

## Decision Statement

### Hydropower Scheme – West Lyn River

01/09/2014

<b>Application Numbers:</b>	NPS/WR/014994 (Full Licence) NPS/WR/014996 (Impounding Licence)
<b>EA Area:</b>	Devon & Cornwall
<b>Date of Application:</b>	05/12/2013
<b>Applicant details:</b>	Lyn Valley Trust Partnership % Mr A Ireland, Lynmouth & Lynton Lift Company The Esplanade, Lynmouth, Devon. EX35 6EQ
<b>Summary of the proposal:</b>	<p>We have decided to refuse the two applications received from Lyn Valley Trust Partnership for water resource licences for a hydropower scheme on the West Lyn River in Barbrook, North Devon. The applications had been submitted in competition with prior applications by Glen Lyn Generations Ltd for a hydropower scheme within the West Lyn River at Barbrook.</p> <p>In determining these applications, the Environment Agency has exercised its duties and powers under the Water Resources Act 1991 (as amended) and the Environment Act 1995.</p> <p>The Lyn Valley Trust Partnership (LVTP) proposals required the installation of a weir, fish pass and intake structure in the West Lyn River in Barbrook, just downstream of the A39 road bridge, for abstraction purposes. Water would be conveyed in a pipeline installed under the B3234 road and discharged back to the river via a turbine located adjacent to Lynbridge Hill and just upstream of the abstraction intake for the Lynmouth &amp; Lynton Lift Company (licence 14/51/009/0001) – an overall reach of approximately 940 metres. The proposed abstraction was set at a maximum of 1090 litres per second with an annual rate of 20,718,720 cubic metres. The applications were submitted as a project that would benefit the local (Lynton &amp; Lynmouth) community.</p> <p>The estimated installed capacity for the scheme is 257 kW using a crossflow turbine, with the estimated energy capture projected at 1014 MWhrs producing a carbon saving of 507 tonnes per year. The effective head for this proposal was between 35 to 40 metres. The application proposed a Hands off Flow (HoF) indicated at the 95 percentile (Q95) which was assessed at 142 litres per second.</p>
<b>Source of supply:</b>	West Lyn River
<b>Points of Abstraction &amp; Impoundment:</b>	<p>The application submitted and accepted by the Agency indicated the point of abstraction at NGR SS 71495 47673. The proposed impoundment was applied for at the same location.</p>
<b>Means of abstraction:</b>	Gravity by means of a new fixed weir, intake chamber and siphon tube
<b>Purpose of abstraction:</b>	Power generation

**Purpose of Impoundment:** To facilitate abstraction and provision of fish passage structure

**Abstraction period:** All year

**Competing hydropower schemes:**

The determination of the Lyn Valley Trust Partnership (LVTP) application has been delayed beyond normal statutory time limits due to its submission as a competing scheme for hydropower development on the West Lyn River, in competition with a previously submitted application by Glen Lyn Generations Ltd. The determination process for the Glen Lyn proposal's hydropower development on the West Lyn River was nearing completion in November 2013 when the LVTP scheme was submitted, requiring the Agency to follow current guidance for "run of river hydropower Competing Hydropower Schemes".

Once the formalities of accepting the LVTP application were completed a meeting was arranged for 3<sup>rd</sup> February 2014 in Lynmouth between the Environment Agency, the representatives of each scheme and relevant consultants. The meeting was called to clarify the stages of each development, and explain the Agency's approach to competing schemes, which is:

- To detail the hierarchy of options
- To indicate what parameters will be compared
- To indicate the Agency assessment of schemes backed by solid evidence and data
- To advise a time period for assessing the potential for shared working
- To establish if the determination of both schemes would be in competition
- To advise that if in competition, there would be a timescale for the provision of extra information, detail and evidence

Glen Lyn Generations Ltd was unable to agree a shared scheme, or shared water schemes with the consequence that both schemes remained in competition. Who applied first would not be relevant. The Agency would consider a scheme on its merits. For that decision to be made, each applicant was required to provide specific detail (hydrological, ecological, hydromorphological plus appropriately annotated/rated-in drawings indicating dimensions, AOD and depths). In addition, each applicant was required to provide a résumé in support of their particular scheme which should include considerations for:

- Reasonable & efficient use of water resources
- Electricity generating capacity
- Carbon footprint of the scheme and carbon savings
- Intake, weir, fish passage, screening and efficient HoF method
- Outfall details, location, screening and scour prevention
- Depleted reach, with associated impact on sediment movement, biodiversity fish movement and flow regime
- Impact on other protected rights and lawful users of water
- Benefit to local community
- Impacts during construction
- Sustainability of proposed scheme and likelihood that scheme will be constructed

**Impact assessment of the LVTP proposal:**

Lyn Valley Trust Partnership submitted ecological, fisheries and hydromorphological reports and assessments with their applications – these reports and assessments had originally been commissioned and submitted by Glen Lyn Generations Ltd. The Agency however, required LVTP to submit reports, assessment and drawings specific to their scheme, so that a detailed comparison could ultimately be made between the two schemes. The reason for this was that the proposed weir/intake/fish pass arrangement was to be in a different location, the deprived reach was shorter and although within the overall footprint of the Glen

Lyn proposal, was significantly different. Thus, the Agency required specific site assessments and drawings pertinent to their projects from each applicant, to properly compare proposals and assess the likely impacts..

There are designation issues to consider and address, namely the downstream geological boulder SSSI and nearby SACs that require Agency notification to and consultation with Natural England.

The West Lyn River is designated 'Main River' with any works in, under, over or beside the river requiring prior consent from the Agency. It is very likely that a Flood Risk Assessment by the applicant would be required for this process and would again be a requirement of any subsequent application to the local planning authority – in this case, the Exmoor National Park Authority.

The West Lyn River does not have a gauging station. The Agency had requested hydrological assessments from both competing organisations, but decided to provide both parties with Agency-produced hydrological assessments based on a methodology using transposed data from a known gauged catchment of similar characteristics in conjunction with theoretical data for the West Lyn River. The Agency was satisfied that this was a practical way forward for this issue, and that the data would require modest extrapolation (by the Agency) with respect to the two schemes.

Requests to LVTP for supporting ecological detail and engineering drawings were made on several occasions, notably on 18/12/2013, 21/01/2014, 04/03/2014, 12/03/2014, 08/04/2014 including the "comparing schemes" résumé. A deadline for receipt of this information was set at 2<sup>nd</sup> June 2014. In April 2014 onwards, the LVTP submitted hydrological reports – not to an acceptable standard, hence the Agency's intervention (above); concept drawings for the weir, intake, screen and fish pass – not acceptable for the Agency to assess as there were no dimensions or a precise location; hydromorphology report, whilst acceptable in part, it did not assess the highly flow-dependent nature of the deprived reach, a section of both schemes which overlapped. Both schemes were likely to have a similar impact on this reach with this section of the river being potentially better able to support resident trout populations, which is why an Agency request for a fisheries assessment for this reach was made, so informed comparisons could be made.

The LVTP advised the Agency that the community aspect of the scheme was being designed to support the Lynton Town Hall financially, as the Town Hall was losing grant support from North Devon District Council. The Agency, while requiring detail of any community benefit, had repeatedly requested the fundamental ecological detail and drawings as these would inform any impact assessment. The LVTP consultant and representative respectively advised the Agency that detailed drawings will be provided shortly (21/01/2014) and that the consultants had been instructed to provide a feasibility report and expert reports (22/01/2014). These were never submitted, and it became clear that LVTP were not prepared to invest in such reports until necessary rights of access to the abstraction point were concluded.

Due to difficulties over rights of access at the applied for point of abstraction (NGR SS 71495 47673), the Agency was advised that LVTP was relocating the abstraction point and weir structure some 30-40 metres downstream. The LVTP supplied the Agency with heads of terms details with Devon County Council for the left hand bank. This would be pertinent for a right of access for abstraction purposes. The Environment Agency owns the right hand bank, both at the applied for position of impoundment and at the subsequently revised impoundment location. The Agency is unaware of any further progress with the owners of either bank. For a licence to abstract water to be granted, the right of access agreement must be in place, and the Agency would require specific national grid references for the

relocated position to correctly grant abstraction and impoundment licences.

The LVTP requested an extension beyond the 2<sup>nd</sup> June 2014 for the submission of the requested details. In considering this request the Agency enquired how much time the applicant required to provide all requested information. The advice from the LVTP was that “at least 6 months” would be required. In view of the early requests from the Agency regarding all supporting detail (from December 2013 on), the Agency was not confident that requested details would be submitted and was not prepared to wait beyond 25<sup>th</sup> July 2014 for that detail to be submitted. The Agency considered it entirely feasible for the LVTP to have supplied the requested detail by that date and LVTP were thus advised of the extended deadline of 25<sup>th</sup> July 2014. On the 16<sup>th</sup> July 2014, we contacted LVTP to enquire of their intentions. LVTP responded with a short acknowledgement saying they would get back to the Agency. LVTP were informed on 11<sup>th</sup> June 2014 that unless all requested supporting information, including essential clarification of outstanding issues, was received by the Agency by 25<sup>th</sup> July 2014, then their applications would be refused.

**Notices:**

Details of the proposal were placed on the Agency’s website and in the North Devon Journal on 26 June 2014. There were no representations.

**Statutory Consultations:**

The Agency consulted the Statutory Water Undertaker, Exmoor National Park Authority and Natural England with respect to the LVTP applications. The Statutory Water Undertaker advised there were no conflicts with water abstraction or sewerage assets. Exmoor National Park Authority did not respond. While Natural England responded, it was expecting further consultation via the appropriate protocols for the Habitats and Species Regulations 2010 and Countryside and Rights of Way Act 2000. The Agency advised Natural England of the non-submission of the requested information to an acceptable standard and the Agency’s decision to refuse the applications, and thus an inability to progress the usual consultations.

**Protected Rights:**

No protected rights have been identified as being at risk of derogation as a result of this proposal. The Lynmouth & Lynton Cliff Railway authorised abstraction (14/51/009/0001) is just downstream from the proposed LVTP outfall. The abstraction points for the Glen Lyn Generations existing licence 14/51/009/0086 are located further downstream and would be unaffected as any water that might have been abstracted by the LVTP proposal would have been returned to river.

Lawful uses of water have been considered and appropriate measures to safeguard them have been taken.

**Costs/Benefits:**

The Agency did not have the supporting information requested within the advised timeframe to determine the LVTP proposals as a comparative scheme. It was not possible to assess the scheme in isolation on the potential benefits to the local community.

**Conclusions and recommendations:**

There has been limited response from the applicants to the requests for further appropriate and acceptable supporting detail and clarifications for the abstraction licence (NPS/WR014994) and impounding licence (NPS/WR/014996) applications.

In summary we have refused the applications because:

- The applicant has not provided the ecological assessments necessary for the Agency to make a robust judgement on the applications
- The applicant has not carried out a fisheries assessment as requested
- The applicant has not provided the required drawings showing levels, depths and dimensions of the proposed weir, screen, fish pass and intake
- The applicant has not confirmed the location of the proposed weir structure within the West Lyn River – The Agency has been advised of an approximate location, which is not the same as originally applied for
- In determining licence applications, reasonable amendments can be made, but for that the applicant must submit and or confirm such detail
- The applicant has not responded to the requests for clarification on hydrological matters – the proposed maximum daily abstraction rate, the proposed HoF regime, whether seasonal or fixed
- The Agency does not have enough information from the LVTP to determine their applications, either alone or to determine between the competing schemes
- There has been no further update on the Right of Access negotiations. The LVTP was informed on 22 January 2014 that without the grant of a lease, deed of grant, or tenancy agreement or similar at the date of any licence starting, the applications would be refused. The extended determination dates have now passed without submission of further evidence of a Right of Access
- The applicant has concentrated on proceeding with developing a community basis for the scheme. The applicant requested a further time extension on 2<sup>nd</sup> June 2014 of at least 6 months without qualification of a potential timetable as to when requested information would be available. The Agency had made it clear that it required the environmental and engineering detail as a priority
- The Agency acknowledges that a hydropower development is likely to be in place for many years, and so a decision to approve a scheme has long term implications. The fact that a particular applicant had contacted the Agency first will not (under the Competing schemes guidance) normally be relevant. The Agency will therefore seek to apply the criteria to decide between competing schemes as set out in this guidance. However, here the Agency has been unable to determine this proposal on a “comparing schemes” basis as there has not been appropriate detail to compare
- The Agency has made its decision on the basis of the limited detail proffered

**Date Completed:** 02/09/2014

**Date of sign-off:** 3/09/2014

**Team Leader:** *a. apres*

Permitting Team Leader

**Date of final submission:**

**Contact the Environment Agency team responsible for this decision:**

If you have any questions with regard to our decision please contact  
[PSC-WaterResources@environment-agency.gov.uk](mailto:PSC-WaterResources@environment-agency.gov.uk)