



## Statutory Consultation for the Renewables Obligation Order (Northern Ireland) 2009: Questions

### Chapter 2: Banding the NIRO

Q. Are any of the definitions in Table 1 unclear, difficult to interpret or have they the potential to open the NIRO to gaming?

The British Hydropower Association (BHA) accepts that the reference to restrictions on hydropower schemes above 20MW reflects the current position in Great Britain and may not apply within Northern Ireland. However, the BHA is concerned about the continuation of these restrictions. We believe they have acted as a break on the upgrading of plant and consequently have decreased the capacity for the generation of carbon-free electricity over the operating period of the Renewables Obligation. We believe that the refurbishment of existing plants close to the 20MW limit has meant in some cases, that the potential to significantly up-rate them has been lost by ensuring their rated capacity is kept below 20MW. (See Annex A attached.)

We are concerned that the definition of hydropower appears to exclude generation from waterwheel from the RO. Whatever the technology used to convert the water energy to electricity, surely it is fulfilling exactly the same purpose and waterwheels should be included in the definition.

Q If so, what changes need to be made to them and why?

See above.

Q. Do you agree that, in Northern Ireland, Landfill Gas should, unlike the GB proposals, continue to receive 1NIROC/MWh? Please provide an explanation for your view.

Q What are the costs for micro landfill gas and micro sewage gas, and how should we ensure that there are no perverse incentives to deploy sub-scale plant?

As a single technology trade association, the BHA does not have a view on these two questions.

Q: Should the threshold for micro-hydro stations be raised above 50 kW?

Yes. A threshold of 50kW is too low for all but a few micro-hydropower schemes to be economic. We believe the threshold should be 250kW (see the evidence attached at Annex B).

Q: If the threshold is raised do you agree with the approach that these stations would receive 2 ROCs for the first 50 kW of capacity and 1 ROC for the remainder?

Yes. The BHA believes that hydropower schemes above 250kW up to 500kW should benefit from 1.5 ROCs.

Q Should offshore wind or marine generating stations located outside the UK and its waters with (i) an exclusive and direct connection to a UK transmission and distribution system and (ii) where they sell their electricity into the UK for supply to customers in the UK benefit from the RO? Are there any risks or disbenefits?

As a general rule the BHA does not believe that schemes outside the UK should be supported by taxpayers in this way. The UK is reported to have the best offshore wind and marine resources in Europe and we believe that the Government should concentrate on bring forward renewable generating stations in the UK and its waters first. We accept that position is different for Northern Ireland, the only part of the UK with a land border and coastal interface with an other country and there may be the case for such an exclusive project to be treated in a special way.

### Chapter 3: Grandfathering

Q: Do you agree with the transitional arrangements proposed for existing stations using biomass or mixed waste?

The BHA does not have view on this question

Q: Do you agree with the transitional arrangements for stations affected by changes to definition?

Yes.

Q: Have you a project that might fall within the requirement to repay grant as an option for banding-up? If so, please make contact with DETI to discuss the potential requirement and/or respond through this consultation process.

Yes.

#### Chapter 4: Co-Firing

Q Do you agree that, in the current absence of support for renewable heat production, co-firing with CHP should in some circumstances receive more support than co-firing which only generates electricity?

Q. If so do you agree with the proposals set out in Chapter 4 and summarised in Table 2?

Q. Are there specific changes that you would like to see to these proposed arrangements and if so why?

As a single technology trade association, the BHA does not have a view on these questions.

#### Chapter 5: Good Quality CHP

Q. Do you agree that the proposals in Chapter 5 will allow the majority of renewable CHP schemes to benefit fully from the NIRO?

As a single technology trade association, the BHA does not have a view on this questions.

#### Operating the Banding Regime

##### Chapter 6: Calculating the Obligation

Q. Do you agree that the mechanism set out in Chapter 6 is the best way of delivering a headroom mechanism at an individual supplier level? If not are there preferable alternatives?

Yes

Q. Are there other sources of information that should be used to predict the future size of the ROC supply market

The BHA is not aware of other sources of information for this purpose.

Q. Do you agree with this approach or do you see a clear benefit in the immediate future of having a ski slope mechanism of the type described in the UK Government Response to the 2007 UK-wide consultation?

The BHA does not believe that there will be need for the ski slope in the near future.

Q. If you disagree, what value would you place on this benefit?

Not applicable.

##### Chapter 7: Advice on Setting Future Banding Levels

Q. Do you agree that consultants should be appointed to provide independent advice to BERR and Ministers in order for them to make decisions on band setting for scheduled and emergency reviews?

We agree that consultants should be appointed to provide independent advice.

Q. Do you agree that RAB should be given a formal role to peer review any work carried out by the appointed consultants prior to advice being given to the BERR Secretary of State?

No. RAB is not representative of the industry. It does not have a specific hydropower representative. The BHA has nominated candidates for vacant posts but none of them has been appointed. We are concerned that this may indicate an erroneous view that the potential for new hydropower capacity is too limited to deserve much attention. The BHA has on numerous occasions indicated the potential is very significant. We believe that trade associations, which do have the depth and breadth of experience in the sector, should lead peer review. (An alternative solution is suggested in "The Case for Hydropower" which is to be read in conjunction to these responses to the consultation.)

Q. Have you any proposals for ensuring that banding reviews should adequately take account of specific Northern Ireland considerations?

No

## Chapter 8: Bandsetting Process Biomass and Waste Issues

### Chapter 9: Sustainability Reporting

Q. Are there any other environmental quality assurance schemes you think should be considered?

Q. Will reporting on the criteria outlined in Chapter 9 allow generators to provide an 'accurate' representation of the sustainability of any given biomass fuel? If not what other criteria should be specified?

Q. Do you agree that the Authority should be able to postpone NIROCs equivalent to the number of NIROCs the Annual report refers to where:

(i) the report is not provided by a set date?

(ii) information on biomass type etc is not provided

(iii) an Authority audit reveals the information was available and a response of "no information available" has been returned?

Q. Do you agree that reports should be provided by two months after the end of the compliance period?

Q. Do you agree that the cut-off point for providing the information required should be three months after the date for submitting the report?

As single technology Association the BHA cannot comment on these questions.

### Chapter 10: Determining the Renewable Content of Waste and Fuels

Q. Will the proposed approach address the concerns of industry regarding access to NIROCs for eligible EfW technologies whilst ensuring NIROCs are not issued for non-renewable generation?

Q. Do you think waste composition contracts should be the primary form of evidence used to determine the renewable content of mixed waste? If not what would you suggest is used?

Q. Do you think the proposed approaches to determining the renewable content of fuels produced through anaerobic digestion, gasification or pyrolysis strike the right balance between accuracy and ensuring that

NIROCs are not issued for electricity generated from fossil fuel? If not, why not, and how should this balance be struck?

As a single technology trade association, the BHA does not have a view on this questions.

### Chapter 11: Mixed Fuel Scenarios

Q Are there any mixed fuel scenarios missing from the analysis in Chapter 11?

Q Do you agree with the treatment of co-firing fuels produced through anaerobic digestion, gasification or pyrolysis? Do you have any evidence of such projects coming forward?

As a single technology trade association, the BHA does not have a view on this questions.

### Chapter 12: Neutrality of SRF

Q. Do you agree with the definition of SRF for the purposes of distinguishing it from other waste under the NIRO?

As a single technology trade association, the BHA does not have a view on this questions.

## Administrative Changes

### Chapter 13: Funding the Regulators' Costs of Administering the NIRO

Q. Do the new funding arrangements have any unintended consequences?

We are not aware of an unintended consequences

Q. Are there any alternative arrangements which would be more appropriate?

We are not aware of any.

### Chapter 14: Late Payments Fund

Q. Do you agree with the proposal to set a threshold for repayment of the late payment fund?

Yes

Q. Is £50,000 the right level?

Yes.

## Chapter 15: Private Wire Networks

Q. Are there any examples of private wire networks in Northern Ireland that the common themes above would not capture? What are they?

We are not aware of any.

Q. Do you agree that it should be limited to 200 kW? If not what size would be appropriate?

The BHA is not sure why a limitation is needed. There does not seem to be any logic in restricting electricity generation that will reduce CO<sub>2</sub> emissions. Prior to the creation of the Central Electricity Generating Board towns generated their own electricity. If one of the new ECO towns was situated near a suitable source that could generate its total requirement there should not be a limit of 200kW.

Q. Is it appropriate to specify that a private wire network should not include one operated over the national grid?

We are not sure why the definition should exclude the Grid. If the renewable power generated includes the Grid, it is still a benefit.

Q. Should we limit the number of customers supplied?

Why restrict the benefit by the number of customers? Restrictions only lead to a non-level playing field and reduction in the resourcefulness of the individual or community. They also require a control system to monitor them.

## Chapter 16: Microgeneration

Q. Is a two month window sufficient?

Yes.

Q. Are there any unintended consequences arising from this change?

We are not aware of any.

Q. Do you agree that there should be the option for notification of the appointment of an agent to be sent either by the generator or via their agent?

The BHA believes that small generators should be allowed to switch agents during an obligation period.

Q. Should there be a limit on the number of times a generator can switch agents?

No.

Q. Are there any unintended consequences of allowing generators to switch agents during an obligation period?

We are not aware of any.

Q. Do you agree with the principle of introducing a code of practice?

Yes.

Q. Should the code of practice be voluntary or compulsory?

The code should be compulsory.

Q. What could a voluntary code of practice include?

It should be as simple and short as possible.

Q. Who should operate the code of practice?

Ofgem should operate the code of practice.

Q. How should a code of practice be funded?

It should be funded in the same way as Ofgem's work on the Renewables Obligation.

Q. Should we consider further, the proposal for agents to accredit small generators?

If accreditation of agents is considered further, Ofgem should set up the appropriate rules.

Q. Are there any alternative options which would reduce the administration associated with the participation of small generators in the NIRO?

We are not aware of any.

## Chapter 17: Changing Metering Requirements

Q Do you agree that the proposed relaxation in metering requirements is necessary and

Q Do you agree that the proposed relaxation in metering requirements is necessary and appropriate?

The BHA cannot comment on these questions.

### **Annexe A**

#### **20MW Refurbishment Threshold**

In the hydropower sector the 20MW limit for ROC allocation for refurbishment and upgrade of existing plant caused the de-rating of a number of power stations to come within the cap limit and the non-refurbishment of plant above the limit thus depriving the UK of considerable renewable electricity generation. The BHA believes that refurbishment of these facilities should be linked to overall station efficiency/availability.

The 20MW cap presents problems for future investment at sites where pipelines and tunnels are old - up to 80 years old in some cases. Some of these plants are generating at substantially lower levels than their rated capacity. The costs of refurbishment are likely to be as great as the costs of constructing and equipping an entirely new plant, and without the ROC income operators would find that it is commercially more advantageous to develop alternative facilities rather than refurbish them.

### **Annexe B**

#### **Microgeneration threshold**

The BHA welcomes the Government's intention to provide double ROC's for microgeneration from all technologies for new and existing schemes. We believe there is a case for defining microgeneration according to technology. For example, a photovoltaic station of 50kW would be considered a very large station indeed and one beyond the means of most individuals. The 50kW threshold is set too low for hydropower. Within the hydropower sector there are sound technological reasons for describing micro hydropower as being up to 100kW.

Due to the shape of a typical flow duration curve stations much larger than 75kW could also find it more economic to stay below 50kW (not even taking into account the likely savings in capital costs). We are aware of a scheme where the original plan was for a plant of 130kW, but a 50kW version with double ROCs would have generated much less renewable electricity but only about 15% less revenue. The tipping point in terms of revenue is at least 100kW - taking into account the capital costs, stations up to 150 - 200kW could well find that 50kW (with high load factor) gave a better return. We think the threshold should be at least 250kW.

Two studies into the potential for new hydropower development in the UK are being carried out this year. For England and Wales there is support from BERR. The Scottish Government is supporting a similar survey for Scotland. Once completed, they will provide a picture of the generation potential from hydropower from all sizes of plant. In order to show how potentially wasteful a cap set at 50kW for receiving double ROC's would be we give below an analysis for the counties of Dorset and Somerset. The following is the total power estimate for 102 sites (usually old watermills) identified in the two counties:

	More than 50kW	50kW or less	Total
Annual output (kWh)	3,682,529	3,843,240	7,525,769
Number of mills	12	90	102
Percent of total output	48.9%	51.1%	100%
Output per mill (kWh)	306,877	42,703	

11 of the sites in the first column would earn more by restricting their output to 50kW under the new proposals. The figures would then be:

	More than 50kW	50kW or less	Total
Annual output (kWh)	489,334	6,545,700	7,035,034
Number of mills	1	101	102
Percent of total output	7%	93%	100%
Output per mill (kWh)	489,334	64,809	

It can be seen from these tables that if the installed capacity were limited to get the double ROC's then total output would fall by 490,735kWh. This equals the output from up to 40 of the sites with less than 50kW. In other words those 40 sites would receive double ROC's for no overall benefit to the nation's renewable generation targets.

If the 12 sites with a generating potential of over 50kW were to build plant to keep within the threshold, the 102 sites in Dorset and Somerset would cost an extra £133,322 but generate 490,735kWh less renewable electricity.

	All @ single ROC*	12 sites @ single ROC*	+90 sites @ double ROC*s
Difference value of ROCs	£ 245,227	£378,549	+£133,322
kWh generated	7,525,769	7,035,034	- 490,735

\*At £0.0326

Extrapolation from those figures to cover the whole country, assuming a potential of 20,000 micro hydropower sites, indicates that this perverse disincentive would cause a loss of 96,200,000 kWh annually for an additional cost of £26m.

There are various means of transitioning between the double and single ROC bands to avoid this problem, one simple suggestion would be to pay all micro hydro generation (on a daily basis) up to 100kW (ie up to 2400 kWh / day) double ROCs and anything above 100kW single ROCS, so that a 120kW station would get double ROCs on most generation and single on peak generation. This should apply to stations with a total capacity of up to (say) 500kW, above which the additional revenue will be less significant.

There is also a further economic argument for a banding of, say 1.5 ROC's per kWh for hydro projects up to a capacity of 500k. To enable the many good technically viable projects in this capacity range to be developed, schemes up to a level of 250kW should receive 2 ROCs for the first 100kW and the remainder 1 ROC. Schemes between 250kW and up to 500kW it should be 1.5 ROCs for the first 100kW and 1 ROC thereafter.

