Comprehensive Review Phase 2B: Consultation on Tariffs for non-PV technologies and scheme administration issues

Please use the table below as a template to respond to the consultation. It will help us to record and take account of your views.

Also, please provide evidence for your answers and comments where possible.

PERSONAL DETAILS
Respondent Name: Gavin King-Smith Email Address: administrator@microhydroassociation.org Contact Address: Contact Telephone: Organisation Name: Micro Hydro Association Would you like this response to remain confidential? ~~Yes/~~No (Delete as appropriate) If yes, please state your reasons:
CHAPTER 2: THE FINANCIAL ASPECTS OF THE SCHEME
Q1: Do you have any comments on the data used to develop these tariffs? Comments: The figure of 25 years lifetime for hydro schemes is not appropriate. The civils components of hydro schemes can be expected to last 50-100 years with modern materials, and other maintenance and component replacement costs are low. As a result hydropower is the most effective technology available for clean electricity generation. This should be reflected in the balance of support given by the FiT to development of hydro schemes given the limited availability of suitable watercourses. This has an impact on the requirement for *Long-term value for money (ref consultation para 17)*

In practice, load factors for hydro schemes, particularly small scale high head schemes, are higher for hydro than other non resource consuming technologies. This has an impact on the requirement to favour sites with *reasonable load factors (ref consultation para 30).*
Q2: Do you agree with the proposed tariffs? Yes~~/No~~: Comments: The proposed tariffs are sufficient given the structure and bands of the present FiT scheme. However the structure and banding do not provide the most effective support mechanism for small scale hydro schemes and are resulting in downsized designs to maximise returns on investment. A proposal to address these concerns is being submitted separately to DECC.
Q3: Do you agree with the proposed timing for implementation? Yes~~/No~~: Comments: in order to provide certainty, tariff changes for Micro Hydro schemes should be set at least two years in advance at the moment – if planning and environmental regulations and grid connection processes can be simplified and speeded then this period could be reduced. The timing for introduction of the proposed new tariff is acceptable as it is only a small reduction for micro hydro.
Q4: Do you agree that the cost control mechanism should apply across all technologies? Yes~~/No~~: Comments: It is acceptable for the mechanism to be applied to all, but the actual values for degression and timing and scale of caps should be variable.

Q5: Do you agree with the proposal that all tariffs will be subject to a minimum degression rate of 5% per year beginning in April 2014?

~~Yes/~~No:

Comments: this is too early for micro hydro and may also be too large as most cost elements for micro hydro schemes (commodities – plastic piping, steel, concrete, copper; civil engineering labour; environmental survey and mitigation) are on the increase. Also the technology is largely mature in design terms although there is some scope for improvement in design and efficiency of such items as valves and electronic control equipment. Degression will introduce further uncertainty and act as a barrier to hydro schemes.

The degression rate should be kept to zero or a proportion of the rates for other less mature technologies.

Q6: Do you also agree that there should be an element of capacity-based triggers that could accelerate the degression mechanism? Do you agree with the proposed triggers?

Yes/No:

Comments: capacity-based triggers could provide a reasonable cost control. The proposed level for hydro may be acceptable because the rate of development of micro hydro is constrained by the availability of skilled resources for design and installation and time to build and by regulation timescales. However, if these constraints can be removed, the trigger level for hydro should be raised and delayed in relation to levels for other technologies because of the greater value for money of hydro schemes.

The capacity level should be for schemes registered with Ofgem from October 2012, not those schemes currently under development, so as to avoid retrospective capping.

Levels should be reviewed and revised to reflect actual uptake patterns.

Q7. If not, can you propose an alternative model, e.g. contingent degression or quotas that would deliver certainty for investors and confidence that we can meet our Levy Control Framework obligations?

Comments: Quotas could be a useful mechanism to support the introduction of different types and scales of technology by setting protected levels of support. This could, for example, avoid large scale hydro schemes consuming a disproportionate amount of the available support and preventing introduction of small scale high head schemes which can be equally or more cost-effective*.

The balance between quotas for different technologies (and possibly for different designs within technology) should be kept under review and revised according to their relative longevity and effectiveness*.

*as measured by lifetime cost per unit of energy generated.

Q8: Do you agree that it should be a longer term objective to have an energy efficiency requirement for some or all non-PV technologies? How might this be done?

No: (assuming this means efficiency of use in properties).

Q9. Do you consider that equivalent energy efficiency requirements to those required for solar PV should be applied to microCHP and wind installations?

Yes/No:

Comments: No comment

Q10. Do you think that tariffs should continue to be index-linked for all technologies?

Yes~~/No:~~

Comments: This is reasonable under the present FiT scheme structure.

Q11. If index-linking is maintained what would be the best model? RPI, CPI, or another model e.g. time-limiting of indexation?

Please select:

- RPI ✓
- CPI
- Another model

Comments: RPI may be more likely to reflect commodity and labour cost inflation

CHAPTER 3: ELIGIBILITY AND ACCREDITATION

Q12. Do you agree that the 5 MW cap remains the appropriate limit or should a lower limit apply?

Yes/No:

Comments: No comment

Q13. Are there other technologies you think should be supported under the FITs scheme?

Yes/No:
Comments: No comment

Q14. Should the definition of hydro generating station be extended to include small tidal projects such as tidal mills and tidal locks that use a mixture of fluvial and tidal power?

Yes~~/No~~:

Comments:

This technology could provide access to additional valuable clean energy in particular localities. The licensing, environmental and navigation constraints, deployment, maintenance difficulties all mean that this area will be far too onerous for there to be a risk of developers seeking inappropriate access to the FiT.

Q15. Should second-hand and refurbished equipment be permitted for FITs accreditation?

Yes~~/No~~:

Comments:
Refurbishment and re-use of second-hand equipment will deliver benefits without the environmental costs of new production where this is possible. Costs of reinstating schemes will not be significantly different from installing new schemes – e.g. turbine refurbishment is similarly expensive to new build and in many cases new penstocks or leats will be needed providing greater longevity; there will also be opportunities to modify the siting of abstraction to gain improvements in efficiency.

Q16. As this equipment has a different cost base, would you support the payment of a lower tariff for such equipment, and how much lower should the tariff be compared with the standard tariffs? How would this tariff be calculated?

Yes/No:

Comments:
Only if existing equipment has to be retained for heritage purposes and capital funding for this is available elsewhere might it be reasonable to apply a lower tariff.

Q17. Do you think that the position relating to metering should be changed?

~~Yes/~~No:

Comments:

Q18. Do you agree that FITs should only be payable for usable energy and that metering installation standards should reflect this?

Yes~~/No~~:
Comments:

Q19. Is the existing definition of site sufficient? Do any of the criteria require further definition?

Yes/No:

Comments: It is sufficient for micro hydro in the majority of cases. However the location of micro hydro schemes for the most effective clean energy generation is dependent principally on the fixed location and topology of watercourses and on the availability of existing power lines. Micro hydro scheme tariffs should be considered individually to maximise generation (not to maximise income from tariffs). In some cases, for example maximum power can be obtained from a given watercourse or catchment by having more than one turbine of different sizes co-located. Grid references should be used to identify the location of a turbine.

Q20. What additional criteria or definitions could be used?

Comments: No comment

Q21. How would you resolve the private wire issue? Should there be a separate definition?

Comments: This is not an issue for micro hydro in the majority of cases.

Q22. Do you think that the definition of stand-alone needs to be clarified, for example to specify a minimum amount of onsite use?

~~Yes/~~No:

Comments: There is no reason to introduce a concept of "stand-alone" for micro hydro. Also, off-grid hydro should receive same generation tariff as on-grid as long as all electricity is used purposefully and displaces other less effective energy sources such as oil and gas.

Q23. Should consideration be given to the use being made of the building such as whether it is occupied?

~~Yes/~~No:

Comments: This is not an issue for micro hydro in the majority of cases, but hydro is often located where there is no building or facility requiring electrical power. This should not prevent development of a viable grid-connected scheme.

Q24. Do you agree with DECC's position on mobile installations? If not, what alternative would you propose?

Yes/No:

Comments: No comment

Q25. Do you think that the definition of "commissioned" needs to be clarified, for example, to specify that the installation needs to be in operation and generating electricity on which FIT generation/export payments can be made?

~~Yes/~~No:

Comments: specify that the installation will be deemed commissioned when it is *capable of operating and the generator is safely connected*. This would be the first time that the generation meter registered output after the scheme has been certified as being safely connected to the grid (or to the designated load if off-grid).

Q26. Do you agree with our proposal to allow a preliminary accreditation process for certain defined installations in the FITs Scheme?

Yes~~/No~~:

Comments: preliminary accreditation for a hydro installation will help provide certainty for investment. Even small scale hydro projects can take between 12 to 18 months to assess, design and permit. Consequently proprietors are reluctant to commit to this work which can be very costly given the risk that the initial benefit forecasts could become obsolete if the FiT tariff were to change part way through the development process.

Q27. Do you agree that preliminary accreditation be limited to ROO-FIT installations and not allowed for PV developments?

Yes/No:

Comments: micro-hydro should be included irrespective of the process for accreditation because of the high capital outlay and the long development lead time

Q28. Should preliminary accreditation also involve the fixing of tariffs for a set period of time at the point at which preliminary accreditation is achieved?

Yes~~/No~~:

Comments:

Q29. What are your views on the key design issues for preliminary accreditation i.e.

(a) at what stage would projects be eligible e.g. with planning approval, grid connection offer? or other factors?

Options would be: upon gaining an environment agency provisional approval or, for G59 connections, DNO statement of current grid connection capacity/indicative availability would be suitable stages for micro hydro; if the available capacity changes, the clock should be restarted to allow for the delay. For off-grid or G83 connected schemes, and possibly for all micro hydro schemes,

a suitable stage for pre-accreditation will be on submission of key design parameters to Ofgem under ROOFIT procedures: location, owner details, intended design capacity, turbine type, connection type, on or off-grid (or both).

Planning approval and abstraction licence stages are too late: planning approval is usually obtained but this can be well after commitments have been made and expenditure incurred; abstraction licences are often not finalised until detailed design and development work have already taken place.

(b) how long should the guarantee of tariffs last? three years with renewal if there are delays in planning, licensing, or if grid capacity/availability changes

(c) should there be a penalty for uncompleted projects to prevent speculative applications? not for micro hydro as there is little opportunity – the penalty would lie in the expiry of the set period and hence the possibility of a lower tariff

(d) what modification to the original application should be tolerated and still receive the tariff guarantee? any modification other than change in capacity band – it is often impossible to predict at an early stage what constraints may be imposed as a result of planning or environmental issues. If a final application for accreditation results in a change in capacity band as a result of addressing such issues, then date of the preliminary accreditation should still be used to determine the capacity band and tariff.

Comments: see above

Q30. Should MCS continue to be the route for FITs accreditation for microgeneration under the scheme or should there be a new body?

Please select:

- ~~MCS should continue to be the route for FITs accreditation~~
- ~~There should be a new body~~

Comments: The MCS route or anything similar is not appropriate for micro hydro – see answer to Q33

Q31. Are the criteria listed above sufficient to be used to determine if a scheme is equivalent to MCS? Are there alternative criteria that could be used?

Yes/No:

Comments:

- **be accredited under EN45011;**

this could be acceptable for an optional certification process in due course after piloting but is not feasible at present

- **be established for the purpose of assessing FITs eligible microgeneration installations;**

not necessary – the FiT would only be payable in cases where energy from a renewable resource was generated – Ofgem checks are sufficient to ensure this assuming that they are policed with spot checks on actual generation (see answer below re monitoring)

- **have the capability to assess products and installer companies against the objective quality standards;**

what does this mean? – there are no viable standards for micro hydro although some could be produced quickly – see answer to Q33

- **be able to provide documentary evidence to enable the accreditation of an installation on the central FITs register in a form compatible with Ofgem and licensees' systems;**

a standard site commissioning form for micro hydro schemes (to be completed by the installer/ development manager and the proprietor) would ascribe responsibility for compliance appropriately and could be produced quickly

- **ensure that installations comply to the technical requirements of the FITs scheme,**
- **including that approved meters are used;**

these are currently Ofgem's roles – must avoid duplication, but it would be acceptable to introduce an independent check to Ofgem and remove Ofgem checks

- **provide the required information to assist the management and monitoring of the FITs Scheme;**

yes – essential, but could be carried out on a selection of sites – it need not be done for all sites for management and monitoring purposes;

in order to monitor compliance with FiT eligibility requirements, sites could to be visited on a random spot check basis as long as this were done by experienced staff, preferably in conjunction with environmental licence compliance.

- **ensure documentation is valid and the accreditation process is secure; and** see answer to Q33

- **provide a level of consumer protection that meets the Office of Fair Trading Consumer Code requirements.**

this could be an optional element for generators requiring assurance – if a scheme does not work effectively the lack of performance will cost the tax-payer or electricity consumer nothing because FiT payment will be reduced or zero – see comments to Q33.

Q32. Do you have any other comments on the current operation of the MCS-FIT accreditation system?

Comments: Micro hydro should be removed completely as there is no prospect of an MCS accreditation process that will be suitable; the present transitional arrangements offer no assurance of installer or product credibility as there is no certification body equipped to assess micro hydro; the principal issues (safety, environmental impact, planning, and consumer protection) are already covered extensively by existing regulation.

Q33. What do you consider is the best way for micro-hydro installations to be accredited for FITs?

Comments: The micro hydro sector of the industry is unanimous in recommending adoption of the ROOFIT process for accreditation for the foreseeable future, and there are opportunities for simplifying this for small scale schemes.

We consider that there is no need for accreditation of micro hydro installers or products but that the idea of introducing optional certified scheme assessment at the design stage, and post implementation, could provide assurance for those potential generators who do not feel competent to assess whether the design or implementation of a scheme has been carried out as contracted. There is already guidance on scheme design and implementation available from industry associations and on the web and this could be extended; in due course it could be helpful for independent organisations to assess relative performance of different suppliers and technologies.

An alternative approach would be industry self-regulation in the form of expert peer review. A proposal to consider such an approach is being submitted separately to DECC.

Q34. Do you support the principle of a voluntary approach to ensuring sustainable use of purpose grown crops in AD plants that benefit from FITs and to prioritise plants using waste feedstocks? If not, what alternative controls should be put in place?

Yes/No:
Comments: No comment

CHAPTER 4: COMMUNITY AND MULTI-INSTALLATION PROJECTS

Q35. Which organisations do you consider should be included in the definition of "community" installations? Should the definition include social enterprises? Charities? Non-profit social housing providers? Any other groups?

Comments: This is not an issue for micro hydro in the majority of cases – where a community is involved in a micro hydro scheme, increasing the feed-in tariff would not seem an appropriate way to further supplement the necessary investment –some form of grant may then be more suitable; reducing the tariff would reduce the number of schemes that would be viable.

Q36. Should other factors be taken into account e.g. scale and primary purpose?

Yes/No:

see answer to Q35

Q37. Do you agree that non-community multi-installations should receive a basic stand-alone tariff? Should the energy efficiency requirement still be applied to these installations once they are receiving the stand-alone tariff?

Please select:
Yes - non-community multi-installations should receive a basic stand-alone tariff
No - non-community multi-installations should not receive a basic stand-alone tariff

Yes - the energy efficiency requirement should still be applied once installations are receiving the stand-alone tariff
No - the energy efficiency requirement should not still be applied once installations are receiving the stand-alone tariff

Comments: This is not an issue for micro hydro **- see answer to Q35**

Q38. Do you agree that "community" multiple installations should receive a higher rate of multi-installation tariffs than commercial installations?

Yes/No:

Comments: This is not an issue for micro hydro **- see answer to Q35**

Q39. Would it be possible to design a cost effective mechanism that would allow "community" projects to "fix" their FITs tariff for a set period of time at some point earlier in the development process?

Yes/No:

Comments: See answers to Q29

Q40. Should this apply to just solar, or also to wind projects up to 50kW (DNC)?

Please select:
- Just Solar
- Also to wind projects

Comments: This is not an issue for micro hydro

Q41. What other ideas do you have for helping one-off community projects?

Comments: Water resources suitable for hydro schemes can present an ideal opportunity to provide community benefit from what can be considered a community (or even national) resource. In many cases several land owners could be affected by one potential scheme as with the electricity grid, telephone network, public water supply, etc. The return from investing in a hydro scheme should accrue to those who have invested, and some compensation for wayleaves may in addition be appropriate for affected land owners.

Where a viable community scheme is identified, landowners and others in the community could have first refusal on investing in the scheme with perhaps a DNO being required to make up any shortfall or perhaps required to invest a specified proportion of the capital cost with an obligation to provide maintenance services.

CHAPTER 5: CONSUMER ISSUES

Q42. Do you believe that the current enforcement provisions of Ofgem's powers are sufficient?

Yes~~/No~~:

Comments:

Q43. Do you believe that a power to remove individual installations post-accreditation would provide a more proportionate penalty to deal with individual cases of malpractice?

~~Yes/~~No:

Comments: This is not an issue for micro hydro

Q44. If further provisions are required, what form might these take?

Comments:
No comment

Q45. Do you believe that the current provision of information and advice regarding FITs is adequate?

Yes~~/No~~:

Comments: but it will need to be updated if the proposed provisions are to be implemented.

Q46. Who do you think should have the responsibility for drawing up and providing advice to Generators?

Comments: for micro hydro: independent organisations for general information (e.g. Energy Savings Trust); industry associations (for design and supply advice); environment agencies (for environmental legislation); DECC for operation of the FiT, and Ofgem (for advice on grid connection negotiation with DNOs)

Q47. How should the dissemination of advice be monitored, and who should have the responsibility for ensuring this is carried out correctly?

Comments: DECC/Ofgem should do this in conjunction with industry associations as the overall aim is energy generation

Q48. Are the FITs terms set out in the Summary of Terms appropriate and sufficiently clear or are they too complex or onerous, requiring the Generator to accept too many obligations?

Please select:

- **Sufficiently clear**✓
- Too complex or onerous

Comments:

Q49. Is payment to generators at least every 3 months reasonable? Should it be obligatory to make payments more or less frequently?

Yes~~/No~~:

Comments: 3 monthly is sufficiently frequent for micro hydro

Q50. Are there any issues that are not taken account of in the DECC guide?

Comments:

Complaints concerning hydro products and suppliers will need to be dealt with at present under normal consumer protection measures as there is no certification process.

Sections could usefully be added referring to complaints procedures regarding grid connection issues, environmental and heritage regulation, and planning regulation.

Q51. Do you think that the current complaints/dispute resolution arrangements for the FITs Scheme are adequate? Yes/No: Comments: no comment
Q52. If the current arrangements are not adequate, what changes should be made? Comments: no comment
CHAPTER 6: LICENSEE ISSUES
Q53. Do you support changing the thresholds for mandatory licensees to 250,000 residential consumers? If not what alternative do you propose? Yes/No: Comments: no comment
Q54. Should individual installation data be collected centrally, and what do you think the most cost-effective way of doing this would be? Yes Comments: but this could be done selectively to reduce costs – see answer to Q31.
Q55. Do you support the establishment of provisions equivalent to the supplier of last resort arrangements for FITs payments? Yes~~/No~~: Comments: there is no other mechanism for ensuring continued FiT payments for generators who have invested in renewable technology.
Q56. Do you support the mutualisation of shortfalls within the FITs levelisation arrangements among licensees? Yes/No: Comments: no comment
Q57. Do you support the continuation of the current arrangements on the frequency of levelisation, i.e. at least quarterly but more frequently at the discretion of Ofgem? If not, what alternative to you propose? Yes/No: Comments: no comment