Licensing Process for Micro Hydro

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Overview

- WFD Background
- CAR Regulations
- Potential Impacts
- Mitigation Measures
- Environmental Standards
- Assessment Process
- Mitigation Measures
- Application Process
Water Framework Directive

- SEPA must prevent deterioration
- Seek to improve to ‘good’ status
- Promote sustainable water use
- Protect other water users
- By controlling abstraction & impoundment activities
- Using the Water Environment (Controlled Activities) (Scotland) Regulations 2005
SEPA and Renewables

• Key message
• Hydropower is one of Scotland’s largest sources of renewable energy and it is important to promote further hydropower development in order to reduce carbon dioxide emissions. However, it can not be renewable energy at any price. Getting the balance right between promoting hydropower and protecting and improving the water environment is a key challenge for SEPA.
CAR

Require licence for:-
• Abstractions;
• Impoundments;
• May require Engineering
The Water Environment (Controlled Activities) (Scotland) Regulations 2005

A Practical Guide

A practical guide to the regulations, including:
- An overview
- Definition of the regimes
- Levels of authorisation
- The General Binding Rules

Version 5, June 2015
### Charging

<table>
<thead>
<tr>
<th>Installed Capacity</th>
<th>≤100kW</th>
<th>≤2MW</th>
<th>≥5MW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Application Fee</strong></td>
<td>A Simple licence fee (currently £574) for all abstractions and impoundments</td>
<td>Normal Application Fees</td>
<td></td>
</tr>
<tr>
<td><strong>Subsistence Fee</strong></td>
<td>Exempt</td>
<td>£1060 per abstraction £1060 per impoundment</td>
<td>Normal Subsistence Fees</td>
</tr>
</tbody>
</table>
Potential Impacts – short term

• Sediment run off from roads
• Mobilisation of sediment from bed or banks
• Oils
• River diversions/ pumping
• Machines in rivers
Potential Impacts – long term

- Low flows/loss of mid range flows – impact on biodiversity
- Fish and fisheries – migration and spawning
- Loss of wetted margins
- Sedimentation problems u/s and d/s of impoundments
- Pollution during construction
- Third party users
Hydropower impoundments
Mitigation Measures

- Mitigation flows – hands off, compensation & freshets
- Screening
- Fish passage
- Construction impacts
- Good historic practice and very site specific
Environmental Standards

- The Scotland River Basin District (Surface Water Typology and Environmental Standards) (Scotland) Directions 2007
- Came into effect on 1 October 2007
- Presumption to refuse applications which breach standards
Effect of a Hydro scheme on FDC

- Natural Flow Duration Curve
- Flow Duration Curve for run of river Hydro Scheme
- Flow duration curve indicating Good status
Hydropower Applications

• The vast majority of applications for hydro schemes will breach environmental standards – standards that are in place to ensure the water environment is protected
• Some of these will also threaten ecological status – and will need to be reported to Europe in the River Basin Plan
• To authorise hydro scheme applications requires SEPA to carry out specific assessments under CAR and/or WFD
Not all failures of standards will threaten status.
Socio-Environmental Balance?
Balancing the Environment and Renewables

- SEPA needs to strike the right balance between the protection of the water environment and the social, economic and environmental benefits gained from its sustainable use.
- SEPA may decide it is appropriate to authorise an activity which would cause a failure of environmental standard where they consider the benefits to sustainable development, human health or human safety of so doing would outweigh the adverse social, economic and environmental consequences.
How does assessment work?

• What is the current status of the affected waterbody?
• What effect will the proposal have on its own and in combination?
• Will Environmental Standards be compromised?
• Will ecological status be affected?
• Will third parties be affected?
• Can the impacts be mitigated against?
• Is the proposal licensable?
Derogation (Exemption) Tests

- Set out in Article 4(7) of WFD
- Apply where activities result in the deterioration of ecological status
- CAR requires a similar test where an Env. Std. is breached
- Regulatory Method 34 developed as guidance for staff
- Used for breaches of standards as well as status
Application process

• Contact your local office at initial scoping stage
• Contact other responsible authorities and interested parties at earliest stage
• Forms and details of fees available on website
Pre-application discussion
Consultation
Application
Advertisement
Proposed determination
21-day notice if third party representations
Determination
Four months
Information required

• Scheme Details
• Hydrology Data
• Physical Habitat / River Morphological data
• Ecology Data
• Relevant Local Issues
• Pollution Control
• Monitoring
• Wider benefits of Proposal
NO CANOES PLEASE
Advertising

- When SEPA serve notice for the application to be advertised the clock stops.
- Adverts to be placed within 28 days of notice being served
- Clock could be stopped for up to two months.
- Allows third parties to raise any issues
- In time responses allow call in request
Consultation

- No specific consultees within CAR
- Designation of Responsible Authorities
- Requires RA’s to work cooperatively
- Aim is for an integrated approach to managing & protecting the water environment
- SEPA will therefore seek the advice of RA’s as appropriate
- Where responses are received within statutory time limits RA’s have the same right to request call-in as any third party
Call In and Appeals

- Responding within the 28 days allows third parties to seek a call-in by Scottish Ministers if they are not satisfied with licence conditions
- Appeal process gives the applicant the right to appeal any licence conditions also
- New ground for SEPA and Scottish Government
Cumulative Impact

• Concerns over the cumulative impact of many schemes and other activities
• May impact fisheries, and designated sites
• Ongoing monitoring of new and existing schemes needed
• Ongoing discussions with interested parties required
Links

• Offices - www.sepa.org.uk/
• WFD - www.sepa.org.uk/wfd/index.
  • Practical Guide
  • Application forms
  • Charging

• http://www.british-hydro.org/

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