

ENTERPRISE AND BUSINESS COMMITTEE  
NATIONAL ASSEMBLY FOR WALES

INQUIRY INTO THE POTENTIAL OF THE MARITIME ECONOMY IN WALES

SUBMISSION RE PROPOSED TIDAL LAGOON, SWANSEA BAY, BY:  
PONTARDAWE AND SWANSEA ANGLING SOCIETY LTD  
AFAN VALLEY ANGLING CLUB

Background

1. We are clubs providing angling facilities for our members on the Rivers Tawe and Afan. Along with other clubs on the Tawe, Neath and Afan we have hundreds of members who are against the proposal to build a tidal lagoon in Swansea Bay because of its likely detrimental effects on the salmon and sea trout belonging to our rivers, in which we have substantial investments.
2. The developer, Tidal Lagoon Power (TLP)<sup>1</sup>, needs numerous approvals for the proposed lagoon before it can be constructed and they are far from being resolved:
  - a. Development Consent from the Secretary of State for Energy and Climate Change (DECC); although this was granted in June 2015, the Development Consent Order (DCO) is subject to several very significant pre-construction Requirements;
  - b. Marine Licence from the Marine Licensing Team (MLT) of Natural Resources Wales (NRW) – a function exercised on behalf of the Welsh Govt – for dredging and construction activities;
  - c. A further Marine Licence (not yet applied for) for late changes to the shipping channel into Swansea;
  - d. Derogation from the EU Water Framework Directive (WFD), because the project will compromise achievement of WFD objectives;
  - e. Contract for Difference (CfD) and agreed Strike Price from DECC – effectively a generating subsidy which is funded by consumers via a levy on their bills;
  - f. Discharge of pre-construction DCO Requirements by Local Planning Authorities (LPAs) and Natural Resources Wales (NRW) relating inter alia to:
    - i. arrangements for mitigating, offsetting, monitoring and generally addressing environmental impacts on an adaptive basis;
    - ii. flood risk mitigation;
    - iii. strategies for fish mitigation, avian enhancement, habitats creation, beach mitigation management, marine mammal mitigation, WFD monitoring and management, etc;
    - iv. an employment and skills plan;
3. Our concerns and details of our participation in the development consent process can be seen at [www.pasas.org.uk](http://www.pasas.org.uk).
4. We are currently pursuing objections to the proposed Marine Licence.

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<sup>1</sup> Tidal Lagoon Power Ltd (TLP) is the parent of Tidal Lagoon (Swansea Bay) plc (TLSB), the company which would actually construct and operate a Swansea lagoon. The personnel who gave evidence in Swansea spoke in their capacity as directors of TLP so we use TLP for convenience throughout this document.

5. We have supported the submission by Citizens Advice in respect of the proposed CfD and Strike Price, to be found at [www.citizensadvice.org.uk/Global/Migrated\\_Documents/corporate/swansea-bay-tidal-lagoon-call-for-evidence-response.pdf](http://www.citizensadvice.org.uk/Global/Migrated_Documents/corporate/swansea-bay-tidal-lagoon-call-for-evidence-response.pdf).
6. We are making representations to the LPAs and NRW in respect of the DCO pre-construction Requirements.
7. Because there appear to be so many misconceptions amongst the public, commentators and politicians, we are now also taking the opportunity to address the most important of those, where our limited resources allow. Hence this submission, following our attendance as observers at the meeting of the Enterprise and Business Committee in Swansea on 15<sup>th</sup> October.

### Issues

8. The main issues with the proposed Swansea lagoon relate to:
  - a. energy and the claimed contribution to UK renewable energy needs;
  - b. environmental impact assessment and mitigation / monitoring schemes;
  - c. claimed economic benefits
9. Energy and the claimed contribution to UK renewable energy needs:
  - a. The application for development consent described it as a 240MW project but it would actually only produce 46MW on average (400GWh per annum).
  - b. That's about 0.05% of UK electricity consumption, which would not even meet the domestic consumption of Swansea, Neath and Port Talbot, let alone commercial and industrial consumption in those areas.
  - c. It would not provide stable baseload as claimed because, although tides are utterly predictable, it would only be able to generate for 14 hrs per day and this generation would vary:
    - i. in time from day to day; and
    - ii. in quantity from week to week (approx 4 times as much on spring tides as on neap tides).
  - d. TLP is apparently seeking a CfD and Strike Price of £168 per MWh for 35 years. That's about four times the current market price of wholesale electricity. With market prices at current levels, that would involve an annual subsidy of more than £50 million, more than enough over 35 years to cover construction costs of £1 billion.
  - e. Citizens Advice, who have a particular interest in consumers' bills, have described that as "appalling value for money", calling the project a "boondoggle" and saying:

"Citizens Advice believes the proposal offers poor value for money for the consumer, with billpayers being asked to sustain very high guaranteed prices for an excessive length of time.

The process to decide whether to subsidise construction is opaque and prevents rigorous scrutiny of the project.

Even after publication of a completed contract, it may be impossible to assess the true burden on consumers because of irrational commercial confidentiality provisions. Given the huge cost and lack of countervailing benefits of the project, the department should reject the application."
  - f. The cost of energy is already a problem for domestic and industrial consumers, having been cited recently as a reason for the closure of Redcar and for the shedding of 1,200 jobs by Tata Steel.
  - g. Several further, much larger lagoons would be needed to make a significant contribution to UK energy needs. A Swansea lagoon will never make energy sense and that presumably explains TLP's inability to date to secure a CfD with DECC. The Committee might wish to seek a progress report from DECC...

- h. TLP has been reported recently as saying that DECC are taking Cardiff and Newport lagoons into account in their assessment of Swansea value for money considerations. If that's correct, we object strongly:
    - i. TLP hasn't even applied for consents for those projects yet and can't count on getting them, because even more stringent environmental standards apply:
      - (a) to protect migratory fish and other features of the Severn Estuary and the rivers Usk and Wye, which are SACs (Special Areas of Conservation) designated under the EU Habitats Directive and Eel Directive;
      - (b) the Severn Estuary also requires protection of fish and other features under the Ramsar convention
    - ii. NRW MLT have declined to insist on the cumulative environmental impacts of Swansea, Cardiff and Newport being assessed;
    - iii. Citizens Advice have said:

"There can be no assurance that expansion beyond Swansea Bay is even possible; investment approval cannot be predicated on the belief that another two lagoons can be brought forward, only reaching a remotely competitive price point with the third lagoon. The case that Swansea Bay is justified because it will enable further future larger tidal lagoons to be built, which will make a material contribution to UK decarbonisation, should be heavily discounted".
10. Environmental impact assessment and mitigation / monitoring schemes:
- a. Our particular interest is in salmon and sea trout, migratory fish which have to navigate through Swansea Bay when:
    - i. returning as adults to the rivers of their birth to spawn;
    - ii. migrating out to sea as juveniles (smolts);
    - iii. returning to sea as adults which have spawned (kelts).
  - b. Other environmental issues include coastal processes (distribution of sand, etc), flood risk, risk to marine fish, mammals, birds, etc.
  - c. Without going into detail, TLP generally claims high levels of confidence that impacts would be negligible and manageable. As far as fish are concerned, we and our advisers do not accept either the levels of confidence or the level of the predicted impact.
  - d. NRW also don't accept TLP's evidence in a number of areas. NRW submissions to the Planning Inspectorate for the purposes of Development Consent can be seen on the Planning Inspectorate (PINS) website at <http://infrastructure.planningportal.gov.uk/projects/wales/tidal-lagoon-swansea-bay> where their concerns about coastal processes and fish in particular are expressed strongly.
  - e. The PINS Examining Authority were, in our view, unduly inclined to accept TLP's assurances but TLP is clearly having greater difficulty with the NRW MLT, from whom a Marine Licence is so far not forthcoming, long after the date when TLP expected it.
  - f. The Committee might wish to seek a progress report from the NRW MLT...
11. Claimed economic benefits:
- a. The main local benefits claimed by TLP are:
    - i. local job creation (1,850 during construction, 80 during operation);
    - ii. the boosting of local industry as a result of the "ambition" to spend 50% of procurement costs in Wales;
    - iii. local development of and export throughout the world of expertise in a major new industry;
    - iv. tourism and recreational facilities.
  - b. The Committee was clearly excited about this but asked some perceptive questions about the ability of TLP to realise ambitions.

- c. TLP indicated that the claimed benefits for Wales are looking increasingly unlikely because Wales has “lost” its heavy industry capability in the areas of casting, forging, machining, switchgear manufacture, etc.
- d. Similarly TLP mentioned significant skills gaps in Wales, which suggests that most of the 1,850 construction jobs would go outside Wales.
- e. The Secretary of State for DECC appears to have recognised this, saying in her decision letter:

“As part of her WFD assessment, the Secretary of State’s economists undertook an economic assessment of the project, using publicly available information to assess the economic case for it. Their advice was that the local economic benefits should be secured to make the case and for this reason a Requirement has been included in the Order to require the applicant to produce an ‘employment and skills plan’ setting out opportunities for local employment and procurement of goods and services (Requirement 41). The economic assessment also identified that the Applicant’s modelling to demonstrate the economic case for this test is sensitive to the level of subsidy provided to this project. If set too high, this additional societal costs could offset the economic benefits. (A detailed analysis of the economic costs and benefits and due diligence is being undertaken separately as part of the negotiations on a possible Contract for Difference for the proposed Development and will need to be completed to the Secretary of State’s satisfaction to inform any future decision on committing public funds to tidal lagoon technologies.)”
- f. TLP appeared to suggest during the hearing in Swansea that this “employment and skills plan” setting out opportunities for local employment and procurement of goods and services, wouldn’t be ready before Christmas. As it was apparently their intention until very recently to start construction in early 2016, we find it surprising that they haven’t already compiled such information. Their reticence suggests to us that they will be unable to secure the claimed local benefits and that most of the jobs and procurement will arise outside Wales, if not outside the UK. It’s already reported that:
  - i. construction of the lagoon wall would go to Chinese contractors CHEC – a £300 million contract with just 50% being spent in the UK;
  - ii. turbine design and manufacture would go to GE Andritz – American / Austrian with a base in England;
  - iii. rock would be shipped from England or, if the necessary consents can’t be obtained, from elsewhere – possibly Norway;
  - iv. of the major elements of the scheme, Welsh suppliers have only been mentioned in connection with turbine assembly and roadway construction
- g. As for the development of an exciting new industry:
  - i. there’s nothing new about building sea walls;
  - ii. bulb turbines have been used in the marine environment for many years;
  - iii. if anything, those countries with experience in these areas appear to regard lagoon tidal energy as not particularly viable:
    - (a) La Rance (cited frequently by TLP and built in 1966) was supposed to be the first of a series but a second was never built;
    - (b) Canada, which has conducted experiments in the Bay of Fundy (highest tidal range in the world) has adopted a precautionary approach to Lagoons because of likely environmental impacts and high costs.

### Approval Processes

- 12. You heard representations from TLP directors, from Dr Masters of Swansea University and from others that the various approval procedures are constraints which the industry can do without. They talked about taking greater risks and adopting “deploy and monitor” or “deploy, monitor and survey” approaches. They

would say that, wouldn't they. Developers are in it to make money, if not from profits then from government subsidies. Academics are keen to get involved in related research projects. Any risks would be borne by others:

- a. the public, in the case of subsidies;
  - b. "the environment" – fish, mammals, birds, natural features and people who value them; and
  - c. interested parties like us, in the case of property and rights which are injuriously affected .
13. We submit that the developers have yet to demonstrate that the benefits, to others, are so great that they outweigh the risks. We regard the approval processes, operated by regulators and government, as essential restraints on people who would otherwise wreak havoc for the sake of vast profits at public expense. It seems to us that TLP are having problems because of shortcomings in their applications and in their case, flaws in which are being revealed by the approval processes.
14. We are alarmed at talk of using the Wales Environment Bill as a way of changing current procedures for the benefit of developers. If anything, we would wish to see changes to the Marine Licensing procedures to make them more open and transparent, like the Development Consent procedure under the Planning Act 2008, where all application documents and all representations are published on the PINS website as the process unfolds.
15. The delays with the CfD, Strike Price, Marine Licence and discharge of DCO pre-construction Requirements all confirm, as far as we are concerned, that there are real problems with the proposals, which:
- a. do not make energy sense;
  - b. threaten major environmental impacts;
  - c. promise questionable benefits for the public; but
  - d. have huge implications for the public purse.

Pontardawe and Swansea Angling Society Ltd  
Afan Valley Angling Club  
21<sup>st</sup> October 2015