



aotearoa wave and tidal energy association

# Marine Energy Resource Consenting Workshop

Wellington, 4 December 2008

## ABSTRACTS and BIOGRAPHIES



AWATEA Executive gratefully acknowledges financial support from the **Energy Efficiency and Conservation Authority** for this workshop and for AWATEA's activities in promoting and accelerating the uptake of marine energy in New Zealand.

AWATEA would also like to acknowledge support from **Local Government New Zealand** in organizing and publicizing this workshop.



# **Marine Energy Resource Consent Applications:** **the Practical Experience**

## **Coastal Consenting Processes – the GWRC Experience**

**Sonia Baker**, Team Leader, Consents and Compliance, Greater Wellington Regional Council

### **Abstract**

My talk will be on GWRC consenting processes, with a focus on Neptune Energy's recent consent to place, use and maintain a prototype generation turbine in Cook Strait. This is a high-energy environment and the main aim of the proposal is to gather information on the pelagic and benthic environment to better assess the environmental impacts of a large-scale future proposal.

I will use this case study by working through the steps Greater Wellington's Council Officers took to finally determine the notification decision and ultimately the reason they recommended non-notification.

### **Biography**

I have been a Team Leader in the Environmental Regulation Department of GWRC for 5 years supervising our consents and compliance Resource Advisors.

I studied at Waikato University gaining both a Bachelor degree and Post Graduate Diploma in Earth Sciences. Prior to working for GWRC, I was employed by Porirua City Council as their Monitoring and Enforcement Officer.

# **Practical Pitfalls in Consenting Tidal Generation**

**Anthony Hopkins**, Crest Energy Kaipara Limited

## **Abstract**

After a degree in Environmental Biology, Anthony worked for computer services companies, then moved to a financial services environment and spent 16 years in a mix of roles with Reuters PLC internationally. He left in 2003 as a Commercial Director of the group, and founded a business consultancy firm and became a director of Crest Energy in November 2006.

## **Biography**

Crest Energy Limited is a marine energy developer and applied in July 2006 for RMA consents to install 200 marine turbines for electricity generation in the Kaipara Harbour in Northland NZ. The consents are currently under appeal and are scheduled for the Environment Court in June 2009.

# **Energy Pacifica's Experiences: Challenges Astern, Abeam and Ahead**

**Anthony Bellvé:** Executive Director, Energy Pacifica Limited

## **Abstract**

Energy Pacifica is focused on developing and installing marine current turbines for harnessing energy from tidal currents passing through the northern section of the Tory Channel, Marlborough Sounds, New Zealand. The Tory Channel experiences high-velocity currents driven by turbulent tidal currents coursing through the narrows of Cook Strait. The latter currents are forced through the strait by alternating high and low tides occurring in 140°-phase shifts on NZ's west and east coasts.

The Tory Channel has currents of <3.6 m/s, few sand banks, a 'relatively smooth' bathymetry of hard basement rock, depths of 30- to 55-metres and usable widths of 300 to 650 metres. Motu Arapawa, which supports an isolated island community, forms the northern and western coasts, while a narrow South Island peninsula forms the eastern coast. The channel has a capacity for <25 1.5-MW, purpose-designed, marine current turbines. The turbines, when mounted on or near the seafloor, will incur only minimal audible, visual and environmental effects. Nevertheless, Tory Channel presents unusual challenges for obtaining resource consents; since it comprises an M1 oceanic highway for ferry transits. Development of the proposed turbine arrays would require precautionary measures to ensure continual bi-directional ferry sailings.

It is suggested processing of resource consent applications might benefit on implementing an alternate system that would ensure separation of semi-judicial powers, and enable rapid and more efficient review of local, regional and national applications. Regardless, the Tory Channel project will require judicious processing of the resource consent applications.

## **Biography**

Anthony R Bellvé MAgSc, PhD is Chairman, Energy Pacifica, with offices in Auckland and Wellington, New Zealand. The company specialises in projects focused on harnessing renewable energy from sustainable tidal marine currents.

Anthony, a graduate of Massey University, served as a professor in the USA for 33 years, first at Harvard University, Boston/Cambridge, Massachusetts, and then Columbia University, New York. Presently, Anthony is affiliated with the University of Auckland, as an Honorary Research Fellow in the Department of Physics.

Anthony, on returning to NZ, participated in marine navigation with the NZ Coast Guard and the Royal NZ Yacht Squadron, and published "Chance to Turn the Tide of Power Supply", in the NZ Herald (2005). Presently, he participates proactively in ecological and political activities as Chair and Member of several societies and organisations, including the Council, Auckland Museum Institute and the Aotearoa Wave and Tidal Energy Association (AWATEA). In this context, Energy Pacifica is exploring and developing novel approaches for harnessing renewable resources for generating energy.

## **DoC's Involvement in Marine Energy Consenting**

**Denise Young:** Policy Group, Department of Conservation

### **Abstract**

Under the Resource Management Act 1991 the Minister of Conservation has responsibilities for the sustainable management of the natural and physical resources of New Zealand's coastal marine area. He approves regional coastal plans and restricted coastal activities, and also has call-in powers in the coastal marine area.

The Department of Conservation provides support to the Minister in these RMA roles and also administers Marine reserves, under the Marine Reserves Act 1971 and reserves where over the foreshore under the Reserves Act 1977. Under the Wildlife Act 1953, Conservation Act 1987 and Marine Mammals Protection Act 1978 the Department has general duties to manage, protect and preserve indigenous species.

The key focus of today's presentation is for generators to understand these roles and to talk to DOC early about the types of permissions you may need, and also the likely impacts on marine species.

### **Biography**

I am a senior coastal planner for the Policy Group, Department of Conservation, Head Office, Wellington. I provide strategic national advice on coastal issues and feed into the head office national co-coordinating group on RMA major projects. I have been involved in coastal issues for around 8 years, including assisting in the independent review to the New Zealand Coastal Policy Statement, undertaken by Dr. Jo Rosier.

## **Using RMA Policies and Plans to Support the NZES**

**Blair Dickie**, Programme Manager: Policy and Strategy Group, Environment Waikato

### **Abstract**

Recent central government strategies and policy statements combined with the 2003, 2004 and 2005 amendments to the Resource Management Act have given local government the direction, the functions and the tools to further the development of marine energy resources.

The national policy environment is considered and the pivotal role of the second generation Regional Policy Statements explained. A recent worked example using the review of geothermal management is covered and similarities with marine energy resources highlighted.

The opportunities for the development of marine energy in the Coastal Marine Area of the Waikato region's west coast and associated integration of terrestrial infrastructure are identified.

### **Biography**

Blair has worked in local government for 25 years starting with the Northland Harbour Board. He has a Master's degree in marine science and public policy and for the last 21 years has worked in Northland and the Waikato Region in a number of roles.

After managing the completion of the Waikato RPS in the late 1990s, Blair's work has included Community Catchment Planning (Raglan and Lake Taupo) the Hauraki Gulf Forum, RMA policy evaluation and implementation, Manager of Environment Waikato's Biodiversity Project Team and Convenor of the Waikato Biodiversity Forum.

Recent highlights include managing the review of Environment Waikato's geothermal policy – recognised this year by the World Energy Globe Awards and the facilitation of the Waikato Regional Energy Forum, which has developed a Draft Regional Energy Strategy to locally implement the national energy strategy and NZ EECS. Blair currently manages the review of the RPS and advises Council on energy and climate change policy.

# **Marine Energy Resource Consenting:**

## **Legal and Planning Perspectives**

### **Legal Framework for Consenting Marine Energy Projects**

**Paul Beverley**, Partner, Buddle Findlay

#### **Abstract**

There is a range of legislation that is relevant to the consenting of a project in the coastal marine area such as a marine energy project. The purpose of this session is to provide an overview of the legal framework for the use and development of the coastal marine area. This will include a discussion of the relevant policy and planning documents, and the implications of legislation such as the RMA, Marine Mammals Protection Act and Foreshore and Seabed Act.

#### **Biography**

Paul is a partner at Buddle Findlay lawyers in Wellington. Paul leads the natural resources and Maori law teams and has a particular specialty in coastal law. In his former role as a lawyer in DOC he has advised the Minister and Director-General of Conservation on a range of coastal issues. His recent work includes appearing for two energy companies in front of the Board of Inquiry on the New Zealand Coastal Policy Statement; advising the Crown on the foreshore and seabed agreements on the east coast of the North Island; acting as lead counsel on a wind farm project for a major energy company; and advising on a range of coastal issues including restricted coastal activities, regional coastal plans, aquaculture, reclamations and marine mammal issues.

## **Resource Consents – Pitfalls and Opportunities**

**James Winchester**, Partner, Simpson Grierson

### **Abstract**

James' presentation on "Resource Consents - Pitfalls and Opportunities" will focus on case law and policy developments of relevance to marine energy, including priority of applications for the same resource, risks associated with monitoring and review conditions, and the impact of increased policy direction from central Government. James will also briefly discuss the potential implications for marine energy of the proposed reforms of the RMA.

### **Biography**

James Winchester is a Partner in the Resources & Infrastructure Department in Simpson Grierson's Wellington office. His primary area of practice is in resource management and environmental law with a particular focus on energy, utilities and infrastructure projects.

Other areas of practice include environmental due diligence, judicial review, financial contributions, subdivision, roading, historic places, environmental enforcement and prosecutions, public works and the Building Act. James also provides environmental compliance and liability advice for corporate clients. He was counsel for Transpower for its North Island Grid Upgrade Project in Board of Inquiry hearings, has acted for EECA in various wind farm appeals, and has obtained consents and designations for a number of major roading, water and wastewater, and public works projects. James also advises a number of oil and gas exploration companies on environmental matters.

# **Supporting the Flow: Marine Energy Planning in NZ**

**Deborah Robertson**, BECA, Hamilton

## **Abstract**

One of the key factors to facilitating the further research and development of marine energy generation in New Zealand (NZ) is a planning framework that appropriately provides for future development, whilst balancing environment, cultural, social and economic needs. This paper presents the research findings of Cushla Loomb's Resource Management Law Association Fellowship 2007, which investigated marine energy planning in the United Kingdom (UK) and NZ. The UK is currently the most active investor in marine energy and NZ has an opportunity to learn from their experiences and challenges in planning for marine energy developments. Key planning considerations for marine energy development in NZ are the efficiency of the use of the marine energy resource, competition for space in the coastal marine area, and dealing with the unknown effects of devices. From the research it is recommended that the Government takes a more proactive approach to marine energy planning, by undertaking Strategic Environmental Assessments (SEAs) of high potential sites. Information gained from the SEAs could then form the basis of planning policy at the regional and district level. Marine spatial planning, i.e. the establishment of Marine Energy Generation Areas (MEGAs), is recommended to be used as a planning tool in regional planning documents.

## **Biography: Deborah Robertson**

Deborah is a planner based in Beca's Hamilton office. She is passionate about environmental planning, particularly coastal issues. Deborah is a member of AWATEA and the NZ Coastal Society, and is the young planners' representative on the Waikato NZPI committee.

Deborah is presenting Cushla's research findings as Cushla is presently on maternity leave

## **Biography: Cushla Loomb**

Cushla is an associate planner in Beca's Hamilton office. Cushla has a Master's of Science and eight years coastal planning experience working in both the private and public sector. Cushla is on the NZ Coastal Society National Committee, is an associate member of the NZPI and a member of AWATEA and the RMLA. Cushla was awarded the prestigious RMLA Fellowship 2007 to study marine energy planning in the UK and NZ.

## **PANEL DISCUSSION**

Following the scheduled presentations, we will hold a panel discussion to give the audience chance to question and discuss issues raised by resource consent applications for marine energy.

The panel has been chosen to represent a wide range of interests in marine space and environment, in which marine energy projects will be located.

Questions will be canvassed from the audience during the course of the day to begin the discussion and then questions will be taken from the floor.

The panel members will include:

**Niki Gibbs** Policy Manager, Seafood Industry Council

**Kirsty Knowles** Conservation Advocate, Royal Forest and Bird Protection Society

**Trevor Willis** Marine Ecologist, NIWA, Nelson

One or two of the presenters during the day, representing project developers and planners, will be asked to sit on the panel and take questions from the audience.