



Tom Riley
Department of Business, Energy and Industrial Strategy
1 Victoria Street
Westminster
London
SW1H 0ET

25 August 2017

Dear Mr. Riley,

Ensuring the Feed-in Tariff works as intended – maintaining projects

The Anaerobic Digestion and Bioresources Association (ADBA), the British Hydropower Association (BHA), the Renewable Energy Association (REA), RenewableUK, Scottish Renewables and the Solar Trade Association (STA) jointly represent a significant proportion of Feed-in Tariff generators across the UK.

We have been made aware of an unintended consequence arising from Ofgem's guidance for suppliers that may impact the maintenance of Feed-in Tariff projects.

Current wording suggests that, where a generator must replace all of the generating equipment as a result of faults or age, this would be considered as decommissioning the site. Our members are therefore concerned that instructing such maintenance may result in the loss of their accreditation.

ADBA, the REA and RenewableUK are already in discussion with BEIS and Ofgem regarding this issue, both of whom have confirmed to us that it is not the Government's policy intent that generators be prevented or deterred from undergoing refurbishments or equipment replacement.

To ensure this is resolved as swiftly as possible and ensure that our members are able to adequately maintain their projects and the Feed-in Tariff works as intended, we ask that BEIS clarify that the Government's policy intent is that such replacement of equipment is distinct from decommissioning and request that Ofgem amends guidance appropriately to reflect this.

We therefore write to propose a budget-neutral solution to this matter.

In summary, we propose that:

Where all generating equipment is replaced, the accreditation of the site should be unaffected.

Where it is not possible to replace equipment with exactly the same Total Installed Capacity, the installation would receive its original tariff on a pro-rata basis against

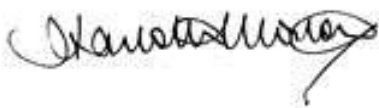
the original project's Total Installed Capacity. For any additional capacity, no further Feed-in Tariff payments would be made.

This proposal involves no legislative change and will have no budgetary impact. It will however enable generators to undertake appropriate maintenance and ensure the Feed-in Tariff functions as intended.

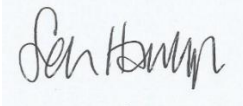
Building on previous conversations with BEIS and Ofgem on this matter, we set out these proposals in further detail in the attached paper.

We would welcome your consideration of these proposals, and are happy to discuss further.

Yours sincerely,



Charlotte Morton
Chief Executive – Anaerobic Digestion and Bioresources Association



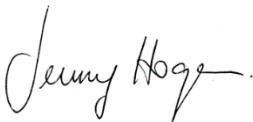
Simon Hamlyn
Chief Executive – British Hydropower Association



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Deputy Chief Executive – Scottish Renewables



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CEO – Solar Trade Association

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Additional information

Cases where replacement of all generating equipment is necessary

Generating equipment (as defined by Ofgem¹) is set out in italics below, followed by examples of when this might need to be fully replaced.

Anaerobic Digestion

The “generating equipment” is ***all equipment required to convert gas formed by the anaerobic digestion of material (which is neither sewage nor material in a landfill) into electricity.***

Possible replacement scenarios: When an engine suffers catastrophic failure, when an engine is faulty at the outset, comes to the end of its life or replacement is scheduled as part of the maintenance contract.

Hydro

The “generating equipment” is: ***any turbine runners, turbine blades, propellers, hydrodynamic screws (including archimedes' screw), water wheels and/or all prime movers; all the inlet guide vanes or all the inlet guide nozzles; any generators/alternators (or any part thereof).***

Possible replacement scenarios: Events such as fire or flood could lead to the need for full replacement of the equipment as could incorrect fixing down that leads to catastrophic failure due to the momentum of the shaft.

Solar PV

The “generating equipment” is ***the solar panels and inverters.***

Possible replacement scenarios: Inverters have a limited life, and replacement is routine at least once within the 20-year FiT duration.

Wind

The “generating equipment” is: ***the turbine blades, tower (or equivalent supporting structure excluding the foundation pad), hub, brakes, nacelle including gear-trains, generator/alternator and any other contents therein.***

Possible replacement scenarios: Where replacements are required on a turbine or nacelle, it may not be possible to replace the equipment with exactly the same specification. As towers and turbines are closely matched for loads and fundamental frequencies, it may not be safe

¹ https://www.ofgem.gov.uk/sites/default/files/docs/2013/02/generating-equipment-decision_0.pdf

to install a slightly different specification of turbine onto an existing tower – thereby requiring that all of the generating equipment is replaced.

Enabling generators to carry out necessary repairs / replacements

The current guidance does not allow repairs or replacements to be carried out in the aforementioned circumstances. This could create a perverse incentive to limit repairs to only a subset of the components classed as ‘generating equipment’. Secondly, if an owner is to lose their existing FiT accreditation after making these repairs or replacements, it is likely to be uneconomic for safe repairs or replacements to be done – likely leaving consumers with a significantly shorter generating equipment life than they would reasonably have expected under the 20-year FiT accreditation.

As the industry has developed, it is now beginning to see such cases emerge across the technologies. Thus far, a case-by-case approach has been taken by Ofgem which affords little certainty for consumers.

We understand the Government’s policy intent to be that where generation equipment has been replaced as a result of repairs, then there should be no impact on the FiT accreditation of the installation.

To reflect this, the references in the supplier guidance ([Feed-in Tariff: Guidance for Licensed Electricity Suppliers \(Version 8.1\)](#)) to stations “being seen as decommissioned” if all components of generating equipment are replaced² needs to be reworded. Plant is decommissioned when all components of generating equipment have been *permanently removed* rather than *replaced*.

This requires no legislative change.

When replacement on a like-for-like basis is not possible

It may not be possible to economically or safely replace faulty equipment with exactly the same specification.

Where the rated Total Installed Capacity (TIC) is not replaced entirely like for like, this should fall under the same process as set out in the following supplier license condition³ – *10.3A In the event that the output of an accredited FIT installation and an installation that is not accredited is not being separately measured, in calculating FIT Payments, the Mandatory FIT Licensee shall pro-rate the amount of electricity generated or exported by reference to the Total Installed Capacity of the accredited FIT installation.*

In this case, the installation would receive its original tariff on a pro-rata basis against the original project’s TIC; even if the capacity of the new equipment is such that the project would fall into a different capacity band within the FIT. For the additional capacity as with FIT extensions, no additional FiT payments would be made.

² i.e. paragraphs 8.2 and 8.14 state “If all components of generating equipment are replaced, the installation will be seen as decommissioned”. This should be reworded to say “If all components of generating equipment are permanently removed, the installation will be seen as decommissioned”.

³ Ofgem (2016) Electricity Supply Standard License Conditions Consolidated

We consider that this would ensure the process for repairs can be understood and administered simply by customers and the regulator respectively. Moreover, this proposal allows a consistent approach across all technologies and all scales of the FiT scheme.

Budgetary impact

This proposal would be budget-neutral as described in more detail below.

Anaerobic Digestion

If the TIC of a new engine remains the same, it is not possible to increase the generation output. The only change in the case of a more efficient machine will be the use of less feedstock to produce that output.

Hydro

If the TIC of a new turbine remains the same, it is not possible to increase the generation output. The only change in the case of a more efficient turbine will be the same power from less water of the same potential energy.

Solar PV

Replacing equipment may change the generation output of the installation but this is likely to be extremely minimal. For example, the efficiency of inverters has increased from 96% in 2010 to approximately 98-99% now. Assuming a load factor of 9%, this would lead to an increase of the load factor of approximately 0.1% - well within the margin of error in current financial reporting of the scheme.

Wind

More efficient turbines may result in an increased load factor and therefore, an increase in generation output.

This will have minimal to no budgetary impact. Taking an extreme and hypothetical scenario of replacements to 1000 installations (or 1/6 of the entire FiT wind fleet) accredited in 2011 and assuming a TIC of 50kW, an increase from the 2011 weighted mean load factor of 15.9% to the 2015/16 load factor of 28.70% remains less than 1% of the total FiT budget – again well within the margin of error in current financial reporting of the scheme.