FISHERIES COMMITTEE

(appointed under the Electricity Act 1989)

ANNUAL REPORT

For the year to 31 March 2009

Membership of the Fisheries Committee – 31 March 2009

Mr James Cockburn (*Chairman*) Mr Gordon Jubb Mr Nick Mardall Mr John Webb

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Further details are provided at Appendix B.

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1. Introduction

- 1.1 This Report describes the work of the Fisheries Committee for the period from 1 April 2008 to 31 March 2009.
- 1.2 The Fisheries Committee is an advisory public body constituted under the Electricity Act 1989. Its statutory remit is to make recommendations to Scottish Ministers and any person engaging in, or proposing to engage in, the generation of hydro-electric power on any questions relating to the effect on fisheries or stocks of fish. The Committee may give advice or assistance on its own initiative or if requested by Scottish Ministers or by a generator or intending generator.
- 1.3 Scottish Ministers have notified the Committee that installations which generate electricity from tidal or wave energy fall within the meaning of the phrase "generating stations wholly or mainly driven by water" as used in the North of Scotland Hydro-Electric Development (Scotland) Act 1943 and its successors and, therefore, that wave and tidal schemes are also within the Committee's remit.
- 1.4 The Committee also advises on the effects on fish or fisheries of the cooling water systems of thermal generating stations.
- 1.5 The functions of the Committee, in terms of the Electricity Acts, are more fully described in Appendix A.
- 1.6 As a public body, the Committee has a statutory duty to further the conservation of biodiversity in accordance with the Nature Conservation (Scotland) Act 2004.
- 1.7 On 1 April 2006, the Water Environment (Controlled Activities) (Scotland) Regulations 2005 (otherwise known as CAR) came into effect with the Scottish Environment Protection Agency (SEPA) designated as the CAR regulator responsible for protecting Scotland's water environment from the impacts of controlled activities. Consequently, the Committee's advice and recommendations concerning the water environment are now given to SEPA and pursued as part of the CAR process across the full range of hydro schemes drawing on its considerable specialist expertise in respect of fish and fisheries. Any other advice or recommendations continue to be given and pursued by way of the Ministerial consent under the 1989 Act.
- 1.8 Also, in terms of the Water Environment and Water Services (Scotland) Act 2003, the Committee was designated as a Responsible Authority thereby requiring it to exercise its statutory functions in a way that secures compliance with the objectives of the Water Framework Directive. In doing so, the Committee acts to support SEPA in its lead role for river basin management planning.
- 1.9 In line with one of the outcomes of the Scottish Government's review of Public Bodies in January 2008, the Governance of the Committee transferred to SEPA in November 2008. In due course, subject to the passing of amending legislation (to the Electricity Act 1989) by the UK Parliament, the Committee will be abolished. This is expected to occur around the middle of 2010. Meanwhile, SEPA established an expert advisory panel on fish and fisheries to advise it across all its relevant functions. The Committee is represented thereon by John Webb.

- 1.10 The Committee continued to work with its partners (ASFB, FRS, SEPA and SNH) to develop a unified guidance document to provide advice as to the information required in support of a CAR application for a new hydro scheme.
- 1.11 In January 2009, the Committee was shocked by the sudden death of Dr Trevor Crisp, a widely respected expert on fish and fisheries, and a member of the Committee since 2003.
- 1.12 The Government's aim of increasing the amount of electricity produced from renewable resources is expressed in the Scottish Renewables Obligation 1994 and the Renewables Obligation (Scotland) 2001 (ROS). These measures have continued to encourage increased interest in hydro-electric generation and much of the Committee's work in 2008/9 has been in relation to proposals stimulated by them. While keen to continue to support the development of new hydro schemes, the Committee is strongly of the view that the proliferation of run-of-river schemes must not be at the cost of irreparably damaging Scotland's stocks of wild fish and fisheries.
- 1.13 Hydro-electric schemes with a generating capacity of more than 1 megawatt (MW) are exempt from the provisions of the Salmon (Fish Passes and Screens) (Scotland) Regulations 1994 but are subject to consent from Scottish Ministers under Section 36 of the Electricity Act 1989, as modified by the Electricity Act 1989 (Requirement of Consent for Hydro-electric Generating Stations) (Scotland) Order 1990. Schedule 9 of the Act provides that, before or on applying for such consent, the applicant must consult the Committee and that the Committee may make recommendations. With effect from 1 April 2006, these schemes also require a CAR authorisation. The various new schemes greater than 1 MW scrutinised during the year are listed in Chapter 2.
- 1.14 Hydro-electric schemes of 1 MW or less are subject to the Salmon (Fish Passes and Screens) (Scotland) Regulations 1994. Developers are not required to consult the Committee, but may do, and the Committee may give advice whether consulted or not with effect from 1 April 2006, these schemes also require a CAR authorisation. Chapter 3 refers to new small-scale hydro schemes.
- 1.15 The Committee continued to monitor the operation and maintenance of existing hydroelectric schemes, including site inspections, to ensure that arrangements for fish and fisheries are satisfactory. This aspect of its work is reported in Chapter 4.
- 1.16 Chapters 5 and 6 refer to wave, tidal and thermal generating stations respectively.
- 1.17 The Committee's liaison and contact with specified bodies is described in Chapter 7.
- 1.18 Chapter 8 refers to policy and strategic issues that were considered by the Committee in the course of the year. The Committee was concerned that, as recently approved hydro schemes are built and begin to come on-stream, the as-built structures do not always accord with best practice and what has been authorised by SEPA to ensure proper protection of fish and fisheries. The Committee is concerned, also, about the growth of interest in low-head run-of-river schemes usually found in the lower reaches of river catchments which, if not built and operated sensitively, have the potential to significantly damage stocks of fish and fisheries throughout much of the river system.
- 1.19 As matters of commercial confidence frequently arise during the Committee's meetings, they are not held in public. The Committee's Annual Reports are publicly available and are posted on the Scottish Government Website at:

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www.scotland.gov.uk/about/ERADFF/FFAME/00017604/Committee.aspx
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1.20 As a public body, the Committee is subject to the Freedom of Information legislation. Its Publication Scheme is available from its Secretary and is posted on the Scottish Government website.

2. New hydro electric schemes of more than 1 megawatt capacity.

2.1 In the course of the year, and in accordance with the terms of Schedule 9 of the Electricity Act 1989, the Committee was consulted by hydro developers applying to Scottish Ministers for Consent under Section 36 of the Electricity Act 1989 to construct new hydro-electric schemes. Following the implementation of the Controlled Activities Regulations in 2006, any Recommendations made by the Committee in respect of any scheme were incorporated into the CAR licence issued by SEPA unless, of course, SEPA was unable to authorise the CAR application for that scheme. The various new schemes greater than 1 MW scrutinised during the year are listed below.

Proposed Scheme	Type of Advice A = Application P = Preliminary O = Ongoing	Capacity (MW)	Location	Developer or Agent
Chaorach	0	2.5	Near Crianlarich, Stirlingshire	SSE
Douglas Water	0	2.2	Near Inveraray, Argyll	N Power
Garry Complex	0	1.1	Dalwhinnie	SSE
GlenFalloch (4 schemes)	A	To be confirmed	Near Crianlarich, Stirlingshire	Hydroplan
Glendoe	0	1.0	Near Fort Augustus, Inverness-shire	SSE
Invervar	0	1.2	Glen Lyon, Perthshire	Shaw
Inverlael	0	1.4	Near Ullapool, Sutherland	N Power
Keltneyburn	0	2.2	GlenLyon, Perthshire	Shawater
Kildermorie	Р	7.5	Alness	SSE
Loch Doon	0		Ayrshire	SP
Loch Eilde Mhor	A	5.0	Kinlocheven	Hydroplan
River Rannoch	A	1.5	Ardtonish	Hydroplan
Tongland Complex	0	33	Galloway	SP
Siadar Wavepower	A	4	Lewis	N Power
Longannet	0		Fife	SP

3. New hydro-electric schemes of 1 megawatt capacity or less

3.1 In the course of the year, as part of the Controlled Activities regulatory regime the Committee provided advice in respect of fish and fisheries to SEPA and/or developers regarding proposals to develop new hydro schemes at the following locations:

Proposed Scheme	Type of Advice A = Application P = Preliminary O = Ongoing	Capacity (MW)	Location	Developer or Agent
Allt da Ghob	A	0.6	Glen Lyon, Perthshire	Shaw
Ardvorlich	А	0.725	Lochearnhead	Hydroplan
Catrine	Р	To be confirmed	R Ayr, Ayrshire	Catrine Heritage Trust
Corryburn	A	0.095	Ullapool	
Duisky	A	0.995	Locheil	Hydroplan
Garvan	А	0.75	Locheil	Hydroplan
Garvault	A	0.750	Sutherland	Hydroplan
Glenforslan	A	0.5	Acharacle	
Glen Finnan	Р	0.95	Loch Sneil	Leiths of Scotland Ltd
Inverinian	0	0.85	Glen Lyon, Perthshire	Shaw
Inverliever	Р	0.575	Ford, Argyll	Wallingford
Keathbank Weir	Р	0.05	Blairgowrie	BARRC
Killean	Р	0.980	Mull of Kintyre	
Loch Tearnait	А	0.75	Ardtonish	Hydroplan
Millburn Micro Hydro	А	0.045	Lairg	Graham Mitchell
Roroeyre	A	0.150	Glen Lyon, Perthshire	Shaw
Roromore	A	0.810	Glen Lyon, Perthshire	Shaw
Russell Burn	A	0.48	Wester Ross	Dulas Hydro General
Semeil	A	0.075	Strathdon	
Tweediemill Micro	A	0.015	Strathhaven	
Urlar	0	0.985	Aberfeldy	Shaw
Wester Merkland	A	0.53	Sutherland	Hydroplan

4. Existing hydro schemes

Galloway Hydros Scheme

Tongland

4.1 The long-term decline in the run of adult salmon in the River Dee (Kirkcudbrightshire) remains of concern to the Committee as is the longstanding uncertainty about the effectiveness of the fish pass at the Tongland dam.

Throughout the year, the Committee continued to liaise with the main local stakeholders regarding the progress of the study to evaluate the effectiveness of the fish pass that was agreed in 2003. An adult salmon trap was subsequently placed in the main channel at Tongland dam to catch ascending salmon and grilse for tagging. The Committee looks forward to receiving a full report on the tagging and counter research project.

The Committee was pleased to receive a copy of the completed report detailing a future management strategy and prioritised action plan to conserve and improve the migratory salmonid fisheries of the Dee catchment. The plan had been produced via a continuing partnership working between Scottish Power, the Dee DSFB and the Galloway Fisheries Trust.

Representatives of the Committee visited Tongland in mid July where they took part in discussions with Scottish Power and other stakeholders about the possibility of changes to the operational regime of the Loch Doon compensation flow that might impact on flows in the River Doon and the River Dee.

Other parts of the Galloway Hydro Scheme

Loch Doon

4.2 Following a request from the Ayrshire Rivers Trust a member of the Committee attended a site meeting at Loch Doon in mid December to discuss the potential impacts of a change to the compensation flow and freshet regime at Loch Doon dam.

Douglas Water

4.3 The Committee had previously visited this scheme in December 2006 and, having identified aspects of its design and construction that were of concern in respect of the protection of fish and fisheries; it had provided advice on various measures to the developer and operator, RWE Npower. In late August, the Committee visited the scheme again to carry out an inspection and, subsequently, provided further advice on issues related to intake and outfall (screening) design.

Glen Lochay and Glen Lyon Schemes

4.4 Following a contact from the Tay DSFB in 2008 the Committee visited Scottish and Southern Energy's Glen Lochay and Glen Lyon schemes in late October and received an update on the improvements to the fish passes that Scottish and Southern Energy was undertaking in conjunction with the Tay District Fishery Board. The visit also provided a useful opportunity to discuss aspects of smolt and adult salmonid migration, and the impact of altered flows and thermal impacts of releases from impoundments. The Committee looks forward to receiving further reports on the ongoing work but envisages that further detailed investigations on the impacts of both schemes might be beneficial.

Sloy

4.5 Members of the Committee attend a site visit and meeting at Sloy power station in late January with representatives of SSE, SNH and Professor Peter Maitland (Fish Conservation Centre, Stirling). The purpose of the meeting was to discuss the outline proposals to develop the existing storage/generation site into a pump storage scheme, and the potential implications for fish and fisheries of Loch Lomond and Loch Sloy. The Committee await a report from Prof Maitland on the conservation status and vulnerability of the rare and endangered Powan (*Coregonus clupeoides clupeoides*) in Loch Sloy.

5. Wave and tidal generating stations

Siadar Wave Energy Scheme

5.1 The Committee previously gave some advice to RWE Npower regarding fish and fisheries considerations of a proposed wave energy scheme at Siadar, Isle of Lewis and, during this year, it provided recommendations to Scottish Ministers following a Section 36 application by the developer.

6. Thermal generating stations

Longannet

- 6.1 The Committee continued to liaise closely with and press Scottish Power to resolve the longstanding and serious problem of the entrainment and subsequent loss of a wide variety of marine and anadromous fish species in the cooling water intake of Longannet Power Station on the Forth estuary which is acknowledged to be an important nursery for sensitive North Sea fish stocks.
- 6.2 The Committee visited Longannet power station in late April and held a meeting with representatives of Scottish Power and their consultants to discuss the report on the findings of the recent trials of the prototype Fish Return System. The Committee provided feedback on the results of the trails and looks forward to receiving regular updates on future progress.

7. Relationships with other organisations

The Committee worked closely with and, latterly, was supported by the Scottish Environment Protection Agency to whom it provided advice and recommendations regarding CAR hydro applications, hydro development guidance and river basin management planning. From time to time, the Committee, usually in liaison with SEPA, met with or corresponded with directorates of the Scottish Government, Scottish Natural Heritage, the Association of Salmon Fishery Boards, a number of individual District Salmon Fisheries Boards and Fisheries Trusts and individual hydro operators and developers.

Scottish Government

Energy Consents Unit of the Business, Enterprise and Energy Directorate

7.1 The Committee liaised with the Energy Consents Unit regarding hydro schemes > 1MW that require Section 36 consent from Scottish Ministers albeit that its recommendations in respect of the water environment have been processed by way of the CAR licensing process for which SEPA is responsible. It has also provided advice for Environmental Assessment Scoping Opinions in respect of fish and fisheries issues.

Freshwater Fisheries and Aquaculture Division of the Marine Directorate

7.2 The Committee discussed with the Freshwater Fisheries and Aquaculture (FF&A) Division of the Marine Directorate the changes to its governance announced by the First Minister in January 2008 following the Scottish Government's review of Public Bodies. These were implemented in November 2008.

Scottish Environment Protection Agency

7.3 The Committee continued to work closely with SEPA regarding CAR applications for hydro developments and related matters in accordance with the MOU that was put in place towards the end of 2007/8. In November 2008, the governance of the Committee, including the provision of its secretariat, transferred to SEPA. The Committee was pleased to welcome Richard Fyfe and Alistair Duguid as SEPA, both of SEPA, to its meetings and visits.

The Committee continued to participate with SEPA, SNH, Marine Scotland and ASFB to develop a broader guidance document on the gathering and interpretation of data to support proposals to develop new hydro schemes.

Also during the year, in connection with the development of Scotland's first River Basin Plan, the Committee, being a Responsible Authority, continued its membership of the RBP National Advisory Group, the associated Area Advisory Groups and was represented on the steering groups of relevant research projects.

The Committee accepted an invitation to be represented on the Fish and Fisheries Advisory Group established by SEPA.

Scottish Natural Heritage

7.4 The Committee liaised with Scottish Natural Heritage on a number of proposed and existing schemes and on the development of guidance for developers.

District Salmon Fisheries Boards and Fisheries Trusts

7.5 During the year, the Committee, together with SEPA, corresponded with and held meetings with relevant District Salmon Fisheries Boards and Fisheries Trusts in relation to specific new and existing schemes in their areas and opportunities to develop sustainable fish stocks and fisheries arising from River Basin Planning considerations. The Committee and Boards became increasingly concerned about the growth of plans to install low-head Archimedes Screw hydro installations in the lower reaches of important salmon rivers.

Developers and Operators

7.6 The Committee, along with SEPA, met with individual developers and/or operators of new and existing hydro schemes, as required, to discuss specific concerns.

Forum for Renewable Energy Development in Scotland (FREDS)

7.7 The Committee continued its membership of FREDS.

The Committee continued to keep abreast of developments relating to hydro and fisheries and was represented at a number of scientific meetings and seminars during the year.

8. Policy and strategic issues

Information Provided by Developers in Support of Applications for New Schemes

8.1 The Committee remains concerned that the hydrological and fisheries information provided in support of applications for new schemes is not always adequate for its purpose. In the past, the Committee has produced detailed guidelines that fully explain the data and information it requires to thoroughly assess proposals and these have been widely circulated to all interested parties including developers. During this year, work was ongoing to incorporate the Committee's guidance into a broader guidance document on hydro development for developers wishing to submit applications to SEPA for CAR licences.

Regulation of Hydro Schemes

8.2 Following the implementation of the Controlled Activities Regulations (CAR) all new schemes require to have a CAR licence issued by SEPA. This change should allow both better scrutiny of proposed schemes at the CAR authorisation stage and more effective monitoring of impacts during the subsequent operational stage coupled with a mechanism for requiring unsatisfactory performance to be rectified if necessary. Any scheme, irrespective of size, if designed and/or operated without adequate protection for adult fish access, maintenance of holding, spawning and juvenile rearing habitats, safe passage of downstream migrants, and suitable flow regimes will have the potential to cause significant, long term damage to fish stocks and fisheries. Small schemes constructed in small streams and tributaries containing such habitats can be as significant as larger schemes on major watercourses.

The Committee has considerable concerns about the way the CAR regime is presently being implemented, for all sizes of hydro schemes. Currently the regime does not always ensure that new schemes are being constructed in accordance with approved designs and/or best practice. This is to the potential detriment of fish and fisheries. More needs to be done by way of inspecting hydro schemes under construction, certifying conformity with approved designs, and enforcing corrective measures.

Cumulative Impact of Hydro Schemes

8.3 The Committee has sought to highlight its concerns about the potential cumulative impact of hydro and continues to be strongly of the view, supported by other agencies and stakeholders, that there are long term risks to the fishery production potential of important areas. This is applicable to an increasing number of river systems via the potential cumulative reduction or degradation of increasing numbers of spawning and nursery areas of migratory fish and other species within single catchments. It is therefore important that the process of consenting and licensing of new schemes takes account of the presence of existing or other proposed schemes and the possible cumulative risk of such development bearing in mind the importance of the wider bio-diversity issues. There is a duty to observe the Habitats Directive and also have regard to the various designations that are in place.

The wild fish resources of Scotland and their associated fisheries are important economic, cultural and ecological elements of the country's heritage. The Committee continues to recommend, therefore, that the impact of hydro schemes on all fish species should be minimised as far as is reasonably possible by way of the carefully controlled siting, design, operation and monitoring of schemes; with a particular emphasis on protecting diversity and production via the protection of key habitats (including spawning,

juvenile production and migratory options) and ensuring safe passage up (where applicable) and downstream.

Monitoring Impacts of Hydro Schemes

8.4 The Committee is of the opinion that, in many cases, it is not possible to predict with certainty how both the structural and operational elements of hydro schemes might affect hydrology, fish and fisheries and other matters of potential concern and so it supports pre- and post-intervention characterisation and monitoring. This will enable the longer-term checking of the initial assessment of impacts and the effectiveness of any mitigation measures provided. The extent to which monitoring for data collection should be undertaken will be dependent on individual schemes and the perceived potential for putting the well-being of the environment and ecology at risk of unacceptable damage via degradation. The Committee is pleased that CAR licences for hydro schemes usually include a requirement for the provision of a fish monitoring plan that takes account of its formal guidance and requirements.

The Committee continues to be concerned about the scientific uncertainties associated with the present system of estimating low flows and the process of setting appropriate flow consent levels. In the case of new schemes and their CAR licenses, the Committee believes that in many cases protective, interim levels should be applied with the primary objective of conserving fish resources. Furthermore, in such cases the terms of the new licence should include explicit reference to the recognition of the potential deficiencies of the methods used and that subsequent review and alteration may be necessary. Following a process of suitable monitoring and evaluation, an effective procedure must be established whereby interim consent levels can be reviewed and revised (if necessary) in the light of new information.

New Technologies

Archimedes screw hydro systems

8.5 Until recently, most existing and new hydro schemes in Scotland have been based on well known technologies and their applications. New approaches to hydro power generation may pose different and sometimes novel risks to fish and fishery resources. The emergence of Archimedes screw hydro technology is a matter of increasing concern to the Committee because it is particularly suited to installation on existing low head weirs and dams often in the lower reaches of rivers. Furthermore it requires large volumes of water to generate economic returns and is currently being promoted in the UK as a 'fish friendly' technology. However, in the Committee's opinion, this technology poses a number of significant risks to both fish and fisheries - particularly because of its requirement for relatively large volumes of water. Accordingly, whilst many uncertainties exist the Committee is of the view that applications for all Archimedes systems warrant particularly close attention and should therefore not be routinely considered via the normal process of run-of-river scheme evaluation. It is worth noting that the 'fish friendly' designation is confusing as it refers only to physical contact with the generating machinery. The Committee has great concerns about the associated issues around the structure. These include new water course establishment or reopening of existing lades, significant diversionary influences at key migration times and means of effective control of abstraction.

Development, installation and operation of Marine Renewable Energy Installations: (MREI): Wave and Tidal power

Despite wave and tidal power being in it's infancy, applications for offshore MREI installations and the associated land based coastal infrastructure are expected in increase in future. MREI has the potential to produce significant impacts on marine and coastal ecosystems including but not limited to habitat loss, collision risk, noise and electromagnetic fields.

Research and Asset Information

8.6 The process of establishing suitable flow standards involves both policy and science. Further science is required to develop and implement methods that will provide a more secure foundation for decisions regarding consented flows that balance instream requirements and hydro uses. On this basis, the Committee wishes to see a continuing programme of review and improvement of data collection, flow modelling, decisionmaking frameworks, management objectives and monitoring programmes associated with hydro planning, development and operation.

The Committee continues to be concerned that little research effort is being focussed on establishing the necessary flow regimes to sustain fish and fisheries in a Scottish context. To date, in-stream flow (and loch level) requirements associated with hydroelectric schemes focus largely on a simplistic process of establishing compensation flows or flows to be maintained in watercourses during dry weather. Consequently, it is felt that insufficient attention is currently being given to establishing the full life history needs of fish (together with the requirements of associated fisheries) in different river and loch types. The Committee is keen to encourage the use of the River Basin Planning mechanism to provide funding for research into these important issues.

Also, the Committee recommends that resources should be made available to undertake robust studies to assess the impact of existing schemes on fish and fisheries so as to better inform the identification of improvement priorities and measures. In the first instance, the Committee would like to see funding of scientific work focused on a robust interpretation of all the existing data. In addition, the Committee recommends that robust strategic studies be undertaken to identify the cumulative impacts of all of the features of each of the existing larger hydro impoundment schemes on Scottish rivers and lochs including compensation flows, water transfers and the efficiency of fish migration and protection measures (this would be in the nature of an asset performance audit). The Committee will continue to encourage the various public bodies with an interest to take this work forward in partnership with the owners and operators of the schemes.

9. Acknowledgements

- 9.1 The Committee wishes to acknowledge the co-operation and support it has received from the Scottish Environment Protection Agency, existing hydro scheme and other power station operators and the developers of new hydro schemes together with their agents as well as the Marine Scotland and the Business, Enterprise and Energy directorates of the Scottish Government. The Committee welcomes the constructive liaison it continues to enjoy with Scottish Natural Heritage, the Association of Salmon Fishery Boards, individual Boards and Fisheries Trusts.
- 9.2 The Committee wishes to express its considerable appreciation of the significant contribution of Dr Trevor Crisp to its activities during his period of membership from 2003 to his untimely death at the end of 2008. Trevor, who was widely respected for his expertise and lifetime of research work on fish and fisheries throughout the UK, contributed greatly to the development of the Committee's strategy for supporting hydro development while affording proper protection to fish and fisheries together with its guidance to developers on the proper investigation and assessment of impacts on fish and fisheries. His participation in the Committee's deliberations and his practical advice are sorely missed.
- 9.3 The Committee wishes to thank Richard Fyfe and Alistair Duguid, both of SEPA, for their helpful contributions to its work during the year.
- 9.4 Last but by no means least, the Committee wishes to pay tribute to the good work of its Secretaries Mr Andrew Dailly (until November 2008) and Karen Shepherd (from November 2008).

APPENDICES

APPENDIX A – Functions of the Committee

The Fisheries Committee was constituted in 1943 to consider hydro schemes proposed by the North of Scotland Hydro-Electric Board and to advise on the effects on fish and fisheries and on ways of preventing or minimising damage. At the same time, schemes approved by the Secretary of State and constructed by the Board were exempted from the statutory Fish Passes and Screens Regulations. The provisions were consolidated in the Electricity (Scotland) Act 1979 and, in 1986, were extended to cover other persons intending to establish or extend a hydro-electric scheme. The functions of the Committee are continued under the Electricity Act 1989.

Statutory functions

The statutory functions of the Committee are set out in Schedule 9 to the 1989 Act and may be summarised as follows:

- to advise and assist Scottish Ministers and any person engaging in, or proposing to engage in, the generation of hydro-electric power (including wave and tidal power) on any questions relating to the effect of hydro-electric works on fisheries or stocks of fish; the Committee may give such advice whether asked or not;
- the Schedule provides that any person engaged in, or proposing to engage in, the generation of hydro-electric power has to give the Committee such information and assistance as it reasonably requires;
- Section 36 of the Act (as modified by SI 1990/392) provides that any person wishing to construct or operate a hydro station with a capacity of more than one megawatt has to apply to Scottish Ministers for consent; Schedule 9 provides that:
 - before or on making such an application the applicant must consult the Committee;
 - the Committee may make recommendations to the applicant or to any other person; and
 - Scottish Ministers may refuse consent under section 36 if an applicant does not undertake to implement a recommendation made by the Committee.

N.B. This informal summary of the statutory functions is not a substitute for direct reference to the Act.

Other functions

In addition to its statutory functions, the Committee has been asked by Ministers to advise as necessary on the effects of the water systems of thermal generating stations on fisheries and stocks of fish.

APPENDIX B – Membership of the Committee at 31 March 2009

Members of the Fisheries Committee are appointed under the terms of the Electricity Act 1989 and in accordance with the Code of Practice issued by the Office of the Commissioner for Public Appointments in Scotland. A copy of a Code of Practice for members of the Fisheries Committee is at Appendix C. Appointments are part-time and attract a level of remuneration of £137 (members) or £188 (chairman) per meeting. None of the members of the Committee have been politically active in the last five years.

Chairman: James M T Cockburn BSc, CENG, FICE, FCIWEM

(appointed 1 March 2003 – 2nd Term)

Chartered Civil Engineer. Fellow of the Institution of Civil Engineers and of the Chartered Institution of Water and Environmental Management. Nearly thirty years experience in water and environment industry, including consultancy and senior management positions. Trustee of Caledonia Community Leisure Ltd.

John H Webb BSc, MSc, MIFM

(appointed 27 February 2004 – 2ndTerm)

Senior field and research biologist and fisheries management advisor sponsored by Atlantic Salmon Trust (AST), based at the Fisheries Research Services Marine Laboratory (FRS ML), Aberdeen; extensive experience of research and management of salmon and trout resources in UK rivers; currently Tripartite Working Group Conservation and Restoration Coordinator; a member of AST's Honorary Scientific Advisory Panel; member of the Institute of Fisheries Management.

Nick Mardall BSc, MSc, MIFM, MIEEM

(appointed 1 February 2005 – 1st Term)

As Team Leader with SAC, Nick is an environmental consultant with fisheries and aquaculture management and research experience in Asia, Africa, Europe and Scotland. His work covers environmental conservation around renewable energy projects and includes river and loch enhancement, salmon and sea trout rehabilitation work. He is a full member of the Institute of Fisheries Management, the Institute of Ecology and Environmental Management and associate member of the Institute of Environmental Management and Assessment.

J Gordon Jubb FRICS

(appointed 1 April 2006 - 1st Term)

Chartered Surveyor (Rural Faculty) with over forty years experience in rural land management latterly as Regional Manager for Scottish Rural Business & Property Association/Scottish Land Owner's Federation after many years as Estates & Wayleaves Manager for Hydro Electric.

Secretary:

To November 2008 - Andrew Dailly, Scottish Government – Marine Directorate From November 2008 – Karen Shepherd, Scottish Environment Protection Agency

APPENDIX C – Code of Practice for members of the Committee

The Committee is appointed by Scottish Ministers under provisions in the Electricity Acts. Its statutory function is to advise Scottish Ministers and any person engaging in the generation of hydro-electric power on any question relating to the effect of hydro-electric works on fisheries or stocks of fish.

Public Service Values

Members of the Committee:

- are accountable to Scottish Ministers for the Committee's activities and for the standard of advice it provides;
- must observe the highest standards of impartiality, integrity and objectivity in relation to the advice they provide and the manner in which the Committee conducts its activities; and
- shall, in accordance with Government policy on openness, provide and make available an Annual Report on the Committee's activities.

Standards in Public Life

Each member of the Committee must:

- follow the seven principles of public life set out by the Committee on Standards in Public Life (annexed), insofar as they apply to the activities of the Committee;
- comply with this Code, and ensure that he or she is familiar with the function and role of the Committee and understands the duties, rights and responsibilities related to it;
- not misuse information gained in the course of work in the Committee for personal gain or for political purpose, nor seek to use the opportunity of public service to promote their private interests or those of connected persons, firms, businesses or other organisations; and
- not hold any paid or high-profile unpaid posts in a political party, and not engage in specific political activities on matters directly affecting the work of the Committee.

Role of Committee Members

Members of the Committee have collective responsibility for its operation. They must, so far as is practicable:

- engage fully in collective consideration of the issues, taking account of the full range of relevant factors, including any guidance issued to them by Scottish Ministers;
- ensure that the Code of Practice on Access to Government Information is adhered to and agree an Annual Report;
- respond appropriately to complaints, if necessary, with reference to the Scottish Government; and
- ensure that the Committee does not exceed its powers or functions.

The Role of the Chairman

The Chairman has particular responsibility for providing effective leadership on the issues described above. In addition, the Chairman is responsible for:

- ensuring that the Committee meets at appropriate intervals, and that the minutes of meetings, and any reports to Scottish Ministers and others, accurately record the decisions taken and, where appropriate, the views of individual members;
- ensuring that new Committee members have been briefed on the functions of the Committee and their duties and rights and responsibilities; and
- representing the views of the Committee to the public, if appropriate.

Conflicts of Interests

Members of the Committee should not participate in the discussion or determination of matters in which they have an interest, and should normally withdraw from the meeting if:

- their interest is direct and pecuniary; or
- their interest is covered in specific guidance issued by the Committee or Scottish Ministers which requires them not to participate or to withdraw from the meeting.

THE SEVEN PRINCIPLES OF PUBLIC LIFE

(as set out by the Committee on Standards in Public Life)

Selflessness

Holders of public office should take decisions solely in terms of the public interest. They should not do so in order to gain financial or other material benefits for themselves, their family, or their friends.

Integrity

Holders of public office should not place themselves under any financial or other obligation to outside individuals or organisations that might influence them in the performance of their official duties.

Objectivity

In carrying out public business, including making public appointments, awarding contracts, or recommending individuals for rewards and benefits, holders of public office should make choices on merit.

Accountability

Holders of public office are accountable for their decisions and actions to the public and must submit themselves to whatever scrutiny is appropriate to their office.

Openness

Holders of public office should be as open as possible about all the decisions and actions that they take. They should give reasons for their decisions and restrict information only when the wider public interest clearly demands.

Honesty

Holders of public office have a duty to declare any private interests relating to their public duties and to take steps to resolve any conflicts arising in a way that protects the public interests.

Leadership

Holders of public office should promote and support these principles by leadership and example.