RETAIL ENERGY CODE

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NON-CONFIDENTIAL CONSOLIDATED CONSULTATION RESPONSES

R0179 - PROPOSAL FOR LIMITING QUERIES IN EES API CALLS (SINGLE QUERY PER API CALL)

On 20 June 2025 the Code Manager issued a consultation to industry to seek feedback on the Preliminary Change Report for R0179 – Proposal for limiting queries in EES API (Single query per API call).

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

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RESPONSE TYPE	**NON- CONFIDENTIAL**
DATE ISSUED	06/08/25
RESPONSIBLE COMMITTEE	Change Panel
LEAD ANALYST	Holly Law

DATE CONSULTATION ISSUED	20/06/2025
RESPONSE DEADLINE	11/07/2025

Question 1:	Do you agree with the proposed solution? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SSE Energy Supply Limited (Energy Supplier)	Yes, as SSE only raises single API queries. Therefore, we agree with proposed solution.	Noted, thank you.
SEFE Energy Ltd (Energy Supplier)	We do not agree with the proposed solution. • As the impacts of MHHS are unknown, is there feedback from REC Parties to support a change. For example, is there tickets raised where parties have seen delays in responses that are having an adverse impact on their abilities to carry out their obligations. There was a consultation which 3 parties responded to, with only 1 supporting, is this being taken into consideration? • Have any alternatives been considered, as technically solutions can be applied that would prevent the issue for example, throttling (Throttling for an API service is the process of limiting the number of API requests a client (user, app, or system) can make within a specified time period)? • For electricity this is the only source of information the industry has access to, being able to establish and validate information on supply points is important for balancing and data cleansing. The Gas industry has the DDP where we can draw	There have been tickets raised into the EES Provider reporting problems with delays in responses and there is data to show that when multiple queries are made into 1 API call, it impacts performance and response times. Most users of the EES API service will send a request through the API with 1 query per request. Recent investigation shows some users are sending 1000's of queries per request. There is a clear correlation between these users and the periods of slower response time. These events often adversely impact the performance of other users generating calls in a standard '1 query to 1 call' approach.

	information from, should an alternative be considered for electricity.	All responses have been considered as part of the final change report and recommendation. We did consider putting a limit and this was impact assessed by the Service Provider (1000 calls per API call), this however would still have a negative impact on performance and would be around 16 times slower than average. While the idea of restricting single-call logic to peak hours is understandable, it may unintentionally encourage users to shift bulk activity to off-peak times, rather than addressing the root cause of performance issues. This would delay rather than resolve the underlying strain on the system and could lead to unpredictable spikes in usage outside of peak hours. If another API was created it would pull from the same database (as the different Gas API's do), so would not resolve the problem of performance issues. EES has evolved into one single dynamic API as it facilitates future change to be done more efficiently and at a lower cost.

ENGIE (Energy Supplier)	We do not currently support the proposed solution as we do not believe all the issues we raised in the RFI have been adequately addressed. We raised the following concerns: 1. Specifically which APIs are being proposed to have a threshold applied, and how will that be implemented? 2. What alternatives/exceptions are being proposed for bulk processes or necessary processes which exceed the threshold? 3. How does REC quantify this risk or issue? 4. Has REC seen any service degradation due to 1 customer placing large API requests and that having a service impact on another customer? 5. Has REC taken action on technical solutions on their side to mitigate this risk (ie auto scaling, segregated instances etc) or business process (like collaborating with customers who send large request to schedule them)? REC's response to our RFI comments was: EES only has 1 API. The proposal is to mitigate the Risk where a single User can cause system degradation to all other Users due to high unexpected usage (due to industry processes or security assurances Enquiry Services want to put in place). Yes, please see A to Q3. These initiatives are currently being discussed and considered as part of the Evolution of the Enquiry Services project which aims to provide technology improvements in the coming years.	1. There is only one API within EES. There are, however, multiple methods to gather data within the API. All will have the threshold imposed, except for static data (e.g. error codes, reporting). 2. You would still be able to submit the same volume of queries to the API, they would just have to be done as 1 query per API call. 3. Most users of the EES API service will send a request through the API with 1 query per request, a few users are putting through 1000's of queries per API call. We consider this risk to the performance of EES on all it's users greater than the risk to those few Parties who are not using the service as intended. 4. There have been tickets raised into the EES Provider reporting problems with delays in responses and there is data to show that when multiple queries are made into 1 API call, it impacts performance and response times. Most users of the EES API

	This response answered points 1, 3 and to some extent 5 but importantly not points 2 or 4.	service will send a request through the API with 1 query per request. Recent investigation shows some users are sending 1000's of queries per request. There is a clear correlation between these users and the periods of slower response time. 5. These initiatives are currently being discussed and considered as part of the Evolution of the Enquiry Services project which aims to provide technology improvements in the coming years.

Question 2:	Do you agree with the proposed implementation technique & date? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SSE Energy Supply Limited (Energy Supplier)	SSE agrees with the next major code release as the date for implementation.	Noted, thank you.
SEFE Energy Ltd (Energy Supplier)	We do not agree with the implementation date • As the change is considered low priority, could there be an assessment 6 months after full migration to MHHS to determine the impacts to EES?	We understand that this change is seen as low priority by some stakeholders, and appreciate the suggestion to reassess post-MHHS migration. However, with full migration still over two years away, there is a significant risk that parties will continue batching queries and potentially overload the EES during the critical MHHS period. Implementing the 1:1 query-to-call ratio now is a proactive step to mitigate this risk and ensure system stability.
ENGIE (Energy Supplier)	No, as our view is that this proposal needs more work to address the concerns we have raised.	Noted, thank you.

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**
SSE Energy Supply Limited (Energy Supplier)	Yes, we agree.	Noted, thank you.
SEFE Energy Ltd (Energy Supplier)	• Based on the information within the presentation, by moving to a 1 query to 1 call this will increase the number of seconds for multiple requests and be less efficient for parties. **1 query to 1 call low**: 40,000 requests, 0.150 seconds per query, 6,000 total seconds **1 query to 1 call high**: 40,000 requests, 0.280 seconds per query, 11,200 total seconds **1 query to 1 call multi-site**: 500 requests, 0.15 seconds per query, 75 total seconds **Multiple queries to 1 call**: 40,000 requests, 0.006 seconds per query, 250 total seconds **Multiple queries to 1 call**: 10,000 requests, 0.005 seconds per query, 50 total seconds	You are correct, this would be less efficient for the few Parties that use the EES system in this way. Most users of the EES API service, however, will send a request through the API with 1 query per request. Recent investigation shows that only some users are sending 1000's of queries per request. These events often adversely impact the performance of other users generating calls in a standard '1 query to 1 call' approach.
ENGIE (Energy Supplier)	No, we remain to be convinced of the extent of the issue being addressed by the change and did not receive an adequate response when we raised this concern.	Please see response to Q1.

Question 4:	Do you agree with the Code Manager's recommendation that this Change Proposal should be approved for implementation on 7 November 2025? If not, please explain why?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SSE Energy Supply Limited (Energy Supplier)	Yes, we agree.	Noted, thank you.
SEFE Energy Ltd (Energy Supplier)	We do not agree with the implementation date as per our response above, this should be assessed post go live of MHHS.	Please see response to question 2.
ENGIE (Energy Supplier)	No, for the reasons stated above.	Noted, thank you.

Question 5:	Do you have any other comments relating to this Change Proposal?	
RESPONDENT DETAILS	**RESPONSE**	**CODE MANAGER COMMENTS**
SSE Energy Supply Limited (Energy Supplier)	No.	Noted.
ENGIE (Energy Supplier)	No.	Noted.

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