

Glyn Rhonwy Pumped Storage Development Consent Order

Statement of Funding



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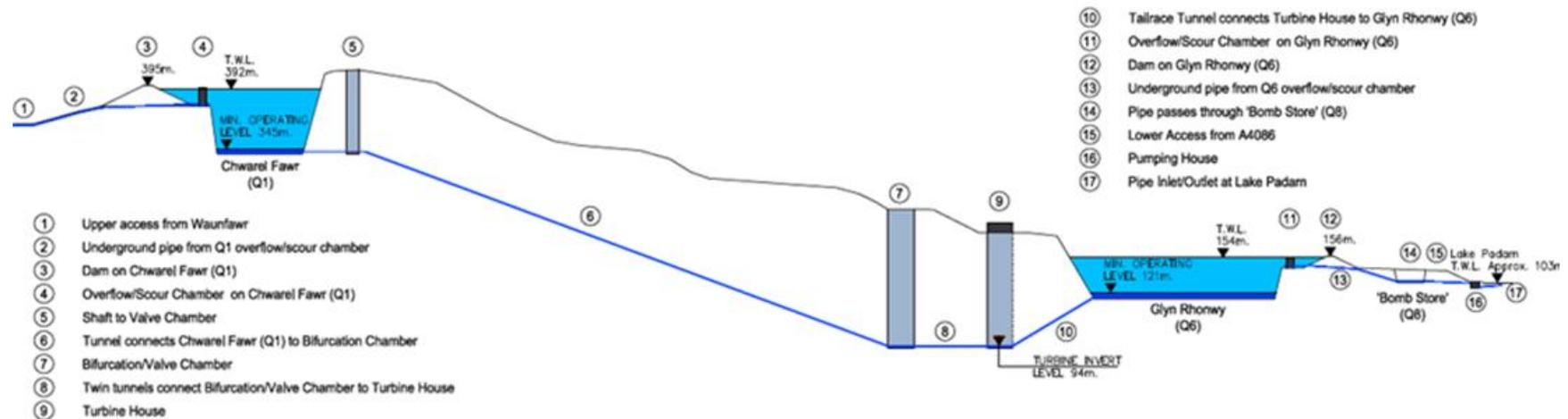
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1. Introduction

- 1.1 Snowdonia Pumped Hydro Limited (“The Applicant”) is making an application (“Application”) to the Planning Inspectorate (PINs) under the Planning Act 2008 (“the Act”) for the Development Consent Order (“DCO”), which would grant powers to construct and operate a pumped hydro storage facility at Glyn Rhonwy, Gwynedd, North Wales (the “Development”).
- 1.2 The Development will have an output capacity of 99.9MW and is therefore classified as a nationally significant infrastructure project (“NSIP”) for the purposes of sections 14 and 15 of the Act. Under the Act, a DCO application is required under s37 to authorise construction and operation for such a generating station.
- 1.3 The DCO sought by the Application includes powers of compulsory acquisition of land and rights over land. This Statement of Funding relates to the Application and has been prepared in compliance with the requirements of Regulation 5(2)(h) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 which states that, if the proposed order would authorise the compulsory acquisition of land or an interest in land or a right over land, the application must be accompanied by “*a statement to indicate how an order that contains the authorisation of compulsory acquisition is proposed to be funded*”.
- 1.4 This Statement of Funding is one of a number of documents accompanying the DCO application and should be read alongside those documents. In particular, this Statement of Funding is supported by the Statement of Reasons (Document 4.01) which justifies the compulsory acquisition powers which SPH is seeking, and explains why in SPH’s opinion, there is a compelling case in the public interest for those powers.

2. Project Background

- 2.1 The Development is a pumped hydroelectricity storage facility with an energy storage capacity of 1.3m cubic metres of stored water and a peak power output of 99.9MW. The Development site covers an area of approximately 91.24 ha located on the slopes of Cefn Du Mountain above Llyn Padarn, approximately 1.5km north west of Llanberis and 11km south east of the town of Caernarfon.
- 2.2 The Development is comprised of several disused quarries pits and slate tips. The slopes around the quarries are built up with slate waste and interspersed with the remains of outhouses and quarry workings, scattered over steep grazing land. The neighbouring land is primarily agricultural. Three adopted highways cross the site, including the A4086, Ffordd Clegir and an unnamed road (locally known as 'the Green Road'), as well as several Public Rights of Way (PRoW). The Development has an estimated lifespan of 125 years.
- 2.3 A previous scheme for the development of a pumped hydro system on the Development site was granted planning for a power output of 49.9MW from Gwynedd Council on 19 February 2014.
- 2.4 The works included within the project are identified in the diagram on the following page.



- **Upper Dam and Spillway** - the upper dam will be a rock fill dam utilising the slate debris that surrounds the site. The volume of the upper reservoir will contain 1.3m m³ of water at an altitude of 240m above the lower dam.
- **Penstock** - the penstock will be approximately 4m in diameter, bored through slate by a tunnel boring machine at approximately 50m in depth. The penstock will be around 1.5km in length and lined in steel for the lower half to contain the pressures expected.
- **Power Station** - the power station will be built within an excavated shaft to 70m below ground level. This depth is to allow the turbines to be placed at a lower altitude than the two reservoirs.
- **Lower Dam and Spillway** - the lower dam will also utilise a rock fill dam comprised of locally sourced debris. The volume of the lower reservoir will similarly contain 1.3m m³ of water.

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- 2.5 Access to the Development during construction and operation will from the Waunfawr Road (Upper Dam and Spillway) and the A4086 (Lower Dam and Spillway and Penstock).
- 2.6 The Project will be connected to the electricity distribution network via a new electrical connection. This will be exported from an onsite substation to an offsite substation. SPH does not require the acquisition of interests in land in regard to grid connection as consenting of the electrical connection is the responsibility of the District Network Operator, SP Manweb, or an Independent Connections Provider. The Development will be distribution connected at 132kV. The site is close to significant power lines and the HV National Grid. The cable is planned to run underground from the onsite substation to the distribution side of the Grid Supply Point at Pentir, approximately 7km away.
- 2.7 The land required for the construction is not owned by SPH and whilst SPH has already acquired rights to the majority of land required, powers of compulsory acquisition are being sought in the Application for those Plots the rights to which remain outstanding to be acquired. This Funding Statement addresses how the acquisition of such land and the construction of the Development will be financed.

3. Company Background

- 3.1 The applicant for the DCO is Snowdonia Pumped Hydro Limited (“SPH”), a company incorporated in England (Company Number 8644844) with registered office of 1 Finsbury Circus, London EC2M 7SH.
- 3.2 SPH is a subsidiary of The Quarry Battery Company Limited (“QBC”). QBC was established to develop new large scale electricity storage projects that are considered a fundamental requirement in decarbonising the UK electricity infrastructure and which accommodate higher volumes of intermittent renewable generation. SPH was established as a special purpose vehicle to progress the proposed development. Currently QBC holds a majority shareholding in SPH.
- 3.3 To meet the capital cost of the proposed development will require that SPH creates/issues further shares that may result in QBC no longer retaining its majority shareholding position.

4. Estimated Development Costs

Development Cost

- 4.1 The capital cost of constructing the Development is anticipated to be £160m. This cost estimate is based on detailed design work prepared by the Hydro Division of AECOM who has acted as primary consulting engineers since the inception of the Development.
- 4.2 The CAPEX costs are further informed from input received from other leading hydro organisations and turbine manufacturers. The cost estimate also includes a price received from SP Manweb to obtain a full Grid connection.
- 4.3 The cost estimate for the Development has also been benchmarked against other hydro schemes throughout the world. The benchmark exercise undertaken indicated that the Development will be comparable in terms of cost per megawatt of peak power, and cost per megawatt hour of storage.

Development Funding

- 4.4 The Project has to date been funded by private equity investment and this arrangement will continue up to financial close of the major lending arrangements required for construction.
- 4.5 The capital cost of construction will be met through a mix of commercial debt and additional equity.
- 4.6 SPH has had extensive discussions with a wide range of organisations to assess the feasibility of raising the necessary capital. These organisations include:
- specialist investment advisers and merchant banks operating in the renewable energy sector;
 - commercial lending organisations including The Green Investment Bank;
 - specialist private equity investment funds;
 - infrastructure investment funds;

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- overseas sovereign wealth funds;
 - departments of UK Government including UK Trade & Investment; and
 - major international power companies.

4.7 Those discussions indicated that the Project has the potential to meet the investment return hurdle rate that key investor and lending organisations might require. The make up and structuring of this debt/equity will be driven by the commercial conditions then prevailing but is likely to be in the ratio of 30% equity to 70% debt.

4.8 A considerable amount of independent research and modelling has been commissioned by SPH to demonstrate that the Project can deliver sufficient operating revenues to allow the required debt/equity to be secured. The majority of this external research and modelling was delivered by two leading energy consultancies, Poyry (www.poyry.co.uk) and EnAppSys (www.enappsys.com).

5. Land Acquisition and Blight Expenditure

- 5.1 Construction of the Development requires the acquisition of interests in land, rights under and over land and the temporary use of land.
- 5.2 SPH has already acquired the freehold to one Plot. Otherwise the Development will directly affect two principal landowners and eight known smaller landowners. SPH has to date completed agreements to acquire the rights to the freehold or a 125 year lease with the majority of affected landowners.
- 5.3 The major landowners are the Crown Estate and Gwynedd Council. Gwynedd Council are the main landowner for the lower half of the site, including the location of the tailpond, lower dam, power house, lower access roads, spillway and pumphouse / abstraction point. An option agreement to enter into a lease is expected to be completed shortly with the Council for these areas. There remains uncertainty regarding the ownership of the land beneath the highway and the cycle path that run along the western edge of Llyn Padarn and compulsory acquisition of the unknown interests in these areas only is sought. Gwynedd Council has been consulted on and consented to the acquisition of unknown interests in Plots.
- 5.4 SPH is currently in negotiations with the remaining landowners with regards to acquiring the rights to the freehold or a 125 year lease over land or under land or temporary use of land with Gwynedd Council, Mr and Mrs A. Morris, Mr and Mrs J. Mitchell, Tyn yr Onnen Farm, Mr G. Jones and Misses C. Slade and A. Daimond. Pursuant to its application for the DCO, SPH is requesting compulsory acquisition powers for the acquisition of interests, rights and use of land not secured with these parties by the close of the examination of the Application.
- 5.5 The capital budget for the Development includes an amount of £1.5m to cover the cost of purchasing the land under option and covering rental charges during the build phase. This amount also includes the cost of land acquisition and any compensation payable as a result of the use of power of compulsory acquisition.

The upper valuation of the compensation for acquisition of all the land for which powers of compulsory acquisition is sought is £190,000.

5.6 SPH is a special purpose vehicle which does not have substantial assets and is presently funded by its shareholders. Article [26] of the draft DCO provides that powers of compulsory acquisition may not be exercised unless a suitable guarantee for the compensation liability has been provided and approved in writing by the Planning Authority. The DCO provides that the suitable guarantee must be one of the following:

- (a) The deposit of a cash sum;
- (b) A payment into court;
- (c) An escrow account;
- (d) A bond provided by a financial institution operating within the United Kingdom;
- (e) An insurance policy;
- (f) A guarantee by a person of sufficient financial standing other than the undertaker.

5.7 The Order accordingly provides a suitable mechanism for ensuring that security for compensation which would be payable following the exercise of any rights of compulsory purchase is in place prior to any acquisition being progressed.

Funding for Blight

5.8 It is not anticipated that claims for statutory blight will arise as a result of the promotion of the DCO. Nevertheless, should claims for blight arise as a consequence of the application for development consent being made, and before it is known whether the Development will proceed, the costs of meeting blight claims that are upheld will be met through the Development Funding described in section 4.4 above.

5.9 The concept of blight derives from the provisions of sections 149 to 171 of the Town and Country Planning Act 1990 (“TCPA 1990”). The blight provisions

operate as a form of reverse compulsory acquisition, where a person owning land within certain limited categories of landowner, is able to require the acquisition of his right by an acquiring authority, to which SPH is analogous here. That ability arises where the land is or may be subject to powers of compulsory acquisition, as provided under paragraph 24 of Schedule 13 to the TCPA 1990. That paragraph applies the blight provisions to land which is subject to an application for development consent which seeks authority to compulsorily acquire the land in question.

5.10 A blight notice can be served under the TCPA 1990 by owner occupiers of certain types of land. These are:

- where the land is or is part of a hereditament under Section 64 of the Local Government Finance Act 1988, which has an annual value less than that specified by the Secretary of State in an order, which is £34,800 and the whole or a substantial part of the land is occupied by the owner. This applies mainly to small businesses, which is not applicable in this case;
- where the land is a hereditament occupied by an individual who occupies the whole or a substantial part of the hereditament as a private residence. In this case, no private residences are subject to compulsory acquisition; and
- where the land is an agricultural unit or part of such a unit. The term “agricultural unit” in this context means land which is occupied for agricultural purposes including any dwellinghouse or any other building occupied by the same person for the purpose of farming the land. Again, SPH does not consider this category is applicable to the Development.

5.11 SPH, on the basis of advice received from Bilfinger GVA, who was retained to undertake an independent exercise to determine the scope and cost of worst case blight exposure for the Development, has concluded that there are eight potential blight plots and areas, representing a total blight exposure of £110,000 (One Hundred and Ten Thousand Pounds) including associated costs.

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- 5.12 SPH confirms that it has made provision to cover this potential blight exposure within the budget for the Development.
- 5.13 The Property Cost Estimate and Blight Risk Assessment report is enclosed within Appendix 1.5.2 to the Statement of Reasons (Document 4.01). .