Appendix 5.5

Project introduction flyer
Plan of proposed tidal lagoon in Swansea Bay

Investment opportunity

There is currently an opportunity to invest in the necessary research, development and planning activities required to develop, construct and operate the world’s first, purpose-built, tidal lagoon power plant, to be situated in Swansea Bay.

With the Company issuing £5m of qualifying Enterprise Investment Scheme (EIS) shares, alongside £5m of non-EIS qualifying shares there is a significant opportunity for individuals to back the development of the UK’s largest tidal range power project.

Welcomed by the community, this high profile, renewable energy project will also help facilitate local regeneration opportunities in South Wales. On completion, it will produce sustainable and predictable electricity during its expected useful economic life of over 100 years.

More detail on all aspects of the project can be found on our website, www.tidallagoonswanseabay.com, where you can also register for regular newsletters.

For any enquiries please contact us at info@tidallagoonpower.com or FREEPHONE 0800 080 3055

Swansea Bay Tidal Lagoon will be the world’s first, purpose-built, tidal energy lagoon, capable of generating predictable, renewable electricity for over 120,000 homes for over 100 years.
Our vision
We aim to create a power plant that means something positive for everyone in Swansea Bay.

The tidal opportunity
Climate change is an issue of global importance with local impacts. Finding viable alternatives to fossil fuels is essential and the UK has made legally-binding commitments to deliver 15% of its energy from renewable sources by 2020. Currently, just 5% of our power is renewables sourced and some forms of low carbon energy are controversial or unsuitable for the UK. Tidal Lagoon Power Ltd has developed a way to generate cost-effective, renewable power from high tidal ranges such as those found in Swansea Bay and the wider Severn Estuary. We believe tidal lagoons should form a vital part of our energy mix, whilst creating the opportunity for South Wales to lead a worldwide tidal range industry.

Low-risk innovation
Swansea Bay Tidal Lagoon is a man-made seawall impounding a 12km² area of water. Power is generated by creating a “head” of water – a difference in water level between the inside and outside of the lagoon – and channelling the resulting flow through low-head hydro turbines. Although the lagoon is the first of its kind, all component parts of the project have been proven elsewhere in the world, keeping technology risk low. The development comprises: a UK-standard seawall; concrete turbine housing similar to those found in many maritime structures; and hydro turbines whose reliability has been established for 50 years. Furthermore, we have brought together a consortium of leading design, construction and delivery partners to ensure our combined expertise for the delivery of tidal lagoons is second to none.

Environmental impact
We recognise that any development of this size will have an effect on its environment. An Environmental Impact Assessment (EIA) is underway, based on a scope of work agreed in December 2012 with the Planning Inspectorate and wider statutory consultees. We have commissioned independent experts to conduct detailed studies in order to understand the potential impacts of the lagoon during construction and operation. From this understanding, the lagoon design can incorporate measures to minimise its effects from the outset. Assessment areas include: seascape and visual impact; coastal processes, sediment transport and contamination; marine water quality; intertidal and sub-tidal benthic ecology; recreational and commercial fisheries; marine mammals; coastal birds; habitat regulation assessment; navigation and marine transport; terrestrial ecology; onshore transport and air quality; economy, tourism and recreation; marine and terrestrial noise; flood risk; land quality; marine and terrestrial archaeology; and historic landscape.

Have your say
In line with government guidance, we began informal consultation early in the planning process, showing stakeholders development options and discussing the issues arising. During an 18-month feasibility study, we met more than 100 organisations. Public consultation events held in April 2013 enjoyed a very positive response. Formal consultation is scheduled for summer 2013, when detailed designs and Preliminary Environmental Information will be presented to the public and statutory consultees. We aim to submit an application for development consent to the Planning Inspectorate in autumn 2013, with a public examination commencing in early 2014 and providing a further opportunity for debate.

The power of the tides in Swansea Bay can be harnessed to provide electricity that is secure, local, renewable, reliable and long-term. Swansea Bay Tidal Lagoon is a £650 million investment and an opportunity for Wales to lead the UK’s tidal energy industry, while enjoying the diverse benefits of this unique energy infrastructure. In addition to clean power, tidal lagoons can create jobs, support onshore regeneration, enhance flood defences, and even foster healthy living.

In Swansea Bay, the lagoon and accompanying visitor centre (both freely open to the public) will become a key education amenity and tourist attraction. Art and culture will sit alongside sport and recreation, as the lagoon creates a unique place to explore and learn, and a stunning venue for local fitness and international sporting events. The project will support ambitions for the Swansea Bay City Region and existing local development plans for a vibrant waterfront economy. In addition, we hope to offer low-cost electricity tariffs to locals and we will be issuing a local share offer associated with the construction investment.