



Making a positive difference
for energy consumers

Electricity generators and storage
licensees and other interested
parties

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Dear stakeholders,

Decision on clarifying the regulatory framework for electricity storage: changes to the electricity generation licence

In June 2019, we conducted a statutory consultation on proposed changes to the electricity generation licence to clarify the regulatory framework for electricity storage. These changes will ensure that in the licensing regime electricity storage is subject to the same rules and regulations as other forms of generation.

The changes we consulted upon are:

- To include a definition of 'electricity storage' and 'electricity storage facility' in the electricity generation licence, in order to clarify the role of electricity storage in the energy system; and
- To introduce a new licence condition E1 'Requirement to provide storage information' to ensure that licence holders provide accurate information regarding their electricity storage facility/facilities to their relevant suppliers, to facilitate the correct identification of licensed facilities as electricity storage and the correct calculation of certain charges.

Following consideration of the responses to our consultation, we have decided to implement these licence modifications, with some minor changes that will remove the proposed obligation on licensees to publish information on their storage facilities on their website, as highlighted in this letter.

To add further clarity that the licence conditions in the electricity generation licence apply to electricity storage as well, we have added reference to 'electricity storage' to the definitions of 'generation business', 'generation set', 'generation station' and 'generating unit'. In 2019 we consulted on amending the definitions of 'generation station' and 'generating unit', but following feedback from stakeholders we think that amending the other two definitions would make our policy view that electricity storage applies to them too explicitly clear.

Notice of the licence modifications is published alongside this decision. The licence changes will take effect from 29th November 2020.

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Background

The energy system is rapidly changing: becoming smarter, more flexible and low carbon. During this transition, we are committed to enabling competition and innovation as well as protecting consumers. In our Decarbonisation Action Plan published in February 2020,¹ we said that to ensure a reliable energy system we need to integrate into the energy system a growing volume of renewable energy sources that have fluctuating generation patterns, as well as nuclear power which is relatively inflexible in its output. This will require much more flexibility in our energy system and our consumption patterns, especially to achieve this at lowest cost.

We have a central role to ensure that the energy system works in a smarter and more flexible way. We do this through effective regulation of monopolies and enabling competitive markets. In July 2017, alongside government, we announced the actions we would take to achieve this in the Smart Systems and Flexibility Plan (SSFP)² and we updated industry on the progress early in 2019.³

Electricity storage plays a key role in the energy system, and it is a valuable source of flexibility. It can support cheaper connections and provide ancillary services to the system operator. We want to support the competitive deployment of storage and the uptake of flexibility in the electricity system, while ensuring that the regulatory framework for storage is consistent with our approach to regulating flexibility markets and takes into consideration the evolving nature of the energy system.

In our Smart Systems and Flexibility Plan we set out our views that storage faces barriers that are inhibiting its competitive deployment, one of which being that the regulatory framework for storage is unclear.

Alongside government, we have clarified our view that in the energy system, storage provides services equivalent to generation. Therefore, our view is that electricity storage – for licensing purposes – should be treated as electricity generation.

We have previously stated that our approach to regulating storage⁴ should be:

- consistent with the current regulatory and licensing framework, under which other forms of generation are regulated;
- technology neutral, future-proof and proportionate, thus not inhibiting innovation;
- non-discriminatory, to ensure that there is a level-playing field for flexibility sources to compete when providing flexibility services, and
- consistent with the intention to ensure greater transparency of the impact of service providers (both in terms of contribution and costs) on the energy system.

¹ The Decarbonisation Action Plan is available here: <https://www.ofgem.gov.uk/publications-and-updates/rewiring-britain-net-zero-future-ofgem-publishes-decarbonisation-action-plan>

² The first publication on the SSFP is available here: <https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan>

³ The update on the SSFP is available here: <https://www.ofgem.gov.uk/publications-and-updates/upgrading-our-energy-system-smart-systems-and-flexibility-plan-progress-update>

⁴ The 2019 statutory consultation document is available here: https://www.ofgem.gov.uk/system/files/docs/2019/06/storage_licensing_-_statcon_covering_letter_final_for_website.pdf

We have engaged with industry through consultations, and have reflected on the feedback we received to conclude how the electricity generation licence should be amended.

We acknowledge that storage facilities currently face multiple challenges, including a disproportionate charging regime and incorrect Final Consumption Levies (FCLs) payments. Storage imports electricity to store it and either release it on site, or export it back to the grid and ultimately the end consumer. This latter case can result in a 'double counting' of the supply of electricity to the end consumer, as the storage facility is not using the electricity as a final consumer, but both the storage provider and the consumer pay levies on the electricity. This would also result in an increase in the operational costs of storage projects, making storage a less competitive source of flexibility.

Our intention is to remove barriers to the competitive deployment of storage. To achieve this, we first consulted on making changes to the electricity generation licence standard conditions to reflect this in September 2017.⁵ Following that, we have considered respondents views and issued a statutory consultation on licence changes in June 2019.⁶

Associated areas of work

It is important to consider our approach to storage licensing in the context of wider ongoing work. As the energy system evolves, there is an increased need to strike the right balance between – on the one hand – ensuring routes to market are available for those who want to operate in the sector and that the impact and value of actions taken by parties are priced as accurately as possible; and – on the other hand – ensuring consumers do not pay an unfair cost for the electricity they consume.⁷

A large amount of work has been undertaken so far, looking at how to support the transition to a smarter, more flexible energy system that works for all consumers. Other areas of work associated with storage include:

- The Targeted Charging Review (TCR) Significant Code Review (SCR) to reform how residual network charges are recovered from network users, and review the remaining "embedded benefits".⁸ We published our decision on this SCR in November 2019.⁹ Although storage charges were out of scope of the SCR, we have decided that residual charges should be paid by final demand only, thereby excluding all types of generation (including stand-alone storage) from residual network charges.
- Industry code modification proposals, looking at implementing the policy view that storage should not pay a disproportionate amount of network charges. Reforms are proposed for each of Transmission Network Use of System (TNUoS), Balancing

⁵ The 2017 consultation document is available here: [Clarifying the regulatory framework for electricity storage : licensing](#)

⁶ The 2019 statutory consultation is available here: <https://www.ofgem.gov.uk/publications-and-updates/clarifying-regulatory-framework-electricity-storage-statutory-consultation-proposed-modifications-electricity-generation-licence>

⁷ As highlighted by the guiding principles we have used for both the TCR and Access reform SCRs.

⁸ "Embedded Benefits" is the name given to the differences in transmission and balancing services charging arrangements between Smaller Distributed Generators (which are less than 100MW connected to the distribution network) and larger generators (>100MW) connected to either distribution or transmission networks. Some of these benefits extend to micro-generation and on-site generation, particularly when power is exported onto the network.

⁹ The TCR Decision is available here: <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-decision-and-impact-assessment>

Services Use of System (BSUoS) and Distribution Use of System (DUoS)¹⁰ charges. We have approved five proposals:

- Distribution Connection and Use of System Agreement (DCUSA) change proposals DCP341 and DCP342– Removal of residual charging for storage facilities in the CDCM/EDCM;¹¹
- Balancing and Settlement Code (BSC) modification P383 - Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281;¹²
- Connection Use of System Charge (CUSC) modification proposal CMP281 - Removal of BSUoS charges from energy taken from the national grid system by storage facilities;¹³ and
- CUSC modification proposal CMP319 - Consequential changes to Section 11 of the CUSC as a result of CMP280 and/or CMP281.¹⁴

We are also currently reviewing one modification on CUSC. We published an open letter alongside this decision letter for the below CUSC modification to give an update to industry today¹⁵:

- CUSC modification proposal CMP280 - Creation of a new generator TNUoS demand tariff which removes liability for TNUoS demand residual charges from generation and storage users.¹⁶

Our proposals

We have engaged with stakeholders to clarify the regulatory framework of electricity storage, by adding definitions to the electricity generation licence standard conditions, and clarifying what activities licence holders are authorised to carry on under a generation licence. In the September 2017 consultation, we proposed to:

- include a definition of 'electricity storage' and 'electricity storage facility' in the electricity generation licence. We also proposed to amend the definitions of 'generating station', 'generation business' and 'generation set' to reiterate that the definitions apply to electricity storage too; and
- introduce a new licence condition into the generation licence - condition E1 - only applicable to electricity storage providers. The condition would require the licensee to ensure that they do not have self-consumption as their primary function when operating its electricity storage facility.

¹⁰ Residual network charges cover those that are not recovered by forward-looking charges.

¹¹ The Decision document is available here: <https://www.ofgem.gov.uk/publications-and-updates/distribution-code-and-use-system-agreement-dcusa-dcp-341-and-dcp-342-removal-residual-charging-storage-facilities-cdcm-and-edcm>

¹² The Decision document is available here: <https://www.ofgem.gov.uk/publications-and-updates/p383-enhanced-reporting-demand-data-netso-facilitate-cusc-modifications-cmp280-and-cmp281>

¹³ The Decision document is available here: <https://www.ofgem.gov.uk/publications-and-updates/cmp281-removal-bsuos-charges-energy-taken-national-grid-system-storage-facilities>

¹⁴ The Decision document is available here: <https://www.ofgem.gov.uk/publications-and-updates/cmp319-consequential-changes-section-11-cusc-result-cmp280-and-or-281>

¹⁵ See the letter here: www.ofgem.gov.uk/publications-and-updates/cmp280

¹⁶ The Final Modification Report is available here: <https://www.nationalgrideso.com/codes/connection-and-use-system-code-cusc/modifications/creation-new-generator-tnuos-demand-tariff>

Taking the responses we received into consideration, we published a statutory consultation in 2019 where we proposed amendments to the changes suggested in the 2017 consultation:

- include a definition of 'electricity storage' and 'electricity storage facility' in the electricity generation licence. We also proposed to amend the definitions of 'generating station' and 'generating unit' to include electricity storage as consequential changes from the new definitions to clarify that the conditions of the generation licence apply to electricity storage facilities;
- introduce a revised new licence condition E1 into the generation licence only applicable to electricity storage providers. This condition would require the licensee to provide accurate information regarding their electricity storage facility/facilities to their relevant suppliers. The proposed draft condition superseded the previous proposal for electricity storage facilities not to have self-consumption as their primary function. The requirement aimed to support suppliers' compliance and ensure that electricity storage facilities are charged final consumption levies accurately.
- a requirement for licensees to publish specific information on their website about the electricity storage facilities they own or operate. The aim of this requirement was to be consistent with the direction of travel towards greater transparency of the impact of service providers (both in terms of contribution and costs) on the energy system and support the efficient deployment and use of flexibility. We sought industry views on practicality concerns that this requirement might raise, the commercial sensitivity of the data and the content of the data to be published.

The rationale for introducing the new licence condition E1 is to support suppliers in meeting their obligation to accurately report supply volumes for the correct calculation of final consumption levies. The requirement for licensees to provide information associated with their licensed activity to their relevant supplier would allow the correct identification of electricity storage facilities that are operated by a licensed generator as electricity storage and facilitate the estimation of supply volumes to correctly calculate final consumption levies.

Below we present the feedback received to our statutory consultation, and our response.

Feedback from statutory consultation and our views

We received 22 responses to our 2019 statutory consultation. The non-confidential ones are published on our website, alongside this decision letter.

We set out below the feedback received and our views.

Definitions of 'electricity storage' and 'electricity storage facility'

In the statutory consultation we proposed two definitions for 'electricity storage' and 'electricity storage facility':

electricity storage 'is the conversion of electrical energy into a form of energy which can be stored, the storing of that energy, and the

subsequent reconversion of that energy back into electrical energy’

and

electricity storage facility ‘means a facility where Electricity Storage occurs’

Based on 2017 feedback, in the 2019 statutory consultation we had already decided to omit the phrase ‘in a controllable manner’ from the definition of electricity storage.

Of the 22 respondents, 16 agreed with the proposed definitions, of which one stated that they welcomed our decision to omit the phrase ‘in a controllable manner’. The remaining 6 respondents did not comment on the definitions.

We have therefore decided to include these definitions in the electricity generation licence.

Consequential changes in the licence based on the changes in definitions (SLC 1)

In order to ensure that the new definitions are reflected throughout the licence we also proposed consequential changes. In the 2019 statutory consultation, we proposed to amend the definitions of ‘generating station’ and ‘generating unit’ to ensure that the conditions of the generation licence apply to electricity storage facilities.

One respondent noted that the statutory consultation did not discuss the consequential changes, and that the proposed modifications in the statutory notice were different to the ones as they appeared in the draft legal text included in the 2017 policy consultation. The respondent raised concerns around the applicability of certain conditions to electricity storage.

In the 2017 consultation, we proposed to amend the definitions of ‘generating station’, ‘generation business’ and ‘generation set’ to explicitly include storage, and also proposed amendments throughout the licence as consequential changes from the new definitions to reiterate that the conditions of the generation licence apply to electricity storage facilities.

We did not include these changes in the 2019 statutory consultation because we concluded that adding explicit reference to ‘electricity storage facility’ in the definition of ‘generation business’ and ‘generation set’ would not be necessary. This is because the definition of electricity generation already includes electricity storage – and therefore the licence conditions should apply to electricity storage too – as per our policy view. A ‘generation business’, being the business of producing electricity, by definition includes the activities carried out by an electricity storage facility (ie the reconversion of stored energy in electricity). Likewise, a ‘generation set’, being any plant or apparatus for the production of electricity, by definition includes an electricity storage facility too. However, we appreciate that adding reference to ‘electricity storage’ in these two definitions may add further clarity around the applicability of the licence conditions. We have therefore decided to amend the definition of ‘generation business’ and ‘generation set’ to include explicit reference to ‘electricity storage’.

In the 2019 statutory consultation, we added explicit reference to electricity storage in the definition of ‘generating unit’. This is because ‘generating unit’ is defined in the Grid Code and in 2019 there was no mention to electricity storage in the Code itself. We therefore felt it necessary to make it explicit that a generating unit includes an electricity storage facility

too. In May 2020, the Authority approved Grid Code modification GC0096¹⁷ which proposed to include a definition of electricity storage in the Grid Code. As a result, the definition of 'generating unit' in the Code now includes electricity storage. We have decided to implement these proposed changes and add reference to 'electricity storage' to the definition of 'generation station' and 'generating unit'.

Definition of storage in primary legislation

Feedback to our 2017 consultation indicated interest in having storage defined in primary legislation, and stakeholders proposed the creation of a separate licensing framework for storage. In the statutory consultation we stated the reasons why we only partially agree with this view.

Five stakeholders noted in their responses their view that storage should be defined in primary legislation, and another five that a separate licensing framework would facilitate the policy intent.

Our thinking on this has not changed since the statutory consultation. A definition of storage in primary legislation would further clarify how storage fits into the legislative framework and Government have committed to providing this, when parliamentary time allows. In the meantime, we are addressing other barriers to storage deployment and ensuring storage is competing on a level playing field with other forms of generation and flexibility sources. We believe that this target is being achieved through the industry codes modification processes (see section above) and by providing clarity on how existing regulation applies to storage through the changes we are introducing to the generation licence.

Types of storage technology

In the consultation we published in 2017, we included a non-exhaustive list of technologies that should and should not be considered as electricity storage.¹⁸ In the statutory consultation we noted that some stakeholders who provided feedback to the 2017 consultation agreed that the list correctly captures the range of technologies that should be included in the definition of electricity storage and had no comments on those that should not be included.

In the statutory consultation responses, two stakeholders noted that they would like clarification on what types of technologies are covered in our electricity storage definitions. One asked that this should be included again as part of the decision document or included in a separate guidance document.

Given the potential for new technologies and opportunities for innovation on electricity storage, we re-iterate the point that we do not consider the list provided in 2017 as closed. We expect electricity storage providers to refer to the definition of electricity storage and the non-exhaustive list of storage technologies when considering the eligibility to be licensed of new electricity storage technologies.

¹⁷ See the Authority decision here: <https://www.nationalgrideso.com/document/170516/download>

¹⁸ See Appendix A in the 2017 consultation, available here: https://www.ofgem.gov.uk/system/files/docs/2017/10/electricity_storage_licence_consultation_final.pdf

We have included the list in Appendix A of this letter. For the avoidance of doubt, we believe that the list should be considered as a non-exhaustive list of storage technologies that meet the definition of electricity storage.

Feedback on Condition E1

Requirement to provide and share information

In the 2019 statutory consultation, we proposed to introduce a new licence condition E1 on electricity generation licensees to provide information (set out in paragraph 3 of the proposed condition E1) in relation to the electricity storage facilities they own or operate to their relevant supplier (paragraph 1 of proposed condition E1). The reason was to ensure suppliers' compliance with reporting obligations and to facilitate the correct calculation of final consumption levies.

We also included in condition E1 a requirement for licensees to publish the relevant information (set out in paragraph 3 of proposed condition E1) on their website (paragraph 2 of proposed condition E1). The intention behind the publication of certain information was to support the deployment of flexibility technologies.

We sought industry views on the content of the information and the practicalities of this requirement, as well as views around the commercial sensitivity of the information to be published under this requirement.

The majority of respondents (18 out of 22) agreed with the need for licensees to provide information on electricity storage facilities to their relevant licensed electricity supplier to allow charges to be calculated correctly.

However, 11 stakeholders raised concerns around the practicalities of the requirement for licensees to publish the information on their websites, and 14 respondents noted that some of the information (in paragraph 3) may be commercially sensitive. Others noted that the requirement to publish would create extra administrative costs and that the publication is not aligned with Energy Data Taskforce (EDT) suggestions around simplifying processes.

We note stakeholders' concerns and have given further consideration to the publication requirement. We agree that satisfying the requirement to publish information on a website could be practically challenging, some of the information could be considered commercially sensitive and we agree that a requirement to publish would not benefit the industry at this stage.

We have reviewed our policy position considering the latest developments of our Modernising Energy Data (MED) programme (which is a collaboration between Ofgem, BEIS and Innovate UK). The MED programme is leading our work in the implementation of the EDT recommendations as well as more widely rationalising our data-related regulatory work. The MED programme is currently developing "Data Best Practice" guidance.¹⁹ We therefore believe that in the near future, there is likely to be a better approach to making information about electricity storage assets available to its stakeholders. We expect electricity storage providers to ensure they remain updated in relation to this work and consider how this would apply to them when the guidance is published.

¹⁹ See here for early drafts of Data Best Practice guidance: <https://www.ofgem.gov.uk/publications-and-updates/early-draft-data-best-practice-guidance-available>

We have decided not to include the requirement to publish the information on the licensee's website, and we have therefore removed paragraph 2 of condition E1 as proposed in the statutory consultation and renumbered the paragraphs accordingly.

Capacity of facilities and the exemptions regime

Nine stakeholders asked for clarification on the capacity of the facilities that condition E1 applies to. Seven asked that we clarify the expectations and obligations for facilities under 50MW, whether they should hold a licence and whether the exemptions regime applies.

As previously noted, the new condition E1 will apply to both existing and future generation licence holders who own or operate electricity storage. The new condition E1 will only impact licensees who own or operate electricity storage facilities. The proposed changes will apply to all electricity storage facilities operated by a licence holder, regardless of their capacity. This includes any small batteries operated at domestic level and facilities below 50MW that operate under a generation licence.

As noted in the letter accompanying the 2019 statutory consultation, we do not consider this obligation to be too onerous. Our engagement with stakeholders shows that in cases where small batteries are provided by the supplier as part of an offer, or are provided and operated by a third party (eg an aggregator), the information requested in the new licence condition is already available or often shared between parties.

We note that depending on their capacity, some electricity storage facilities may be eligible to be operated under a licence exemption. The same licence exemption regime applies for all types of generation, be it electricity storage or otherwise. All generation (including electricity storage) with capacity below 50MW (or up to 100MW with the approval of the Secretary of State) can be licence exempted.

It is the responsibility of the applicant to decide whether they should apply for a licence or an exemption based on their individual circumstances (for example, this could be the set-up of the electricity storage site and their business model). For the avoidance of doubt, once a generator becomes licensed, that licence is applicable to all generation activity undertaken by the licence holder, regardless of MW capacity.

Electricity storage providers should consider whether holding a licence is required for carrying out their services, and how they intend to comply with condition E1. We expect storage providers to consider how the metering arrangements in place can correctly identify electricity associated with storage.

For the avoidance of doubt, a party (eg a household) operating an individual small storage facility (eg a <50MW battery operated at domestic level) with the purpose of consuming the stored electricity on-site will not be required to hold a generation licence.

As we previously stated in the statutory consultation, storage providers who are generation licence holders will:

- be exempt from payment of final consumption levies when the electricity imported is used only for the electricity storage; and
- depending on the capacity of their electricity storage facilities and on the services provided, be required to sign-up to industry codes. Some licensees, particularly those operating smaller electricity storage facilities may not need to sign up to certain codes. In our 2017 consultation we clarified our expectations for electricity

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storage facilities regarding some of these requirements associated with holding the generation licence.²⁰

Compliance with the condition E1

In the statutory consultation, condition E1 included a paragraph to cover when we expect licensees to comply with the proposed condition. This was paragraph 4 of condition E1 as below:

4. *The licensee must comply with paragraphs 1 and 2 within, either:*
- a. *This condition coming into force; or*
 - b. *The electricity storage facility becoming operational (whichever is sooner), and update their relevant supplier and website as soon as reasonably practicable following any change in the information specified in accordance with paragraph 3 in relation to every electricity storage facility it owns or operates.*

One respondent requested further clarity on whether the information should be provided once or whether it is an ongoing requirement.

The requirement to provide information is ongoing, as it should cover any changes during the operation of the electricity storage facility. Based on paragraph 4 of the draft condition E1 as proposed in the statutory consultation, the licensee is expected to provide the information to their relevant supplier and update them in a timely manner following any change in the information related to every electricity storage facility they own or operate.

One respondent raised concerns regarding the wording of paragraph 4(b), noting that the wording should be amended to 'later' instead of 'sooner', as some of the information might be available only upon operation of the asset.

We have reviewed the feedback on paragraph 4(b) of the condition E1, and agree that changing the wording to 'later' would better address the policy intent. This would remove the obligation to provide information on assets until they are operational. We have therefore decided that proposed paragraph 4(b)²¹ of condition E1 will be amended as below:

- ~~4. 3. The licensee must comply with paragraphs 1 and 2 within either:~~
- a. *This condition comes into force; or*
 - b. *The electricity storage facility becomes operational (whichever is ~~sooner~~ later), and update their relevant supplier ~~and website~~ as soon as reasonably practicable following any change in the information specified in accordance with paragraph ~~3~~ 2 in relation to every electricity storage facility it owns or operates.*

²⁰ See table in pages 8 and 9:

https://www.ofgem.gov.uk/system/files/docs/2017/10/electricity_storage_licence_consultation_final.pdf

²¹ Now renumbered as paragraph 3(b)

Format of the data

In the 2019 statutory consultation, we stated our expectations with respect to the format to be used for providing the required information. We proposed that suppliers and generation licence holders that operate or own storage should consider what works best for them depending on the information that the relevant supplier may already hold and what additional information they may require. We asked for stakeholder views on whether further guidance was needed so that we could take this into consideration.

Eight respondents raised general concerns regarding the format of the information to be provided and published. One stakeholder mentioned the need for a specific format to provide the information. The majority of respondents focused on the need to ensure that all information is captured in a specific way so that a consistent set of information is available when the information is published and can be used by any interested parties. Respondents also noted the need for a central point for the information to be collected and stored, such as a central data repository, to ensure that all information is captured in a specific way and industry parties avoid the administrative costs of handling data from different sources.

In general, the feedback we received on the format of the information focused on finding a way to ensure that the information is published in a consistent way and can be used by all parties, so that practicality issues can be minimised.

We have decided not to pursue the requirement for general publication, at this time. Therefore, the feedback we received that relates to potential inconsistencies in the published information without further guidance or a format template is now out of scope.

We have considered the comments around guidance and format in the sharing of information between generation licence holders that operate/own storage' and their relevant suppliers as required by condition E1. It is our view that suppliers already have processes in place to gather information from generation licence holders, and to share information with other suppliers and other parties, if necessary and when permitted to do so, to calculate charges correctly. We therefore expect that relevant suppliers will update their processes to facilitate information gathering for the information in condition E1 based on their existing procedures and their business operations.

If industry parties believe that further guidance and templates would still be needed we would encourage them to contact us so that we get a better understanding of the challenges and consider any necessary next steps.

Our Decision

We have considered the consultation responses and have decided that we will proceed with changes to the generation licence standard conditions in order to:

- clarify the role of electricity storage in the energy system and the regulatory framework, and
- ensure that electricity storage providers are charged final consumption levies accurately, by facilitating the correct calculation of environmental charges.

We have decided to:

- include a definition of 'electricity storage' and 'electricity storage facility' in the electricity generation licence; and
- introduce a new licence condition E1 into the generation licence only applicable to generation licence holders that operate/own storage. This condition would require the licensee to provide accurate information regarding their electricity storage facility to their relevant suppliers. The purpose of the condition is to facilitate the correct identification of facilities operating under licence as electricity storage, the correct calculation of relevant charges by suppliers and ensure that suppliers are able to report accurately against their own obligations.

For the avoidance of doubt, we have decided to exclude the requirement for website publication of information in relation to electricity storage facilities. As a result, we have removed paragraph 2 of condition E1 as proposed in the statutory consultation and amended accordingly the rest of the condition to reflect this change. We understand the practicality concerns raised by industry. We believe that the final changes cover the concerns regarding the commercial sensitivity of the information.

We believe that these changes in the generation licence will ensure the competitive deployment of electricity storage as a flexible resource, as it will bring a level-playing field for electricity storage to compete with other forms of generation.

Should any changes to the information provided by a licensee be required, we would implement such changes through a direction (paragraph 5 of the proposed condition E1, now paragraph 4).

Similarly, in exceptional circumstances, we could waive the information sharing requirement through a derogation (paragraph 6 of the proposed condition E1, now paragraph 5), subject to the licensee providing robust evidence to support their case for a derogation. Each request would be assessed on a case-by-case basis.

For the avoidance of doubt, the new obligations apply to generation licence holders that own or operate electricity storage facilities of any capacity, and new condition E1 covers each electricity storage facility owned or operated by a licensee. For example, if a licensee owns or operates two or more electricity storage facilities under the same licence, in order to be compliant with condition E1 they would be required to provide information to their relevant supplier(s) for each electricity storage facility.

Next steps

Alongside this decision letter we have issued relevant licence holders with notice of our decision to modify the generation licence, and these modifications will take effect 56 days from the date of that notice. We consider this an acceptable timeframe to comply with paragraph 3(a) of the condition E1 as storage providers should already hold this information.

Yours faithfully,

Andrew Self
Deputy Director, Electricity Network Charging & Access

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Appendix A – Technology list

Key principles

- The definition is not intended to capture network equipment whose primary function is not energy storage on the power system.
- Lists A and B below are not exhaustive, but intended to serve as indicative of the storage technologies that should and should not be considered to be captured by the definition.

(A) Technologies that should be considered as electricity storage

- Electro-chemical batteries, such as:
 - Flow batteries
 - Solid state batteries
- Gravity energy storage systems such as:
 - Pumped hydro
 - Weights being moved up inclines
- Air based storage systems, such as:
 - Compressed air energy storage
 - Liquid air energy storage
- Kinetic energy storage systems, such as:
 - Flywheels
 - Advanced rail energy storage
- Thermal storage where the heat stored is re-converted to electricity, such as:
 - Molten Salt
 - Phase-change energy storage systems
 - Pumped heat
- Chemical storage where the stored chemical energy is then converted back into electricity, such as:
 - Synthetic gases
 - Synthetic liquid or solid state fuels
- Electromagnetic storage such as:
 - Superconducting magnetic energy storage
 - Supercapacitors when used to store electrical charge

(B) Technologies that should not be considered as electricity storage

- Capacitors and supercapacitors when used as circuit impedance components
- Transformers
- Inductors
- Thermal energy storage when the stored energy is used directly as heat and not re-converted to electricity before being used

NOTE: Treatment of power-gas-power systems

Power-gas-power systems, such as those based on electrolysis to create hydrogen, would not be captured by the definition as, in practice, they would entail the export of hydrogen to a wider gas network and import of gas at certain times to generate electricity.

Thus, it would not be the 'same' energy being stored and converted back into electricity, which is specified by the definition.

If there were a system which involved the creation of gas from electricity, and the subsequent storing and reconversion of that energy to electricity on-site, this would fall within the definition.