

Modification proposal:	Connection and Use of System Code (CUSC) CMP398: GC0156 Cost Recovery mechanism for CUSC Parties (CMP398)		
Decision:	The Authority ¹ directs that Workgroup Alternative CUSC Modification Proposal (WACM) 1 be made ²		
Target audience:	National Grid Electricity System Operator (NGESO), Parties to the CUSC, the CUSC Panel and other interested parties		
Date of publication:	29 February 2024	Implementation date:	Ten working days after decision

Background

In April 2021, the Department for Business, Energy and Industrial Strategy (BEIS), now the Department of Energy Security and Net Zero (DESNZ), released a policy statement introducing the Electricity System Restoration Standard (ESRS).3 The ESRS requires that in the event of a Total or Partial Shutdown of the Great Britain (GB) electricity system, the Electricity System Operator (ESO) must be capable of restoring 60% of Demand on the Transmission System in all regions within 24 hours, and of restoring 100% of Demand nationally within 5 days.⁴ It also sets out that the ESRS requirements must be met by 31 December 2026. In August 2021, we issued our decision on licence modifications to facilitate compliance with the ESRS.⁵

DESNZ introduced the ESRS as any significant loss of electricity supply would severely impact national infrastructure networks, public services, and economic activities. DESNZ noted in their policy statement that a nationwide electricity failure has never occurred in

¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

https://www.gov.uk/government/publications/introducing-a-new-electricity-system-restoration-standard/introducing-a-new-electricity-system-restoration-standard-policy-statement
 All capitalised letters in this paragraph are defined in the Grid Code

⁵ https://www.ofgem.gov.uk/publications/decision-licence-modifications-facilitate-introduction-electricitysystem-restoration-standard

GB, but events on a similar scale have occurred internationally. Thus, whilst such events are unlikely, they represent a credible risk for our energy network. As a result, DESNZ concluded that GB must adequately prepare for the worst-case scenario and therefore introduced the ESRS.

As a result, the ESO made a proposal to change the Grid Code, via Grid Code modification (GC0156): Facilitating the implementation of the Electricity System Restoration Standard. We approved the Original Solution of GC0156 on 05 February 2024. This puts an obligation on existing and future Connection and Use of System Code (CUSC) parties who are not contracted with the ESO to provide Restoration Services to have 72-hours resilience onsite for their plant and apparatus. It was noted in the GC0156 workgroups that there was no cost recovery mechanism for CUSC parties who do not hold contracts with the ESO to provide Restoration Services. CMP398 was raised in light of this.

The modification proposal

CMP398 was raised by SSE (the Proposer) on 15 September 2022. It seeks to introduce a cost recovery mechanism into the CUSC for obligations that GC0156 imposed on CUSC parties without a Restoration contract. SSE believes that such parties would otherwise be at a commercial disadvantage stating that these CUSC parties without a restoration contract are the only obligated parties that would have costs arising from GC0156 but no funding mechanism to recover their associated Capital Expenditure (CAPEX) or have an allowance for their Operational Expenditure (OPEX).

The CMP398 workgroup convened five times to discuss CMP398 and consider the proposed solution. The workgroup raised two Workgroup Alternative CUSC Modifications (WACMs) alongside the Original Solution of CMP398. The three solutions would all introduce some form of process to assess the costs incurred as a result of the obligations set out via GC0156, and obligated parties would be reimbursed in accordance with such assessments. However, the three proposals have differences in how they would operate. These are summarised below.

 $^{^{6} \ \}underline{\text{https://www.qov.uk/qovernment/publications/introducing-a-new-electricity-system-restoration-standard/introducing-a-new-electricity-system-restoration-standard-policy-statement}$

⁷ https://www.nationalgrideso.com/industry-information/codes/gc/modifications/gc0156-facilitating-implementation-electricity-system

⁸ https://www.ofgem.gov.uk/sites/default/files/2024-02/GC0156%20Authority%20Decision.pdf

⁹ As defined in the Grid Code

¹⁰ Grid Code CC.7.11.2, CC.7.11.3, ECC.7.11.2 and ECC.7.11.3

Original Solution

The Original Solution was proposed by SSE. It would introduce an independent claims committee to validate claims for CAPEX and set an allowance for OPEX in respect of costs incurred due to the obligations set out in GC0156. Its key features are summarised below.

Claims assessment

 An independent claims committee would be appointed and selected by the President of the Chartered Institute of Arbitrators.

Type of claims

- CUSC parties can claim ex-post for CAPEX incurred in order to become 72 hours resilient.
- CUSC parties can claim ex-ante pre-expenditure approval requests for CAPEX items in excess of £100,000.
- CUSC parties would receive an ex-ante allowance for OPEX costs which is set by the committee.

Claims Window and Payment Structure

- Claims for CAPEX costs incurred or to be incurred (including requests for preapproval of expenditure) that are assessed to be reasonable, efficient and proportionate would be paid by the ESO within one month of the committee validated claim or pre-approved expenditure request.
- For OPEX, after consultation with stakeholders, the independent claims committee
 would set the OPEX Allowance Band based on technology type and size of assets.
 This allowance would be inflated annually using Consumer Prices Index (CPI) or
 would be updated by the committee from time to time due to potential new data
 and developed understanding.
- There are no claims windows, therefore claims can be submitted to the independent claims committee at any time.
- There is no end date on when claims can be submitted.

New CUSC Parties

- CUSC parties that sign a Bilateral Connection Agreement (BCA) with the ESO after the date of implementation of GC0156, are not permitted to submit a claim.¹¹
- CUSC parties that sign a BCA with the ESO after the date of implementation of GC0156, would be entitled to the annual OPEX allowance.

WACM1 Solution

WACM1 was proposed by the ESO. It would introduce a process run by the ESO to validate claims for CAPEX as a result of cost incurred due to the obligations set out in GC0156. Its key features are summarised below.

Claims assessment

Claims would be assessed by the ESO.

Type of claims

 CUSC parties can claim CAPEX incurred in complying with new obligations set out in GC0156.

Claims Window and Payment Structure

- Claims can only be submitted during the claims' submission month, which would be in September 2024, September 2025 and December 2026.
- From 31st December 2026 (the end of the final claims window), no further claims would be accepted.
- When a claim is approved, the ESO would pay the claim in 12 equal monthly
 payments over the following 12-month period that begins in April the year after
 submission of the claim .

New CUSC Parties

 CUSC parties that sign a BCA with the ESO after the date of implementation of GC0156, are not permitted to submit a claim.

WACM2 Solution

¹¹ Page 12 of the FMR states that WACM1 and WACM2 would differ from the Original Solution as it would exclude claims by new generators that sign a BCA after Ofgem's decision on GC0156. Therefore, implying that the Original will allow claims from generators without a signed BCA. This is in contradiction with the Original Solution draft legal text clause 6.37.6, which states that users that sign a BCA after GC0156 implementation are not permitted to submit a claim. Therefore, we are making our decision based on the draft legal text of the solutions in the FMR annex 3. Had we considered the FMR as the correct interpretation it would not have changed our decision.

WACM2 was proposed by Cornwall Insights and is identical to the Original Solution in all but one aspect, namely in relation to CUSC parties that are able to claim after signing a BCA after the implementation of GC0156.

Under WACM2, CUSC parties that sign a BCA with the ESO after the date of implementation of GC0156, would not be permitted to submit a claim, unless they could demonstrate with evidence that they had already undertaken design work on a generation project for which there was not yet a signed BCA and that the cost of the project had increased by at least £100,000 following a re-design to be compliant with GC0156.

Workgroup vote and Code Administrator Consultation

On 10 March 2023 (and 14 March 2023), the workgroup voted on their preferred solution. The full votes and voting statements can be found in Annex 7 of the CMP398 submission.¹²

A Code Administrator Consultation ran from 2 May 2023 to 9 June 2023 receiving 4 non-confidential responses. The non-confidential responses can be found in Annex 9 of the CMP398 submission.¹³ We have taken all responses into account.

CUSC Panel¹⁴ recommendation

At the CUSC Panel meeting on 30 June 2023, a majority of the CUSC Panel concluded that the Original Solution, WACM1 and WACM2 would each better facilitate the CUSC applicable objectives (compared to the baseline).

Our decision

We have considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 11 July 2023. We have considered and taken into account the responses to the industry consultation on the modification proposal which are

¹² https://www.nationalgrideso.com/industry-information/codes/cusc/modifications/cmp398-gc0156-cost-recovery-mechanism-cusc-parties

¹³ https://www.nationalgrideso.com/industry-information/codes/cusc/modifications/cmp398-gc0156-cost-recovery-mechanism-cusc-parties

¹⁴ The CUSC Panel is established and constituted from time to time pursuant to and in accordance with section 8 of the CUSC.

included in the annexes to the FMR.¹⁵ We have concluded that WACM1 solution should be approved as:

- implementation of WACM1 will better facilitate the achievement of the applicable objectives of the CUSC, compared with the baseline, the Original Solution and WACM2;¹⁶ and
- directing that WACM1 be approved and implemented is consistent with our principal objective and statutory duties.¹⁷

Reasons for our decision

We consider that the Original Solution, WACM1 and WACM2 would better facilitate CUSC objective (a) and (b), have a neutral impact on CUSC objective (c) and have a negative impact on objective (d) when compared to the baseline.

When we compare the Original Solution, WACM1 and WACM2 against each other, we believe that WACM1 is more positive against CUSC objective (b) and less negative against CUSC objective (d) (and that the impact of the three proposals would be similar in respect of CUSC objectives (a) and (c)). We therefore consider that WACM1 is better than the Original Solution or WACM2.

Overall, we consider that the positive impacts that WACM1 has on CUSC objective (a) and (b) outweigh the negative impacts that WACM1 has on CUSC objective (d). We therefore consider that WACM1 is better than the baseline.

(a) the efficient discharge by the licensee of the obligations imposed upon it under the Act and by the Transmission licence

We believe that the Original Solution, WACM1 and WACM2 would have a positive impact on CUSC objective (a).

This is because GC0156 set an obligation on CUSC parties to have at least 72 hours resilience to facilitate the ESO meeting the requirements of the ESRS by 31 December 2026. Industry responses noted the challenges associated with achieving retrospective

¹⁵ CUSC modification proposals, modification reports and representations can be viewed on NGESO's website at: https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc/modifications

¹⁶ As set out in Standard Condition C10(1) of the Electricity Transmission Licence, see: https://www.ofgem.gov.uk/energy-policy-and-regulation/industry-licensing/licences-and-licence-conditions ¹⁷ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

resilience at a large volume of sites within the ESRS timescales. As set out in our decision for GC0156, we considered there to be strong justification for these changes to be made in a timely manner and, therefore, that a cost recovery mechanism would be conducive to ensuring that the ESO is capable of meeting the requirements of the ESRS. If there were to be no cost recovery mechanism in place, we would be concerned that parties may not be able to raise their own capital in time to meet the ESRS timelines, which would likely prevent the ESO from meeting the requirements of the ESRS.

(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity

We consider that the Original Solution, WACM1 and WACM2 would each better facilitate CUSC objective (b) compared against the baseline. However, when comparing the three solutions against one another, we consider that WACM1 has an overall more positive impact against CUSC objective (b).

All three solutions would ensure that CUSC parties who are obligated to become 72 hours resilient would be able to recover costs associated with complying with this requirement. Absent of such a mechanism, there may be potential negative impacts on competition since certain parties would have to spend more than others to become 72 hours resilient due to their size, age or technology. Therefore, we consider that CMP398 would support a level playing field for all parties required to implement 72 hours resilience.

As a general principle, we believe the costs of complying with Grid Code changes should ordinarily be borne by industry in the first instance. This decision should not be considered to establish any precedent or future expectation as to entitlement by market participants to recover any costs incurred in order to meet new Grid Code (or indeed other regulatory) obligations. However, in the case of generator resilience, as required by GC0156, we note that there have been no previous Grid Code requirements with respect to site resilience to a loss of supply (although resilience and operability post restoration of supplies data was required from HVDC System Owners, DC Converter Station Owners and Large Power Stations - PC.A.5.7 of the Grid Code¹⁸). We further note that the GC0156 requirements stem from the ESRS which fundamentally changed system restoration planning, necessitating whole system changes.

¹⁸ https://www.nationalgrideso.com/industry-information/codes/grid-code-gc

Impact on parties without a restoration contract

The Original Solution, WACM1 and WACM2 would all ensure that CUSC parties without a restoration contract would be able to recover their costs and this would be consistent with the position for CUSC parties that previously secured a restoration contract. This is because, in order to secure a restoration contract, a provider must have at least 72 hours resilience. It is expected that CUSC parties that competed in previous restoration tenders priced the cost of achieving 72 hours resilience into their tendered price. Therefore the parties that secured a restoration contract would have recovered the cost of obtaining 72 hours resilience through the price paid by the ESO.

Now that GC0156 provides a mandate for all CUSC parties to be 72 hours resilient, parties without a restoration contract would be at a commercial disadvantage compared to those with a restoration contract. From the BEIS survey in Autumn 2022, 20 we understand that approximately 70% of parties will need to invest in order to reach 72 hours resilience. The Original Solution, WACM1 and WACM2 would each address this issue as they would allow CUSC parties without a restoration contract to recover the cost of attaining 72 hours resilience, therefore facilitating a level playing field irrespective of whether or not a CUSC party was previously successful in securing a restoration contract.

Impact on competition in restoration tenders

As a result of GC0156 and CMP398, we also believe that there will be an improvement in competition for future restoration tenders. This is because GC0156 provided a mandatory requirement for all CUSC parties to have 72 hours resilience, which is a necessary condition to compete in restoration tenders. CMP398 provides a route for these costs to be recovered. Therefore, in combination, GC0156 and CMP398 will increase the number of providers able to participate in restoration tenders and better ensure that these providers are able to compete on a level playing field when submitting tender prices.

CUSC Panel, Workgroup and Consultation arguments against objective (b)

¹⁹ Further details can be found in the technical requirements of the Restoration Tender information: https://www.nationalgrideso.com/industry-information/balancing-services/system-security-services/restoration-services#Document-library

²⁰ BEIS surveyed 670 plants (existing Restoration Contractors were exempt), 290 provided a response. 70% stated they need to invest to reach 72 hours resilience, 24% stated they are able to already meet 72 hours resilience, 4% stated they won't be able to meet 72 hours resilience and 2% stated that they did not know if they could reach 72 hours resilience.

We note that some of the CUSC panel, workgroup members and consultation respondents believed that CMP398 would be negative against objective (b) when

compared to the baseline.

Market forces

Some respondents suggested that removing market forces from the cost of complying

with GC0156 risks the costs being higher than they would be under the baseline.

Whilst we acknowledge this point, we consider that the Original Solution, WACM1 and

WACM2 would only allow for the recovery of costs which were assessed to be reasonable,

efficient and proportionate. CUSC parties would therefore still be incentivised to ensure

that they complied with the requirements of GC0156 in a cost-effective manner.

Impact on suppliers

Another consultation respondent believed that not enough thought had gone into the

impact CMP398 could have on suppliers.

We believe that the impact the Original Solution, WACM1 and WACM2 has on suppliers

would be minimal because, absent a cost recovery mechanism, suppliers would still pay

(at least a portion of) the costs for parties to attain 72 hours resilience. This is because

without a cost recovery mechanism, parties would aim to recover the costs of meeting

the GC0156 obligations through higher wholesale prices.²¹

Impact on ESO's balancing services markets

A workgroup member also suggested that CMP398 could be detrimental to competition in

the ESO's balancing services markets because CUSC parties who have had costs

recovered via CMP398 may use their new equipment for other commercial purposes (ie

ESO's balancing services markets) and compete against non-CMP398 funded sites such

as demand side management.

We note this potential impact but consider it to be minor as any equipment funded via

CMP398 is likely to be of a relatively small scale.

Overall view on all three proposals of CMP398

²¹ Parties could also recover cost through other means than wholesale prices such as Balancing Mechanism prices, balancing services bids, Capacity Market bids etc

As set out above, we recognise that there may be some potential negative impacts against objective (b), but when assessed in the round we consider that the Original Solution, WACM1 and WACM2 would each have an overall positive impact on CUSC

objective (b), compared against the baseline.

We have also assessed the Original Solution, WACM1 and WACM2 against each other in terms of objective (b) and consider that WACM1 is slightly more positive. This is due to certain aspects of the WACM1 process having a more positive impact on competition. The

reasons for this are set out below.

Opex claims

The Original Solution and WACM2 would allow the independent claims committee to set out (after consultation with stakeholders) an OPEX allowance which will be based on technology type, size, cost of staff, training, fuel etc. However, WACM1 does not include

an OPEX allowance.

We do not believe that CUSC parties should have an allowance for OPEX costs as a result of obligations set out by GC0156. OPEX activities are more closely aligned and integrated to business-as-usual activities of CUSC parties. As a result, CUSC parties will have greater flexibility and therefore we believe it would be inappropriate to award generic banded OPEX allowances. We also don't believe that any individual CUSC party would be at a commercial disadvantage as a result of OPEX costs. This is because all CUSC parties, even those who already have 72 hours resilience, will incur OPEX costs in order to

maintain 72 hours resilience.

New CUSC parties

WACM2 proposes that CUSC parties that sign a BCA with the ESO after 04 March 2024, are not permitted to submit a claim, except if they can demonstrate with evidence that they have already undertaken design work on a generation project that has not yet signed a BCA and that they can evidence that the design cost has increased by more

than £100,000 as a result of requirements of GC0156.

We do not consider this appropriate, as the aim of CMP398 is to allow cost recovery to plants that are required to retrospectively implement equipment that enables them to attain 72 hours resilience. If the plant has not signed a BCA prior to the implementation

of GC0156 then we don't believe the GC0156 obligation of having 72 hours resilience

would put them at a material disadvantage. These plants will still be able to redesign their plant to have 72 hours resilience which is much easier than retrospectively fitting

equipment to an existing site.

Moreover, WACM2 could also give new generators a perverse impact to minimise business-as-usual resilience capability at the design stage in order to maximise the

amount of costs they could recover.

(c) compliance with the Electricity Regulation and any relevant legally binding

decision of the European Commission and/or the Agency

We consider that the Original Solution, WACM1 and WACM2 will have no impact on CUSC objective (c) and that this objective is neutrally impacted by all three proposed solutions

for CMP398.

(d) promoting efficiency in the implementation and administration of the CUSC

arrangements

We consider that the Original Solution, WACM1 and WACM2 would each have a negative impact on CUSC objective (d). This is because they would all increase complexity and

administrative burden in CUSC arrangements due to the creation of processes required to

assess costs of implementing 72 hours resilience.

We consider however that WACM1 has a smaller negative impact on CUSC objective (d)

when compared with the Original and WACM2. There are a number of reasons for this.

These are set out below.

Claims assessment process

The Original Solution and WACM2 propose that an independent claims committee should

be established, which would be made up of independent experts that are selected by the

President of the Chartered Institute of Arbitrators. The independent claims committee

would not allow the ESO to participate. By contrast, under WACM1 claims would be

assessed by the ESO.

We do not consider it necessary or desirable for the ESO to be excluded from any claims

assessment process.

Firstly we do not agree that having the ESO be a part of the claims assessment process would create commercial confidentiality and conflict of interest issues. The ESO does not compete with CUSC parties and therefore we do not see this as being a material issue.

Secondly, it is unclear how much an independent claims committee would cost and there would be no incentive to keep costs down as the Original Solution and WACM2 would allow the President of the Chartered Institute of Arbitrators to determine the costs and remuneration of the proposed claims assessment panel, and how many panellists to appoint. The administrative costs associated with WACM1 are likely to be lower due to the incentives and licence obligation on the ESO to be cost efficient.

Thirdly, we consider that having the ESO as the lead party in this assessment process would be beneficial. This is because it will give the ESO a better understanding of the applicable equipment being used by CUSC parties to become 72 hours resilient. This may be of use when seeking to agree alternative arrangements with parties who believe that it is too 'cost prohibitive' to become 72 hours resilient as set out via GC0156.²²

We recognise the view from the Proposer that the ESO would lack expertise to run this type of claims process. However, we expect the ESO to consider what kind of knowledge would be required to assess claims and efficiently fill any potential knowledge gaps through recruitment, upskilling or external support.

We also expect the ESO to produce clear and comprehensive guidance for how the claims process would run and ensure that this guidance is in place prior to the first claims window in September 2024. We expect the ESO to engage with industry on the creation of this guidance and create a route for parties to engage with the ESO before incurring costs.

Claims Window and Payment Structure

The Original Solution and WACM2 have no claims window, which would allow CUSC parties to submit claims to the committee at any time. There is also no end date for the submission of claims. Therefore, it is unclear if CUSC parties could still claim for costs post 31 December 2026. Finally, the solutions propose that claims must be paid in full within one month of the committee validating a claim.

²² Grid Code - CC.7.11.2 and ECC.7.11.2

We consider that these aspects of the Original Solution and WACM2 would be inefficient. Firstly, as there is no end date or claims window, the claims committee would have no way of planning for when claims would come in or have a set date after which claims were no longer allowed - the costs associated with operating the claims committee would therefore be ongoing and indefinite. Secondly, due to payments being made within one month of the committee validating a claim, there would be unpredictable impacts on BSUoS charges, due to the difficulty predicting when claims will be made and how large of an impact, they could have on outturn BSUoS costs compared to the BSUoS forecast.

We believe that the procedural steps put in place by WACM1 would alleviate our concerns noted above. WACM1 will have three claims' windows (September 2024, September 2025 and December 2026) and a specified end date, whereby no CUSC party can claim after 31 December 2026. This would permit the ESO to effectively plan a structured claims process. In addition, WACM1 proposes that approved claims will be paid in 12 equal monthly payments, therefore smoothing out the impacts on outturn BSUoS costs.

Case specific to ESRS

As stated above, it is important to note that the decision being made to approve WACM1 of CMP398 is case specific. It should not be considered as setting a general precedent for costs associated with obligations arising from code modifications or regulatory changes being recovered via an assessment process.

WACM1 of CMP398 is essential due to the severity of the impacts associated with a partial or total shutdown event and the importance of all CUSC parties of having 72 hours resilience to ensure system security in such an event. The cost recovery mechanism will ensure that CUSC parties will be able to make the changes in a timely and non-discriminatory manner.

Ofgem's principal objective and statutory duties

Finally, we have reviewed the proposals submitted to us with regard to our statutory duties. These include under section 3A of the Electricity Act 1989²³ which requires the Authority to protect "the interests of existing and future consumers" (section 3A(1)and 3A(1A)). This includes consumers' interests in the security of the supply of electricity to them and their interests in the Secretary of State's compliance with Sections 1 and

²³ https://www.legislation.gov.uk/ukpga/1989/29/section/3A

4(1)(b) of the Climate Change Act 2008²⁴ (net zero target for 2050 and five-year carbon budget).

In light of the reasoning above, we consider that approval of WACM1 is the course of action which is most consistent with our principal objective and statutory duties. WACM1 would mitigate the potentially adverse implications for competition of GC0156 while having minimal adverse impact on the efficiency of the CUSC arrangements (compared with the other proposals). We consider that this would be to the ultimate benefit of existing and future consumers.

Decision notice

In accordance with Standard Condition C10 of the Transmission Licence, the Authority, hereby directs that WACM1 of modification proposal CMP398: 'GC0156 Cost Recovery Mechanism for CUSC Parties' be made.

Grendon Thompson

Acting Deputy Director – Institutions for Net Zero

Energy Systems Management and Security

Signed on behalf of the Authority and authorised for that purpose

²⁴ https://www.legislation.gov.uk/ukpga/2008/27/contents