attempt to rectify the wider replication guarantee issue but ultimately must be worked around. It is important to note that the wider R0096 Solution is addressing far more

	Please consider that if the RPS solution can be seen to be justified by re-use and re-deployment as a key capability in preserving the integrity of existing and future solutions, which strategically introduce increased dependency on critical real time event-based energy industry systems, then it could be seen in a much more favourable beneficial light. Examples might include the MHHS DIP (Data Integration Platform), and future message-based services, potentially Trident, SSES programme, DSI (VES Programme), etc… Correspondingly, if other existing solution e.g. MHHS DIP, have suitable solutions then they should be taken into consideration. **Context** This response is based on a document review of "Message Regeneration Detailed Design Stage (PR8003)",and as such does **not** include: • Data (including wider than CSS) or conclusions on risk, frequency and impact of the main issue – Blob replication – focus is on the one CSS critical incident from 2023 • Results (existing or proposed) from general improvements in operational and housekeeping e.g. reducing data storage for replication, utilising new/additional/combination of alerting & monitoring tools, service improvements & upgrades • Consultations with Microsoft on addressing the main issue – Blob replication, and potentially checking the status of blob replication with tools to resolve • Discussion of wider deployment (re-use) of RPS across additional industry real time event based systems/services in order to realise benefit	than just the replication issue. The RPS ensures downstream impact to CSS Users is mitigated as far as possible. Furthermore, this solution considers that the architecture of the CSS has changed in last 2 years and is the most interoperable solution for future architectural changes. This solution also looks beyond the failed registrations during the P1, providing mitigation to all messages sent within the CSS. The RPS has the ability to track any process happening throughout the CSS infrastructure and identify where a stall may have occurred and rectify that to minimise any potential impact. This is not specific to Switch Requests only, but for other key business processed for CSS users, such as Agent appointments, Change of Shipper requests and Alliance changes. As CSS is the Data Master for Registration information it is vital that requests are processed quickly, accurately and with all information being sent out to recipient users, this solution supports that, plus other resilience improvements such as:

	Background The design of the proposed Recovery Point System (RPS) would strengthen the overall CSS approach to operational resilience and BCDR utilising an industry-aligned approach. RPS addresses the key issue of Blob replication with a **supportive** solution, and in addition provides tools and a framework for issue identification for analysis & resolution. • RPO – Stalled messages - Monitoring, Alerting & Requeue • RPS – Recovery Point and Re-Starts – Integrated Service to capture data • RPL – Data Store – Manage data However, the RPS solution is in response to a known scenario – geo-replication for asynchronous Blob replication – and does not address the issue head on. Instead, it provides a be-spoke **supportive** solution, additional to the main systems operations, albeit with standard and well recognized Azure components and approaches. The development of RPS will be invasive of the core CSS solution – scheduled to be under significant change - and comes with a sizable cost to deliver and maintain. Hence, consideration in assessing cost v benefit needs to include the wider view than CSS – a view of the increased dependency on critical real time event-based energy industry systems, for example the MHHS DIP (Data Integration Platform), and future message-based services, potentially Trident, SSES programme, DSI (VES Programme), …. If	• Reduced Market Disruption via automatic recovery of stalled workflows • Change from Azure Storage Queues to Service Bus Premium, enabling multi-region writes in Cosmos DB. This greatly improves message delivery resilience and eliminates risks seen with Storage Queues during BCDR events. • RPSys stores a full payload snapshot in the Recovery Point Ledger. This protects message integrity when storage replication lags, directly responding to the failure patterns • Near real time analytics through Cosmos Analytical Store which allows CSS and DCC to spot emerging issues early and trace failures with full operational context.

	solution centralisation and/or re-use can be seen beneficial, then this would have a positive influence on benefit over cost.	

Question 2:	Do you agree with the proposed implementation approach (BIG BANG)? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	Yes.	Thank you for your comments.
National Grid Electricity Distribution (Distribution Network Operator)	Yes, we agree.	Thank you for your comments.
ScottishPower Energy Retail Limited (Energy Supplier)	Yes.	Thank you for your comments.
British Gas (Energy Supplier)	NO	Thank you for your comments.

Question 3:	Do you agree with the Code Manager's assessment of the costs and benefits for this change?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	We have no view on the costs, as there is no impact on DNO in terms of this change.	Thank you for your comments.
National Grid Electricity Distribution (Distribution Network Operator)	Yes.	Thank you for your comments.
ScottishPower Energy Retail Limited (Energy Supplier)	We agree with the Code Manager's assessment of the benefits of this proposed change to industry. However, we are concerned about the associated costs of integrating this functionality into CSS. These cost estimates should be revised downward, particularly given that consumers would ultimately bear the financial impact. This is even more so as industry has placed a renewed focus on the consumer bill.	Thank you for your comments, we will take this into consideration in the Change Report (Final Recommendation). Following receipt of the technical design, the Code Manager scrutinised the technical validity of the solution to ensure it was appropriate to resolve the issue at hand, as well as cost appropriate. Multiple discussions were held with the DCC as Switching Operator, and as a result, concluded that this was the optimal solution. The Code Manager also scrutinised the costs associated with the implementation plan, and

		where appropriate, reduced steps i.e. reduced start-up phase time and FTE costs.
British Gas (Energy Supplier)	We consider this to be extremely costly for the industry. Careful planning and caution are therefore essential, given the significant upfront and ongoing costs that will ultimately be borne by industry. We understand that this issue was raised and extensively debated at the Technical Expert Panel	Thank you for your comments.

Question 4:	Do you agree with the Code Manager's assessment of the Change Path, that this Change Proposal should be subject to Self-Governance approval by the Technical Expert Panel?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	Yes	Thank you for your comments.
National Grid Electricity Distribution (Distribution Network Operator)	Yes.	Thank you for your comments.
ScottishPower Energy Retail Limited (Energy Supplier)	Yes	Thank you for your comments.
British Gas (Energy Supplier)	Yes	Thank you for your comments.

Question 5:	Do you agree with the Code Manager's recommendation that this Change Proposal should be approved for implementation on the standard REC release in November 2027? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	Yes	Thank you for your comments.
National Grid Electricity Distribution (Distribution Network Operator)	Yes. We agree that implementation should take place as soon as possible once all required works have been completed, along with the appropriate testing	Thank you for your comments. Subject to approval at TEP, DCC have estimated 90 weeks for mobilisation and testing. As such, the earliest implementation would be November 2027.
ScottishPower Energy Retail Limited (Energy Supplier)	Yes	Thank you for your comments.
British Gas (Energy Supplier)	No, we believe it is still too soon to implement such a significant change. If not carried out correctly, it could potentially lead to an incident like the one we experienced a couple of years ago	Thank you for your comments. Waiting longer to implement a change does not reduce the risk of large implementations such as R0096. We are assured that the risks are understood and are mitigated. CSS and DCC have also taken lessons from previous releases into the plan for R0096.

Question 6:	Do you have any other comments relating to this Change Proposal?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SP Energy Networks (Distribution Network Operator)	No other comments.	N/A
National Grid Electricity Distribution (Distribution Network Operator)	No further comments.	N/A
ScottishPower Energy Retail Limited (Energy Supplier)	N/A	N/A
British Gas (Energy Supplier)	While we agree that measures, controls, and system upgrades must be implemented to prevent issues like those seen in previous years, this represents yet another costly exercise that the industry is once again being asked to shoulder.	Thank you for your comments. Whilst the cost of this solution is appreciated, the robustness and enduring nature of this solution means that the possibility for future CPs covering system upgrades would be reduced, which could lead to cost-savings in the long-term.