



Glyn Rhonwy Pumped Storage Development Consent Order

Appendix 2.6 Minutes of Gwynedd Council and NRW meetings



Project Name: **Glyn Rhonwy DCO**

Date: **30th March 2015, 2pm**

Attending: **Catherine Anderson, AECOM**

Chris Williamson, Snowdonia Pumped Hydro

Ben Lewis, GVA

NRW – Gareth Thomas

Gwynedd Council – Glyn Llewellyn Gruffydd, Rhys Jones

1 Introductions and Aim of the Meeting

To discuss the s42 response and some points of the scoping opinion
Agenda as follows

2 Water Resources

2.1 We note the comment on the 5m level for the outfall in Llyn Padarn and have understood the requirement for this level since the meeting held with CCW on the 27th February 2014 and the response provided on the 2nd April 2013. In addition this meeting also resolved the issue of temperature. Can NRW confirm that this approach is still valid?

2.2 We would like some clarity on the requirement for discharge and abstraction licenses and the information required to support their applications.

We would like confirmation that any discharges from Q1 to the Nant Y Betws will be subject to discharge consent and also the requirement for an environmental permit. It is difficult to provide frequency of discharges as this will rely on climatic and weather patterns.

As the spillway design will be subject to detailed design, it is proposed to provide a Requirement on the DCO whether the design of the spillway will have due regard to the velocity of discharges as to not cause any downstream flooding or exacerbate third party flooding.

2.3 We note that NRW have requested these elements be controlled through a MoU but request clarification whether a Requirement is more appropriate?

2.4 We note comments on the discharge or transfer of nutrient rich waters between catchments. We would like clarity on this point as the level of nutrients discharged into Llyn Padarn is managed by DCWW discharge consent over which SPH have no control over. The water within the reservoirs will be subject to treatment.

Can we reach agreement of the discharge limits and quality of the waters discharged?
Will this be part of the MoU proposed by NRW?

3 Flood Risk

3.1 We also propose that the Excess Water Management Strategy will be formulated through the detailed design and also be a Requirement of the DCO.

3.2 We have been in contact with the Reservoirs Team and have agreed a way forward. We would like confirmation that this is sufficient for the DCO.

3.3 We can confirm that the pumping station will have flood resilience measures. However the above ground structures will only be of a small kiosk structure with the remainder of the pumping station underground.

4 Ground Contamination

- 4.1 Should there be any further information missing from the ES, please note that NRW can notify the applicant at any time.

We can confirm that final ES will provide details on the scope of the preliminary site investigation works but no more than details provided to NRW on the 26th February 2015.

- 4.2 We can confirm that the Water Management Plan will be updated to contain information on silt management.

5 Protected Species and Ecology

- 5.1 We can confirm that a Phase 1 habitat survey will be carried out for the Order Limits.

From the CCW response contained in the Scoping Opinion, please can NRW confirm whether a badger license will be needed. It is proposed to undertake a pre-construction survey and this will be a Requirement of the DCO.

- 5.2 Please can NRW confirm their comments on the requirement for a DSCO for working within the Llyn Padarn SSSI?

- 5.3 It is proposed to undertake fish and invertebrate surveys prior to commencement of works and controlled through Requirement – is this acceptable to NRW and GC?

There is a condition on the T&CPA decision notice related to floating plantain and so can this also be a Requirement?

- 5.4 Valuation of Arctic charr; in the valuation table of the Ecology Chapter Table 6-15 it stated that Arctic charr would be valued under Llyn Padarn SSSI for which they are a designated feature. All other fish species are valued as low. All features for designated sites are valued under that site rather than separately, unless they occur outside of the designated site as well. Please could NRW confirm they are happy with this approach?

We note your comment on providing details of Arctic charr spawning times? It is generally understood to be Autumn - early winter, although it can vary between local populations. Does NRW have any further information to inform their comment?

- 5.5 Can we discuss the temperature difference of the water discharging from the system? We believe this issue was resolved at an earlier meeting (see section 2.1)

- 5.6 NRW stated: *We do not agree with the conclusion due to the periodic overspill from Q1 into the Nant-y-Betws. This spillway will give a clear direct hydrological link between Llyn Padarn, the various quarries and the Afon Gwyrfa SAC. There is unknown species within the quarries, nutrient enrichment in Llyn Padarn, and these could be passed to the Afon Gwyrfa SAC.*

Can we discuss this in further detail? It was stated in the NSER Table 3.3 that the Development will not allow the spread of invasive species into any Natura 2000 sites. Should more detail be provided on how, i.e. nutrient enrichment: the water will be treated to prevent nutrient enrichment exiting the system through the spillways?

Section 6.8.185 that NRW refers to is for Nant-y-Betws running water, not Afon Gwyrfa SAC. As such the magnitude of the effect of invasive species is medium, for a low value receptor this equates to a minor effect. The effect of invasive species on the Afon Gwyrfa is under section 6.8.171, and here the effect is classed as **permanent major adverse**.

- 5.7 NRW stated: *It has been stated (table 3.3 and paragraph 4.2.11, pg 43) that increases in the flows in the Afon Gwyrfa could have a beneficial effect on the river, we do not agree with this due to the risk involved. However, with suitable mitigation measures, these effects may be managed.*

Can we discuss this, it was understood that the Afon Gwyrfa suffered from depleted flows and this was agreed in the 2012 ES.

- 5.8 Breeding bird method statement – we would like to discuss what would be expected to be within this statement with GC
- Can GC also comment on how the peregrine was observed moving from Q3/4 to Q5? Is the vantage points used for previous surveys still applicable?

6 **Landscaping**

There will be a requirement for operational fencing around the reservoirs. It was agreed previously that this will be of an equivalent type of that currently around Q6.

It is proposed that there will be a Requirement on the DCO to confirm a lighting strategy both during construction and operation which has due consideration of location and lux levels, ecology, security and proximity to dwellings and the proposed Snowdonia National Park dark skies reserve.

Workplace lighting at the onsite temporary compounds and operational power house will have due regard to UK guidelines on construction lighting, namely Health and Safety Executive guidance HSG38 Lighting at Work and also Bat Conservation Trust Statement on the Impact and Design of Artificial Light on Bats (May 2011).

Will NRW and GC accept a requirement on a lighting scheme as a Requirement as per the T&CPA decision notice?

7 **Access and Recreation**

We can confirm that these have been considered within Chapter 14 and throughout the design evolution.

Project:	Glyn Rhonwy Pumped Storage DCO	Job No/Ref:	60334725
Purpose:	Discussion of NRW and Gwynedd Council comments to s42 consultation	Date held:	30/03/15
Held at:	NRW office, Bangor	Made by:	SC (AECOM)
Present:	Chris Williamson (SPH) Catherine Anderson (AECOM) Sophie Collins (AECOM) Hannah Richardson (AECOM) Nigel Pilkington (AECOM) Ben Lewis (GVA) Gareth Thomas (NRW) Hugh Jones (NRW) Dave Thorpe (NRW) Dave Hatcher (NRW) Helen Hughes (NRW) Glyn Griffiths (Gwynedd Council) Rhys Jones (Gwynedd Council) Iwan Huws (NRW) David Wilby (NRW) Euryn Roberts (NRW) Tecwyn Evans (NRW)	Distribution:	All attendees
Apologies:	N/A		
No.	Item	Action By	
2	Water Resources		
2.1	<p><i>We note the comment on the 5m level for the outfall in Llyn Padarn and have understood the requirement for this level since the meeting held with CCW on the 27th February 2014 and the response provided on the 2nd April 2013. In addition this meeting also resolved the issue of temperature. Can NRW confirm that this approach is still valid?</i></p> <p>NRW recognise that previous agreements stand. Request communication of agreement and commitment of discharge pipeline to be placed above thermocline of Llyn Padarn at 5m depth to be clarified in the ES.</p> <p>Discharge licence will provide conditions of discharged water (temperature, quality and rate).</p>	AECOM / SPH	
2.2	<p><i>We would like some clarity on the requirement for discharge and abstraction licenses and the information required to support their applications.</i></p> <p><i>We would like confirmation that any discharges from Q1 to the Nant Y Betws will be subject to discharge consent and also the requirement for an environmental permit. It is difficult to provide frequency of discharges as this will rely on climatic and weather patterns.</i></p> <p><i>As the spillway design will be subject to detailed design, it is proposed to provide a Requirement on the DCO whether the design of the spillway will have due regard to the velocity of discharges as to not cause any downstream flooding or exacerbate third party flooding.</i></p> <p>SPH cannot confirm level and frequency of discharge required during operation</p>		

	<p>due to unpredictable rain fall in any given year. SPH are to provide NRW with a list of anticipated licences and permits that they require.</p> <p>NRW agree that spillway design will be a requirement on the DCO.</p> <p>NRW expect that 5 permits will be required: 2 for draining Q1 and Q6, 2 for scouring for Q1 and Q6, 1 for abstraction from Llyn Padarn. NRW to provide clarity on the type and consenting regime for any additional licenses and consents that may be required.</p> <p>NRW to outline their requirements for water sampling to inform the application for discharge of Q1 and Q6 waters prior to commencement of construction. NRW estimated that up to 12 non-consecutive samples would be needed.</p>	<p>SPH</p> <p>NRW</p> <p>NRW</p>
2.3	<p><i>We note that NRW have requested these elements be controlled through a MoU but request clarification whether a Requirement is more appropriate?</i></p> <p>NRW are of the opinion that a Requirement would be preferable to a Memorandum of Understanding.</p>	
2.4	<p><i>We note comments on the discharge or transfer of nutrient rich waters between catchments. We would like clarity on this point as the level of nutrients discharged into Llyn Padarn is managed by DCWW discharge consent over which SPH have no control over. The water within the reservoirs will be subject to treatment.</i></p> <p><i>Can we reach agreement of the discharge limits and quality of the waters discharged? Will this be part of the MoU proposed by NRW?</i></p> <p>NRW are concerned with sediment from the quarries being transferred to Llyn Padarn, specifically Q6 where there is the potential for munitions to be present. SPH confirm that filters/screening and water monitoring will be undertaken, and possibly water treatment.</p> <p>SPH enquired after the nutrient levels of Llyn Padarn and whether these have changed since the blue green algae bloom in 2009. NRW confirm that phosphate levels have dropped, and data can be provided should SPH submit a formal request for information (Bob Edwards of NRW to provide data).</p> <p>Agreement of discharge limits and water quality will only be commented on by NRW when a permit application is received.</p> <p>NRW confirmed that they are able to provide water quality information from monitoring stations in Llyn Padarn and the Afon Gwyfai to assist the HRA. This request should be made through the general enquires department (request made 31st March 2015).</p>	<p>NRW</p> <p>NRW</p>
3	<p>Flood Risk</p>	
3.1	<p><i>We also propose that the Excess Water Management Strategy will be formulated through the detailed design and also be a Requirement of the DCO.</i></p> <p>NRW agree that the Excess Water Management Strategy can be a Requirement on the DCO, but will require appropriate assessment of impact on receiving waters.</p>	
3.2	<p><i>We have been in contact with the Reservoirs Team and have agreed a way forward. We would like confirmation that this is sufficient for the DCO.</i></p>	

	<p>Design of the dams will be in accordance with the required legislation (Reservoirs Act), and the design has been initially reviewed by an AECOM Panel Engineer. NRW will confirm in their formal response regarding this.</p> <p>In relation to the dam design and landscaping, the dams will be faced in slate and blended into the existing slate mound surrounding landscape. Final details will be detailed in the Landscape and Reinstatement Plan to be finalised prior to construction.</p>	
3.3	<p><i>We can confirm that the pumping station will have flood resilience measures. However the above ground structures will only be of a small kiosk structure with the remainder of the pumping station underground.</i></p> <p>No further comment</p>	
4 4.1	<p>Ground Contamination</p> <p><i>Should there be any further information missing from the ES, please note that NRW can notify the applicant at any time.</i></p> <p><i>We can confirm that final ES will provide details on the scope of the preliminary site investigation works but no more than details provided to NRW on the 26th February 2015.</i></p> <p>Results of preliminary ground investigation works will not be available until pre-examination stage.</p>	
4.2	<p><i>We can confirm that the Water Management Plan will be updated to contain information on silt management.</i></p> <p>SPH confirm the WMP will be updated to contain the requested information.</p> <p>NRW request that if any silt or waste that is classed as hazardous is found during the construction phase, then this will need to be taken to an environmentally licensed site for disposal. This provision will need to be accounted for within the ES. Note – there are no hazardous waste sites located in Wales.</p>	
5 5.1	<p>Protected Species and Ecology</p> <p><i>We can confirm that a Phase 1 habitat survey will be carried out for the Order Limits.</i></p> <p><i>From the CCW response contained in the Scoping Opinion, please can NRW confirm whether a badger licence will be needed. It is proposed to undertake a pre-construction survey and this will be a Requirement of the DCO.</i></p> <p>SPH confirm that Phase 1 will be updated (30 March – 1 April) for revised Order Limits.</p> <p>SPH propose that a pre-commencement survey on the badger sett will be undertaken. It is not currently proposed that any works will be undertaken within 30m of the sett. NRW to confirm if works within 30m will require a protected species licence.</p> <p>NRW enquired after whether there is expected to be felling of trees and whether felling licences will be required. SPH confirmed that some trees near the lagoons, where there is a blanket tree protection order (TPO) may need to be removed when constructing the spillway, but that efforts would be made to retain the more valuable species (oak and ash). In addition practical working methods</p>	NRW

	<p>can include reduced the working width where possible to minimise impacts to root systems. There may also need to be some trees felled on the fringes of Q6. SPH confirmed that bat surveys would be carried out prior to any felling and that appropriate mitigation will be put in place, likely in the form of replanting elsewhere within the Order Limits. This will be incorporated in to the Habitat Management Plan.</p>	
5.2	<p><i>Please can NRW confirm their comments on the requirement for a DSCO for working within the Llyn Padarn SSSI?</i></p> <p>NRW cannot confirm whether a DSCO is required at this time.</p> <p>SPH suggest that due to uncertainty DSCO is included within the Details of Consents and Licensing – to be confirmed.</p>	SPH
5.3	<p><i>It is proposed to undertake fish and invertebrate surveys prior to commencement of works and controlled through Requirement – is this acceptable to NRW and GC?</i></p> <p><i>There is a condition on the T&CPA decision notice related to floating plantain and so can this also be a Requirement?</i></p> <p>NRW confirm that fish surveys in Q1 and Q6 are to be undertaken and the results included as part of the DCO submission, due to uncertainty of species that may or may not be present within quarry water bodies.</p> <p>SPH to provide proposed methodologies for approval of fish and invertebrate surveys. SPH note that certain survey methodologies may not be suitable due to potential presence of UXO in the bottom of Q6. Additionally it was noted that Q1 is very hard to access safely, rope access only, and this may have implications on survey methods.</p> <p>NRW to provide most recent floating water plantain survey data from lagoons where spillway will be located.</p> <p>NRW agreed that surveys prior to commencement of works would be preferable to surveys prior to submission of DCO, and if floating water plantain is found to be present then translocation may be required. NRW are to confirm if a translocation licence is required in this instance.</p> <p>SPH enquired as to whether NRW would be able to supply an equivalent to a Letter of No Impediment, in addition to a Statement of Common Ground. NRW are to confirm whether this can be provided.</p>	<p>SPH</p> <p>NRW</p> <p>NRW</p> <p>NRW</p>
5.4	<p><i>Valuation of Arctic charr; in the valuation table of the Ecology Chapter Table 6-15 it stated that Arctic charr would be valued under Llyn Padarn SSSI for which they are a designated feature. All other fish species are valued as low. All features for designated sites are valued under that site rather than separately, unless they occur outside of the designated site as well. Please could NRW confirm they are happy with this approach?</i></p> <p><i>We note your comment on providing details of Arctic charr spawning times? It is generally understood to be Autumn - early winter, although it can vary between local populations. Does NRW have any further information to inform their comment?</i></p> <p>AECOM clarified that the sensitivity of Arctic Charr has been incorporated into</p>	NRW

	<p>the SSSI sensitivity classification. NRW note that whilst all fish species in the assessment are valued as low, the Arctic Charr present in Llyn Padarn are rare and should therefore be of higher value.</p> <p>NRW (Wally Hanks) to provide further detail on spawning timescales of the Charr.</p> <p>SPH to confirm whether screening / filters will be sufficient to prevent uptake of eggs and juveniles.</p>	NRW
5.5	<p><i>Can we discuss the temperature difference of the water discharging from the system? We believe this issue was resolved at an earlier meeting (see section 2.1)</i></p> <p>SPH confirm that water being discharged will not be of a temperature significantly different from the surface water in the receiving water bodies. This will also be controlled by the conditions of the permits issued by NRW.</p>	
5.6	<p><i>NRW stated: 'We do not agree with the conclusion due to the periodic overflow from Q1 into the Nant-y-Betws. This spillway will give a clear direct hydrological link between Llyn Padarn, the various quarries and the Afon Gwyrfa SAC. There is unknown species within the quarries, nutrient enrichment in Llyn Padarn, and these could be passed to the Afon Gwyrfa SAC.'</i></p> <p><i>Can we discuss this in further detail? It was stated in the NSER Table 3.3 that the Development will not allow the spread of invasive species into any Natura 2000 sites. Should more detail be provided on how, i.e. nutrient enrichment: the water will be treated to prevent nutrient enrichment exiting the system through the spillways?</i></p> <p><i>Section 6.8.185 that NRW refers to is for Nant-y-Betws running water, not Afon Gwyrfa SAC. As such the magnitude of the effect of invasive species is medium, for a low value receptor this equates to a minor effect. The effect of invasive species on the Afon Gwyrfa is under section 6.8.171, and here the effect is classed as permanent major adverse.</i></p> <p>SPH will ensure that final ES contains details of how any potentially adverse effects from a hydrological connection between the two receiving water bodies and the quarries will be mitigated against including the likelihood of a discharge from Q1.</p>	SPH
5.7	<p><i>NRW stated: 'It has been stated (table 3.3 and paragraph 4.2.11, pg 43) that increases in the flows in the Afon Gwyrfa could have a beneficial effect on the river, we do not agree with this due to the risk involved. However, with suitable mitigation measures, these effects may be managed.'</i></p> <p><i>Can we discuss this, it was understood that the Afon Gwyrfa suffered from depleted flows and this was agreed in the 2012 ES.</i></p> <p>NRW believe that the statement regarding beneficial effects on the Afon Gwyrfa SAC should be removed as this is not certain. NRW noted that in times of high rainfall, when it is most likely that scouring would be required from the quarry reservoirs into the two receiving water bodies is when water flow would be highest and least beneficial.</p>	SPH
5.8	<p><i>Breeding bird method statement – we would like to discuss what would be expected to be within this statement with GC</i></p>	

	<p><i>Can GC also comment on how the peregrine was observed moving from Q3/4 to Q5? Is the vantage points used for previous surveys still applicable?</i></p> <p>GC agreed that the breeding bird method statement should include all breeding birds, not just the peregrine falcons. SPH requested that the breeding bird method statement be a Requirement of the DCO. This was agreed with NRW and Gwynedd Council.</p> <p>AECOM requested confirmation of the source of information in the Gwynedd Council s42 response regarding the breeding location of the peregrine falcon. Gwynedd Council confirmed that this was from anecdotal records and that they suggested that the peregrines present in Q3 and Q4 have also used Q5 for nesting. Gwynedd Council suggested that due to the potential movement of the peregrines, annual surveys should be undertaken to monitor their location.</p> <p>SPH confirmed that additional breeding bird surveys are to be undertaken this season and asked if the current breeding bird methodologies, using the same vantage points were acceptable for these survey updates. Gwynedd Council agreed that this was acceptable.</p> <p>GC and SPH agreed that during construction works, works which may effect the peregrines (blasting in the quarries) should be overseen by the Ecological Clerk of Works.</p>	SPH
6	<p>Landscaping</p> <p><i>There will be a requirement for operational fencing around the reservoirs. It was agreed previously that this will be of an equivalent type of that currently around Q6.</i></p> <p><i>It is proposed that there will be a Requirement on the DCO to confirm a lighting strategy both during construction and operation which has due consideration of location and lux levels, ecology, security and proximity to dwellings and the proposed Snowdonia National Park dark skies reserve.</i></p> <p><i>Workplace lighting at the onsite temporary compounds and operational power house will have due regard to UK guidelines on construction lighting, namely Health and Safety Executive guidance HSG38 Lighting at Work and also Bat Conservation Trust Statement on the Impact and Design of Artificial Light on Bats (May 2011).</i></p> <p><i>Will NRW and GC accept a requirement on a lighting scheme as a Requirement as per the T&CPA decision notice?</i></p> <p>SPH confirmed that fencing around Q1 will be of similar type to that already present – stockfencing incorporating post and wire, as is also stipulated by the land agreements with the Crown Estate. Fencing around Q6 will also be of an equivalent to that already present.</p> <p>Gwynedd Council agreed that lighting could be controlled by a Requirement on the DCO.</p> <p>SPH confirm that a Landscape and Reinstatement Plan will be included within the ES.</p>	
7	<p>Access and Recreation</p> <p><i>We can confirm that these have been considered within Chapter 14 and</i></p>	

	<i>throughout the design evolution.</i>	
	No further comment.	
AOB	NRW enquire as to where water for construction will be drawn. SPH confirm that there are hydrants located near both Q1 and Q6, so it is likely that water will be taken from the mains supply. If this is not possible at Q1 due to low pressure, water supplies will be supplemented with onsite bowsers.	

Project Name: **Glyn Rhonwy DCO**

Date: **15th July 2015 (10am site visit) (1pm meeting @ NRW Bangor offices)**

Attending: **Catherine Anderson, AECOM**

Chris Williamson, Dave Holmes, Snowdonia Pumped Hydro

Ben Lewis, GVA

NRW – Gareth Thomas, Elaine Wort, David Wilby et al

Gwynedd Council – Glyn Llewellyn Gruffydd, Rhys Jones

1 Introductions and Aim of the Meeting

Agenda as follows

2 Update on progress

(a) Aquatic inverts, fish and ecology surveys

As per email to NRW and GC on the 11th May 2015, a summary has been provided following the completion of the fish and invert surveys. No response was received. Summary repeated below.

Fish and invert surveys and a water sampling round at both quarries were complete in late May/ early June. Water testing and chemistry and diatom analysis is ongoing. We thought it may be useful to provide you with a summary of the results for your information.

Q1 – No fish found, palmate newts were present. No invasive fish were found. Numerous attempts were made using a grab sampler and a core sampler but no sediment could be gained for analysis due to the slate waste and boulders. A round of water sampling was taken.

Q6 – Three sticklebacks and a large eel were found in Q6. No invasive fish were found. Sediment samples were attempted in 25 locations with a core sampler (not a grab sampler due to the UXO risk) and again no sediment was present. A round of water sampling was taken. The lack of any discernible sediment seems to confirm that the quarries are effectively oligotrophic and therefore there is an extremely unlikely risk of any eutrophication of Llyn Padarn. If they were considered to be mesotrophic or eutrophic we would have expected there to be a reasonable amount of sediment in them.

Having consulted with the Natural History Museum and Buglife, we are of the opinion that the analysis of CPET will have no meaningful input into the HRA other than setting a species baseline for Chironomids within the quarries. In addition there are no “invasive” species of Chironomids. Adult Chironomids are free flying and can easily cover distances in excess of over 1-2km from their hatch sites when windblown. We would not therefore expect to find any species within the quarries that are not freely mobile within the area of Llyn Padarn SSSI and Afon Gwyfai SAC.

Aquatic ecology survey was completed on the 22nd June and the results have confirmed no floating water plantain in the vicinity of the spillway.

Final report was submitted to NRW and GC for comment on the 10th July 2015. Welcome comments on the requirement for CPET testing and also when comments

may be available on the ecology report.

(b) Water Sampling Results

There are seven samples from Q6 and two samples from Q1 and from each of the boreholes hence any conclusions need to be preliminary until further samples from Q1 and from the boreholes are obtained.

- There is no evidence of organic contamination in Q1 or Q6 with PAHs, BTEX and TPH all below the limits of detection.
- A similar conclusion can be drawn for the groundwater, although PAHs above the limit of detection are reported for the samples taken from boreholes BH14, between Q5 and Q6, and BH22, to the south east of Q1.
- SVOCs and VOCs are below the limits of detection.
- Other than occasional minor exceedances of the EQS for 'freshwater' for ammoniacal nitrogen, all of the determinands are present at concentrations well below the guidance levels, typically the EQS for freshwater or the UK Drinking Water Standard where there is no EQS specified.
- Most of the metals are present at low concentrations or below the limit of detection.
- Arsenic has been recorded in all of the groundwater samples and in Q6 with a maximum recorded concentration of 7.36µg/l in borehole BH13, significantly below the EQS of 50µg/l.
- Copper is present in both groundwater and surface water at slightly elevated levels (maximum 9.9µg/l in borehole BH26) and, subject to the alkalinity of the water, occasionally exceeds the EQS. It is possible that this may be due to natural mineralisation of the groundwater through the presence of mineral veins in the rocks. This may also explain the presence of arsenic.
- Most of the samples have a low mineral content with an electrical conductivity for most groundwater samples less than 250µS/cm, except for boreholes BH13, BH14 and BH19. The electrical conductivity of the groundwater samples is slightly higher than recorded in Q1 and Q6.
- Chloride concentrations are low in the order of 10mg/l except for the sample from borehole BH05, in which chloride of 49mg/l was reported.
- The water quality in Q6 is consistent for the seven samples. The concentrations of specific determinands are generally slightly higher than in Q1.
- The main differences in Q6 are the presence of much higher barium concentrations of generally approximately 550µg/l and strontium of approximately 90µg/l compared with Q1. The barium concentration is an order of magnitude higher than in the groundwater.
- In general and based on the preliminary data, it can be concluded that there is no evidence of any significant contamination in the groundwater or in the surface water in Q1 and Q6.

(c) Breeding birds

Three surveys have been undertaken (8th April 0715-1115hrs, 30th April 0650-1125hrs and 19th May 0640-1105hrs).

On 30th April a male chough was seen feeding the female chough (courting/breeding behaviour) and a pair were regularly seen in/around Q4 so breeding was predicted (noted as confirmed in the report).

Peregrine pair regularly seen around Q4 in 8th April and 19th May and birds were very active along the southwest rockface where a nest was predicted. Peregrine often flew

up and landed on that cliff (out of sight). The exact nest location of both the chough and peregrine were not found but breeding was predicted given activity/behaviour in the quarry

Subsequent observations by onsite ecologist during site investigation works confirmed peregrine activity.

Fourth survey proposed for July 2015

(d) Update on Site Investigation Works

SPH to update on SI progress and demobilisation.

(e) UXO

Comments from both GC and NRW have now been received. A revised Zetica report has been produced on the basis of finds during the SI works. This will be submitted with the ES.

(f) NRW & GC Queries

TBC by NRW and GC

3. Updates on Scheme Evolution Post Consultation

4. Submission Timescales and Draft Documentation

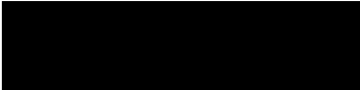
Submission proposed for late August / early September 2015

DCO documents are to be sent to PINS for comment in the next 2-3 weeks. Can NRW and GC confirm whether they wish to see any documents prior to submission?

5. AOB

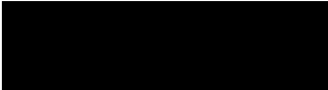
Project:	Glyn Rhonwy Pumped Storage DCO	Job No/Ref:	60334725
Purpose:	Pre-Submission Meeting with NRW and GC	Date held:	15/07/2015
Held at:	NRW office, Bangor	Made by:	HR (AECOM)
Present:	Catherine Anderson, AECOM Hannah Richardson, AECOM Ben Lewis, GVA David Holmes, Snowdonia Pumped Hydro Chris Williamson, Snowdonia Pumped Hydro Julian Boswall, Burges Salmon Elaine Wort, NRW Gareth Thomas, NRW David Wilby, NRW Huw Jones, NRW Glyn Llewellyn Gruffydd, Gwynedd Council Rhys Jones, Gwynedd Council	Distribution:	All attendees
Apologies:	Tecwyn Evans, NRW Iwan Huws, NRW Alun Hughes, Gwynedd Council		

No.	Item	Action By
1	Introductions	
1.1	NRW request that they should be notified of any issues where feedback is required (and provided with any necessary documentation / plans / etc) at least 2 weeks prior to scheduled meetings to allow sufficient time to provide a response. This was noted by SPH and the project team and it was agreed that comments from NRW and GC on the letter setting out the changes to the scheme since February 2015 would be provided by the 31 st July 2015.	
1.2	AECOM had provided an agenda and pre-meeting note on the items to be discussed. These are shown in italics.	
1.3	NRW and Gwynedd Council both advised on the apologies. AECOM enquired whether Alun Evans would be able to provide comments on the noise monitoring briefing note sent to him a few months ago. GLG advised that Alun had moved departments but would chase this up	GLG
2	Progress Update	
2 (a)	Aquatic invertebrates, Fish and Ecology Surveys <i>Fish and invert surveys and a water sampling round at both quarries were complete in late May/ early June. Water testing and chemistry and diatom analysis is ongoing. We thought it may be useful to provide you with a summary of the results for your information.</i> <i>Q1 – No fish found, palmate newts were present. No invasive fish were found.</i> <i>Numerous attempts were made using a grab sampler and a core sampler but no</i>	



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	<p><i>sediment could be gained for analysis due to the slate waste and boulders. A round of water sampling was taken.</i></p> <p><i>Q6 – Three sticklebacks and a large eel were found in Q6. No invasive fish were found. Sediment samples were attempted in 25 locations with a core sampler (not a grab sampler due to the UXO risk) and again no sediment was present. A round of water sampling was taken. The lack of any discernible sediment seems to confirm that the quarries are effectively oligotrophic and therefore there is an extremely unlikely risk of any eutrophication of Llyn Padarn. If they were considered to be mesotrophic or eutrophic we would have expected there to be a reasonable amount of sediment in them.</i></p> <p><i>Having consulted with the Natural History Museum and Buglife, we are of the opinion that the analysis of CPET will have no meaningful input into the HRA other than setting a species baseline for Chironomids within the quarries. In addition there are no “invasive” species of Chironomids. Adult Chironomids are free flying and can easily cover distances in excess of over 1-2km from their hatch sites when windblown. We would not therefore expect to find any species within the quarries that are not freely mobile within the area of Llyn Padarn SSSI and Afon Gwyfai SAC.</i></p>	
<p>2.1</p>	<p>NRW agreed to review the UCL report and provide comment, however based on their initial review, it appears that nothing of significance has been found in Q1 or Q6. NRW to provide a formal response by 31st July 2015.</p> <p>AECOM requested NRW opinion on the requirement of CPET testing for chironomids. This is to be provided by the 31st July 2015.</p>	<p>NRW</p>
<p>2.2</p>	<p>Gwynedd Council confirmed that they do not wish to make a comment on UCL Report</p>	
<p>2 (b)</p>	<p>Water Sampling Results</p> <p><i>There are seven samples from Q6 and two samples from Q1 and from each of the boreholes hence any conclusions need to be preliminary until further samples from Q1 and from the boreholes are obtained.</i></p> <ul style="list-style-type: none"> • <i>There is no evidence of organic contamination in Q1 or Q6 with PAHs, BTEX and TPH all below the limits of detection.</i> • <i>A similar conclusion can be drawn for the groundwater, although PAHs above the limit of detection are reported for the samples taken from boreholes BH14, between Q5 and Q6, and BH22, to the south east of Q1.</i> • <i>SVOCs and VOCs are below the limits of detection.</i> • <i>Other than occasional minor exceedances of the EQS for ‘freshwater’ for ammoniacal nitrogen, all of the determinands are present at concentrations well below the guidance levels, typically the EQS for freshwater or the UK Drinking Water Standard where there is no EQS specified.</i> • <i>Most of the metals present are at low concentrations or below the limit</i> 	



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	<p><i>of detection.</i></p> <ul style="list-style-type: none"> <i>Arsenic has been recorded in all of the groundwater samples and in Q6 with a maximum recorded concentration of 7.36µg/l in borehole BH13, significantly below the EQS of 50µg/l.</i> <i>Copper is present in both groundwater and surface water at slightly elevated levels (maximum 9.9µg/l in borehole BH26) and, subject to the alkalinity of the water, occasionally exceeds the EQS. It is possible that this may be due to natural mineralisation of the groundwater through the presence of mineral veins in the rocks. This may also explain the presence of arsenic.</i> <i>Most of the samples have a low mineral content with an electrical conductivity for most groundwater samples less than 250µS/cm, except for boreholes BH13, BH14 and BH19. The electrical conductivity of the groundwater samples is slightly higher than recorded in Q1 and Q6.</i> <i>Chloride concentrations are low in the order of 10mg/l except for the sample from borehole BH05, in which chloride of 49mg/l was reported.</i> <i>The water quality in Q6 is consistent for the seven samples. The concentrations of specific determinands are generally slightly higher than in Q1.</i> <i>The main differences in Q6 are the presence of much higher barium concentrations of generally approximately 550µg/l and strontium of approximately 90µg/l compared with Q1. The barium concentration is an order of magnitude higher than in the groundwater.</i> <i>In general and based on the preliminary data, it can be concluded that there is no evidence of any significant contamination in the groundwater or in the surface water in Q1 and Q6.</i> 	
2.3	<p>NRW note guidance previously sent on scour valves should be considered and to seek advice from the panel engineer on whether a scour valve at Q1 is needed for the scheme</p> <p>Scour valve discharge requires further consideration of the potential for the introduction of invasive species into Nant y Betws. NRW also note that modelling needs to be undertaken in the FCA for the Nant y Betws to check that the overspill will not affect the catchment. AECOM to confirm if this has already been undertaken and if it has already been included in previous FCA.</p>	AECOM
2.4	<p>David Wilby to provide any further comments on water sampling by w/c 20th July, if no new comments are made then AECOM to refer to original comments provided by NRW.</p>	NRW
2.5	<p>Gwynedd Council confirmed that they do not wish to make any comments on the water quality results.</p>	
2 (c)	<p>Breeding Birds</p> <p><i>Three surveys have been undertaken (8th April 0715-1115hrs, 30th April 0650-</i></p>	-



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	<p>1125hrs and 19th May 0640-1105hrs).</p> <p><i>On 30th April a male chough was seen feeding the female chough (courting/breeding behaviour) and a pair were regularly seen in/around Q4 so breeding was predicted (noted as confirmed in the report).</i></p> <p><i>Peregrine pair regularly seen around Q4 in 8th April and 19th May and birds were very active along the southwest rockface where a nest was predicted.</i></p> <p><i>Peregrine often flew up and landed on that cliff (out of sight). The exact nest location of both the chough and peregrine were not found but breeding was predicted given activity/behaviour in the quarry</i></p> <p><i>Subsequent observations by onsite ecologist during site investigation works confirmed peregrine activity.</i></p> <p><i>Fourth survey proposed for July 2015</i></p>	
2.6	NRW confirm sighting of peregrine on site on a recent site visit and that it had prey in its talons which is a confirmed signal of breeding activity	
2.7	SPH appointed Ecological Clerk of Works is satisfied that SI works have not interfered with peregrine falcons that utilise the area. This has been supported by the North Wales Wildlife Trust, who confirm no disturbance to peregrines.	
2 (d)	<p>Update on Site Investigation (SI) Works</p> <p><i>Site Investigation works commenced on the 30th March and are due off site w/c 17th July. All rigs have now been removed, and reinstatement works carried out. There are 19 borehole locations around both quarries and penstock route. Also trial pits on site. Borehole logging and geological studies of cores have been undertaken but awaiting results. Also packer testing to determine hydrological capabilities of the rock. Ongoing water sampling is being undertaken and water testing of boreholes (3 suites of testing left).</i></p>	
2.8	Overall the GI works went well with no major issues occurring. Some minor environmental and planning issues dealt with quickly in conjunction with NRW and Gwynedd Council enforcement officers – responded to Concern About Glyn Rhonwy group as and when required. No major problems aside from hardness of rock in places being greater than expected.	
2.9	SPH to send NRW current testing and water sampling schedule to review data.	SPH / AECOM
2.10	Following this SPH request that NRW provide advice on the length of water monitoring required.	NRW
2 (e)	<p>UXO</p> <p><i>Comments from both GC and NRW have now been received on the Zetica report. A revised Zetica report has been produced on the basis of minor finds during the SI works. This will be submitted with the ES.</i></p>	
2.11	The Glyn Rhonwy site is part of what was RAF Llanberis. Although UXO	



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	clearance works have taken place in the past, some residual risk remains that more UXO will be encountered during further works on site. Zetica UXO specialists have now visited the site a number of times. We are actively working with them to develop an effective UXO strategy for the ongoing works.	
2.12	NRW and GC to advise if they wish to review updated Zetica report prior to submission of ES.	NRW / GC
2 (f)	NRW & GC Queries	
	SPH and AECOM invited any further comments from the mornings site visit	
2.13	NRW stated that they are satisfied that the majority of the waste created will remain within the curtilage of the site boundary. However they advised SPH to outline why CL:AIRE Code of Practice may not apply within the ES.	SPH / AECOM
2.14	CA stated that the Code of Construction Practice would provide a waste management strategy and agreed that it would include details of the wood, foliage and any inert waste that may be generated.	
2.15	NRW enquired if any slate crushing would be onsite. SPH confirmed this. NRW advised that pollution prevention from slate waste must also be detailed, namely protection of water quality due to runoff must be adequately dealt with in the CoCP. NRW highlight that the aluminium present within slate can be washed away and end up in either catchment, and can be toxic. It is also important to determine size of slate waste that results from the crushing process. DW advised that the smaller the granule, the more significant the potential for run-off impact. DW advised SPH to determine how the slate will be treated and reused and then make the decision on temporary stock-piling.	AECOM
	NRW to provide AECOM with details on methods available for the management of potential aluminium run-off and slate waste and note the use of settlement lagoons on other projects (e.g. scheme at Blaenau Ffestiniog) or dosing to effectively mitigate any adverse effects.	
	DW confirmed that a mobile plant permit would be required.	
	NRW highlight the importance of providing detail on the location of temporary stock piles and the location of where the crushed slate will be stored, within the ES.	
2.16	GLG suggest that suppliers may be interested in the slate waste, in particular that arising from Q6, however this would entail the need to remove waste offsite. GLG recommends that the Applicant should keep in contact with North Wales Mineral Department.	SPH
2.17	NRW enquired about the requirement for a scour value at Q1 and requested that there be more detail in the Final ES and permit applications about the flow rate, duration and volume of any discharges from Q1 to the Nant Y Betws. This was noted.	
3	Updates on Scheme Evolution Post Consultation	
	<i>At Llyn Padarn the location of the pumping station has been changed and is now positioned onshore, however outside of the car park. A coffer dam will also need</i>	



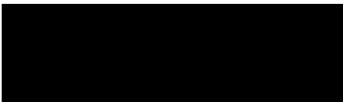
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	<p><i>to be installed. Alternative methods for creating the spillway have been explored including the use of a barge.</i></p> <p><i>Further investigation works since the submission of the PEIR, including LiDAR and bathymetry surveys have identified that Q1 is bigger, and Q6 smaller than originally thought. As a result of this a conveyor connection will be required in the penstock to allow excess material from Q6 to be moved up to Q1 to be stored on stock piles. This will have no additional effects and no further assessments are required.</i></p> <p><i>Due to confirmation in quarry size the reservoir volume has increased and therefore capacity has increased from 1.1 million m3 to 1.3 million m3. SPH/AECOM to discuss this increase in required abstraction with NRW at later stage.</i></p> <p><i>The scheme capacity remains at 99.9MW but the additional reservoir volume will allow it to operate for longer.</i></p>	
3.1	NRW note that there are issues with de-watering in terms of the cofferdam and the EA position statement should be referenced and adhered to. If this is not possible a further (temporary) environmental permit may be required for de-watering activities.	
3.2	GC and NRW enquire if there will be any new landscape effects as a result of the scheme evolution. AECOM confirm that there will be no significant change from viewpoints and a new photomontage and ASIDHOL report will be submitted with the final ES.	
3.3	It was agreed that comments from NRW and Gwynedd Council on the design amends would be provided by 31 st July 2015	
4	<p>Submission Timescales and Draft Documentation</p> <p><i>Submission proposed for late August / early September 2015</i></p> <p><i>DCO documents are to be sent to PINS for comment in the next 2-3 weeks. Can NRW and GC confirm whether they wish to see any documents prior to submission?</i></p>	
4.1	NRW and GC requested to see HRA, CoCP, Breeding Bird Report, WFD Report, Water Sampling Plan and Requirements prior to submission	
4.2	NRW enquired whether the HRA would cover the potential for other invasive species should they be found in the future such as vampire shrimp. AECOM confirmed that the baseline surveys had not identified this species and that the HRA should only assess what is the baseline. Notwithstanding this, should any new invasive species be found in the future, then there would be a strategy in place to deal with this but the risk of cross catchment contamination is extremely low as the Q1 scour valve is only to be used in emergency purposes and not regular discharge.	
4.3	NRW confirmed that in any permit application for discharge from Q1, modelling of the Nant Y Betws catchment would be required. AECOM and SPH agreed.	



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4.4	CA enquired about the construction water sampling regime and whether the same sampling suite could be used for the baseline sampling	
4.5	NRW confirmed that the sampling suite should at least include metals, total and dissolved suites.	
End of Meeting		



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Glyn Rhonwy Scheme Amends Briefing Note to NRW and Gwynedd Council 14th July 2015

We write in connection with the Glyn Rhonwy Pumped Storage scheme in advance of the submission of an application for a Development Consent Order (DCO).

Following the consultation undertaken under sections 42 and 47 of the Planning Act 2008, which included the issue of a Preliminary Environmental Information Report (PEIR), Snowdonia Pumped Hydro (SPH) has undertaken further ecological surveys and continued the preliminary site investigation works. This additional work has been undertaken in response to dialogue with consultees, including Gwynedd County Council (GCC) and Natural Resources Wales (NRW). As a result of the additional survey work, and in response to consultation feedback, it has been necessary to refine the proposed development.

As part of its on-going consultation, the applicant wishes to provide both GCC and NRW with an overview of the minor amendments proposed to the scheme as part of this refinement process, and to confirm that no changes are required to the agreed scope of the EIA. It is the applicant's view that no additional likely significant effects will arise from the scheme amendments and that the changes proposed can be mitigated through the mitigation measures already proposed. The scheme amendments will be fully assessed as part of the EIA process and reported in the ES submitted with the application. An overview of the amendments to the scheme subsequent to the consultation exercise is provided below, and the enclosed table highlights how changes will be assessed through the EIA and reported in the ES.

Change in Scheme Capacity

To ensure an optimal design within the scope of the development consent, additional investigation has been undertaken to confirm the existing volume of the voids at Q1 and Q6. Detailed topographical and bathymetry surveys have been undertaken, supplemented with a laser scan of both quarries using LiDAR and Detailed Terrain Model (DTM) information. This has confirmed the volumes of the existing quarries are larger than set out in the PEIR.

This increase in potential storage capacity does not materially change the proposed development as consulted on in February 2015. The volume of the reservoirs proposed for the scheme will be 1,300,000m³ – an increase of 200,000m³ over that stipulated in the consultation documents. Importantly, this increase does not represent any additional excavation of the quarries, but is entirely attributable to the improved accuracy provided by the detailed topographic surveys. The increase in capacity will deliver an increase in energy generated from 600 to up to approximately 720MWh. The overall power generation of the proposed development remains at 99.9MW (as the increased storage capacity will allow the facility to operate for a longer time period) and therefore no changes to the electrical connection are required.

It must be noted that the increased storage capacity will not result in any changes to the overall size of the dams or the above ground buildings (such as the power house). It is purely the volume of the reservoirs and the length of time the scheme can operate at maximum output of 99MW. This is to be taken account of in the operational (tonal) noise assessment which will be reported in the ES.

Change in Construction Method - Movement of Material from Q6 to Q1

The detailed topographic and digital mapping survey has identified that whilst the void at Q1 is larger than previously estimated, it has been confirmed that Q6 is smaller than originally estimated. Principally, at Q6, this is due to the presence of a number of geological intrusions below the surface of the water identified through the bathymetric survey - these intrusions will need to be removed to create the reservoir at Q6. Therefore, in order to provide the equivalent storage capacity in Q6 as Q1, up to approximately 650,000m³ of virgin material will need to be excavated from Q6 after material is used for the construction of the Q6 dam.

Therefore SPH have undertaken a design review, where alternative storage areas were considered. It was recognised that opportunities to store the excess virgin material in the

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vicinity of Q6 are constrained, it is proposed that the excess virgin material not utilised in the construction of the dam at Q6 can be transported through the penstock utilising a conveyor. The construction method for the penstock includes a conveyor for removal of excavated material, and this conveyor will be connected to run the full penstock length between Q6 and Q1 to carry material from Q6 to Q1. This material will then be deposited within the proposed slate mounds at Q1.

The material excavated from Q6 will result in an increase in the volume of the slate mounds at Q1 from up to approximately 690,000m³ to up to approximately 935,000m³. However the slate mounds still remain in the same orientation as approved previously and as per the photomontage of Viewpoint 2 Moel Eilio (see Appendix 5.4 of the Draft ES). As the bulking factor of 1.6 and compaction factor of 1.3 have remained the same, the slate mounds will occupy a larger footprint than previously proposed, but not result in any additional impacts as the mounds will be 4m away from the nearest public right of way (and their associated permanent diversions), 10m away from the Nant Y Betws and 2m away from the Order Limits boundary in any other non-constrained areas. The use of detailed terrain data has confirmed that there is sufficient space and a landscape assessment has confirmed that there are no additional effects.

The material will be subject to a contaminated land assessment (the methodology for which will be established in the ES) and the material will be screened for any unexploded ordnance, as per the proposed Discovery Strategy, prior to its transportation. However given its virgin material status, it is highlighted that it is unlikely that there will be any significant effects from its transportation. As per the Q1 slate mounds, this will be controlled via a Material Management Plan (which is expected to be controlled by a DCO Requirement). Any additional permitting or licensing requirements will be confirmed with NRW.

Change in Construction Method – Spillway into Llyn Padarn

SPH have considered the responses received during the consultation process, and have sought to refine and revise the proposed construction method of the spillway into Llyn Padarn.

The previous construction method may have included a cofferdam to provide a dry working environment as the pumping station was proposed to be located in an area where the ground is predominantly made up of slate waste with a high water permeability, close to the shore of Llyn Padarn. However given the concerns raised regarding the works at Llyn Padarn, the applicant proposes to minimise the working area contained within the cofferdam and limit this to the immediate vicinity of the proposed pumping station and the area required within Llyn Padarn to allow for sufficient depth to be achieved for the spillway. This working area is expected to be approximately 5m by 20m.

In effect, this will allow a small boat or barge to be used to “string out” the spillway and connect it to the onshore section, once it has been sunk into place with pre-cast concrete weights.

This alternative construction method has been proposed in response to health and safety concerns of the users of Llyn Padarn. It should also be noted that any likely significant effects are unlikely as the works in this area are only temporary in nature and will be undertaken outside of any school holidays to minimise disruption and also in full consultation with Parc Padarn.

SPH can also confirm that the pumping station has been moved further away from the banks of Llyn Padarn and not within the car park area. This will greatly reduce the potential impact, and working timed in the area closest to the lagoons; a key issue identified by the CAGR group.

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14th July 2015

Table 1 – Scheme amends				
Chapter	Changes to Final ES	Additional Measures to be Considered	Changes to Residual Effects	Revised Information
Chapter 1 Introduction	Description and Parameters	None	None	Description and Parameters
Chapter 2 Approach to EIA	None	None	None	None
Chapter 3 Project Description	Changes in project description	N/A	N/A	Changes in project description. Change in figures and example construction
Chapter 4 Evolution of Design and Parameters	Changes in Rochdale Envelope parameters, dimensions and additional information on design refinement.	N/A	N/A	None
Chapter 5 Planning Policy	None	None	None	None
Chapter 6 LVIA	Slight revision to dimensions of the excess slate mounds at Q1. Minor differences will occur to VP2. Views from remaining VPs remain unchanged due no other scheme changes.	None	There is no change to the significance of effects assessed and the conclusions of the ES are not affected.	Photomontage to be re-rendered for VP2 only
Chapter 7 Ecology	No further change to operational footprint. ES chapter to be updated with fish, inverts, aquatic ecology and water quality testing. HRA to be updated and revised in light of ecology survey and water	None	None. Habitats are relatively homogenous. Mitigation remains valid.	Updated chapter and HRA

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	quality information			
Chapter 8 Ground Conditions	The transfer of material from Q6 to Q1 is to be considered in the ES	Amended assessment. Revised conceptual site model will be undertaken as per DCO Requirement.	None	Revised assessment
Chapter 9 Water Resources	Water Framework Directive to be amended. ES Assessment to be amended with increased volumes to be abstracted.	Updated calculations on WFD for commissioning abstraction		Updated ES assessment and WFD assessment
Chapter 10 Flood risk	No change in assessment apart from minor updates No changes to FCA or modelling report	None	None	Minor updates for increased capacity
Chapter 11 Cultural Heritage & Archaeology	No changes to archaeology on penstock route Slate mounds amends to be considered in ES chapters and ASIDOHL	None	None	Amended ES assessment and ASIDOHL to be updated in line with VP2 photomontage
Chapter 12 Traffic & Transportation	Delivery of additional conveyors	None	None	Amended ES assessment
Chapter 13 Noise	No change to construction or operational noise limits.	None	None	Amended assessment for length of operation
Chapter 14 Air Quality	No additional emission points or changes to emissions levels. Updates for additional slate mound volumes	None	None	Amended ES assessment
Chapter 15 Socio-economics	Amended for alternative construction method at Llyn Padarn	None	None	Amended for alternative construction method. Impact of loss / replacement of common land and open

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				space will be assessed.
Chapter 16 Environmental Management	No change to ES Chapter or CoCP	None	None	No change to submitted chapter, figures or appendices
Chapter 17 Cumulative Assessment	No change to cumulative assessment or Appendix 16.1	None	None	No change to submitted chapter, figures or appendices

Glyn Rhonwy Scheme Amends Briefing Note to NRW and Gwynedd Council 14th July 2015

Conclusion

Given that the impact of the proposed amendments are predominantly addressed through the existing mitigation measures as proposed within the draft ES (with some minor additions and additional information to be provided as outlined in the preceding table), the Applicant considers that these proposed amendments are not material and do not amount to a substantive change to the proposed development consulted upon in February 2015.

The Applicant has taken the opportunity to explain the proposed amendments to statutory consultees in advance of the proposed submission of the DCO application in late summer 2015. This will ensure that any further queries or matters arising can be addressed within the submission timetable.