# CAIRNGORMS NATIONAL PARK AUTHORITY

Title: REPORT ON CALLED-IN PLANNING

**APPLICATION** 

Prepared by: NEIL STEWART, PLANNING OFFICER

**DEVELOPMENT CONTROL** 

DEVELOPMENT PROPOSED: FULL PLANNING PERMISSION FOR NEW

INTAKE FOR SMALL SCALE HYDRO POWER GENERATION SCHEME, SEMEIL

FARM, STRATHDON

REFERENCE: 06/456/CP

APPLICANT: JOHN RILEY, SEMEIL FARM,

**STRATHDON** 

DATE CALLED-IN: 17 NOVEMBER 2007

RECOMMENDATION: APPROVE, WITH CONDITIONS

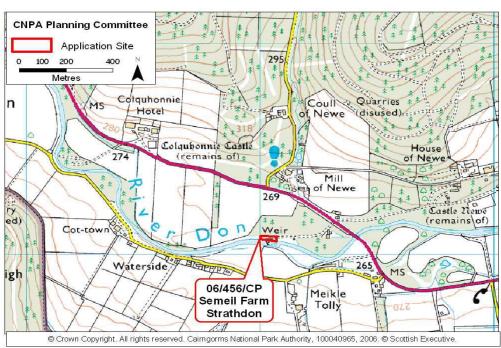


Fig. 1 - Location Plan

#### SITE DESCRIPTION AND PROPOSAL

- The site to which this application relates is located on the north bank of the River Don, at Newe, Strathdon (Fig. 1). The site is approached from the A944 road to the west of the Bridge of Newe and lies to the west of a disused hydro-electric generating house. The land lies within the boundaries of Semeil Farm, as does the river bank (apart from the interest of the Don Salmon Fisheries Board who own the weir at the location).
- 2. The proposal forms part of a scheme to reintroduce small scale hydro power at the location, where generation ceased in 1974, having been in operation for approximately 30 years. The hydro scheme proposed, involves works within the turbine house, including the installation of a fish-friendly Archimedean screw generator. Energy is extracted from falling water, which turns the screw and is harnessed to provide electrical power. The water is returned to the river via the tail race, with no change in quality of the water. The Archimedean screw generator will operate continuously 24 hours a day, whenever there is enough water for electricity generation. An existing intake at the existing weir to the west of the turbine house, diverts water from the river into a lade, where a sluice can then be raised to allow flow into a tunnel approximately 250m long which leads to the turbine house (Figs, 2, 3, & 4). Since it is reinstatement of a use, none of the works at the turbine house (including the installation of the Archimedean screw) require planning permission. This has been confirmed by Aberdeenshire Council.

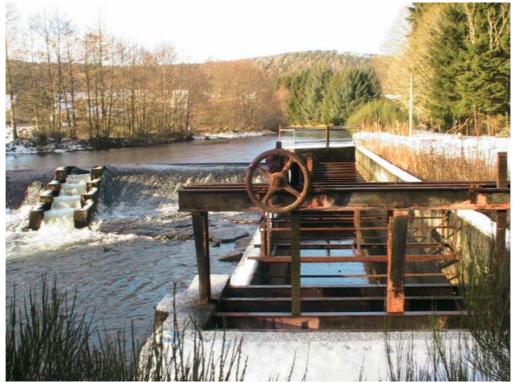


Fig. 2. Existing intake, weir and salmon ladder, looking upstream.



Fig. 3. Existing intake, looking downstream



Fig. 4. Existing turbine house – works not part of application

3. The application therefore relates to a fairly small proposal for the creation of a new intake and underground link to the existing tunnel running to the turbine house. This new intake, is to be constructed in a location where the riverbank is formed by a concrete wall (Figs. 5 & 6). The intake will be approximately 5m wide with four 1.2m wide sluice

gates (refurbished from the turbine house) fitted above the waterline which can fall by gravity to stop the flow when necessary. Below the waterline will be a trash screen of horizontal metal bars. This will allow the water to flow into a steel intake box which will then channel water into the new length of underground pipe on the north bank leading to and connecting with the existing tunnel to the turbine house.

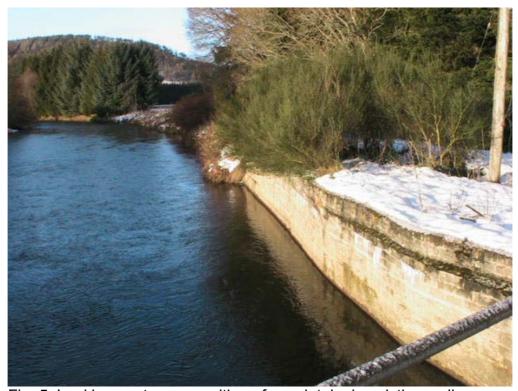
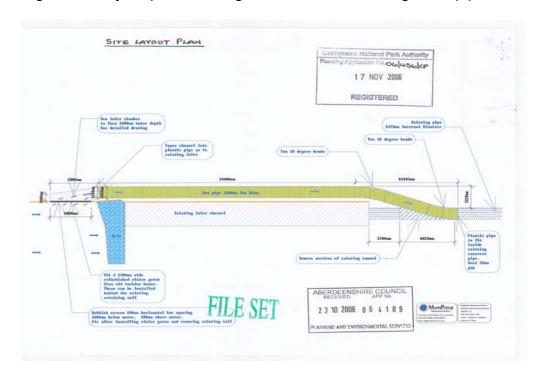


Fig. 5. Looking upstream, position of new intake in existing wall





4. The application is accompanied by an Environmental Report. In its summary, it advises that the restoration of hydro-electric generation at this location would provide enough "green" electricity to power 204 houses, which in turn would save around 180 tonnes of carbon dioxide emissions annually. This renewable and sustainable generated power would be sold to the electricity grid. The report also covers an assessment of impacts and mitigation measures, covering aspects including, emissions from the development, noise and nuisance, roads and transport, architecture and historic heritage, habitats, plants and animal species, hydrology, geology etc.

## **DEVELOPMENT PLAN CONTEXT**

## Aberdeen and Aberdeenshire Structure Plan 2001-2016 (NEST)

5. Policy 5 (Renewable Energy Facilities) advises that proposals for renewable energy facilities shall be favourably considered, subject to ecological, transportation, landscape and amenity considerations as set out in Local Plans. Policy 19 (Wildlife, Landscape and Land Resources) states that development which would have an adverse impact on International Designations will only be permitted where there is no alternative solution and there are imperative reasons of over-riding public interest, including those of an economical, social or environmental nature.

## Aberdeenshire Local Plan 2006

- 6. Policy Env\4 (Biodiversity) states that development that would have an adverse effect on habitats or species protected under British or European law will be refused unless the developer demonstrates that; the public benefits at a local level clearly outweigh the value of the habitat for biodiversity conservation; the development will be sited and designed to minimise adverse impacts on the biodiversity of the site, and; there will be no fragmentation or isolation of habitats as a result of the development. Where there is evidence to suggest that habitat or species of importance exists on a site, the developer may be required at his own expense, to undertake a survey of the site's natural environment. Policy Env\5B (Areas of Landscape Significance) advises that development in such areas will not be permitted where its scale, location or design will detract from the quality or character of the landscape, either in part or as a whole.
- 7. Policy Env\15 (Aquatic Engineering Works) states that engineering works that would result in the deterioration of the ecological status or potential of a river, through impacts on water quality, quantity or flow rate, riparian habitat or protected species, will be refused. Policy Inf\8 (Other Renewable Energy Sources) advises on the provision of renewable energy facilities, other than wind energy. Support is given in principle, if located, sited and designed in accordance with criteria,

including (amongst other things); impacts on natural heritage. **Policy Gen\1 (Sustainability Principles)** requires new developments to be assessed against sustainability indicators that relate to local environment, community and economy.

### **CONSULTATIONS**

- 8. **SEPA** have advised that a CAR licence has been submitted to them under the Water Environment (Controlled Activities) (Scotland) Regulations 2005 with respect to the proposal for water abstraction from the River Don. The submitted Construction Method Statement is satisfactory in respect of identified risks and associated mitigation measures. **SEPA** therefore have no objections.
- 9. **SNH** initially advised that they had no objections to the principle of the development but that they considered that the proposal could have potentially serious adverse impacts on important natural heritage interests in the form European Protected Species – otters. In addition, there was insufficient information to ascertain if the proposal would have detrimental effects on water voles which are protected under the Wildlife and Countryside Act 1981 (as amended). In respect of otters, it was considered that they could enter the proposed intake, and therefore the turbine house and become trapped, injured or killed. The applicants were requested to provide information to demonstrate that measures are in place to prevent this from occurring. In addition, it was necessary to establish whether ofter are present at the locality and a survey was requested. In relation to water voles, it was stated that if the river bank, where the intake is proposed, is a relatively unaltered bank with a steepish edge, and a substrate with lush vegetation that can be burrowed into, a survey for water voles was recommended. Until such time it was satisfied that there would be no effects on otters and water voles, **SNH** reserved its position.
- 10. Following confirmation from the applicant about the status and character of the river bank in the locality (wall), **SNH removed its requirement for a water vole survey.** Following receipt of a report on otter activity in the area, and proposals to prevent otter from entering the new intake (installation of otter guard width grille), **SNH have removed their objection, provided the grille is installed and is subject to a planning condition.**
- 11. The CNPA Economic and Social Development Group have advised that the Draft National Park Plan covers renewable energy and specifically hydro. Strategic objectives in this respect include "Help achieve national targets for greater renewable production through community and domestic scale schemes" and "Help communities and households to obtain the information, expertise and support they need to reduce energy consumption and increase renewable generation." It is important that the Park does its best to help Scotland meet national

targets for renewable energy where appropriate. This means helping smaller community based schemes, take forward renewable energy projects which are relatively low impact. Hydro is a good renewable energy to promote as it is generally less aesthetically intrusive than wind power generation. This renovation of a former scheme lowers the impact even further. The scheme uses new innovative screw technology which is to be welcomed. From an economic point of view, the scheme potentially provides the landowners with a new income, a power source to reduce their on-going costs as well as providing power to the Grid. This is to be welcomed. **The E & SDG** also advise that they do not see any adverse effect on tourism. Indeed, it could be a potential tourist attraction.

12. The CNPA Natural Heritage Group state that the site is fairly typical of a riverside location with mature trees, though none would be compromised by the development. The main detractors in the vicinity are the weir and its associated man-made structures. In particular the existing intake arrangement, being a large concrete box and grille, is an incongruous element. The new intake is significantly smaller than the existing feature but it would add to the general clutter at this point. However, when considered with the existing features the additional impact is marginal. It would appear though to be common sense to reuse the existing inlet (assuming that it is still fit for purpose) so that no additional impact is created. Alternatively, if the new inlet is granted permission, there must be scope for removing the existing feature and restoring the bankside to something more natural. However, there is no overall landscape objection. In relation to ecology, the NHG advise that these have been dealt with in detail by SNH. safeguards put forward to prevent otters entering the intake seem like a sensible method of significantly reducing this risk. The construction method statement should ensure that the risk of sediment being released to the river would be minimised.

## **REPRESENTATIONS**

- 13. Three letters of concern have been received. The issues raised include:
  - There is an existing intake and lade which should be used.
  - The new intake will be visually intrusive.
  - If negotiations can be concluded between the Don Salmon Fishery Board and the applicants, the existing intake would suffice and there would be no need for the new intake.
  - Concern that the proposal may impact on flow levels and volumes of water at this location which in turn could have impacts on migratory fish

     the location is an important one for protecting and enhancing stocks of migratory fish and capturing brooding fish for the nearby hatchery operated by the Fishery Board.

- 14. In reply the applicant has provided a representation. To summarise:
  - The lease conditions set down for the potential re-use of the existing intake from the Fishery Board are too restrictive and would not provide security.
  - An engineers report advises that because of erosion and deterioration, the existing intake lade would require significant engineering and expensive works – and this would have only facilitated a "trial" period under the terms of the proposed lease.
  - All safeguards required by the Fishery Board will be covered by the conditions of the abstraction licence issued and monitored by SEPA.
- 15. Copies of the representations are attached.

### **APPRAISAL**

16. The primary issues for consideration relate to the principle and need for the development, and the impact of the proposal on the surrounding area and features of natural heritage interest.

## **Principle and Need**

- 17. The provision of small scale hydro power is welcomed. The reinstatement of hydro power generation at this location is supported in planning policy terms and raises no issues in terms of principle. It will provide a renewable method of local electricity supply at a location where there was a previous well-established use. The proposal which is the subject of this application is to form a new intake only. Other parts of the development such as the reinstatement of the turbine house use, the installation of the "Archimeadian Screw", and the relining of the connecting tunnel do not require planning permission and do not therefore form part of the application.
- 18. It is the case that there is an existing intake at the weir which provides an existing link into the system, and, in the first instance, it would seem logical and sensible to utilise this in the reinstatement proposals. Indeed this was the initial proposal by the applicants when they sought to work with the owners of the intake, the Don Salmon Fishery Board. However, from the evidence submitted in relation to the application, it seems that the engineering problems and the failure to reach a satisfactory lease agreement between the Fishery Board and the applicants, create a fundamental problem with re-using the existing intake. As such the applicants now propose a new intake.

19. In planning terms, provided the new intake does not create any additional problems in terms of impact on the surrounding area and on the natural heritage of the locality, it is not possible to justify a planning objection, on the sole basis that there already is an intake in place. Quite clearly, the reinstatement of the existing intake will involve on-going expenditure in terms of the proposed lease agreement, and at the outset in relation to the upgrading works. The applicants feel this would be better channelled to their new proposal. The existing intake is also not within the control of the applicant. Any requirement to "de-commission" the existing intake will need the agreement of the Don Fishery Board, and could only be achieved in planning terms through a Section 75 Legal Agreement. In my view this cannot be justified in this case.

# Impacts on Surrounding Area and Natural Heritage

- 20. The River Don does not carry any natural heritage designations. In the process of the consultations however, it was clear that the surroundings could be important habitats for European and other protected species. The creation of a new intake could have impacts on these species and their habitats.
- 21. SNH had an initial concern about the potential for adverse impacts on water vole habitat. However, it was confirmed that the new intake is to be formed in an existing concrete block wall which forms the riverbank at this location. The new intake would therefore not involve the disturbance or removal of any natural embankments which could provide water vole burrows or shelters. SNH now have no concern in this respect and there is no requirement for a water vole survey.
- 22. The impact on otters has been however a more important issue. The main concern being that otters could become trapped, injured or killed if they entered the system via the new intake. The applicants were required to carry out an otter survey and instigate mitigation measures as appropriate.
- 23. A survey was carried out and it was discovered that there was evidence of some otter activity in the general area. It has also been accepted that the River Don catchment is considered to be good otter habitat in general. The findings of the "otter expert" were that "otters undoubtedly visit the area but that the area did not have any specific characteristics that would make it any more important to otters than any other site." In addition, "the proposed lade site does not have the characteristics of one that would be used by otters to give birth. Indeed the area of the proposed new underground lade is currently well used by people with vehicle access to the existing weir, fish trap and ladder." The proposed excavation works would not take long and the conclusion is that it is highly unlikely that the operations would affect any otters. No mitigation measures are deemed necessary during construction works, and because no actual otter habitat is being affected by the

position of the new intake the only potential issue is the possibility of otters accidentally or intentionally entering the lade. The solution is to ensure that the spacing of the horizontal bars at the intake grille are narrow enough (85mm) to classify as an "otter guard". The applicants are agreeable to designing the grille to this specification.

- 24. SNH have reconsidered their position in light of this information, and are content to remove their objection, provided a planning condition is imposed to this effect.
- 25. In relation to impacts on fish, SNH have no planning objections. However, the Don Salmon Fishery Board has a concern about the potential impact on water flow levels of extracting water from the river, the ability of fish to proceed upstream, and the potential for fish to get trapped in the system. In this respect, the applicants are required to obtain an abstraction licence from SEPA before they can commence operations. This is currently being considered by SEPA but one of the considerations is the flow levels and how this may impact on migratory fish. It has been agreed with SEPA that minimum flow levels will be set as conditions of the licence and that the sluice gates at the new intake will automatically close when the minimum flow level in the river is reached. The spacing of the grille bars will also help minimise fish entry. While not part of the consideration of this planning application the "Archimeadian Screw" is specifically designed to allow the safe passage of fish that enter the system. With the safeguards and monitoring that SEPA require as part of the conditions of the abstraction licence, I can raise no planning objections to the new intake proposal on these grounds.
- 26. Finally, in terms of landscape impact, the suggestion by the CNPA Natural Heritage Group that the existing intake be removed, as mentioned in paragraph 19 above, is not possible. It is not in the control of the applicant. It could only be justified in planning terms if with the creation of the new intake, there was a significant combined and additional visual impact. In my view, the new intake, being located in an existing wall, will not have such a significant impact as to require the removal of the existing structure. While preferable, in planning terms it is not justifiable to resist the proposal on this alone.

### IMPLICATIONS FOR THE AIMS OF THE NATIONAL PARK

## Conserve and Enhance the Natural and Cultural Heritage of the Area

27. The addition of a new intake at this location will add a further manmade structure into a natural environment. However, it is not of a scale, design or location which will have significant adverse landscape impacts. Concerns about impacts on European and other protected species have been removed, and control of water flow and impacts on migratory fish is administered through the terms and conditions of the abstraction licence from SEPA. It can be argued that the reintroduction of a previous established hydro-power use at this location conserves and enhances the cultural heritage of the area.

### **Promote Sustainable Use of Natural Resources**

28. The new intake is just part of the proposals for the reinstatement of a small scale hydro scheme at this location which will provide power into the system from renewable sources. The proposal is seen as being positive in terms of this aim.

## Promote Understanding and Enjoyment of the Area

29. No formal proposals are in place for promoting the finished scheme as a tourist facility. However, in time the reintroduction of the hydro power station could provide an opportunity to introduce visitor interaction and the provision of interpretative information. No existing formal or informal recreational uses are affected.

## **Promote Sustainable Economic and Social Development of the Area**

30. The reintroduction of the hydro use has some economic benefits by providing electricity to the grid from sustainable sources.

#### RECOMMENDATION

31. That Members of the Committee support a recommendation to:

Grant Full Planning Permission for New Intake for Small Scale Hydro Power Generation Scheme at Semeil Farm, Strathdon, subject to the following conditions:

- 1. The development to which this permission relates must be begun within five years from the date of this permission.
- 2. The construction of the development hereby approved shall be carried out in accordance with the agreed Construction Method Statement dated May 2006, all to the satisfaction of the CNPA acting as Planning Authority, in consultation with SEPA.
- 3. Unless otherwise agreed in writing with the CNPA acting as Planning Authority, following consultation with Scottish Natural Heritage, the intake entrance hereby approved, shall be fitted with a grill screen with horizontal bars spaced at an otter guard width apart (minimum 85mm). Such a screen shall be retained in place at all times when the water intake is in operation.

Neil Stewart 25 January 2007

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