

Sustainable Development Commission (SDC)
with South West Regional Assembly & Severn Estuary Partnership

Tidal Power in the UK
Severn Local Authorities' Workshop

TRANSCRIPT OF WORKSHOP

Held in Bristol, 22 May 2007

Prepared by Sustainable Development Commission
June 2007

Objective: To understand the views of Severn local authorities on the implications of potential tidal power development, including a barrage, in the Severn estuary from a local government perspective

OUTLINE AGENDA

930-1000	Arrival Tea/coffee	
1000-1015	Welcome & introductions	SDC, SWRA, SWRDA
	Local authorities & SWRA Energy Group members	[representative from each participating council to introduce names/council]
1015-1025	Severn Estuary Partnership (SEP) role	Natasha Barker, SEP Officer
1025-1100	SDC Tidal Power Project – presentation	Oliver Knight, SDC
1100-1200	Discussion sessions [indicative topics] Implications of potential tidal power development in the Severn for local authorities in relation to the following – <ul style="list-style-type: none"> • Regional economic development issues • Local authorities’ strategies, planning and processes • Infrastructure & transport • Flood risk management • Decision-making and process – role of local authorities 	Facilitated by SDC [2 groups]
1200-1220	Plenary – Report back & discussion	
1220-1230	Wrap-up & conclusion	SDC & SEP

Discussion sessions

GROUP 1 (FACILITATED BY KARLA HILL)

A number of relevant discussion topics were identified (in addition to suggested agenda) and points made on a range of issues

- Climate change
- Environmental costs and benefits
- Communities – human impact
- Impacts of development site aggregates – construction sites around the UK and Europe, including Cornwall aggregate, china clay processing – current constraints include the Tamar bridge.
- Public engagement - Level of understanding and participation, How well informed are the public? Role of media and headlines in this process
- Alternatives and Opportunity costs
- Engineers required – renewables, wind etc
- Open Channel barrage (Forest of Dean) – Redesign concept (discussed with STPG), flood control of the Thames barrier, river drainage
- Science – must be rigorous
- Issues of uncertainty, myths, turbines, water pressure, stagnant lake. La Rance.
- Flood – Defra money funding the barrage?
- Clarity of purpose for the scheme and the original design
- Process and decision making – not sudden, next stage, sustainability appraisal
- SDC remit – energy from tidal power in the UK; Severn tidal resource, more than that for the LAs
- Regional perspective – share energy production in the SW. What are security of supply implications; low / declining. What would the SW need to consider – cost benefits, nuclear

Climate change

- Climate change impacts are already impacting. County and District Councils – infrastructure decisions and planning – budgets
- Climate Change strategy: Environment Agency cannot provide the same level of flood protection.
- Rivers – 23 flow into the Severn estuary – potential contribution to energy output. Tidal range – change as a result of rising sea levels.

Background to the study

- Concern exists at the DTI over the amount of money you could spend on new studies – reason for seeking input from the SDC

Future implications

- Downstream / upstream river
- Ongoing revenue and maintenance costs

Development – role of a barrage facilitating development

- Paying for it
- Energy demands and climate change of that development
- Impact on estuary (habitats etc)

- Shift of development from other regions (as a result of physical reconfiguration of the estuary.)
- Travel patterns – Weston, proximity to Cardiff – access issues

Time scales

- Talked about for a long time
- Major potential contribution – should not be a distraction from other ‘clean’ technologies that are available
- Process – 10 year timescale? Need to account for public/pressure group opposition.

Options and alternatives

- Diversity of supply – type / location
- Decommissioning of existing generation around estuary - Is there an opportunity to use the grid to trial the options for? Nuclear sites – more viable if water is available
- Price of energy - Spend money on investment in energy efficiency

Transport

- Transport links – will affect Devon and Cornwall, at risk of sea level rises.
- Dorset – opportunities with transport link to Cardiff – road / rail
- Somerset – strategic planning – have considered road / transport issue; well aware of what would go where – infrastructure.
- The road is not the purpose here but it would create opportunities to do a link to the M5 from the 358
- Different views on opportunities with rail option

Ports

- Big implications
- Build port into the barrage
- Flow on impacts for road / rail links
- Existing ports – if ‘abandoned’ would be a development opportunity.

SWRA role

- If development seen as a viable national option
- SWRA is also transport authority

GROUP 2 (FACILITATED BY OLIVER KNIGHT)

Impacts of infrastructure

- Development issues – carbon emissions. Less well connected areas could see increase in lorry journeys - Insufficient transport infrastructure to cope
- Competitive issues
- Capacity issue of getting through a sea lock (the lock would be in use all the time)
- Shipping capacity and electricity generation
- Upstream – Bristol, Sharpness

Pressure for mineral rights

- What pressure for the rest of the country? (may have implications for the Forest of Dean)

Mitigation of habitats – how feasible?

- Insufficient habitat areas there for mitigation to work; the area has an EU Wildlife designation and a Defra Special Area of Conservation.
- Dredging the channel – sub sediment transfer – leads to future coastal erosion.
- Effects on wading birds – how moveable are natural habitats/ What effect on sandbanks and fish stocks?
- Natural habitats may increase but area would lose its distinctiveness.

Road across the barrage – also need links across if this is planned – (extra costs)

- What *need* is there for extra road links? SD angle – is it sustainable?
- ‘Shoots’ proponents – point to rail link only.
- Siting of the Welsh end – how critical? (new roads are needed there anyway.)
- Squabbles over location

Nuclear angle

- Hinkley Point – outside the barrage area. Grid reinforcements for management; capacity.
- The view may exist that having the barrage will remove the need for nuclear.

Wind Farms – what impact on these? Could wind power be combined?

- Targets for renewable energy – no immediate benefits before 2020 (EU and renewables target.)

How justifiable / viable would the barrage be?

- Planning and processes; an Act of Parliament and possible EU legislation may be needed before giving the green light to the project.
- Imminence of the Planning White Paper
- It may take years and years of planning before a baseline date can even be considered.
- Economic importance of fish stocks.
- What are the projected costs of the construction?
- Planners are interested. Care has to be taken to ensure the carbon consumption doesn't exceed benefits. Impacts of new developments, new housing and extra traffic
- Would carbon from construction be offset by the renewable energy from the barrage?

- Need for further research e.g. effects upon fish stocks of the turbines. (Research with wind farms found that they attract bats.)

Flood risk

- Increase in the potential of flooding outside of the barrage area – (could affect the flat areas of Somerset. Need to protect low lying areas.
- The ‘do nothing’ option may not be enough to save natural habitats anyway due to climate change and rising sea levels.
- Tsunami scenario – could this happen? Would the barrage be built to withstand this? (Impossible to plan for every eventuality.)

Tourism / Recreation

- Would the area become a more benign environment?
- Clearer waters at Weston Super Mare
- The scale of the project may become an attraction – the area could become a destination for day trippers. Economic benefits of this.
- Leisure aspects, cyclists and walkers may have new routes.
- Boating / sailing potential
- Will become a permanent lagoon but won’t become a flat ‘leafy millpond’.

Economic issues

- Time resources and money – what is the payback time? What timescale would a return on the project work towards?
- Commercial viability?
- Economic impact on future areas of new growth with added infrastructures and communities, new patterns of economic growth.

PLENARY REPORT BACK AND DISCUSSION SESSION

Rail link on the Shoots barrage could be a benefit

Quarry issues, dredging, impact on beaches.

Mixed feelings emerged on the likelihood of added tourism

New habitats could be created in the low lying areas of Somerset – how far would this go in mitigating some of the lost habitats?

Implications for Local Authorities

- Creating lots of resources, time and work
- Suggest a group of local authorities to form to consider the issues
- SCOSLA (Standing Committee of Severn Local Authorities) / Estuary wide ranging from S Wales to the South West.

Regional obligation / contribution to security of supply – alternatives; gas, coal, nuclear etc.
Current energy policy

The SW is a net importer of energy – incentive to build?

Private sector, Government's role

- Resources – Government needs to fund studies to make informed decisions.
- Local input, locally led work.

Key / complex to understanding next phase of the process – not resolved by the SDC report, important that this study clarifies the issues.

Planning White Paper – central Government / nationalisation of decision making.

Plan making and decision taking are different roles – significant role for local authorities, need to bust the myths that circulate – huge task.

University of West of England / Cardiff / RSA – independent of debate, need to put forward an unbiased view (proposal is being developed by Mervyn Bramley)

Issues to tackle

1. Controversial nature of plans
2. Vested interests which emerge in unlikely places
3. Misinformation
4. Academic / neutral place needed to discuss / debate the science
5. Grounding for politicians / citizens / social/economic partners to make an informed decision.

Process / next steps for the SDC / feed into Government policy

- Report in September
- Political interest
- Current position is that government is waiting for SDC's response.