

Form WRE: Application for a new impoundment licence, technical variation to an impoundment licence or the removal of an existing impoundment

Water Resources Act 1991, Environment Act 1995, The Water Resources (Abstraction and Impoundment) Regulations 2006, The Natural Resources Body for Wales (Functions) Order 2012

1. Application type

- New impoundment licence ☒ Complete sections 2 and 4
- Removal of an existing impoundment ☐
- To licence an existing impoundment ☐
- Technical variation to an impoundment licence ☐
- Give existing licence or pre- application reference number(s)

2. Impoundment details

All information should correspond with any maps and drawings submitted with this application

2.1 Provide details of all impoundment points. For structures spanning a watercourse, provide a National Grid Reference for each bank. If necessary, continue on a separate sheet and tick here to show that you have done this. ☐

| Impoundment location name / reference | National Grid Reference for each bank, looking downstream (12 digit) | |
|--|--|---------------|
| | Left bank | Right bank |
| Main intake | 276512 221969 | 276513 221970 |
| Feeding intake | 276627 22209 | 276628 22210 |
| | | |
| | | |

2.2 Please provide a full description of the impoundment, outlining its purpose and how it will operate. If this information is detailed in a supporting document, provide the document title or reference in the space below.

If necessary, continue on a separate sheet and tick here to show that you have done this. ☒

Hydro intakes will create an impoundment; the intakes will be constructed from a concrete back wall and stainless steel intake tank. The impoundment will be used to abstract water for a hydro electric scheme to generate electricity. Details on how the scheme will operate is provided within the supporting submitted documents and within the design drawings.

3. Description of impoundment

3.1 Name of watercourse

Nant Ffynnon-wen and un-named tributary of the Nant Ffynnon-wen

3.2 Will your proposed impoundment result in a change to the wetted perimeter (downstream) or new submerged areas behind (upstream of) the impounding works?

No ☐ Yes ☒ If yes, ensure this is shown on any map or drawings submitted

3.3 Will the ponded area created by the impoundment be lined? No ☒ Yes ☐
If yes, give details.

3.4 Give the height of the impoundment structure, from the downstream toe to crest or top of spillway (in metres above Ordnance Datum). If the proposal involves an existing impoundment, state the change in height (in millimetres).

Main intake: Stream bed - 296.000 m AOD, base of HOF notch - 296.331m AOD
Feeding intake: Stream bed - 296.000 m AOD, base of HOF notch - 296.425m AOD

3.5 What is the overflow or crest level of the impoundment (in metres above Ordnance Datum)?

Main intake: Weir crest level - 269.398 m AOD, Crest level of highest point of weir - 296.488 m AOD
(base of HOF notch - 269.331 m AOD)
Feeding intake: 296.000 m AOD, Crest level of highest point of weir - 296.606 m AOD
(base of HOF notch - 296.425 m AOD)

3.6 What is the proposed capacity of the impoundment when full to spillway level (in cubic metres)?

Both intakes: <0.1m³

3.7 Will the proposal create a raised reservoir? No ☒ Yes ☐

3.8 Does the proposal involve the controlled release of water to safeguard downstream flows? No ☒ Yes ☐ If yes, provide details

3.9 Is the impounded water to be used for a subsequent purpose? No ☒ Yes ☐
If yes, provide details (for abstractions, state the daily and annual quantities in cubic metres).

3.10 How will the impounded area be filled initially, and subsequently refilled if applicable?

The impounded areas of both intakes will naturally re-fill with flow and bed material. No manual re-filling will be applicable.

4. Fish and eel passage

4.1 Confirm the fish species present at your site.

Resident fish species

4.2 Complete the table below with full details of the measures you intend to take to safeguard these fish species.

| | Intake | Outfall |
|-----------------------------------|---|--------------------------------|
| Type of fish screen | Main intake: Drilled holes Feeding intake: Drilled holes | Mesh wire |
| Screen aperture size (mm) | Main intake: 3mm Feeding intake: 3mm | 10mm |
| Screen height and width (mm) | Main intake: Height - 290mm, Width - 500mm Feeding intake: Height - 201mm, Width - 600mm | 1 x 300mm diameter agripipe |
| Type of upstream fish passage | N/A | |
| Proposed flow for fish pass (m/s) | Main intake: 0.0019 and remainder of flow not abstracted Feeding intake: 0.0035 remainder of flow not abstracted | |
| Type of downstream fish passage | For both intakes: through the HOF notch and a short section of rock ramp easement | |

5. Construction, maintenance and operation

5.1 Provide details of maintenance or activities relating to the operation of the impoundment. If necessary, continue on a separate sheet and tick here to show that you have done this. ☐

The intake/impoundment requires very little maintenance, and is mainly self-cleaning. However the scheme owner will regularly check the structure to ensure that neither the screen nor the HOF notch is blocked. Should either be blocked these will be cleared to allow the scheme to operate as designed.

5.2 Provide details of diversion works or removal of existing works.

Bypass – the stream flow will be diverted to one side of the channel via a diversion pipe of approximately 8m length and back into the stream past the intake construction site. All components of this structure will be removed once the intake is completed.

Although discussions have not been directly entered into with the Planning Department of the Local Planning Authority, discussions have taken place with Local Authority Officers with regards to rights of access to the abstraction locations (Heads of Terms have been submitted as part of this application in support of these discussions).

6. Planning application

Have you sought advice on your planning application?

No ☐ Yes ☒

If yes, submit a copy of the Planning Authority's response.

7. Declaration

Please see Guidance Note WRX for details of who can sign this section and note the information in that document relating to the Data Protection Act 1998.

By signing below, you are declaring that as far as you know and believe the information given in this form, on any map and in any supporting or additional information, is true.

Signed



Print name

Gemma Samuel

Position

Hydro Engineer – TGV Hydro Ltd

Date

24/10/2018

Application Checklist

Please tick the following checklist items to indicate that you have included the required information. If any sections of the form are left blank and no supporting information submitted, where we have insufficient information to make a decision on your application, we will return your application to you.

Essential:

Form WRA completed, if there have been any changes since pre-application an updated

Form WRA is required



Map with all impoundment points and new wetted perimeters/submerged areas clearly marked



Drawings and Design Statement



State number of continuation sheets (enter 0 if none included)

0

Where relevant:

Form WRD completed, if your proposal also requires an abstraction licence



Stage 1 photo survey (contact us for more details on this requirement)



Letter of authorisation from the applicant, allowing an agent to act as signatory



Further information requested in our pre-application response letter to you



Planning Authority response, where available



Additional supporting information - please list below:

