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SECMP0046 ‘Allow DNOs to control Electric Vehicle chargers connected to Smart Meter infrastructure’

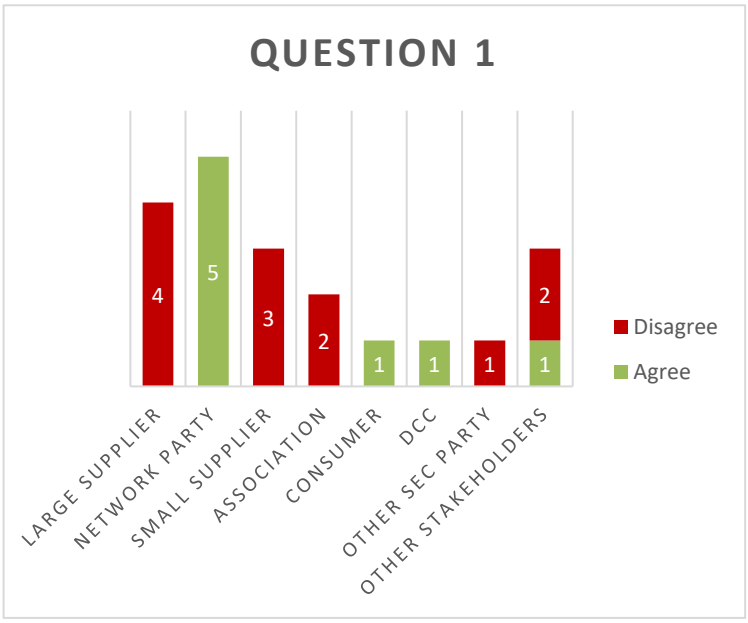
Refinement Consultation responses

About this document

This document contains the full non-confidential collated responses received to the SECMP0046 Refinement Consultation.

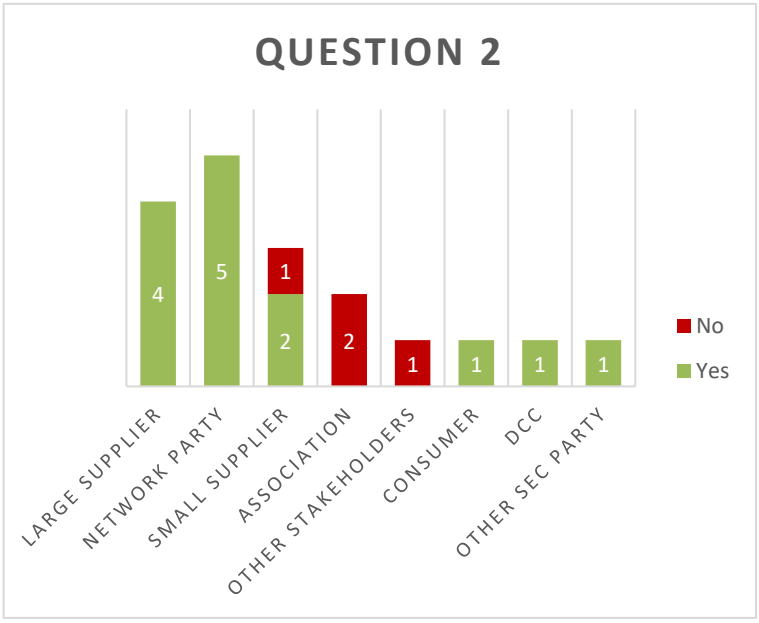
Summary[1]

Question 1: Do you agree with the solution put forward?



	Agree	Disagree
Network Party	5	0
Large Supplier	0	4
Association	0	2
Small Supplier	0	3
Other Stakeholders	1	2
Consumer	1	0
DCC	1	0
Other SEC Party	0	1
Total	8	12

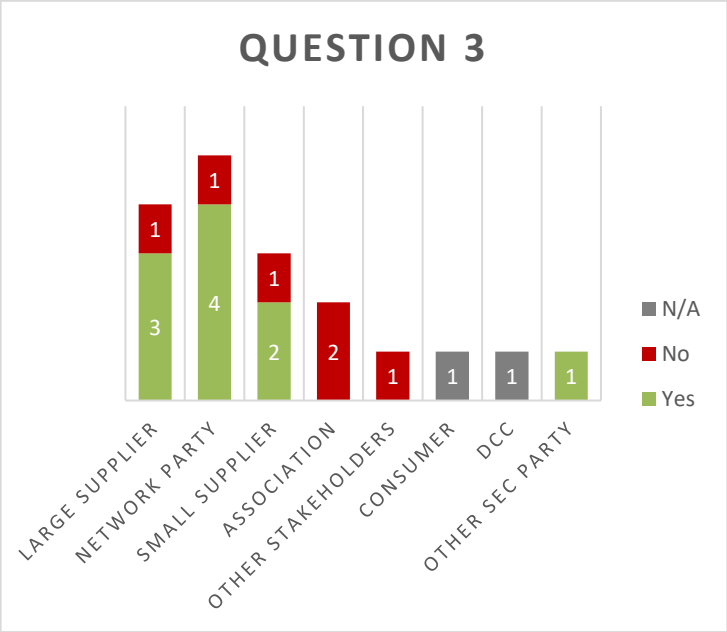
Question 2: Will there be any impact on your organisation to implement SECMP0046?



	Yes	No
Network Party	5	0
Large Supplier	4	0
Association	0	2
Small Supplier	2	1
Other Stakeholders	0	1
Consumer	1	0
DCC	1	0
Other SEC Party	1	0
Total	14	4

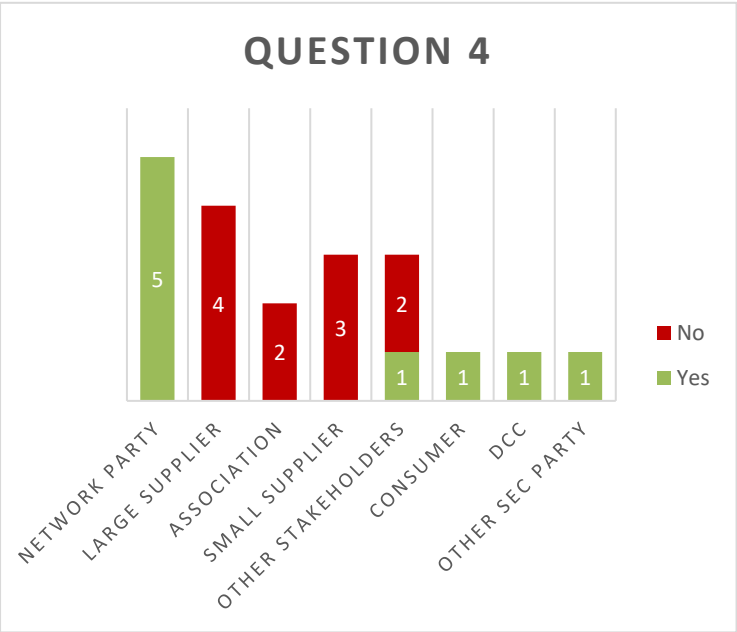
[1] **Please note:** The graphs presented provide a high-level view of the response distribution for selected questions. For non-SEC Party responses, SECAS has assigned a category that consolidated responses from similar organisation type. Responses with caveats have had the caveats removed for the purpose of the summary. Please see full consultation for these details.

Question 3: Will your organisation incur any costs in implementing SECMP0046?



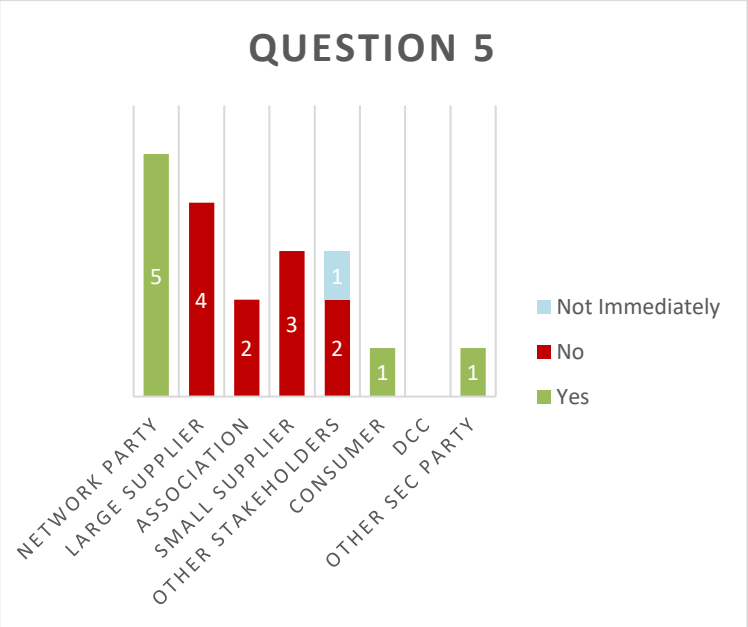
	Yes	No
Network Party	4	1
Large Supplier	3	1
Association	0	2
Small Supplier	2	1
Other Stakeholders	0	1
Consumer	0	0
DCC	0	0
Other SEC Party	1	0
Total	10	6

Question 4: Do you believe that SECMP0046 would better facilitate the General SEC Objectives?



	Yes	No
Network Party	5	0
Large Supplier	0	4
Association	0	2
Small Supplier	0	3
Other Stakeholders	1	2
Consumer	1	0
DCC	1	0
Other SEC Party	1	0
Total	9	11

Question 5: Noting the costs and benefits of this modification, do you believe SECMP0046 should be approved?



	Yes	No
Network Party	5	0
Large Supplier	0	4
Association	0	2
Small Supplier	0	3
Other Stakeholders	0	2
Consumer	1	0
DCC	0	0
Other SEC Party	1	0
Total	7	11

Question 1: Do you agree with the solution put forward?

Question 1			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	Load management on the networks is a real challenge for Distribution Network Operators, especially with the increase in Electric Vehicle chargers and this modification appears to provide a good solution utilising the Smart Metering infrastructure.
SSE	Large Supplier	No	The proposed solution set out in the Refinement Consultation is incomplete and there are elements that are required before we can determine if the solution put forward is agreed with or not. The changes to the overall operation of the load in the property and the legal text being the main items outstanding. We note that the Modification Report states changes to the SEC to deliver the proposed solution will be available toward the end of the Refinement Stage. We expect these to be circulated as a further consultation, with sufficient lead time to address comments made before presenting the Modification Report to SEC Panel. We have concerns that the impacts to consumers, with consumer protections, has not been fully considered or how that will be addressed, based on the content of the Modification Report. These include consumer channels to engage with DNOs, consumer consent, the override process and how the charging will be restored. In addition, we would expect there to be reference to robust problem, incident, complaint and compensation management processes. It is also unclear how the proposed solution aligns with the Proportional Load Control changes BEIS are currently consulting upon, all of which are looking to put the control firmly with the Supplier. Although there are assumptions set out in the Modification Report, this change is still under consideration itself and therefore the associated policy and proposals

Question 1			
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			may evolve. How the SECMP0046 solution will be implemented, in line with that consultation and the associated changes needed, is unclear however we believe there is a considerable overlap that needs to be addressed.
Energy UK	Association	No	Energy UK welcomes the opportunity to feed into this work and recognises the significant effort from the proposer and the working group in considering and refining the technical solution to get it to this stage. However Energy UK does not support the solution as outlined as we are concerned about the ability for DNOs to be able to directly control EV chargers and believes that further discussion on wider regulatory and consumer protection aspects is needed on the topic before the SEC Mod is progressed any further. Energy UK believes it is important to outline these concerns from an early stage so that they can be appropriately considered as part of the technical solution refinement. The proposal is clearly a significant policy decision – due to the impact it would have on consumers and the smart charging market – and Energy UK is concerned that to date this has being progressed as part of a largely technical debate. The work undertaken as part of the SEC Mod has been important to inform the technical discussion. However, Energy UK believes that this issue requires a much higher level of scrutiny and discussion than has happened to date, involving a wider range of stakeholders. To help move this forward, Energy UK will be calling on Ofgem (in conjunction with BEIS due to the wider GB energy policy implications associated with the delivery of net zero greenhouse gas emissions by 2050) to undertake a full consultation on the policy, regulatory and consumer implications ahead of making an Authority Determination on this SEC Mod, regardless of whether the Change Board makes a decision to recommend approval or not. Furthermore, we believe it would be prudent for this SEC Mod to be put on hold (given that it is a technical solution) until the relevant discussions, including cross-code considerations, on the wider policy,

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			regulatory, and consumer implications have occurred with Ofgem (and BEIS) and key stakeholders. There are a number of challenges with the proposals as currently drafted and while Energy UK recognises that a lot of progress has been made in addressing key technical issues, many concerns remain for Energy UK members. Energy UK is of the view that allowing DNOs to control EV chargers would be a breach of market rules – whereby DNOs are prohibited from owning or operating EV chargers. These provisions are in place for a reason and Energy UK is concerned that breaching them will: • Undermine competition and confidence in the market, jeopardising the wider transition to a smarter, more flexible energy system. This would put at risk the EV transition and therefore the net zero target; • Damage the user experience, deterring would-be EV drivers; and, • Erode the value of smart charging, preventing energy suppliers and other market participants bringing forward attractive consumer offerings. We expand on these bullets above further down, as we believe these will have to be considered in conjunction with the technical element (this SEC Mod). Energy UK has two further concerns with the proposed solution which need to be addressed in much more detail: • That this solution is being progressed without real evidence of need; and • That a number of key issues (governance, consumer consent and engagement, etc) are out of scope or not yet fully defined.

Question 1			
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			Should DNOs be deemed able to request EV charging curtailment in order to protect the network (following consultation conducted by Ofgem and Government), the DNO should: a) Not be able to control the chargers directly themselves, instead DNOs should have to go through a third-party market player; and, b) Have to pay to do so. **<u>Undermining competition and confidence in the market by breaching market rules</u>** Energy UK strongly believes that robust competition is the way to deliver the best consumer outcomes in the energy market, something that has been continuously argued by successive Governments, Secretaries of State and energy ministers. Article 33 in the common rules for the internal market for electricity[2], introduced as part of the Clean Energy Package, prohibits DNOs from owning and operating chargepoints which appears to be at odds with SECMP0046. Energy UK suggests that the proposer seeks further clarity on this point as it is likely to feature in Ofgem's decision making on whether to accept or reject the proposal. Energy UK strongly supports the provision of Article 33 – whereby monopoly actors should not participate in competitive markets –as it underpins effective competition for EV charging. It can also be read alongside the provisions of article 32 which requires member states to "[…] *provide the necessary regulatory framework to allow and provide incentives to distribution system operators to procure flexibility services, including congestion management in their areas, in order to improve efficiencies in the operation and development of the distribution system*". Energy UK welcomes this provision as well as the

[2] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2019.158.01.0125.01.ENG&toc=OJ:L:2019:158:TOC

Question 1			
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			commitments in the Ofgem / BEIS Smart System and Flexibility Plan[3] and the ENA's Flexibility Commitment[4]. Taken together these documents highlight the importance of creating open, competitive markets for flexibility, which Energy UK wholeheartedly supports. As such it is disappointing that SECMP0046 seeks to circumvent market mechanisms, in stark contrast to the welcome commitments cited above. The UK retail energy market is currently a challenging environment with a number of suppliers exiting the market over the past 18 months. Nonetheless Energy UK members are investing considerable resources into their EV activities, both in terms of innovation projects and rolling out consumer offerings – which have been widely publicised. Smart charging is at the forefront of these activities. SECMP0046 – in allowing monopoly actors to interfere into a competitive market – will undermine consumer confidence in this market, erode the value of smart charging and undo the considerable progress that has been made. **Damaging the user experience** The user experience of EVs will need to rival or exceed that of the incumbent technologies to encourage drivers to make the switch. Technology and infrastructure is developing at such a pace that this is already true for many use cases and EVs will rapidly become the obvious choice for everyone. The priority for Energy UK members to encourage the uptake of EVs is providing a good user experience, they are doing so through a variety of different and innovative ways. Energy UK is clear that competition and innovation will be key to identifying the most attractive user offerings however is very concerned that managed charging (as this modification enables) will severely damage the user experience. This risks

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/633442/upgrading-our-energy-system-july-2017.pdf
[4] http://www.energynetworks.org/news/press-releases/2018/december/britain%E2%80%99s-local-electricity-network-operators-launch-ena-flexibility-commitment.html

Question 1			
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			creating negative headlines, and deterring would be adopters from switching to EVs. Further, the proposals could deter EV drivers from charging at home, instead resulting in increased reliance on public charging. **Eroding the value of smart charging** It is widely agreed that smart charging will be a key part of integrating EVs into the energy system in a cost-effective way. Smart charging is estimated to deliver energy system savings of £1-2bn[5, 6], highlighting the importance of getting it right for the energy system as a whole. There are also direct consumer benefits to participating in smart charging which will be instrumental in bringing down the cost of EV ownership and encouraging users to switch from ICE vehicles to EVs. Consumer participation in smart charging will hinge upon the ability for market participants to bring forward compelling offerings that deliver value to the consumer. Setting up appropriate market frameworks and price signals, including at the distribution level, will be key to unlocking the full value of smart charging and should be prioritised over non market based solutions. **No clear evidence of need** Implementing SECMP0046 must be based on a robust evidence base considering the significant concerns and risks around it. Energy UK notes Business Requirement 1 for DNOs to monitor load demand on low voltage networks, including determining which LV

[5] https://www.ovoenergy.com/binaries/content/assets/documents/pdfs/newsroom/blueprint-for-a-post-carbon-society-how-residential-flexibility-is-key-to-decarbonising-power-heat-and-transport/blueprintforapostcarbonsocietypdf-compressed.pdf;
[6] https://www.nic.org.uk/wp-content/uploads/CCS001_CCS0618917350-001_NIC-NIA_Accessible.pdf

Question 1			
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			networks are high risk, monitoring the load on high risk networks and assessing if the load is likely to exceed network capacity. Energy UK members strongly support this activity. As laid out in our Future of Energy report[7], monitoring of the low and medium voltage networks must be rolled out as part of business as usual activities and the data widely shared. However Energy UK is concerned that this is being framed as part of SECMP0046 rather than as part of DNOs' day to day activities to operate their networks. LV monitoring will be key to creating a smarter, more flexible energy system and should be rolled out as a matter of course, not only as part of the proposed managed charging solution. **Poorly defined governance and consumer protection** Energy UK is concerned that many of the most important issues for DNO managed charging appear to be out of scope of the proposal documents or very poorly defined. Particular areas that need to be addressed include: notifying consumers; obtaining consumer consent; the consumer override; reporting on managed charging events (which should be publicly available rather than just to Ofgem); usage limits; defining the conditions for a managed charging solution to be used (the current wording is vague); and, the duration of managed charging events. On the latter point, Energy UK is unclear how a DNO will reinstate the charging via the HCALCS. The wording for Specification 1 in the Business Requirements report states that DNOs would only reset a switch's status "[…] if an erroneous instruction is sent, or if the anticipated reduction of Electric Vehicle charging is no longer required" raising questions about how the chargepoint returns to its normal charging schedule.

[7] https://www.energy-uk.org.uk/files/docs/The_Future_of_Energy/2019/FutureofEnergy_ReportSection_Chapter4_04.19.pdf

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			Energy UK is unclear how and where these questions will be resolved and is concerned that unless considered as a whole they will be agreed in private discussions with Ofgem or through disparate technical processes. This would hinder effective scrutiny and discussion and is highly likely to result in a sub-optimal outcome. Energy UK suggests that more work is done to outline how and where these areas will be agreed, including how the proposer will engage with Ofgem, industry and consumer representatives to agree acceptable protections. As discussed above, Energy UK believes that the best course of action is for Ofgem to consult on this decision to ensure that all areas are thoroughly discussed and examined in a holistic manner, rather than being tackled in a piecemeal fashion. One further area that is not mentioned in the documentation at all is the idea of customer compensation. Energy UK is clear that consumers must be compensated for their contributions to the smooth operation of the energy system, it is unclear why this is not discussed in the proposals. It is important that the issue of compensation is included in the SEC Mod documentation to demonstrate that all avenues and concerns have been properly considered.
Electricity North West Limited	Electricity Network Party	Yes	We agree with installing the functionality proposed under the SECMP0046 solution, subject to it only being utilised under specific pre-defined critical electricity distribution network event conditions. We believe that there would need to be clearly defined rules and ownership if Electricity Distribution Network operators were to be allowed to utilise an emergency override of Electric Vehicles (EVs) charging devices. But we do also see that in order to prevent significant interruptions to UK electrical distribution it is in the national interest that charging could become managed by the Electricity Distribution Network operator.

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			We also agree that there should be a defined length for curtailing charging defined under this solution to ensure that the functionality is not restrictive to consumers being able to utilise their EVs in a normal manner i.e. when they need to use their EVs it needs to be sufficiently charged. If consumers feel that an Electricity Network Party has overly restricted their charging they may in the future be less willing to accept more advanced smart charging and time of use tariffs. We would also propose that if this functionality is utilised on a regular basis (to be defined) then this should automatically trigger an Electricity Distribution Network assessment to determine if network reinforcement should be considered. This functionality also has a secondary benefit that it could be utilised in the event of restoring supplies following a prolonged outage to prevent short term stability issues or significant cold load pickup, whilst allowing customer to restore basic electrical functions within their premises. We recognise the governance for the duration that the EV charging is curtailed and usage limits of this solution sits outside the Smart Energy Code (SEC).
Octopus Energy	Small Energy Supplier	No	Octopus Energy strongly opposes SECMP0046, and supports Energy UK's response to this consultation. Furthermore, we believe that the SEC is an inappropriate mechanism for making such fundamental policy changes to the energy market. We believe this proposal will: ● Undermine consumer confidence in electric vehicles by raising fears that DNOs could 'throttle' their ability to charge, and thus drive, their vehicles. ● Undermine trust in the smart meter rollout and further damage consumer for smart meters, as anyone considering getting an EV will not want to risk having their supply controlled by their DNO.

Question 1			
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			• Create barriers to market for existing technologies that are able to provide the level of responsivity required with no additional cost or technology burden on smart meters. • Cause significant consumer detriment by adding complexity to household energy supply relationships, confusing customers who are not accustomed to having to deal with DNOs. • Undermine the opportunities for suppliers to engage consumers in the smart energy transition by undermining suppliers' relationships with their customers. Suppliers are already well placed to manage EV charging responsiveness so we would advocate that, at the very least, this option deserves prioritisation. The ruling out of this option on the basis of inadequate response times is unfounded. Our own evidence (please see attached video by Ohme) demonstrates that it is entirely possible today for suppliers to send signals directly to consumer devices with response times well below the 30 seconds suggested in the consultation documents. All that is required is a market signal from DNOs that will allow us to reward our customers for allowing us to take this action. Should DNOs be deemed able to request EV charging curtailment in order to protect the network (following consultation conducted by Ofgem and Government), the DNO should: a) Not be able to control the chargers directly themselves, instead DNOs should have to go through suppliers; and, b) Have to pay to do so.

Question 1			
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The Renewable Energy Company (Ecotricity)	Small Supplier	No	The UK electricity markets liberalised under NETA in 2001. The whole point of NETA is to permit market based supply, competition and solutions to domestic and wholesale energy provision. With this in mind, as the power market transforms as we enter the so-called smart world, brought about by the advent of smart meters, there is a real opportunity for suppliers – and other energy related providers, whether they be providers of in home smart appliances, smart EV chargers or anybody else – to compete in new areas of the market, beyond the simple price and customer service that have largely characterised the supply sector for years. Introducing mandatory powers for the DNO/DSO to dislocate such innovatory offerings, which this modification does, threatens to ensure such smart offerings are still born, as DNOS go ROUND the supplier to get at the supplier's customers. Rather the DNO should contract firm obligations with the supplier, and rely on the supplier to deliver those obligations in a smart & timely fashion. The supplier, after all, has the detailed, close relationship with the customers that the DNO is asking to be able to control. This measure looks dangerously like system operator 'scope creep' and is at variance with the tenets of a free, competitive energy market. If, as the Consultation says, suppliers currently have the ability to manage load via HCALCS, then get the supplier to do this, rather than the Electricity Distributor (ED). Furthermore, it's not clear if this is JUST about EV charging, or household load generally. For example, what if a house was charging its domestic storage at the time of such an event. Would that be curtailed?
EDF Energy	Large Supplier	No	We do not support the solution put forward. The proposal would represent a significant policy decision and departure from current established approaches which do not give Distribution Network Operators (DNOs) the ability to interrupt or control any forms of supply. As such the proposal could have major implications for consumers, the development of the smart EV charging market and smart home management more generally. EDF Energy is

Question 1			
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			concerned that to date this modification is being progressed as part of a largely technical debate. This issue requires a much higher level of scrutiny and discussion than has been the case to date and EDF Energy supports the response to this consultation that has been submitted by Energy UK, and agree with their view that it would be prudent for this SEC Mod to be put on hold until the relevant discussions and consultation, including cross-code considerations, on the wider policy, regulatory, and consumer implications have occurred with Ofgem (and BEIS). The business case for this SEC Mod also needs to be considered in In light of that BEIS's recent decision to progress a new Proportional Load Control Device. This new device is more likely to be used in the market for the management of EV chargers as the functionality it delivers is much more appropriate to EV charging than that delivered by ALCS/HCALCS. It is not clear that current ALCS/HCALCS functionality would be used by suppliers for significant amount of EV load, which would limit the benefits to be gained through DNOs having access to that functionality. This change needs to be looked at in light of recent BEIS decisions, as well as the wider policy considerations around EV charging. Beyond the general concerns of principle raised above, we also have two main broad areas of concern relating to the proposal as it stands – these relate to outstanding governance and technical issues: **Governance issues** It is not appropriate to progress a technical solution without any detailed consideration of the governance framework that the solution would be operated in.

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			The solution detailed would give Network Operators (NOs) access to critical service requests that would allow them to de-activate any load that is switched through use of an Auxiliary Load Control Switch (ALCS) or a Home Area Network (HAN) Connected Auxiliary Load Control Switch (HCALCS). The potential consumer and market impacts of providing Network Operators (NOs) with this capability are significant and appropriate governance and controls for the use of this functionality need to be agreed before any technical solution can be determined to be appropriate. While many of these governance issues are outside of the SEC, it is not appropriate to progress a technical solution until they are addressed, especially as the governance considerations may in turn influence the requirements design of the system and device changes. Specific areas of concern include: • We strongly favour market solutions above any form of direct NO control of load. The use of this capability is noted as being a 'last resort' within the modification report and other documents. However it is not clear how it will be ensured that this will only be used in a last resort situation, and what actions could and should be taken by NOs and suppliers in order to avoid the need for NO intervention. At a minimum, strong independent governance arrangements would be needed to ensure that any application of the capability was of a genuinely last resort nature and that market based solutions had been suitably tried and tested prior to any use of the approach. • Schedule 8 of the DCUSA is referenced in the Modification Report - this schedule currently sets out an escalation process for Load Managed Areas (LMAs) by which specific actions can be taken by suppliers and NOs to avoid the need for additional restrictions (which may in extreme circumstances require de-energisation of

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			metering points). Something similar should be in place here that enables potential network 'stress' issues to be identified early, and actions to be taken co-operatively by NOs and suppliers (such as the use of ToU tariffs or different switching times) that might avoid the need for emergency curtailment. • Interrupting the supply to any load is likely to be a poor consumer experience - not only should it be a last resort but it should also be time limited until more permanent solutions such as network reinforcement or new flexibility measures can be implemented to resolve the issue. The process by which this will be managed and the oversight that will be provided is not clear. • The Modification Report refers to this capability only being used with consumer consent - it is not clear how this consent will be sought, what information will be provided to consumers as part of that process, and what compensation the consumer might receive (and from whom) as a result of the need to de-activate load in their premises. While Change of Tenancy (CoT) is briefly referenced in the Modification Report it is also not clear how the NO would know about a CoT and the need to seek appropriate consent from the new tenant. • The Business Requirements document includes a requirement that "Electric Vehicle chargers must be connected to the Smart Metering System" - there is no current obligation on suppliers or consumers to connect an EV charger to an SLCS or HCALCS, it is not clear if one is being proposed here and if so how this obligation would be enacted. This requirement would add another level of complexity to every model of Electric Vehicle Supply Equipment (EVSE) and HCALCS. This would require that a very minimally tested standard is mandated for the communication between all HCALCS and all EVSEs. This will add a lot of cost and complexity to

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			EVSE development and would likely minimise the number and variation of EVSEs that come into the UK. • There are also governance issues within the remit of the SEC that would need to be addressed. The Implementation Approach in the Modification Report notes the intent to target this Modification for inclusion in the November 2020 SEC Release alongside the Proportional Load Control Device being developed by BEIS. As noted in the consultation and decision on that device, the intent is for the version of SMETS that includes that new functionality to be made optional, and for suppliers to be able to choose whether to implement that functionality into the devices they install. If SECMP0046 is proposed to be included in the same version of SMETS it assumed that this would also be optional - in which case it is not clear how many devices will actually include this new functionality and provide NOs with the control they are looking for. • Even if this functionality were to be included in a separate version of SMETS it is not clear whether that version would be ever be mandated, or whether suppliers would ever be required to upgrade to that new version. This could mean that the number of devices that are installed that support this new capability may be very small, which would undermine the business case for making the change. Clarity is required on how the Technical Specifications and the TS Applicability Tables would be updated as a result of these changes before they can be progressed. **Technical Issues**

Question 1			
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			There are a number of issues and outstanding questions in regards to the technical solution for SECMP0046 that would need to be addressed before this change could be progressed - as it stands it is clearly not fit for purpose. • The scope of the change as set out in the documentation is very confusing - it talks about EVs but what the change is actually requesting is that DNOs have access to be able to activate/de-activate any load control switch (ALCS or HCALCS) operated by the meter in the same way that suppliers are currently able to. The definition of the change within the documentation should be updated to make this clearer - if there is any intent to restrict this capability to EV chargers that are connected to an ALCS or HCLACS (and not other types of load) then this would need to be reflected in the business requirements. • One of the requirements is for NOs to be able to join HCALCs to the HAN (to which EV chargers would then be connected) - we disagree with this requirement and believe it should be removed. There is no consideration of how these devices will be managed post-installation. It is our understanding that the default position of any load switch is 'off' on installation and it will only be activated as the result of an **Error! Reference source not found.**. The NO is not proposed to be given access to the relevant SR and would not be the right party to do so as the **Error! Reference source not found.** needs to align with the consumer's tariff switching times. • What access will Suppliers have to these devices once installed - suppliers need to be informed that something has been installed as we would need to manage it on an ongoing basis.

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			• How will suppliers know that an HCALC has been installed by an NO? It is noted that NOs will be notified if suppliers remove an HCALCS from the HAN - but it is not clear how suppliers will be notified that it was installed in the first place. • How will this impact EV operators who may be managing the EVs for other grid balancing services or providing optimisation for the customer? • We have concerns around ownership of devices on the HAN - if the HAN connected device is creating an issue supplier might need to de-whitelist it to protect the integrity of the HAN. It is not clear how issues like this might get resolved, and how consumers will charge a device when the HCALCS has been removed from the HAN. • The DCC PA notes that "Priority of these signals sent to the domestic Electric Vehicle charger via the Smart Metering infrastructure will be given to the Electricity Distributor over other eligible User Roles." - How will this prioritisation be enforced, presumably this will need to be done within the devices (ESMEs) which means that additional complexity within smart metering devices would be required to not only allow two parties to have access to the same commands, but to determine priority between two conflicting sets of commands. • It is noted in the Business Requirements that the customer should always be able to override the de-activation by the NO - however boost buttons are not mandatory part of smart metering so how would customers be able to override in the absence of the ability to boost? • It is proposed that NOs will be given the ability to alter the Boost Button on HCALCS - the boost button might form part of the tariff contract the customer has with their supplier - what gives DNOs the right to override this agreement and

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			prevent customers from being able to access the boost function when the risk is only related to time specific network issues? • It is proposed that DNOs will be given access to SR 7.6 (Deactivate Auxiliary Load) - this SR requires the sender to include the amount of time that the switch will be de-activated for within the command, it would be useful to have a view on what period of time it is expected the curtailment will be required for in each case, how it will be identified that this might need to be extended, and how that would be achieved. • What would happen if the NO tried to de-activate the ALCS/HCALCS and were to finds that it is already de-activated - what actions do they take then if de-activating the load connected that switch is not the solution? • We agree that it would need to be mandatory for ALCS/HCALCS to be labelled accurately for the solution to work - would a back-population of any missing data need to be carried out and if so how would this be done if meters have churned and the current supplier doesn't know what (if anything) is connected to the switch for which there is a calendar on the ESME? • NOs will have the ability to whitelist the HCALCS to the Communications Hub, and Join the HCALCS to the ESME - will the SRs be restricted to only allow HCALCs to be joined - will supplier be able to unjoin DNO installed HCALCs and vice versa? In light of the large number of fundamental issues that need to be addressed we can't support this proposal at this stage.
Npower	Large Supplier	No	We have reviewed and are supportive of the response being submitted to this consultation by Energy UK, and ask that you refer to that response for this question

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Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Networks Party	Yes	SSEN agree with the solution of using Home Area Network (HAN) Connected Auxiliary Load Control Switches (HCALCS) and Auxiliary Load Control Switches (ALCS) to control charging of Electric Vehicles
British Gas (Centrica)	Large Supplier	No	The proposed solution requires regulatory / governance changes outside of the Smart Energy Code (SEC) and, until those changes are either approved / implemented, this proposed technical solution is not fit for purpose (i.e. will deliver functionality that cannot be utilised at a cost to consumers). The changes that are required elsewhere include, but are not limited to: 1. Creating the necessary rights and/or permissions for DNOs to be owning or operating EV charges (directly or indirectly). 2. Creation of a framework that dictates the frequency of DNO intervention, any necessary limits and monitoring / reporting arrangements; 3. Customer journey and contractual arrangements. It is unclear what the DNO and customer relationship would be, how any customer permission is obtained, what compensation would be available etc. 4. Arrangements for procurement, installation, operation and maintenance of the associated HCLACS. EV Chargers are not currently usually installed and connected to HCLACS, it is not clear how they will be in future for DNOs ever to be able to use the proposed functionality. Putting aside the reliance on wider governance changes being required, we do not believe that the proposed solution is the most appropriate given other options that have been discussed at the working group. For example, existing load limiting functionality could be used to alleviate the potential network constraints that DNOs are concerned about. This was dismissed by the working group due to the need for a solution to be required at short

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			notice and concerns that suppliers could not facilitate this. However, the proposed solution requires installation of additional equipment and therefore this would need to be present for all domestic EV charging installations to be effective / available to DNOs. As above, we do not believe this point has been suitably addressed by the proposer or working group. An alternative solution, such as load limiting, would not discriminate against those consumers that have Electric Vehicles (EVs) and could apply equally to all consumers on LV Networks. We believe solutions such as load limiting would also require minimal system changes and could rely in part on existing arrangements. The proposed solution is also mostly funded by supplier DCC Users although the benefit is purely for the DNOs. As an alternative, the DNOs could look to progress this through Elective Services We would also recommend that the BEIS proposals for the introduction of Proportional Load Control (PLC) are considered further by the proposer / working group in order to ensure that there are no conflicting requirements and/or that the proposed solution is amended (if deemed necessary) to take advantage of the additional functionality that PLC could introduce (subject to the other governance / regulatory changes being taken forward).
SP Energy Networks	Networks Party	Yes	It is logical that Electricity Distributors have the ability to use the technical opportunity to protect their electricity network, particularly for the benefit of their wider customer base.
REA		No	The REA strongly opposes SECMP0046 and sees it as incongruous with the emergence of a smarter, more price-reflective, and competitive electricity market. The REA's opposition to this proposal is in line with our opposition to the Government's wider proposals to manage smart charge points through smart meters, as outlined in their July 2019 *Smart Charging* consultation and call for evidence & the REA's response.

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Respondent	**Category**	**Response**	**Rationale**
			The REA's opposition to SECMP0046 in particular rests on three key issues – the **respecting the policy-making process**, the need to facilitate competitive **markets for flexibility**, and the need to ensure **positive consumer experiences of home and workplace charging**. The REA's opposition is explained in detail in the bullet points below: • If Ofgem were to accept this proposal it would constitute a major policy decision which would take place outside the normal scope of Government's policy-making and consultative process. There are a wide range of parties which would be impacted by this decision (many of which are not included in the 'impacted parties' list) including charge point manufacturers, automotive manufacturers, electricity suppliers, aggregators and other software companies, digital payments platforms, and the consumer themselves who may have a more negative experience of vehicle charging. Additionally, politicians need to be made aware as negative experiences experienced by consumers will likely be rapidly communicated to them. • Ofgem has not yet decided on the roles, boundaries, and responsibilities of DNOs as they transition to DSOs. The SEC code should not be used as a means of informing these roles, boundaries, and responsibilities until a more clear vision from the regulator emerges.

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			• DNOs should not be allowed to be directly interacting with consumer behaviours behind the meter. Electricity suppliers are much better equipped to engage with consumers and have teams in place to deal with complaints, concerns, and questions. The REA would be open to working with proposals where the DNOs send signals to third parties around constraints, following which these parties rapidly deploy management solutions, preferably utilising their own communication and control signals. • Enacting SECMP0046 would have a range of impacts on external parties. The UK's smart meter system is already less interoperable and at a more limited stage of deployment than other European countries, and smart meters being deployed here are not aligned with those being deployed in Europe. Therefore, international product manufacturers are already incurring costs for having to design products that specifically interact with the UK system architecture. SECMP0046 would force international manufacturers to take on further product costs which could result in companies pulling out of the market – reducing competition and increasing costs for consumers. • For domestic charge point manufacturers, particularly independent ones, the sector would be hamstrung as products would need to be certified for use to connect to the smart meter network. One members' experience of getting one firmware release through the Certified Product Assurance (CPA) process, which is derived from a military security standard, was that it took 11 months and costs in excess of £300k. The approval of an updated firmware system with bug fixes took an additional 9 months, meaning that consumers had to endure bugs through the gap between the adoption of Firmware V1 (FW V1) and FW V2.

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Respondent	**Category**	**Response**	**Rationale**
			• As the certification (and re-certification) process is designed for stable mature products with minimal changes, and the EV charging sector is rapidly emerging and in a pioneering mind-set, the CPA process is very cumbersome and inappropriate. Mandating companies to navigate this process would be prohibitive and may close market access for a host of companies. • This policy would also pose a risk to automotive manufacturers. As consumer problems with the charging system, e.g. having their chargers turned off, end up in the national press it could undermine electric vehicle sales growth. In turn this risks damaging the market for EVs which is a strategic priority for the UK as outlined in the Industrial Strategy. • The REA has conducted significant work on building markets for flexibility services. In a future electricity system dominated by variable low-cost renewables, storage, and demand response a smarter grid management system will be required to actively balance behind the meter. Smart charge points managed by electricity suppliers, charge point operators, and / or aggregators should be able to receive signals relating to grid constraints and electricity prices and, should a consumer so choose, be able to manage charging. • Work the REA has conducted to build the case for flexibility include our white paper with Eaton, the Flexible Futures report with ElectraLink, the Energy Transition Readiness Index with Drax and Eaton, and the modelling on flexibility requirements produced by Bloomberg New Energy Finance. • Developing markets for flexibility, be it delivered by an energy storage unit, demand response, embedded generation or smart EV charging, is essential. SECMP0046

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Respondent	**Category**	**Response**	**Rationale**
			appears to be a blunt instrument which undermines this aim and the deployment of which is poorly thought-through. Particular areas that need to be addressed include: notifying consumers; obtaining consumer consent; the consumer override; reporting on managed charging events (which should be publicly available rather than just to Ofgem); usage limits; defining the conditions for a managed charging solution to be used (the current wording is vague); and, the duration of managed charging events. • Following a managed charging event, it is unclear how a charging session would restart. Additionally, engaging consumers in smart charging will be crucial to ensuring they simply do not turn off the smart charging functionality of charging stations. This means making sure they are properly communicated with, remunerated, and they understand what's taking place within the wider context of system operation. DNOs are not in a strong position to do this in comparison with charge point operators and suppliers who are built up as consumer-facing entities. • Additionally, the REA cannot see clear evidence of the need for this provision at this stage. Until DNOs are able to point to a body of evidence that market- based incentives and actors are unable to deliver smart charging then they should be unable to propose such modifications. If they are able to do so in the future, decisions should be taken through a formal government consultation process rather than via a niche technical industry forum.
EO Charging		Fully support REA's response	

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Respondent	**Category**	**Response**	**Rationale**
Citizens Advice	Consumer	Yes	- This solution should be taken forward as a last resort mechanism to protect consumers from network failure due to an inability to otherwise manage load from clustering of high power devices in domestic properties. - Although this solution provides a functional solution, it does not provide a good level of transparency to consumers about the potential curtailment of their energy service. This risks consumer trust in smart meters and electric vehicle charging being reliable, transparent and fair. - The development of the proposed solution and the addition of a supporting governance model will be important to understand the extent of the options to provide solutions to the issue addressed. - Communication and understanding will be crucial. Consumers need to be provided with as much information as possible about the implications of this last resort service. - Although not directly within the scope of the SEC, we are pleased to see Business Requirements 4, 5 and 6 relating to consumer consent, an override function and reporting to Ofgem. These are absolutely vital to give consumers confidence in the electricity networks, not discourage EV uptake and improve the consumer journey. - Further information to support consumer understanding could include a risk rating for their curtailment. This would give consumers a meaningful information, as it develops, relating to their particular position on the network and the permission they provide for curtailment. - Market propositions should be used as far as possible to engage consumers with demand control. We would expect that a network operator would make every effort

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			to avoid using this measure and instead work with suppliers and third party providers to avoid the use of this capability where possible. - We assume that proportional load control (PLC) would be added to the solution to control load in a more controlled manner. Without it, using single control switch is a blunt tool most likely to be between drawing power or not. Using multiple control switches could potentially be confusing for the consumer depending on the set up of their home devices. In these instances we hope the DNO would work with a consumer to establish how their device would respond in a curtailment event. - This modification should apply to all similar high power devices in the home that can be reasonably be curtailed. EV drivers should not be unfairly singled out. From research we conducted with EV drivers1, we know that they feel unfairly targeted through such a solution and have rightly asked why other large loads are not curtailed. This may include heated pools, machinery or greenhouses also being curtailed. However, any unknown or high priority devices such as medical equipment need to be exempt.
Tonik Energy Limited	Small Supplier	No	We disagree with the proposed solution and change on the basis of: - Consultation on Electric Vehicle Smart Charging has not yet confirmed that the Smart Metering System is to be the desired future platform, therefore implementing Load Control functionality on the platform is second guessing the outcome of the consultation. - The requirement to control loads beyond a LV feeder station is likely to be required in other countries other than the UK. The solution being based on the Smart Meter System will mean that charge point manufacturers will need to create products which are specific to the UK. This will create barriers for international companies to

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			sell their products in the UK and will restrict UK companies from exporting their products into other markets - Customers will need an HCALCS to be installed along with an EV charger to participate. This will increase cost and friction of the installation – especially as the HCALCS can only be joined to the Smart Metering System by either the Supplier or, under this solution, the Electricity Distributor. - Customers will need to opt into the load control of their EV charger. - Without financial compensation for offering this service to the Electricity Distributor, we do not believe that there will be much uptake from customers. - The Electricity Distributor will rely on the label of the HCALCS to decide the type of device that is attached to it. This is currently optional and is not information that an Electricity Supplier has – other than when the Smart Meter is installed at a customer site. Can the Electricity Distributor be assured that the customer may not change the device that is attached to the HCALCS and hence control of that device might mean inadvertently controlling the wrong device which may damage that device or have other impacts for the customer? - EV Smart Chargers installed under OLEV EVHS grants must have the capability to adjust the load remotely delivered to the EV. https://www.gov.uk/government/news/government-funded-electric-car-chargepoints-to-be-smart-by-july-2019 Rather than introducing additional hardware into a customer's home, solutions should be investigated that use software integration to fulfil the requirements.
DCC		Yes	DCC strongly supports the Government in its aim to maximise the use of smart charging technologies - which can be facilitated through the smart metering system. However, BEIS's

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			long-term approach for operational requirements for EV charging is expected to be finalised between 2020 and 2022 and implemented by 2025. We believe that until such a time, an interim solution is needed to minimise the possibility of multiple households being disconnected as a result of power outages caused by high usage of EV chargers in low voltage networks. The solution put forward in this proposal will allow Distribution Network Operators (DNOs) to monitor load demand on low voltage networks and provide them with the ability to alter charging amperage of domestic EV chargers. We believe this is a proportionate and cost-effective solution that could mitigate the risk highlighted above. The solution put forward in this modification is intended to be time limited and only used as a last resort by DNOs. The consumer using the EV charger will also be able to override the DNOs' instruction to curtail the charging of the EV. Provided that these limitations are clearly reflected in the legal text of the modification and monitored by Ofgem (as per business requirement 5) the potential negative impacts to suppliers and consumers should be minimal.
Secure Meters (UK) Limited	Other SEC Party	No	The solution appears to focus on making minimal DCC changes. The solution provides full access to the DNO of all HCALCS and not just those connected to EV chargers. It is not clear what controls are being used to ensure that the DNO cannot control HCALCS where the customer has declined alteration. As HCALCs are able to control load, there could be a CNI risk and it is not clear what controls are in place to mitigate the risk or need to be added to mitigate the DNO having this ability. The requirement mandates DNO priority but the solution does not provide any details of how this will be achieved (nor does the DCC IA).

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			The DNO also currently have access to a large population of Radio Tele-Switches (RTS) and Radio Tele-Meters (RTM) which will also be enrolled into the DCC Systems in due course and as such the modification may wish to consider them as part of the solution also. Additionally, there could be an adverse consumer experience since it is not clear who the responsible party is. If the HCALCS is turned off unexpectantly (which could be due to the Import Supplier or Electricity Distributer), does the customer engage with ASP, IS or ED?
Northern Powergrid	Network Party	Generally yes, although the proposed solution is not particularly clearly	We generally agree with the DNO requirements presented in the documentation. However additional clarity in the following areas would be helpful. Section references relate to Annex A of the consultation document. • Clarity is required on how this proposal links to the changes proposed in CRP612, specifically in relation to the DNO „override functionality" (Load Controller functionality). • Clarify if the High, Medium and Low business requirements are included in the proposal. Requirement 3 is categorised as being both Low and Medium priority in the document. Similarly some of the specifications (in section 3) are described as being optional. It is unclear whether these are included as part of the proposal. • Section 2.2. Preconditions of the DNOs being able to modify EV charging are that the EV must be i) connected to the charger and ii) charging at the point in time when the DNO initiates the SR. Without an indication of the near real time or instantaneous charging current, the DNO will have no feel as to the effectiveness of such a SR. Furthermore, without an indication of the direction of the current to the EV charger, the charger could be operating in V2G mode, such that a DNO initiating the SR will exacerbate the network issue that they are trying to mitigate.

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			• Section 2.2. Clarify that the modification only relates to opening / closing an ALCS / HCALCS rather than the consequences for the EV charger as a result of the controlled switch opening / closing. • Section 2.2. Clarify the meaning of „Priority of these signals sent to the domestic EV charger via the Smart Metering infrastructure will be given to the Electricity Distributor over other eligible User Roles". In particular does this mean that a supplier will be unable to operate a ALCS/HCALCS in the period of time between a DNO sending a SR to open the ALCS/HCALCS and a DNO sending a subsequent SR to close the ALCS/HCALCS. The workgroup should consider what happens in the event that the WAN or HAN fails in the period of time between the DNO sending a SR to open the ALCS/HCALC and sending a subsequent SR to close the ALCS/HCALCS; in such a scenario the normal scheduled activity would be suspended. Text on page 7 implies that the DNO SR to open the ALCS/HCALCS might include a configurable period of time for which the ALCS/HCALCS would be open before reverting to its scheduled operation. • Section 2.3. In the event that the DNO installs a HCALCS and joins it to the ESME, it must be the most appropriate party to be obligated to correctly label the HCALCS. It is unclear why this is a low priority requirement. • Section 2.3. Given that the intent is for the DNO to control EVs on very infrequent basis, only with prior agreement with customer and only when necessary to preserve the integrity of the distribution system, it is unclear why its reasonable for the customer to be able to „decline" the SR. This functionality needs to align with that proposed in CRP612. • Section 2.3. The DNO would not normally be aware of a CoT event, so they wouldn"t know whether there was a need to renegotiate with a new customer. For

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			this to work the DNO would need to receive and act appropriately to a CoT alert from the Supplier. Clarity is also required as to whether the DNO SR functionality would actually work (without the customers agreement) or simply not work as the result including some sort of inhibit as part of the CoT change process.
			• Section 3.2 Specification 1. Clarify that the proposal relates to the DNO capability to operate a ALCS as well as a HCALCS.
			  ○ SRV7.6. It would be good to clarify that opening the switch will not necessarily reduce the „charge amperage" it just has the potential to do so.
			  ○ SRV7.8. It would be good to clarify that the DNO would need to issue this SR on each occasion where the EV charging reduction is no longer required; in practice a SRV7.6 and 7.8 will always be used in pairs.
			• Section 3.2 Specification 2. Clarify whether SECMP0046 includes a requirement to mandate the accurate population of the ALCS/HCALCS labels to build on the requirement set out in SECMP0019. Without accurate labels, the SRs could be applied to the incorrect ALCS/HCALCS.
			• Section 3.2 Specification 3. As above, we do not believe that the customer should be able to override a DNO initiated SR.

Zenobe Energy Limited	Other Stakeholder	No	Zenobē Energy (Zenobē) strongly opposes SECMP0046 and sees it as incongruous with the emergence of a smarter, more price-reflective, and competitive electricity market. Zenobē's opposition to SECMP0046 in particular rests on three key issues – the **policy-making process**, the need to facilitate competitive **markets for flexibility**, and the need to ensure **positive consumer experiences of home and workplace charging**. Zenobē's opposition is explained in detail in the bullet points below:

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Respondent	**Category**	**Response**	**Rationale**
			• If Ofgem were to accept this proposal it would constitute a major policy decision which would take place outside the normal scope of Government's policy-making and consultative process. There are a wide range of parties which would be impacted by this decision (many of which are not included in the 'impacted parties' list) including charge point manufacturers, automotive manufacturers, electricity suppliers, aggregators and other software companies, digital payments platforms, • and the consumer themselves who may have a more negative experience of vehicle charging. Additionally, politicians need to be made aware as negative experiences experienced by consumers will likely be rapidly communicated to them. • DNOs should not be allowed to be directly interacting with consumer behaviours behind the meter. Electricity suppliers and other flexibility and service providers are much better equipped to engage with consumers and have teams in place to deal with complaints, concerns, and questions. We would be open to working with proposals where the DNOs send signals to third parties around constraints, following which these parties rapidly deploy management solutions, preferably utilising their own communication and control signals. • Enacting SECMP0046 would have a range of impacts on external parties. The UK's smart meter system is already less interoperable and at a more limited stage of deployment than other European countries, and smart meters being deployed here are not aligned with those being deployed in Europe. Therefore, international product manufactures are already incurring costs for having to design products that specifically interact with the UK system architecture. SECMP0046 would force international manufacturers to take on further product costs which could result in

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			companies pulling out of the market – reducing competition and increasing costs for consumers. • For domestic manufacturers, particularly independent ones, the sector would be hamstrung as products would need to be certified for use to connect to the smart meter network. One of the REA members' experience of getting one firmware release through the Certified Product Assurance (CPA) process, which is derived from a military security standard, was that it took 11 months and costs around £900k. The approval of an updated firmware system with bug fixes took an additional 9 months, meaning that consumers had to endure bugs through the gap between the adoption of Firmware V1 (FW V1) and FW V2. o As the certification (and re-certification) process is designed for stable mature products with minimal changes, and the EV charging sector is rapidly emerging and in a pioneering mind-set, the CPA process is very cumbersome and inappropriate. Mandating companies to navigate this process would be prohibitive and may close market access for a host of companies. • In a future electricity system dominated by variable low-cost renewables, storage, and demand response a smarter grid management system will be required to actively balance behind the meter. Smart charge points managed by electricity suppliers, charge point operators, and / or aggregators should be able to receive signals relating to grid constraints and electricity prices and, should a consumer so choose, be able to manage charging. • Developing markets for flexibility, be it delivered by an energy storage unit, demand response, embedded generation or smart EV charging, is essential. SECMP0046 appears to be a blunt instrument which undermines this aim and the deployment of

Question 1			
Respondent	**Category**	**Response**	**Rationale**
			which is poorly thought-through. Particular areas that need to be addressed include: notifying consumers; obtaining consumer consent; the consumer override; reporting on managed charging events (which should be publicly available rather than just to Ofgem); usage limits; defining the conditions for a managed charging solution to be used (the current wording is vague); and, the duration of managed charging events. • Following a managed charging event, it is unclear how a charging session would restart. Additionally, engaging consumers in smart charging will be crucial to ensuring they simply do not turn off the smart charging functionality of charging stations. This means making sure they are properly communicated with, remunerated, and they understand what's taking place within the wider context of system operation. DNOs are not in a strong position to do this in comparison with charge point operators and suppliers who are built up as consumer-facing entities. • Additionally, Zenobē cannot see clear evidence of the need for this provision at this stage. Until DNOs are able to point to a body of evidence that market-based incentives and actors are unable to deliver smart charging then they should be unable to propose such modifications. If they are able to do so in the future, decisions should be taken through a formal government consultation process rather than via a niche technical industry forum.
Flexible Generators Group (FGG)	Other Stakeholder	Yes	FGG understands that the SEC is only dealing with the way that a technical solution works. What is needed, before Ofgem approval of the change, are the changes to address the wider governance issues considered by the group. In particular the arrangements for the DNOs to pay the customers for the service, the communications between the customers, DNOs and suppliers, and the reporting of incidents not only by DNOs to Ofgem, but also the wider market.

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Respondent	**Category**	**Response**	**Rationale**
			In a smart, flexible market no parties should be taking services “for free” from customers. It is sensible for the DNOs to consider how they manage their networks, but it is also vital that customers are confident that their reasonable demands will be met if they are to commit to EVs, electric heat, etc., to move to a net zero carbon market. Some customers may well be happy to start to move towards more flexible energy usage patterns, but they should not be forced to do so by having their energy use curtailed with no recognition that there may be an opportunity to cost to them in doing so and a direct benefit to their neighbours. Transparency around how DNOs are managing their networks, where investment is need, etc. will also be key to helping companies like ours deliver the investment needed to support the move to net-zero.

Question 2: Will there be any impact on your organisation to implement SECMP0046?

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Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	Western Power Distribution will be impacted positively as we will be able to utilise this functionality to help manage load on our networks and maintain supply to consumers. We would need to develop systems and uplift to the relevant DUIS version in order to use the new functionality. We will also need to develop internal processes and systems to be able to respond to warnings that the network is under stress. We will need to consider processes to manage customer consent and change of tenancy as well as reporting to Ofgem instances where the functionality has been utilised.
SSE	Large Supplier	Yes	At this time, we are unable to ascertain the extent of the impacts where the full legal text to support the proposed solution has not been provided with this consultation. Implementation of SECMP0046 will introduce system and process changes to deliver the technical solution. We anticipate that there will be a need to establish processes to manage ongoing engagement with DNOs where consumers may contact their Energy Suppliers first. It introduces wider impacts to management of cost models, charging, settlements and customer interactions. As referenced in our response to question 12, we view that further work is required to understand these wider implications. We note that many of the impacts that this proposal introduces, and that have been raised at the Working Group sessions, do not seem to be reflected in the current version of the Modification Report. The changes to DUIS, P&C, MMC and GBCS, outside of those already being consulted upon in SMETS2v5.0, cannot be established until DCC, and BEIS, have completed their assessment.

Question 2			
Respondent	**Category**	**Response**	**Rationale**
Energy UK	Association	No	While there will be no direct impact on Energy UK there will be a significant impact on Energy UK member organisations, of which many of the reasons are noted above. Please refer to their individual responses for further detail. Energy UK would also highlight the opportunity cost of pursuing this SEC Mod instead of taking forward market-led solutions for residential flexibility and grid stability.
Electricity North West Limited	Electricity Network Party	Yes	At this stage in the modification refinement we are unable to provide detailed costs impact to our organisation regarding how we implement and manage the functionality proposed in this solution. However, as a minimum from an IT perspective we expect it would cost £50k+ to make changes to our smart meter gateway system to be able to send a signal. This excludes the costs of implementing the required business functionality within our Network Management System to monitor and trigger the load reduction activities.
Octopus Energy	Small Energy Supplier	No	Octopus Energy takes pride in building confidence and trust with our customers, and have invested heavily in smart technologies that will allow all consumers to benefit from smart energy and positive behaviour change. We have proven that this approach can be highly effective in encouraging charging behaviour at times that benefit the grid - indeed, customers on our 'Agile Octopus' tariff have shifted their EV charging out of peak times by 47%[1]. Suppliers are in the unique position to be able to offer specifically tailored and bespoke products to meet this need, whereas DNOs are not. We risk alienating a significant proportion of these consumers if we do not get this right. Octopus Energy customers have made an active choice to switch to their energy supplier, and are free to leave us (without exit fees) at any point. Customers have no choice in their DNO provider, and as such DNOs do not have the capabilities required to manage

Question 2			
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			relationships with customers. We are deeply concerned about the damage to our relationship with our customers should DNOs be allowed to interact with our customers at this level. It is also crucial to build trust and convert all potential EV customers to shift to smart meters. If interference to smart meter EV chargers is run via the DNOs, this could be hugely off-putting to potential EV customers on the brink of adopting a smart meter and slow down the overall transition to a smarter energy system, undermining our ability to meet our smart meter rollout targets. Octopus Energy also has an EV leasing business, Octopus EV. We are concerned that, should consumers become aware of these proposals, confidence in electric vehicles will be eroded. There is already widespread media coverage of issues with public charging networks, which is one of the most cited reasons for customers not to make the transition to EVs. If they were to discover that DNOs might in future be able to throttle their vehicle charging at home, we believe this would dampen consumer demand for our electric vehicles. --- [1] https://octopus.energy/static/consumer/documents/agile-report.pdf
The Renewable Energy Company (Ecotricity)	Small Supplier	Yes	1) Demand forecasting (cause imbalance). This is recognised in section 4 (Impacts) and is a significant commercial risk 2) We have spent significant resources in building a Virtual Power Plant and associated control platform and are currently developing the domestic side. The

Question 2			
Respondent	**Category**	**Response**	**Rationale**
			value of this is predominantly in load shifting and frequency response provision. This Modification will remove control of the biggest load item at domestic level, and have a significant impact on the domestic proposition we have in development, as well as all the associated investment. 3) The consultation states 'there will be no impact on GHG emissions' (page 8). However, a supplier relying on load control of domestics who suddenly lost that control could well need to switch on a gas peaking plant to compensate for the load he THOUGHT he was going to reduce, but due to ED intervention couldn't, thus needing to replace that power with something short-term and responsive so as to avoid imbalance. Thus increasing GHG emissions.
EDF Energy	Large Supplier	Yes	SECMP0046 is likely to have significant impacts on our organisation; however the extent of these will depend on some of the questions in our response to question 1 being addressed; especially those related to the Technical Specifications. Depending on this is implemented we will need to: • Procure, test and install devices that are compliant with the new versions of the Technical Specifications that these changes would be included in. • Develop, test and upgrade to any new version of the DCC User Interface Specification (DUIS) that might result from this change being approved. • Develop and implement new business processes to deal with interventions that have been made by NOs and devices (HCALCS) that might be installed by them. • There is a potential for additional customer contact as a result of these changes being made.
Npower	Large Supplier	Yes	

Question 2			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Networks Party	Yes	SSEN will need to ensure our systems are altered to allow the sending and receiving of responses for all relevant ALCS SRV's and new alerts that will be generated. SSEN will also need to ensure processes are defined to deal with the new functionality.
British Gas (Centrica)	Large Supplier	Yes	Implementation of this modification proposal would result in revisions being made to DUIS and therefore an impact on us as a User. The extent of this impact is unclear as this may well depend on the timing of implementation and whether it is combined with other user impacting change. If incremental to other changes then we would classify the impact as 'low' as, in isolation, it is likely to be an optional DUIS change for suppliers (based on our understanding of the solution).
SP Energy Networks	Networks Party	Yes	Our DCC gateway application must be enhanced to include the appropriate service request required to undertake the required service request function.
REA	Association	No	The REA as an association will not be impacted but there will be impacts on a host of our members.
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	Yes	Citizens Advice runs the Consumer Service, a telephone helpline which provides consumers with free and independent advice. If this solution is implemented by DNOs without regard to consumer education, consent and satisfaction, we could see an increase of calls to our helpline. We are already receiving calls from 39,000 energy consumers a year, and an increasing number from electric vehicle drivers.

Question 2			
Respondent	**Category**	**Response**	**Rationale**
Tonik Energy Limited	Small Supplier	Yes	The largest impact to our organisation is the relationship with the customer. The Energy Supplier is responsible for the purchase of energy on the wholesale markets and selling it to the customer. We have the primary relationship with the customer when it comes to electricity supply. By the Electricity Distributor influencing the EV charging might mean that the consumption of energy does not happen at the times when the supplier or customer are expecting. This could have a knock-on cost to the customer and will affect the supplier's imbalance position. The supplier is responsible for the Smart Metering System installed at a customer's home. When the EV charging is affected by the Electricity Distributor, it is likely that the customers will contact the supplier to question the behaviour. This will add to the suppliers cost to serve these customers. If there are any issues with the communications between the HCALCS and the Smart Meter System, again the customer is likely to come to the supplier first off to identify the issue.
DCC		Yes	DCC is responsible for implementing system impacting SEC changes. Details are provided in the DCC Preliminary Impact Assessment.
Secure Meters (UK) Limited	Other SEC Party	Yes	As an ESME manufacturer, significant changes (with associated risk, cost and effort) will be need to developed which the MAP may not be support of. As an Other User, by restricting this to DNO it would not be possible for OU to also offer this as a service to DNOs.
Northern Powergrid	Network Party	Yes	There will be a need to modify our DCC gateway to accommodate the revised version of DUIS, however assuming the changes would be implemented as part of an annual release, its expected that the costs would be in line with those already budgeted. There will be costs to develop systems and operate systems to interpret information from LV substation monitoring systems and create the appropriate Service Requests. Whilst we are not able to

Question 2			
Respondent	**Category**	**Response**	**Rationale**
			quantify these at the moment, we believe that such functionality will form part of the systems we require to implement as the LV network becomes more proactively managed to accommodate LCTs.
Zenobe Energy Limited	Other Stakeholder		
Flexible Generators Group (FGG)	Other Stakeholder	No	FGG does not foresee any direct impact. However, as we see the energy market undertake structural changes in both generation, system management and demand, we expect to be very much part of the flexible, smart solution. We are supportive of the principles of paying customers for the services they offer and ensuring transparency around the ultimate use of these arrangements. We therefore urge the impacted parties to work on the wider governance issues to ensure there is a transparent, level playing field for them.

Question 3: Will your organisation incur any costs in implementing SECMP0046?

Question 3			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	The main cost, beside the modification implementation costs, will be developing the systems to accept and handle the additional information within the alerts and be able to send the new Service Requests that will be available to us. It is difficult to determine exactly how much this modification will cost as it will depend what other changes form part of that particular DUIS/XSD release. There will be additional costs beyond the DUIS/XSD change to develop our back ends systems and processes to handle the additional information we are receiving and to trigger the new Service Requests. If we were to implement this change as a standalone change the cost to our organisation would be approximately £20,000. We are unsure exactly what the cost savings would be but believe that it is a modification that will aid network operators in maintaining supply to consumers.
SSE	Large Supplier	Yes	We are unable to ascertain until we have sight of the full set of defined changes that will be proposed to deliver the solution. There are likely to be ongoing costs in management of customer queries and the process to engage with DNOs.
Energy UK	Association	No	As per the response to Question 2, please refer to Energy UK member's individual responses for views on cost implications.
Electricity North West Limited	Electricity Network Party	Yes	See our response to Q2.
Octopus Energy	Small Energy Supplier	No	Procuring the DCC on projects of this kind is paid for by suppliers and thus costs are ultimately borne by consumers. Projects of this kind should therefore be undertaken with extreme caution, particularly when there are already in-market solutions. A thorough

Question 3			
Respondent	**Category**	**Response**	**Rationale**
			opportunity cost impact analysis should be undertaken in consultation with suppliers and technology providers such as Ohme.
The Renewable Energy Company (Ecotricity)	Small Supplier	Yes	Items 1-3 in the previous section will all result in us incurring material costs / losses if this Mod is implemented
EDF Energy	Large Supplier	Yes	We will definitely incur costs as a result of implementing this change; the extent of these is again reliant on addressing the questions previously noted, and especially those related to the Technical Specifications. It needs to be borne in mind that it is virtually impossible to isolate the cost impacts of implementing any change that impacts either the Technical Specifications or the DUIS, as these changes are not made on an individual basis. These changes are implemented as part of a SEC release, and it is the costs of each SEC Release that are significant - the incremental costs that are incurred as a result of an individual change are likely to be hard to isolate. The costs of procuring, developing, testing and cutting over to each new version of SMETS or DUIS are very significant, and will need to be fully justified by the benefit to be achieved. This change will also add costs and complexity to the development of EVSE, both in terms of firmware and potentially hardware as well. Each EVSE will need to be able to receive and respond to the HCALCS message. This will increase the cost of EVSE manufacturing and operation in the UK.
Npower	Large Supplier	Yes	We are not able to provide costs at this stage. We feel that further work is needed on this change proposal to help us impact assess this change fully. At present, we don't believe that this change can progress in its current format.

Question 3			
Respondent	**Category**	**Response**	**Rationale**
Scottish and Southern Electricity Networks	Networks Party	Yes	As described above, minor system changes will be required which will result in build, test and implementation costs.
British Gas (Centrica)	Large Supplier	No	We will incur a significant proportion of the DCC implementation costs via DCC charges. Over and above DCC implementation costs, there will be the cost of any changes associated with implementation a new version of DUIS, or the incremental cost of testing if combined with other user impacting change. As above, we would classify these additional costs as 'low'. The arrangements for the procurement, ownership, installation, operation and maintenance of any HCLACS is unclear – this would currently be a supplier responsibility (and cost) but needs to be defined further to understand any cost implications. We have not identified any cost savings from implementation of this modification proposal.
SP Energy Networks	Networks Party	No	Consider any costs will be negligible
REA	Association	No	The REA will not incur costs but many of our members will. One estimated that the cost of the process of approving firmware through the CPA process to connect to a SMETS 2 system is in excess of £300k takes up to one year.
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	n/a	n/a

Question 3			
Respondent	**Category**	**Response**	**Rationale**
Tonik Energy Limited	Small Supplier	Yes	As set out above
DCC		Not applicable.	
Secure Meters (UK) Limited	Other SEC Party	Yes	[Confidential information provided]
Northern Powergrid	Network Party	Yes	See our response to question 2.
Zenobe Energy Limited	Other Stakeholder		
Flexible Generators Group (FGG)	Other Stakeholder	No	

Question 4: Do you believe that SECMP0046 would better facilitate the General SEC Objectives?

Question 4			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	We believe that this modification better facilitates SEC Objective (e) by facilitating the operation of Energy Networks to deliver a secure and sustainable supply of energy to consumers.
SSE	Large Supplier	No	We are unable to ascertain until such time as a fully formed solution is presented.
Energy UK	Association	No	Energy UK believes that SECMP0046 is at odds with General SEC Objectives c) and d) and raises challenges with regards to Objective e). **Objective c)** is "[…] to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems". SECMP0046 impedes energy customers' ability to manage their energy use by introducing a method for DNOs to take mandatory control of their load, even if there is an existing smart energy proposition in place with an energy supplier. This could undermine energy customers' trust in smart energy propositions and EV solutions altogether. Furthermore, there is no detail provided on consumer protection in respect of this change – this is a fundamental missing piece. **Objective d)** is "[…] to facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy".

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			As discussed in response to Question 1, allowing DNOs to control EV chargers will undermine market confidence as it is represents an intervention of a monopoly actor into a competitive market. Suppliers will compete in this space through time of use tariffs, smart home propositions, appropriate incentives and other innovative offerings. These are already being brought to market and any interventions that disrupt the value proposition will damage competition as well as having implications for suppliers as it is the supplier who is responsible for managing its customers – as this introduces risks outside of the supplier's control. **Objective e)** is "[…] to facilitate such innovation in the design and operation of Energy Networks (as defined in the Data Communications Company Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy". While SECMP0046 ostensibly supports this objective, Energy UK believes that this only holds true if considering short term impacts, or the impacts of one group of market participants – the DNOs. SECMP0046, in that it circumvents the market mechanism, risks impeding the development of competitive local markets for flexibility and therefore the transition from DNOs to DSO – a vital part of creating a smarter, more flexible energy system. As such SECMP0046 does not appear to be consistent with objective e).
Electricity North West Limited	Electricity Network Party	Yes	The proposed solution under SECMP0046 helps to facilitate innovation in the design and operation of Electricity Networks as it provides a last resort optionto prevent failure of our networks in the same way as Low Frequency Demand Disconnection is a last resort to prevent Blackstart. We would envisage that prior to reaching this stage that other more sophisticated smart charging techniques have been utilised similar to those identified within the recent Department for Transport consultation on Electric Vehicle Smart Charging. We would also expect that as part of installing this monitoring and trigger system that a

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			localised Electricity Distribution Network study should be carried out to determine if network reinforcement options should be considered to prevent over utilisation of the HCALCS.
Octopus Energy	Small Energy Supplier	No	Octopus Energy fully supports Energy UK's response to this question.
The Renewable Energy Company (Ecotricity)	Small Supplier	No	**c.1.1 (a) objective** is 'to facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises'. This mod will introduce an arbitrary 3rd party intervention into a contractual arrangement between the supplier and its customer where a smart domestic proposition is in place. Or, if the ED seeks to contract directly with the energy consumer, the consequence will be unpredictable demand load in the supplier position. Either of these outcomes works against the efficiency and interoperability asked for above. **c.1.1 (c) objective** aims to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems. This facilitation will be dislocated by the ED taking mandatory control of their load, where there is a smart home proposition in place between supplier and customer, which incentives load behaviour. This will completely dislocate that proposition at times, as the supplier won't be able to see with sufficient time or granularity when the ED is intervening, and thus provide feedback to the customer via whatever IHD/ app that is in place. **c.1.1 (d) objective** aims to facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy. This will be done via smart home propositions, based around ToU tariffs, smart home devices and suitable incentives, which will create an innovatory, competitive landscape between suppliers. Having an ED be able to control load at times of its choosing will considerably diminish the worth of such

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			smart home propositions, in all likelihood at key price moments, so as to, in all likelihood, render them worthless. SECMP 0046 will facilitate (**e) the fifth General SEC Objective**, that of facilitating such innovation in the design and operation of Energy Networks (as defined in the Data Communications Company Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy in all probability. Its effect on the **6th & 7th General SEC objectives** is likely to be largely neutral.
EDF Energy	Large Supplier	No	Unless the issues noted in our response are addressed we do not believe that SECMP0046 would better facilitate the General SEC Objectives – it does not do so as it stands. Should an appropriate governance framework be put in place that ensures that any capability given to NOs to operate load connected to the smart metering system is used subject to strict controls and only as a genuine last resort, it is likely that this change could be regarded as better facilitating SEC Objective (e). Even then the balance of costs and benefits of the approach vs alternatives will require further consideration.
Npower	Large Supplier	No	Please refer to response provided by Energy UK
Scottish and Southern Electricity Networks	Networks Party	Yes	SSEN believes that this will help facilitate objectives within SEC Objective 5
British Gas (Centrica)	Large Supplier	No	The proposer has indicated that this modification proposal will better facilitate SEC Objective (e) by giving DNOs control of EV chargers and allowing them to operate the electricity network in a more efficient way. We disagree with this as the implementation of this modification [in isolation] does not create the not create the necessary governance arrangements that would allow DNOs to control EV charges, it is a technical solution only. As mentioned in our response to question 1, there are several governance and regulatory

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			matters that need to be resolved outside of SEC governance to enable DNOs to have control of EV chargers in this way. If we were to consider the SEC Objectives in a similar way, we believe implementation would negatively impact on SEC Objectives (a), (c) & (d) for the following reasons: *SEC Objective (a) – the efficient provision, installation and operation of smart metering systems*: It is unclear from the proposal who would be procuring and installing the additional equipment (e.g. HCLACS) required to facilitate the DNOs ability to control EVs. If DNOs are taking responsibility for the additional operational and installation activities, then this would be additional inconvenience for the consumer and therefore negatively impacting on the facilitation of this SEC Objective; *SEC Objective (c): Consumers management of their use of electricity through provision of information from their smart metering system:* DNOs having 'control' of domestic consumer demand goes against the principles of the smart programme and the aim of putting **consumers in control**. Implementation of this modification would do the exact opposite and therefore goes against, and does nothing to facilitate, this SEC objective; and *SEC Objective (d): effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy*: Implementation of this modification proposal could lead to an undermining of competition and confidence in the market. Network intervention should be a last resort activity and DNOs should instead be looking to competitively procure energy/demand reduction/management from suppliers, procuring ancillary services to manage peak demand or making investment in their networks where the justification exists to do so. We therefore believe implementation of this modification proposal will negatively impact on the facilitation of this SEC Objective.

Question 4			
Respondent	**Category**	**Response**	**Rationale**
SP Energy Networks	Networks Party	Yes	The role of an Electricity Distributor is well defined, and as such the opportunity the solution offers is in line with General SEC Objectives.
REA	Association	No	The REA echoes points made in the Energy UK response on this matter, and believe these proposals are not aligned to SEC Objectives c, d, and e. See full Energy UK response for rationale. REA believes that SECMP0046 is at odds with General SEC Objectives: • "[…] to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems". • "[…] to facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy". • And d) "[…] to facilitate such innovation in the design and operation of Energy Networks (as defined in the Data Communications Company Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy".
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	Yes, this change supports the fifth General SEC Objective to facilitate	Giving energy networks the capability to control high loads when low voltage cables are under stress supports the reliability in the operation of energy delivery. This could help avoid imminent brown or black outs, preventing consumers, including potentially those in the most vulnerable circumstances from being without electricity.

Question 4			
Respondent	**Category**	**Response**	**Rationale**
		innovation in the design and operation of energy networks as will best contribute to the delivery of a secure and sustainable supply of energy.	
Tonik Energy Limited	Small Supplier	No	The proposed solution to being able to control loads behind an LV feeder in customers homes does not allow for future innovation. It is a very specific solution to the problem which has limited use cases. A better solution would be to implement open standards to ensure that any solution implemented could be equally applicable to other markets as it is to the UK, which will ensure that customers get the best value for any investment made. The original proposal from SSEN as part of the SMART EV trial stated that Open Charge Point Protocol (OCPP) could be used to implement the solution. https://www.eatechnology.com/wp-content/uploads/2018/01/Smart-EV-Managed-EV-Charging-Use-Case-and-Customer-Impact-Report.pdf Charge points being installed today under government grants must be “Smart” which means that they have OCPP or equivalent functionality – load to the EV can be adjusted remotely. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			_data/file/772457/electric-vehicle-chargepoint-scheme-technical-spec-july-2019.pdf
DCC		Yes	We believe this modification would better facilitate SEC Objective (e) 'Facilitate innovation in the design and operation of energy networks to contribute to the delivery of a secure and sustainable supply of energy'. The proposed solution offers an innovative and more cost-effective alternative to the reinforcement of low voltage networks. At the same, it reduces the possibility of multiple households being disconnected as a result of power outages caused by high usage of EV chargers in low voltage networks.
Secure Meters (UK) Limited	Other SEC Party	Yes	I am surprised that such functionally was not included as part of core requirements as I would considered it key feature to deliver C1.1(e) C1.1 (e) the fifth General SEC Objective is to facilitate such innovation in the design and operation of Energy Networks (as defined in the DCC Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy;
Northern Powergrid	Network Party	Yes	This modification proposal facilitates the fifth General SEC Objective "to facilitate such innovation in the design and operation of Energy Networks (as defined in the Data Communications Company Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy" by providing a method for DNOs to preserve the integrity of part of a distribution network at times of distress.
Zenobe Energy Limited	Other Stakeholder	No	Zenobē echoes points made in the Energy UK response on this matter, and believe these proposals are maligned to SEC Objectives c, d, and e. See full Energy UK response for rationale. REA believes that SECMP0046 is at odds with General SEC Objectives:

Question 4			
Respondent	**Category**	**Response**	**Rationale**
			• "[…] to facilitate Energy Consumers' management of their use of electricity and gas through the provision to them of appropriate information by means of Smart Metering Systems". • "[…] to facilitate effective competition between persons engaged in, or in Commercial Activities connected with, the Supply of Energy". • And d) "[…] to facilitate such innovation in the design and operation of Energy Networks (as defined in the Data Communications Company Licence) as will best contribute to the delivery of a secure and sustainable Supply of Energy".
Flexible Generators Group (FGG)	Other Stakeholder	Yes	Setting up the ability to utilise services from customers who wish to provide them is sensible. Were they to reduce the probability of disruption to other local customers then this may be economic while DNOs undertake necessary investments to ensure that if customers cease to offer a service they can still meet demand in line with their licence obligations. There is a lot of learning to do about how customers will respond to either price signals or direct contracting for services. The roll out of smart meters seems to be very slow, so as a market we need to be mindful that these types of arrangements may not actually deliver much response. Ofgem must therefore continue to ensure suitable levels of investment by DNOs to keep supplies to customers secure.

Question 5: Noting the costs and benefits of this modification, do you believe SECMP0046 should be approved?

Question 5			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	We believe that this modification should be approved as it better facilitates SEC Objective (e) and the benefits on consumers by allowing Network Operators to maintain supply in the event of the network becoming overloaded.
SSE	Large Supplier	No	Given there are still outstanding items to develop, that may have further impact on the solution and overall costs, we are unable to give approval.
Energy UK	Association	No	It should be noted that the DCC Preliminary Assessment for SECMP0019 provided a cost to implement the solution in the DCC Systems of between £432,000 and £622,000 before testing costs[8]. It is therefore concerning that the initial DCC Preliminary Impact Assessment for SECMP0046 provides a cost of £560,000 including implementing the changes proposed in SECMP0019. This does not, in the view of Energy UK, provide an accurate or reasonable estimation of cost. Energy UK would welcome clarity on this disparity. Beyond this, the costs and benefits quantified do not accurately represent the impact that allowing DNOs to control EV charging will have on the market for smart charging. A full impact assessment, which considers the full impacts on smart charging, will be necessary before an informed decision can be made. As noted in the earlier part of our response, there is no clear evidence of the benefits this SEC Mod would bring. Furthermore, the DCC charging approach means that it is energy suppliers who mainly pay for DCC charges – this SEC Mod benefits DNOs only so consideration may need to be given to that aspect.

[8] https://smartenergycodecompany.co.uk/modifications/alcs-description-labels/

Question 5			
Respondent	**Category**	**Response**	**Rationale**
			Lastly, Energy UK is unaware of any security considerations being taken into account (namely by the SEC Panel's Security Sub-Committee) in respect of the proposed technical solution. Allowing DNOs the ability to whitelist HCALCS (in the CH's HAN Device Log) and to join / unjoin them to the ESME will need to be assessed from a security perspective in respect of the overall smart metering system at a consumer premises and the wider DCC infrastructure.
Electricity North West Limited	Electricity Network Party	Yes	See our responses to Q1-4.
Octopus Energy	Small Energy Supplier	No	Octopus Energy fully supports Energy UK's response to this question.
The Renewable Energy Company (Ecotricity)	Small Supplier	No	Ofgem changed electricity trading arrangements in 2001 to increase competition and create an efficient market based mechanism whereby electricity could be delivered to householders. One of the desired outcomes was the reduction of electricity prices to householders, and the advent of smart meters, smart homes and smart propositions is a furtherance of that journey, as well as creating a system to reflect the growing number of DERs and also one which could deliver the flexibility required by a transmission system heavily fed by renewable generation. When one considers the rationale for all of the above, SECMP 0046 is a completely retrograde step – a move back to the days of centralised control. The benefits, as simplified to the regulator are 'keeping the lights on' – the standard go to of reactionary grid operator thinking. This is wrapped up in the language of cost efficiency. However, there are better, more innovative, more creative, and ultimately more market orientated and cost efficient ways to achieve the desired outcome of not 'blowing' the low voltage network than this blunt

Question 5			
Respondent	**Category**	**Response**	**Rationale**
			instrument, which is completely at odds with all the stated aims of the Power Responsive Forum and many other industry initiatives to create a modern, flexible, agile electricity system.
EDF Energy	Large Supplier	No	As detailed in our response to question there are a significant number of fundamental issues that need to be addressed before this change should even be considered for approval.
Npower	Large Supplier	No	We are not in support of this change
Scottish and Southern Electricity Networks	Networks Party	Yes	Due to the ramp up of EV, this modification will help prevent overloading events on low voltage networks which will in turn, avoid potential network outages. Avoiding these events is a key benefit of implementing this SEC Mod.
British Gas (Centrica)	Large Supplier	No	As mentioned above, it is not appropriate for this modification to be approved for implementation. Wider regulatory / governance issues need to be resolved in parallel to the modification proposal and, only when they have been, can a decision be made on whether to approve SECMP0046 for implementation. This proposal is a technical solution to matters that are being debated elsewhere.
SP Energy Networks	Networks Party	Yes	Consider this appropriate to provide protection for all customers
REA	Association	No	The REA does not believe the cost estimates fully reflect the direct financial costs that this would place on the charge point industry, or the indirect costs that this would place on customers and electricity suppliers from radically decreased competition and electricity sector innovation. Additionally, the assessment does not account for the impact that these proposals would have on the future market for smart charging and other flexibility services behind the meter.

Question 5			
Respondent	**Category**	**Response**	**Rationale**
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	Yes	Overall, the solution does facilitate DNOs running electricity networks more efficiently and effectively. The financial costs are minor compared with the potential financial and social benefits.
Tonik Energy Limited	Small Supplier	No	The government have recently consulted on Electric Vehicle Smart Charging and the response from this consultation has not yet been published. Part of this consultation is the future model of how smart charging should operate and proposes the Smart Metering System as an option for operating this. Without agreement that the Smart Metering System is the future model for EV Smart Charging, then this proposal's main purpose is to support two trials that have received government funding https://smartenergycodecompany.co.uk/latest-news/trials-underway-to- demonstrate-automated-low-cost-charging-of-electric-vehicles-through-the-smart- metering-system/ If this solution goes ahead, then the costs incurred for its implementation should not be shared by DCC Users and their customers, they should be covered by the government under the funding for these trials.
DCC		No comment	
Secure Meters (UK) Limited	Other SEC Party	Yes	Without this feature, the Energy Networks will struggle to deliver a secure and sustainable Supply of Energy
Northern Powergrid	Network Party	Yes, provided there is clarity	We generally agree with the DNO requirements presented in the documentation.

Question 5			
Respondent	**Category**	**Response**	**Rationale**
		as to what solution is actually proposed	
Zenobe Energy Limited	Other Stakeholder	No	Zenobē does not believe the cost estimates fully reflect the direct financial costs that this would place on charge point industry, or the indirect costs that this would place on customers and electricity suppliers from radically decreased competition and electricity sector innovation. Additionally, the assessment does not account for the impact that these proposals would have on the future market for smart charging and other flexibility services behind the meter.
Flexible Generators Group (FGG)	Other Stakeholder	Not immediately	The change should not be approved until all the wider governance and communications issues are presented to Ofgem to form a workable package that protects the interests of customers and keeps the rest of the market informed about when and how much and load management is used.

Question 6: How long from the point of approval would your organisation need to implement SECMP0046?

Question 6			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	We would need a minimum of six months lead time to implement this change.	This will allow time for systems to be fully developed and testing and processes to be addressed to manage the new functionality.
SSE	Large Supplier	Unable to ascertain given the information provided	Unquantifiable as the breadth of system and process changes required to implement this change have not been provided with this Refinement Consultation. Whilst the addition of the Network Operator sending an SRV to a HCALC, outside the BEIS proportional control changes, may be one element, this change cannot be viewed in isolation. We would need to fully assess the wider obligations pertaining to the provision of services to an end point customer and all our processes involved. Noting that we still need sight of the proposed legal text, the consultation version of the appropriate SEC sections (GBCS, MMC, P&C and DUIS) to impact assess the changes required to implement this proposal.
Energy UK	Association	N/A	Please refer to member responses.
Electricity North West Limited	Electricity Network Party	We are unable to confirm at this stage.	N/A

Question 6			
Respondent	**Category**	**Response**	**Rationale**
Octopus Energy	Small Energy Supplier	Not answered	As noted throughout this response, Octopus Energy does not support the progression of this modification.
The Renewable Energy Company (Ecotricity)	Small Supplier	Effectively none – this solution cuts out suppliers from being part of the solution.	See above
EDF Energy	Large Supplier	18 months	We would usually require a minimum of 18 months from the approval of a new version of the Technical Specifications to be able to start to install devices that are compliant with the revised requirements.
Npower	Large Supplier		We believe that a lot more work is required in this space and so cannot answer this question at present.
Scottish and Southern Electricity Networks	Networks Party	2 Months	Once the release code and testing facilities are available from the DCC. SSEN will require a period of time to implement the functionality into our adapter, alongside testing and regression testing that will need to be carried out.
British Gas (Centrica)	Large Supplier	3-6 months	We would require a short lead time (e.g. 3-6 months) based on the assumption that the requires system changes are not supplier impacting. For example, if user impacting change is minimal and only results in a new 'optional' version of DUIS. If there are supplier impacts (e.g. DCC testing requirements) then we assume that implementation would be scheduled to align with the 12-month lead time, post approval, principle.

Question 6			
Respondent	**Category**	**Response**	**Rationale**
SP Energy Networks	Networks Party	3-6 months	Time to define requirements, design solution, test and implement
REA	Association	N/A	
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	n/a	n/a
Tonik Energy Limited	Small Supplier	No Response Provided	
DCC		If a decision to approve is received on or before 5 May, we plan to implement the modification as part of the November 2020 SEC Release.	As per Work Group discussions.
Secure Meters (UK) Limited	Other SEC Party		[Confidential information provided]
Northern Powergrid	Network Party		We would need to consider the implementation timescales further before responding.

Question 6			
Respondent	**Category**	**Response**	**Rationale**
Zenobe Energy Limited	Other Stakeholder		
Flexible Generators Group (FGG)	Other Stakeholder		N/A

Question 7: Do you agree with the proposed implementation approach?

Question 7			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	
SSE	Large Supplier	No	The implementation approach only reflects the ability for the DCC to deliver the changes. It does not seem to consider all the other changes required, both to the legal text and to the way the industry works for this change to be used. There could be consideration to implement this in a dormant state for use at a later stage, then there would be opportunity for the required cross-Code (not just SEC) changes to be assessed, consulted on and implemented, for this functionality to be used.
Energy UK	N/A	No	Energy UK does not agree with the proposed implementation approach due to members' significant concerns with the proposed solution. Instead, as outlined in the responses above, it is suggested that Ofgem and BEIS consult more widely on this issue, including addressing the areas that were out of scope of this SEC Mod. Energy UK notes that 'supplier management of whole-meter load' has been discarded as an option due to concerns over the response time. Energy UK questions the discrepancy between a 5-10 minute window and a need for a 30 second response time. Further, Energy UK understands that suppliers and aggregators are currently developing solutions that respond in less than five seconds to allow them to play into fast response ESO markets, and could use these same solutions to respond to a DNO signal. The key blocker for a supplier-led solution therefore lies in the proposal for the communication of a request to be routed through the DCC, rather than the solution itself. As argued in Energy UK's response to the BEIS Smart EV Charging consultation, controlling an EV through the smart meter

Question 7			
Respondent	**Category**	**Response**	**Rationale**
			system is suboptimal due to the time delay, a point that is well illustrated in the proposed solution. These issues should be addressed in the proposals. In addition, due to the disruptive nature of this proposal, Energy UK strongly believes that Ofgem (in conjunction with BEIS) should publicly consult on the proposal (including the wider energy policy, regulatory and consumer protection aspects), once a full impact assessment has been undertaken. A public consultation would give concerned parties (likely to extend beyond those engaged in the SEC Mod process) an opportunity to feed their views directly to the regulator and Government, ensuring that all stakeholders feel they have an adequate opportunity to have their say. The decision to approve or reject a proposal to allow network operators the ability to control behind-the-meter assets in this manner is clearly a significant policy decision, however to date it has largely been treated as a minor technical debate. As such Energy UK will be urging Ofgem (in conjunction with BEIS) to consult on the issue in full.
Electricity North West Limited	Electricity Network Party	Yes	We agree with the proposed implementation approach provided all of the proposed details are considered and where feasible agreed within scope of the SEC ahead of implementation I.e. maximum permitted disruption time, frequency of operation of the HCALCS before a localised network study must be triggered, how to connect an EV charger to the HCALCS, the impacts upon an Electricity Distribution Network Customer interruption and customer minutes lost regulated incentives, conditions when this functionality can be utilised.
Octopus Energy	Small Energy Supplier	No	Octopus Energy supports Energy UK's response to this question.

Question 7			
Respondent	**Category**	**Response**	**Rationale**
The Renewable Energy Company (Ecotricity)	Small Supplier	No	We don't agree that this approach is the best way forward. A range of options should be being considered to solve this issue, rather than this being presented /consulted upon, as the only solution. 'Supplier management of Whole-Meter Load' was dismissed as the assumption was that supplier solutions couldn't respond within 30 seconds. Yet that is exactly what supplier-aggregators are aiming to achieve in their flexibility approaches – yet this approach has been dismissed without further investigation. And it's likely such a solution would encompass EV chargers – also dismissed.
EDF Energy	Large Supplier	No	Given the outstanding issues with this change we do not believe that implementation in the November 2020 SEC Release is in any way achievable.
Npower	Large Supplier	No	Please refer to response from Energy UK
Scottish and Southern Electricity Networks	Networks Party	Yes	SSEN support the proposed dates for implementation
British Gas (Centrica)	Large Supplier	No	At this stage we cannot fully support inclusion in the November 2020 SEC Release. However, we are supportive of it being on the candidate list for the November 2020 release until such time as there is more certainty on the decision timescales and for further discussions on the content of the November 2020 release (e.g. any priority discussions for other candidate modifications and/or DCC or BEIS promoted changes).
SP Energy Networks	Networks Party	Yes	Reasonable and appropriate for the task
REA	Association	No	The REA fundamentally disagrees with this modification proposal, particularly as no supplier or charge point operator-led system has been mooted as an alternative. The REA believes that SECMP0046 represents a fundamentally anti-competitive approach with

Question 7			
Respondent	**Category**	**Response**	**Rationale**
			limited governance structures proposed and no real understanding demonstrated on the impact this would have on the consumer and future uptake of electric vehicles. The REA also believes that this is a policy decision and should be subject to formal Government consultation and debate prior to implementation.
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	This modification should utilise the introduction of proportional load control.	As outlined in Question 1, the binary choice through an ACLS/HCALCS will not ensure that a consumer receives only a minimum level of curtailment required to avoid overloading the network. Utilising proportional load control should mean that there will be instances where consumers curtailment would still allow them to draw some power. For this to happen without without the complexity of multiple switches it would require energy network control of proportional load settings.
Tonik Energy Limited	Small Supplier	No Response Provided	
DCC		No comment	
Secure Meters (UK) Limited	Other SEC Party		
Northern Powergrid	Network Party	Yes, although it"s not clear what the	

Question 7			
Respondent	**Category**	**Response**	**Rationale**
		implementation approach actually is.	
Zenobe Energy Limited	Other Stakeholder	No	Zenobē fundamentally disagrees with this modification proposal, particularly as not supplier or charge point operator-led system has been mooted as an alternative, which would be a preferable system. We believe this is a fundamentally anti- competitive approach with limited governance structures proposed and no real understanding demonstrated on the impact this would have on the consumer and future uptake on electric vehicles. Zenobē also believes that this is a policy decision and should be subject to formal Government consultation and debate prior to implementation.
Flexible Generators Group (FGG)	Other Stakeholder	N/A	While the implementation of the SEC change is defined, as noted above, it is important that the wider arrangements are also addressed. While this could be done in the time available, Ofgem should ensure all arrangements are implemented together.

Question 8: Would it be beneficial to add a new requirement that the Data Service Provider (DSP) will alert the Electricity Distributor when a Supplier sends a Service Request in an attempt to remove the HCALCS from the Smart Metering System?

Question 8			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	Network Operators will rely on the HCALCS being available almost instantaneously when they are required and therefore finding out at this point that the HCALC has been removed means that there is a real chance of the network over loading and consumers losing supply. An alert notifying DNOs when the HCALC has been removed (or attempted to be removed) means that they will have the most up to date information on their systems to be able to manage their systems.
SSE	Large Supplier	Yes	We can see how this would be of benefit to the Network Operator on a removal of a HCALCS if this solution is taken forward. In terms of the wording of the question, there is no system or process constraint preventing a Supplier from removing any Type 1 or Type 2 device from the HAN. BEIS have confirmed the legal responsibility of the HAN lies with the Supplier and that they can remove any or all devices if it impacts them in carrying out their duties or poses a security threat.
Energy UK	Association	Energy UK does not believe it is appropriate to answer this question at this time.	As noted throughout this response, Energy UK and its members do not believe this modification should be progressed until Ofgem (in conjunction with BEIS) considers and consults on the wider issues and impacts associated with EV charging.

Question 8			
Respondent	**Category**	**Response**	**Rationale**
Electricity North West Limited	Electricity Network Party	Yes	See our response to Q1 and Q4.
Octopus Energy	Small Energy Supplier	Not answered	As noted throughout this response, Octopus Energy does not support the progression of this modification.
The Renewable Energy Company (Ecotricity)	Small Supplier	Yes	This is a qualified 'yes'. It should not be in the gift of the ED to decide whether a HCALC should be joined/ unjoined i.e. if the householder and the supplier agree it, for reasons of whatever smart home solution they are working on, then it should be unjoined and DSP inform ED as a matter of information only – not for a matter of discussion with the ED.
EDF Energy	Large Supplier		We disagree that NOs should be able to install an HCALCS in the first place. Should this be the case then this alert might be required, but there are a number of additional considerations that would need to be made including: • How and when the supplier will be notified that the HCALCS has been installed in the first place. What responsibility the supplier has for operating of that HCALCS once it has been installed, given that the operation of the HCALCS will be reliant on an **Error! Reference source not found.** that only suppliers are able to configure.
Npower	Large Supplier		
Scottish and Southern Electricity Networks	Networks Party	Yes	As discussed in Question 5, this requirement is vital in protecting consumers interests and the LV network. If the Network Operator has applied the HCALCS setting in agreement with the consumer. Being made aware of any changes that will amend these settings needs to be communicated to the DNO. The risk of this not being communicated could lead to issues on the network leading to poor consumer experience.

Question 8			
Respondent	**Category**	**Response**	**Rationale**
British Gas (Centrica)	Large Supplier		n/a/ - DNOs are best placed to respond to this question
SP Energy Networks	Networks Party	Yes	Essential that Electricity Distributors are fully aware of the potential risks to their network, for the benefit of their customers.
REA	Association	No Response	The REA does not have a position on this issue at this time.
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	Yes this is a sensible notification to support energy network awareness of high powered loads on their networks.	It is vital for the transparency of electricity curtailment that DNO's maintain accurate records of the devices on their network to inform their approach to energy curtailment.
Tonik Energy Limited	Small Supplier	Yes	Accepting our objection to this proposal, if it were to proceed then we agree that the Electricity Distributor should be notified when the HCALCS is removed from the HAN. This notification should also include the label description of the device attached to the HCALCS so that the Electricity Distributor can determine from that notification whether it is relevant to them.

Question 8			
Respondent	**Category**	**Response**	**Rationale**
			The Electricity Distributor should also be notified as a result of SR 6.14.1 when the label description of a device attached to the HCALCS is updated. This will allow them to determine if an EV Charger has been attached to the HCALCS. There is no guarantee that a change to the physical connection of the HCALCS will be notified by the customer to the Energy Supplier or Electricity Distributor may be controlling different equipment to that advertised on the label description.
DCC		No comment	
Secure Meters (UK) Limited	Other SEC Party	Yes	Without this knowledge the ED will not know what capability they have in time of an emergency curtailment
Northern Powergrid	Network Party	Not if the supplier initiated SR is disregarded by the HCALCS whilst a DNO initiated control is being implemented.	
Zenobe Energy Limited	Other Stakeholder		

Question 8			
Respondent	**Category**	**Response**	**Rationale**
Flexible Generators Group (FGG)	Other Stakeholder	N/A	FGG has left it to others to answer the rest of these questions.

Question 9: Given that the current solution for SECMP0046 will allow Electricity Distributors to join HCALCS, and also will mandate the ALCS/HCALCS labels, should the Electricity Distributor also have the ability to label the switches (SRV 6.14.1)?

Question 9			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	In a Network Operator is installing a HCALC they will need the ability to label it to all interested parties know what that HCALC relates to.
SSE	Large Supplier	Yes	If this part of the solution is taken forward where the Distributor can whitelist devices, then we would expect there to be this associated capability. However, we would seek the engagement of the Security Sub-Committee in assessing this element of the proposal and the implications for End to End Security.
Energy UK	Association	Energy UK does not believe it is appropriate to answer this question at this time.	As noted throughout this response, Energy UK and its members do not believe this modification should be progressed until Ofgem (in conjunction with BEIS) considers and consults on the wider issues and impacts associated with EV charging.
Electricity North West Limited	Electricity Network Party	Yes	See our response to Q1 and Q4.
Octopus Energy	Small Energy Supplier	Not answered	As noted throughout this response, Octopus Energy does not support the progression of this modification.

Question 9			
Respondent	**Category**	**Response**	**Rationale**
The Renewable Energy Company (Ecotricity)	Small Supplier	No	We don't agree this simply because we don't agree that the ED should be the entity targeting EV chargers, which we believe is in the domain of the supplier or 3rd party ancillary service provider's domain.
EDF Energy	Large Supplier	Yes	As previously noted we do not agree that NOs should be allowed to join HCALCS to the HAN in the first place. Should they be allowed access to this capability then they should not just have the ability to label the switches, they should be mandated to do so.
Npower	Large Supplier		
Scottish and Southern Electricity Networks	Networks Party	Yes	SSEN believe that all parties should be mandated to label ALCS and HCALCS correctly. There should be also be DSP validation to support this. If Electricity Distributors were given access to join devices, then we would expect Electricity Distributors to be mandated to correctly label.
British Gas (Centrica)	Large Supplier	Yes	If DNOs can join the HCALCS then it would seem sensible to also allow for access to SRV 6.14.1 to enable appropriate labelling.
SP Energy Networks	Networks Party	Yes	This would assist in ensuring correct labelling
REA	Association	No response	The REA does not have a position on this issue at this time.
EO Charging		Fully support REA's response	
Citizens Advice	Consumer	ALCS/HCALCS should be labeled to support the	We hope that the ability for consumers to decline curtailment will mean that vulnerable consumers and those highly reliant on their high loads are not affected. However, the use of DNO curtailment can potentially negatively impact any consumers and it is sensible to

Question 9			
Respondent	**Category**	**Response**	**Rationale**
		awareness of the impact of curtailment.	understand on which loads they have been impacted. We think reliably of accurate labeling will be vital to avoid unintended consequences.
Tonik Energy Limited	Small Supplier	Yes	Accepting our objection to this proposal, if it were to proceed then we agree that the Electricity Distributor should have the ability to set the HCALCS label, otherwise they would still need to rely on the Energy Supplier to set this.
DCC		No comment	
Secure Meters (UK) Limited	Other SEC Party	Yes	Without this knowledge the ED will not be able to identify which HCALCS are available to be considered to be part of its emergency curtailment capability.
Northern Powergrid	Network Party	Yes	The party joining a HCALCS must be the party responsible for correctly labelling the device.
Zenobe Energy Limited	Other Stakeholder		
Flexible Generators Group (FGG)	Other Stakeholder		

Question 10: Is your organisation working on other Electric Vehicle related activities? Can you provide any details?

Question 10			
Respondent	**Category**	**Response**	**Rationale**
Western Power Distribution	Network Operator	Yes	Western Power Distribution is working on other EV related activities and details will be sent across separately to this response.
SSE	Large Supplier		
Energy UK	Association	No	As a trade association Energy UK is not delivering specific EV projects. However, Energy UK members are engaged in a wide range of EV activities, rolling out EV energy tariffs, EV chargers (in homes, businesses and in the public domain), vehicle to grid chargers, virtual power plants and developing a variety of propositions for the consumer market. Please refer to member responses and recent public announcements for further details.
Electricity North West Limited	Electricity Network Party	No	N/A
Octopus Energy	Small Energy Supplier	Yes	Octopus Energy is working on a number of projects relating to electric vehicles: - Lease electric vehicles via OEV - 'Shift' trial with UKPN to explore market-based solutions for managing capacity around EVs - Innovate UK vehicle to grid trial - Octopus Go - Agile Octopus x Ohme More information about these projects can be found via the following links:

Question 10			
Respondent	**Category**	**Response**	**Rationale**
			https://octopus.energy/blog/vehicle-to-grid/ https://www.ukpowernetworks.co.uk/internet/en/news-and-press/press-releases/Launch-of-UKs-first-electric-vehicle-smart-charging-marketplace-trial.html https://octopus.energy/ohme/ https://www.octopusev.com/charging https://www.octopusev.com/carsinfo https://www.zap-map.com/octopus-energy-and-ohme-launch-smart-ev-charging-cable/ Octopus Energy would be very happy to provide any additional information about these projects on request.
The Renewable Energy Company (Ecotricity)	Small Supplier	Yes	1. We own the network of Electric Highway charging stations across Britain's motorways 2. We are deeply involved (as a participant) in the Innovate project: IUK project number 104225: "GenDrive: Gamification for consumer engagement in V2G services" We are developing a smart charging proposition for our EV customers whose very purpose will be to steer customers away from high grid usage times, due to the cost to us as a

Question 10			
Respondent	**Category**	**Response**	**Rationale**
			supplier. This is entirely logical for all suppliers and as such, this Modification is unlikely to be ever needed.
EDF Energy	Large Supplier	Yes	EDF Energy is developing a growing Electric Vehicle business which is already active in the market for both business and residential customers, We provide a range of customer solutions which include dedicated EV supply tariffs, bespoke charging infrastructure solutions, smart chargers and supply of electric vehicles, We are also working to install vehicle-2-grid chargers and solutions for some of our business customer fleets. Our aim is to provide attractive, accessible offers to our customers which help them make the switch to EVs and maximise the flexibility benefits from smart approaches to EV charging.
Npower	Large Supplier		
Scottish and Southern Electricity Networks	Networks Party	Yes	- A key activity is the £7.5m strategic EV partnership agreed between SSEN, Scottish Government, Transport Scotland and SP Energy Networks. Among the work to be carried out in the project, SSEN are assessing the required electricity network infrastructure needed for the north of Scotland – including the most suitable locations for charging points along the A9. - E-Tourism innovation project - due to limited public transport options, driving is the only viable means to visit many of Scotland's key attractions, with some areas such as Portree experiencing a population spike of over 900% in summer months. Combined with the Scottish Government's plans phase out petrol and diesel cars and vans by 2032, SSEN anticipate the increase in EVs will result in significant peaks in demand during the tourist season, as visitors look to charge their vehicles whilst visiting. The project will look to understand how increased EV uptake and tourist patterns will impact seasonal peak demand on the network, what this means for local communities and local authorities, and identifying local flexible solutions

Question 10			
Respondent	**Category**	**Response**	**Rationale**
			which can help manage the tourism EV charging demand during seasonal peaks as well as benefiting residents all year round. - Optimise Prime - the world's largest trial of commercial EVs. Led by Hitachi and UK Power Networks, it is aiming to quantify the impact of commercial fleets on networks through trials involving two of the largest UK commercial fleets in Royal Mail and Centrica, as well as Uber. SSEN is a partner on this project. It will also develop technical and commercial solutions to save customer costs and enable the faster transition to electric for commercial fleets and private hire vehicle operators. - Project LEO (Local Energy Oxfordshire) – SSEN is leading this £40m project which will explore how the growth in local renewables, EVs, battery storage, vehicle-to-grid (V2G) technology and demand side response can be supported by a local, flexible, and responsive electricity grid to ensure value for consumers and opportunities for communities and market providers. Bringing together a wide range of stakeholders, the project aims to utilise the platform created by the TRANSITION project and balance local demand with local supply in a real-world environment across Oxfordshire, helping to test markets, inform investment models and, ultimately, assess the benefits of flexibility to the energy system. - EV Energy Taskforce – SSEN has been supporting various work packages of the EV Energy Taskforce. - ENA's LCT cost modelling exercise – a key element of enabling mass uptake of EVs is understanding the impact to the networks, the solutions that could mitigate the risks, and the costs associated with any potential solutions. SSEN has been supporting this 'Impact of LCTs on Electricity Networks' project, which aims to assess the impact of LCTs such as EVs and heat pumps on networks under various uptake scenarios and identify which solutions and approach will minimise

Question 10			
Respondent	**Category**	**Response**	**Rationale**
			the cost to customers while maintaining network resilience amidst the large-scale electrification of heat and transport. - Interim solution – SSEN is progressing plans to procure a system which will allow the management of EV charging in emergency scenarios, and with the input of the other DNOs, customers and organisations such as Ofgem, we are working to agree the governance and parameters of use. Combined with the technical specification that has been produced will allow us to tender for the supply of an interim solution and ensure we have another tool in our toolbox ready to use when customers are at risk of a loss of supply. This is seen as the possible solution which could be used when markets fail and smart meter penetration isn't yet high enough to use the functionality being sought in SECMP0046. - EV uptake forecasting – SSEN considered National Grid's Future Energy Scenarios (FES) regarding the forecast scale and rate of EV uptake nationally, but recognising that locality will influence the uptake rates and forecasts with huge variations in local communities and the networks within them, SSEN decided to apply the FES scenarios to more localised areas to explore area-specific consequences. As a result Regen are developing local energy scenarios for the growth of new sources of demand and distributed generation in both SSEN licence areas to better allow the future network impacts to be understood.
British Gas (Centrica)	Large Supplier	n/a	n/a
SP Energy Networks	Networks Party	Yes	
REA	Association	Yes	The REA works on a host of electric vehicle charging infrastructure-related topics ranging from deployment to standards, consumer protection, and payments on behalf

Question 10			
Respondent	**Category**	**Response**	**Rationale**
			of our members. Please refer to our website and public statements for further details
EO Charging		Fully support REA's response	
Citizens Advice	Consumers	n/a	n/a
Tonik Energy Limited	Small Supplier	Yes	Tonik Energy Ltd is green energy supplier and renewable technology provider based in Birmingham. Tonik Energy is part of the RETIG Ltd group of companies which also includes The Phoenix Works Ltd which carries out Electric Vehicle Charge Point installations. Tonik Energy and The Phoenix Works operates a network of smart, network connected charge points.
DCC		Yes	
Secure Meters (UK) Limited	Other SEC Party		
Northern Powergrid	Network Party	Yes	Further information is included in our publication Maximising the value of electric vehicles for our customers: https://www.northernpowergrid.com/asset/0/document/5043.pdf
Zenobe Energy Limited	Other Stakeholder		
Flexible Generators Group (FGG)	Other Stakeholder		

Question 11: Please provide any further comments you may have

Question 11		
Respondent	**Category**	**Comments**
Western Power Distribution	Network Operator	There is mention of a DCUSA change to specify how and when this functionality can be used and I would expect the relevant change to be processed and the both implementation dates aligned. Also, as there is a need for consumer consent, I think there needs to be a defined and agreed process for notifying the DNO of a CoT. I think that the Work Group need to consider if this should be done from a DCC alert or via other means and whether other codes might be impacted, should this need to be mandated somewhere.
SSE	Large Supplier	We believe there needs to be further work undertaken to fully consider any impacts to the Legislative and Regulatory framework, in addition to the cross-Code changes that will be required. We would like to understand how the DCC PA for SECMP0019 quoted an implementation cost of between £432K and £622K to make the ALCS / HCALCS labels mandatory, noting this was the reason at the time for it not being progressed. However, we have now been made aware through the Working Group discussions that this cost has reduced significantly as to not feature as a defined cost under SECMP0046 and can be delivered to Industry. We therefore query the variance in the costs set out in the Preliminary Assessments. We would like to understand where the other items mentioned in the Modification Report will be provided, and when the legal text and the items Ofgem were asked to look at will be circulated. The additions to Requirement 4 – to enable the DNO the ability to add Auxiliary Load to the Boost will directly impact the Consumers' tariff they may be on, as does the matter of the DNO controlling load. We view this as requiring wider consultation and to be discussed as part of the DCUSA/DUOS charging implications of this Modification. Although this technical proposal may have relatively low impact to DCC to provide a solution, there is potential for significant impact to consumers and to Suppliers providing innovative products their customer has signed up for.

Question 11		
Respondent	**Category**	**Comments**
		We also note that any of these installed devices not on the appropriate firmware will need to be OTA'd, therefore any proposed solution needs to consider this process.
Energy UK	Association	As alluded to in response to question 7, while Energy UK welcomes the effort that has been put into this work, as this solution has been progressed as a SEC modification proposal there has been limited scrutiny and discussion among non-energy stakeholders, cutting out many affected parties from the process (for instance vehicle manufacturers and chargepoint manufacturers / operators). Even though Energy UK takes a very active interest in the work there have been few opportunities to input on behalf of members, suggesting that other stakeholders groups may have encountered similar challenges. Energy UK is clear that the proposed solution is a major policy decision that will have significant market implications. As such and as referred to elsewhere in this response, Energy UK believes that this modification should be put on hold until Ofgem (in conjunction with BEIS) considers and consults on the wider issues and impacts associated with EV charging as part of its commitment to the delivery of net zero greenhouse gas emissions by 2050.
Electricity North West Limited	Electricity Network Party	We would welcome confirmation that the following points are considered by the Working Group (or referred to the DCUSA Panel to enable a parallel DUCSA modification proposal to be developed) as part of the next stage of development of this modification proposed solution: • The connection of the EV charger to the Smart Meter will require either a physical or wireless communications link to be established. Physical connections may be disruptive and add significant cost to the installation of an EV charger. • The EV charge point installer will need to carry out work to connect to the smart meter and any safety considerations which may need to be considered as a result of this. • Whether disrupting a consumer's charger would be counted as a customer interruption or contribute to customer minutes lost under the current regulatory framework. Although the consumer will not lose supplies the Electricity Network Party will have interrupted a part of a consumer's supply.

Question 11		
Respondent	**Category**	**Comments**
		• The consequences of communication failures between the substation monitoring, the Electricity Network Party control system, the DCC, and the consumers' Smart Meter. • Any proposed solution should not prevent good Electricity Distribution Network planning and installing sufficient protection on the Low Voltage network to minimise the impact of overloads.
Octopus Energy	Small Energy Supplier	
The Renewable Energy Company (Ecotricity)	Small Supplier	
EDF Energy	Large Supplier	
Npower	Large Supplier	We have not responded to all the consultation questions at this point in time as we believe consideration needs to be given as to whether this is an appropriate change to take forward, as we see this a fundamental policy change which would have large impact on Smart and Consumers.
Scottish and Southern Electricity Networks	Networks Party	N/A
British Gas (Centrica)	Large Supplier	We would welcome clarity from the SEC Panel as to how this modification is to proceed given that there are numerous matters that need to be resolved that reside outside of SEC governance. For example, is the intent to complete the modification process and submit to the Authority for a decision and, if so, are Ofgem content with this approach or would they prefer all related matters to be presented as a package of changes at the same time.

Question 11		
Respondent	**Category**	**Comments**
SP Energy Networks	Networks Party	No
REA	Association	See above comments. The REA is supportive of and aligned with the responses of other actors in this sector, including the Association for Decentralised Energy (ADE) and Energy UK
EO Charging		Fully support REA's response
Citizens Advice	Consumer	n/a
Tonik Energy Limited	Small Supplier	In relation to question 9 & 10, the Electricity Distributor may need the ability to set the schedule on the HCALCS depending on how the HCALCS will operate the switch if the calendar has not been set. The Electricity Distributor may need the ability to set the state of the HCALCS switch after installation if the default state of the switch is open.
DCC		
Secure Meters (UK) Limited	Other SEC Party	
Northern Powergrid	Network Party	
Zenobe Energy Limited	Other Stakeholder	Zenobē is supportive of and aligned with the responses of other actors in this sector, including the Association for Decentralised Energy (ADE), The REA and Energy UK.
Flexible Generators Group (FGG)	Other Stakeholder	