VISUAL IMPACT PROVISION PROJECT

Peak District National Park Stakeholder Workshop, 24th March, 2015

REPORT OF MEETING

Report Purpose

This report aims to provide a summary of the key points raised at the National Grid Visual Impact Project – Peak District National Park Stakeholder Workshop held on 24th March, 2015 and in particular the discussion that led to the recommendations made and captured in Section 9.

It is an aide for participants and forms a record on the meeting. It is primarily drawn from the record made on flipcharts at the meeting (and provided in the photoreport) with wording added to help with clarity.

If on reading this report it raises any immediate questions for you about the project please contact: Ian McKenna on Ian.McKenna@nationalgrid.com

This report was produced by Suzannah Lansdell and Pippa Hyam of Good Partnership. If you have any comments or queries regarding this report please contact Pippa Hyam on pippa@goodpartnership.co.uk or 07956 903209

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1. Participants

Name	Organisation	
Jonathan Adamson	PLACE	
Chris Baines	Chair of National Gird's VIP Stakeholder Advisory Group	
Alexandria Bowden	United Utilities	
Martin Burfoot	Peak District National Park Authority (PDNPA)	
Andrew Darke	PLACE	
Mike Gibson	Barnsley Metropolitan Borough Council	
Simon Howard	United Utilities	
John Keeley	Peak District National Park Authority (PDNPA)	
Mandy Loach	Trans Pennine Trail	
Allen Pestell Ramblers Association		
Richard Politt Natural England		
Anne Robinson	Friends of the Peak District	
	Member of National Grid's VIP Stakeholder Advisory Group -	
Neil Sinden	representing CPRE	
Brian Taylor	Peak District National Park Authority (PDNPA)	
Rhodri Thomas Peak District National Park Authority (PDNPA)		
Andy Tickle	CPRE/ Friends of the Peak District	

National Grid and Consultant Participants

Name	Organisation
Stephen Hesketh	National Grid
Andrea Key	National Grid
Steve Knight-Gregson	National Grid
lan McKenna	National Grid
Hector Pearson	National Grid
David A Smith	National Grid
Stuart Fox	Camargue
Parv Gandham	Camargue
Pippa Hyam	Good Partnership
Suzannah Lansdell	Good Partnership

2. Introductions

2.1 Workshop Aims

The aims of the workshop were:

 To explore with stakeholders and make recommendations to National Grid and the Visual Impact Provision (VIP) Stakeholder Advisory Group (SAG) on the way forward in the Peak District National Park.

2.2 Style of Meeting and Facilitation

The meeting was facilitated by Pippa Hyam and supported by Suzannah Lansdell. Their role was to keep the meeting on track and productive in meeting the aims of the workshop. A record of the meeting was made on flipcharts in real time and this forms the basis of this report which is primarily for the workshop participants. A copy of the photoreport of the flipcharts is included in Appendix 1.

2.3 Ground Rules

The Ground rules for the meetings were proposed and agreed as:

- Devices/ off
- Keep to time and task
- One person speaks at a time
- Focus is providing recommendations to the VIP process
- Aim for consensus but can record divergent views
- No attribution except where divergent views require it in report

2.4 Workshop Agenda

The agenda of the meeting was as follows:

09:30	Welcome				
	Aims				
	Style of meeting				
	Ground Rules				
	Introductions				
	Agenda				
	The VIP project - an overview: Hector Pearson, National Grid				
	The role of the VIP Stakeholder Advisory Group: Chris Baines & Neil Sinden				
	Short review of the work to date – change from Long Term Future Study to the VIP:				
	Steve Knight-Gregson				
	Tea & Coffee				
	Overview of options				
	Questions and explorations of options				
	Lunch				
	Developing recommendations				
	Review, Actions and Close				
4pm	End				

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3. The VIP Project – an overview

Hector Pearson from National Grid gave an overview of the Visual Impact Provision (VIP). This included the conditions around the VIP, the management of the VIP, the process for allocating funds and the next steps in the timeframe. Copies of Hector's slides are in Appendix 2. Following the presentation there was an opportunity for questions of clarification.

Issues and Questions Raised

- Why does there need to be shortlist of options?
- How was the £500m decided and what are the limitations and opportunities in the VIP?
- Is there a central government policy relating to VIP?
- There is recognition of the professional and personal passion on the VIP Stakeholder Advisory Group (SAG) organisations and individuals.
- This is an opportunity to see this VIP as a critical first stage and the opportunity to show potential for other regulators (e.g. OFWAT).
- The SAG has a tough job to assess which projects receive funds across the country.
- The SAG have received technical support from NG but also the landscape assessment has
 provided input in addition to local input (from recreation, ecologist etc.) It has all been an
 enormous amount of work to help the SAG/independent panel make its decision.
- The point was emphasized and recorded that there is a legacy to this area in the Long Term Future Study, but the focus of this meeting is to be the VIP process and funds recommendation.
- The regulator involvement to date has been really useful.
- People are conscious of the back story in this area and why it is difficult to put that to one side and focus on the VIP.

The SAG decisions – Neil Sinden

- Neil gave a quick overview of the challenge ahead for the SAG.
- The SAG are eager for feedback to help shape decisions that need to be made in September 2015.
- The SAG recognise it is not going to be an easy decision. Does the SAG go for fewer schemes in fewer areas or more schemes over wider area? Currently the SAG are unsure which way it will go.
- The SAG want to demonstrate the VIP can make a difference and impact for this regulator (Ofgem) and beyond.

4. Work to date – from Long Term Future Study to the VIP

Steve Knight-Gregson from National Grid gave a recap on the history to the Long Term Future Study and how that relates to the current VIP opportunity. Copies of Steve's slides are in Appendix 2. Following the presentation there was an opportunity for questions of clarification.

Issues and Questions Raised

- None of the Long Term Future Study work looked at east of the tunnel which puts the east of tunnel area in a similar position to the other VIP areas in the country. The east side is up for discussion, but it is further back in terms of study.
 - $_{\odot}$ $\,$ This workshop was about treating all areas equally.
- Surface troughing at Woodhead uses 6 cables at the newer part of the tunnel around Tower 200 which is possible because it is a shorter length of line.
- Is there no filter of asset age in any decisions? Does the eastern side warrant replacement?
 - The Landscape report undertaken just looked at landscape and visual impact not asset age.
 - The eastern side is in better condition, but not relevant to VIP decision making.
- Clarification that tower 238/237 is a tower on the border of the National Park boundary.

5. Establishing the Options

An overview of the 3 sections (taken from the landscape assessment) was given and broadly shown on a schematic slide (See Appendix 2). These were Crossing Bottoms Reservoir; Longdendale Valley and Dunford Bridge. The core options that were apparent for each section were briefly overviewed. The question was then asked about other possible options and this was discussed by the group.

Clarification Questions & Discussion on Options:

Crossing the Reservoir: Bridge

- The bridge would be a substantial structure
 - The challenge is the cliff face on the side of the reservoir that would have to be cut into for the cables to get up.
- Could a bridge be publicly accessible?
 - Unsure but could be explored.

Crossing the Reservoir: Tunnel

- The tunnel would have to be some 25m below water level, 10 metres below the bottom of the reservoir.
 - $\circ~$ Would need a c. 35m deep shaft on the south side and 45m deep shaft on the north side.
 - The tunnel length would be some 1.5km in rock it would be expensive in the tens of millions of pounds, but is technically feasible.
- Would you be prepared to go up to the Park boundary?
 - It depends on the terrain.
- There is some flexibility in the areas defined e.g. to take into account the setting.
- Tower 238 is on the boundary of the park.

- Landscape architects sections are done on landscape considerations, but could be extended e.g. to take account of the siting of the sealing end compound.
- It would be possible to overlap sections in recommendations or do portions of sections.
- If landscape quality is important then need to deal with as much Overhead Line as possible.
- How much can be spent outside the National Park?
 - The policy allows for the "setting".

Other Options Resulting from Discussion

- Laying cable on reservoir bed this was reviewed and rejected in the Long Term Future Study work.
- Running a cable across the Rhodeswood Dam.
 - Currently there is difficulty in taking HGVs over the dam. There is a loading issues and the dams were not constructed for that purpose.
- South of reservoir and over river.
 - \circ This is quite a constrained corridor.
- Shifting the whole line to the north of the reservoir and seeing if it is possible to join up with the Highways proposal
 - This option was explored as an Overhead Line and was eliminated in the Long Term Future report.
 - Is there potential in future to collaborate with roadworks?
 - A628 there is difficulty to stop traffic and likely not be timing line up i.e. will it be there by 2021?
- Using the dam would need further exploration to establish whether this would be viable.
- If, for example, Longdendale Valley went forward, how far would it preclude any of the other sections/options if future VIP money becomes available?

At the end of the discussion the following options were established to discuss at table groups.

Crossing Bottoms Reservoir

- Tunnel cost would be in the tens of millions of pounds
- Bridge
- Run cables across the dam
- Going underground to south and bridge over river
- Aspects of these options included:
 - Tunnel extension north of reservoir Stalybridge side (note depth of shaft is the cost factor rather than the length of the tunnel)
 - $_{\odot}$ $\,$ Crowden crossing diversion $\,$

Longdendale Valley

- Troughs and direct burial c £200m
- Going underground north along the A628

Dunford Bridge

- Remove approx. 8 towers and underground cost would be low tens of millions of pounds
- Different pylon heights/designs

6. Questions and Further Exploration of the Options.

At table groups participants were asked to develop questions and issues that they needed to establish to help make a recommendation or recommendations to the SAG, cognisant that some information may not be available. The following points came back from tables.

6.1 Crossing Bottoms Reservoir

Tunnel

- The extension is good but...
 - How many air shafts might be needed?
 - o Issue might be what it looks like.
 - Need more understanding of what it would be like when undergrounding converts back to overhead line
 - Holybank Quarry this could be a possible site for a sealing end compound, however note it is in private ownership.
- Structures needed at either end of the tunnel but these could be smaller than a sealing end compound.

Bridge

- Interesting consideration could it be a feature bridge? The "Gateway to Glossop" or a green bridge, making it accessible.
- Bridge could be built at the top of dam level i.e. build on the dam line without compromising dam integrity.
- Generally negative view on the bridge option but if get into compromises of sealing end compound, would become more favourable i.e. becomes a comparator between a sealing end on the south side vs a bridge.
- Could there be gantry structures and graded height towers?
 - This is a possible potential.
- Cheap options should be looked at first (before expensive tunnel).
- North side continue with troughing and undergrounding rather than Overhead line go over watershed over Brushes Valley
- In moving from Bottoms catchment into Arnfield catchment any tunneling that affects the catchment would be a concern.

Run cable across the dam

- Do United Utilities need a new dam?
 - No planned work on the dam envisaged.
 - This would need a detailed engineering solution worked up to assess and it has met resistance in the past.
- How would you get the cables across the dam?

Going underground south and bridge over river to the West

- Thought this option would be difficult to consent in the timeframe with potential public opposition.
- Troughing to get to the west of Bottoms new towers and move to the park boundary (undergrounding and some Overhead Lines)

- Another option would be to keep underground.
- Planning and public opposition issues and timeframe are key issues.
- Issue of steep climbs from the valley.
- Engineering and potential compromise to dam challenges.
- Across the River Etherow
 - \circ Could take the whole line to the west of Hollingworth and rationalise lines.
 - Consenting issues and would mean a re-route of a lot of line and that does extend outside the Park.

Other options resulting from table discussion

- Crowden Crossing diversion and tunnel under Tintwistle
 - To consider as another option providing not compromised on timings.
 - Space that avoids dam
 - Users of trails need careful consideration though the Northern Horse Trail would be an alternative. (National Grid have a specification for route upgrades needed).

Other VIP Issues noted

- The Panel need to consider the criteria for allocating funds and whether it is ok to spend significant budget outside the National Park.
- Eastern side of the tunnel
 - $\circ~$ In a similar position as other VIP areas.
 - o What are the issues and options?

6.2 Dunford Bridge

- Tourist impact the area could do with being developed.
- Eyesore in Dunford Terminal tower and sealing end compounds above the village.
- Old sidings on railway plans to be developed into wildlife area.
- Corridor wider so option to avoid the trail.
- Horrendous sealing end compound.
- Do undergrounding in the worst part and then lower height towers.
- Dilemma is where would you site a new sealing end compound?
- Following railway route
 - $_{\odot}$ finish east of Hazlehead there is a conifer area where sealing end could go.
 - $_{\odot}$ 4Z0.1 not an area of severest impact and is out of identified areas.
- Socio-economic impact quite large would make a massive improvement.
- The £24m Landscape Enhancement Initiative fund could also be used to add further value.
- Dunford Bridge community benefit.
- Perception of the edge of the National Park and setting would create a more natural setting.
- There would be lots of local support would welcome it.
- Summary
 - Move the terminal tower some questions of where moved to?
 - Positive community benefit and would be welcomed.

6.3 Longdendale

The Longdendale Valley area has been the subject of discussion through the Long Term Future Study. An opportunity was given to PLACE and United Utilities to highlight some of the key issues as they saw them for this area.

PLACE Key Issues

- Impact of overhead lines along the valley.
- Surface toughing options.
- Main roads views of landscape from roads, provides an introduction to the National Park.
- Landscaping of the road could be an overlapping solution.
- Costing Woodhead to Stalybridge.
- Undergrounding has been part of the discussion for a long time (e.g. since CEGB times).
- Anticipation of renewal of Longdendale line and works to be done.
- Eastern side similar in terms of opportunity and anticipation would be addressed.
- Vision of PLACE is to take out pylons in the landscape, both in the Peak District and nationally.
- Willingness to pay studies suggested people would pay up to £2bn.

United Utilities Key Issues

- Exit at Woodhead Tower 200.
 - $_{\odot}$ United Utilities are key landowners.
 - The area is a catchment for five reservoirs.
- Issues are for:
 - Maintaining raw water quality want to achieve best raw water quality.
 - United Utilities done a lot of work on sustainable water catchment.
 - Need to maintain raw water quality and managing the risk of any works on that.
 - $_{\odot}$ The line passes structural assets e.g. bridges, culverts etc.
 - All are drinking water yield points that need to be considered.
 - Raw water supply
 - Supplies 580,000 customers.
 - Woodhead is the sole supply to Godley.
 - Risk management considerations
 – would need an alternative source of supply during any VIP work.
 - o Investment into public access.
 - Undertaken landscaping and tree planting.
 - Operations obligation to improve access.
 - Would need to find alternative provision for access.
- So not as straightforward as might appear
- £200m cost for any works does not include any mitigation costs which United Utilities would pass on to National Grid.
- The risk is about the operational risk.

Comments

- While there is a loss of the trail then could use Northern Horse Trail, but would require investment to do so.
- Ongoing landscaping

 Landscape improvement from the VIP - how does that sit with United Utilities wanting to improve access?

8. Developing Recommendations

Bearing in mind what participants knew about the different sections and options, at table groups they were asked to agree two recommendations for the VIP SAG and a rationale. These were then collected and grouped in plenary and discussed to see if there was any consensus.

The following recommendations emerged from the table groups

- (equal 2nd) Tunnel under Bottoms Reservoir and A628 and beyond. Continue to cable to suitable cable sealing end compound locations
- (1st) Priority is west two sections (4Z0.3 and 4Z0.4) for burial with a preference to avoid sealing end compound on south side of Bottoms. Explore option of deep bore or skirting west of Bottoms Dam. Rationale: Visual amenity/landscape amenity.
- (1st) Underground from the end of Woodhead tunnel to Bottoms reservoir key part to this solution is to ensure adequate restoration of the trail.
- (1st) Remove OHL (overhead lines) towers from Longdendale Valley visual impact
- (1st) Longdendale (200-227) underground.
 - Significant gains in visual impact in the National Park biggest benefit
 - o Potential synergistic benefits with road enhancements (future road tunnel/landscape enhancement
- (1st) Removal of pylons along Longdendale Valley by:
 - Further exploration of "Crowden Crossing route"
 - And Tintwistle Moor direct route to beyond Park boundary
 - And "cleverer" way of crossing the dams
- (2nd) Remove sealing end compound at Dunford, remove maximum pylons back east towards Hazlehead, sealing end compound east of Hazlehead
 - Rationale visual amenity, residential amenity, socio-economic potential for visitor/tourism
- (1st) 4Z0.2 Underground eastern end to Hazlehead
- (2nd) On the eastern side, a hybrid underground and low height pylon solution (equal 2nd) Remove tower 4Z0164 and cable out as far as Hazlehead (if possible)
- (2nd) Dunford Bridge underground to Hazlehead east of National Park
 - lower cost substantial local benefit
 - opportunity to link to other socio-economic benefits
 - improving public access to reservoir

A plenary discussion of the recommendations captured the following points. Bold text denotes what was defined as key points by the group.

Longdendale Valley

- Remove pylons in the Longdendale Valley (along the 4Z0.3 to 4Z0.4 stretch)
- Explore options and look at work already done and check back.
- Difficult bit is how any work is "finished" / continued with pylons
 - $_{\odot}$ how far north can we get?
 - $_{\odot}$ how the crossing is done.
- Need care that what is put in instead of overhead lines is in line with the National Park i.e. restoration of the trail.
- Should have a net improvement if underground not detriment to the trail
 - should enhance the trail
 - o route quality and enhancement of the visitor experience
- Mechanism for how delivered not yet defined.
 - o but things like undergrounding, tunneling, troughs
 - $_{\circ}$ different routes.
 - Is there an option to do some of the route only technically with "temporary" infrastructure? O Any infrastructure would be permanent regardless as has to meet standards.
- Can't stop at south end of reservoir because of sealing end compound.
- End at Woodhead Tunnel south of Bottoms Reservoir (these are the priority parts)
- View that whatever VIP chosen should have the best impact
 - $_{\odot}$ but shouldn't tell SAG how to make the decision.
- North of reservoir to west of Park group suggest that this is a bigger scheme, but having to choose for this VIP (make a precursor to the recommendation)

 long term aim to resolve pylons throughout Park and its setting.
- Recommendation do as much as possible, make a beacon
- Recommendation do a portion.

Recommendation – Suggestions Summary

- Longdendale Valley preference
 - $_{\odot}$ some debate about how it is best achieved
 - o stop at reservoir or before Stalybridge go as far as can go
 - o location of sealing end compound important

Dunford Bridge

- Moderate scoring.
- 4Z0.2 (high scoring).
- Difficulty is where you put the sealing end compound.
- In line with overall aim to also consider Dunford Bridge and challenge where to stop.

9. Recommendations to the VIP Stakeholder Advisory Group agreed by stakeholders

After the discussion a form of words was developed by the facilitators and shared with the group for comment and amendment. Whilst the English used in the drafting may not be well formed, the purpose was to try to agree on the recommendation rather than wordsmith collectively. The following was agreed by the group and it was also agreed (see Action List) that the group in reviewing this report should not seek to change the words agreed.

Context

• The overall aim of these stakeholders is to reduce the visual impact of lines throughout the National Park whilst enhancing the physical enjoyment and accessibility of the Park to users and the landscape - the totality of the landscape and the setting.

Recommendation 1:

- Prioritise removal of the overhead towers between 4Z0.3 to 4Z0.4 in Longdendale Valley
 - Taking into account how to "stop" without damaging the environment further.
 - Consider whether that would mean a scheme extending across the reservoir and north towards the boundary of the Park if sealing end compound too great an impact.
 - To consider alternative methods other than trenching and undergrounding along existing route - e.g. route A628 corridor (along north coast of reservoir) to Crowden Crossing and or crossing the moor.

Recommendation 2:

• Explore further the potential for removing section 4Z0.2 and underground beyond Hazlehead or finding a stopping point where appropriate.

[Noting it is:]

• Recognised that the Stakeholder Advisory Group and National Grid need to talk to United Utilities and to other stakeholders about how to achieve objectives, the needs of United Utilities and other stakeholders to meet their statutory obligations.

10. Way Forward

- Is there further evidence stakeholders can provide to the process? What about the involvement of local communities?
- In the eastern section National Grid will replicate what has been done in other VIP areas around the country– e.g. technical stakeholder meetings and public workshops prior to the September SAG meeting.
- Further investigations will be done on Recommendation 1 on what is possible and costs and need to check back with this group to check support.
- Suggestion to do a public "drop-in" on the western side.
- Note that work over the summer will be at a high level i.e. not the level of detail of the Long Term Future Study.

11. Actions

WHAT	WHO	WHEN
Photoreport and summary report to National Grid	PH / SL	1/4/15
Draft report to participants for review (please do not add words to recommendation [Section 9])	Camargue	13/4/15
Report published on VIP website	Camargue	Early May
Technical and public engagement at Dunford and in west public drop in	Camargue	Summer
In process of reviewing recommendations get in touch with stakeholders to gather feedback and evidence as per other areas	Camargue & NG	Now onwards
Co-ordinate with Highways Agency	Camargue & NG	Ongoing

Appendix 1: Photoreport

Report date:

Facilitator: Pippa Hyam and Suzannah Lansdell

Contact details: Pippa@goodpartnership.co.uk

VISUAL IMPACT PROVISION PROJECT Peak District National Park Stakeholder Workshop, 24th March, 2015

Photo report

These are photographs of the flip chart record made at the meeting detailed below Meeting Participants were responsible for checking the accuracy of the wall-record during the meeting

- This report serves as a useful aide-memoire for meeting Participants
- The original flip charts are held by National Grid

• Note that photo reports are quite cryptic and should only be shown to people who were not present as part of a briefing by a participant, should ground rules permit

A full written report using these photo's notes made during working sessions and notes made by members of the facilitation team will be circulated to all participants.

Date 24 March 2015

VIP – Peak District Date 24/03/15 Project Aims, ground rules and Facilitators Pippa Hyam and Task Suzannah Lansdell Agenda GROUNDRULES * Dences / off * Keep to time + task To explore with * One person speaks at a time. Stakeholders + make recommendations to National * Toals is providing recommendations to the Grid + The Visnal Impact Ronson (VIP) Stakeholder VIP Process. Advisory Group (SAG) on The * Aim for consensus but can way forward in The Peak record divergent views . District National Park. * No attribution - except where divergent views require it in report AGENDA contol (6) AGENDA Shart reverv of work to dalle - change from Long term futures 0930 Welvome + Introductions Shudy to VIP TEX + COFFEE \$ 5 - Anns -Style of meeting - Overview of options - Groundmiles - Questions + exploration of - Introductions options LUNCH - Prod - Agenda - Developing Recommendations The VIP project - an overnew - Revaul, Actions + Close The role of the VIP Stakeholder END 4pm Advisory Group

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Date 24/03/15 Project VIP – Peak District **VIP** Overview Facilitators Pippa Hyam and Task Suzannah Lansdell UNP Ovenier Grestins (), (2) VIP OWENEN (2) - Why does there need · If can demonstrate can to be a shortlist? put I to good use than Initial work an honpondale hopefully ofgen will allocate was because line had to more in future price control be renewed. periods Lo Soon from consumer Es Initial \$500m Were they prepared to pay + "willingness to pay ' was Erbn ? more to address visual mood. -Survey Said 'yes'-El.1 Lo Escon for this pricing billion estimate - horse hadal period is this a commercial or to 500m. what is central goverment - E spend by 2021 Polian > VIP (3) MP (4) -DNO Central Golf policy -Lo Fechnical Support from NG "listen with interest" but also landscape assessment to provide in put. And local -Bloops on VIP SAG -Tuput (necheatran, ecologist professional + passion ek) 6 Enormous amount of work to Phonyone sees This is a intical 1st Stage Don 4 nant help Independent punel. to see as a trute amount. And * There is a legacy to This also model for other regulators proy area (LT Shudy) but Alt to play for - endless stream focus of this meeting to be of potential sites # \$ VIP process + funds CSNY to assess across the recommendation. conintry

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Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	VIP Overview and
	Suzannah Lansdell		Long Term Future
			Study

VIP (S) VIP (6) Regulator incolvement has () 0 - ferver schemes, or more been really useful - 'don't Schemes over under area? want to frighten The houses Unsure yet which may will go - 19 chapter of process - Want to demonstrate can make mportant a difference + impact for this Consolars of back slory + Negulator (Ofgern) + beyond Why difficult to put to one side SAG -enger for feedback is help Shape decisions (Sept '13) - not going to be an easy decision Long Terri Futures (1) () Long Ferm Furtheres (2) 0 surface troughing at Woodhead ?- 6 cables Note none of that work Part of And Tomer 200 looked at the East of the Tunnel (millar to the other Lo Yes 6 cables - shorter bength of the VIPareas) C today can treat equally Shanne not koked at east side + bridge-not usually a thrachive Lo East side 15 up for discussion, just further back in terms A Study.

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Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Long Term Future and
	Suzannah Lansdell		Options Overview

LTF Questions #(3) Crossing Reservoir (1) -No filter of asset age Does Bridge - substantial structure Eastern side warrant it? - Cliff face - would have to - Landscape report - just cut into for caloles to get looked at landscape + up visual impact-Sydney Harbour Bridge C Eastern side in better type or tall towers, condition better - but Could it be publically accessible: not rele Cunaure-could be explored 238/-15 That tower on border of NP boundary. Turnel #2(3) Crossing Reservory (2) (3) -238 - baundary of park Tunnel - 25m below water level -would need to be 10m below (Another option) -c35m shaft MERCENSON - Landscafe and ilects section - tunnol length 15km in Colone on landscape considerations. rack - would be expensive Could oxtend - eg si hing of a -technically feasible sealing end (can overlap, do portions of - Would you prepared to go 264 (Settys be the sections. - If landscape quality important up to NP boundary? than need to deal with as much -depends on lewauni. oth as possible -There is some hexibility un areas.

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Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and Suzannah Lansdell	Task	VIP Options



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Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	task	Options Feedback
	Suzannah Lansdell		



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Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Options Feedback
	Suzannah Lansdell		

CROSSING BOTTOMS RESERVOIR (9) CROSSING BOTTOMS RESERVOIR fun cable across the dam 3 -Going underground South + building over inver (4) - Do U.U nost a newday? to the WERP (no planned nork on The - Thought difficult to cancent dam envisaged in truchome with potential - would need a detailed public opposition. engneering solution norked - Trongluing to get to the West up to assess has met resistance in past. of Rottoms - new towers - + move to park boundary. (undergrounding + some offe) - How would you get the cable across The dam Another option would be to keep underground other Options from table () Brudge over over the discussia Planning + public opposition "Issues + triveframe PC condie in unicong ob wikzon - to consider as another Steep dambs from valley option prividing not Contractory of compromised on - Engineering + polen hal al and the timoras - space That avoids compromise to dam. - care of users trails (Northern dans-Across Ethnon River Horse Trails) Ltake whole line to West of Hollymood. Clationalise lines -Dicessenting issues + re-row.te of a lot of time. Lo does actend autside the Built.

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 23

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Options Feedback
	Suzannah Lansdell		

DUNFORD BRIDGE AN (9) 00 VIP TSEWES_ (Issues, Questions Criteria Kanel need to consider whether ok to spend. - Townst impact - could do Significant budget antido the with being developed National Park - Gyesore in Dunsford. Eastern side of tunnel (smitching station above - in a smillar position as other Willage) - Old Sidings on railway - will VIP areas be developed in b milduffe -What are the issues t options. area Consider under - so option to avoid the wail. DUNSFORD BRIDGE (2) 134 DUNSFORD BRIDGERS Soco-economic inspact quite () large - massive improvement - Homendaws sealing end compound - The 24min fund could also - Undergrounding in worst part be used to add further value + lower height towers - Durford Bridge community - Dilemma where would site benefit new sealing end compound would - Reneption of edge of NP t be Setting - cheate a more - Tolloning railway route natural setting--finish East of Itazel hard (conifer area where seeing and These would be lots of local 4-201 - not severist mupachsupport - would melcome it - is out of identifical aways

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 24

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Options Feedback and
	Suzannah Lansdell		PLACE & United
			Utilities key issues

Changendale key koves #1 DUNSERD BRIDGE #19 (2) PLACE OVANEW Switching Station to move Some question of whore moved Impact of OTL along valley ON WIND Surface houghing (in mid-bds 107 Positive community benefit + tunnel ontrance to seating would be welcomed. end Cabling could go along disused Vailway track Main roads - news of landscape hom roads - mundaction to National Park Landscoping of the read-cald be one-happing solution - g burding - (asting - Woodhood - Staleybridge Inited uthilities key issues the Longendarie Key Issues #2 -07238 (Eego talked about undergrounday EXH Woodhead Tunnel U.U. are key kindowned when existed Cathment for 5 Nesenvoirs Anticipation of renewal of Longreindale two + works to be dow Kernes for Eachern side - smillar in horins * Row water quality-want of opportunity t anticipation best grating hould be addressed Constainable water catchmont - Vision to take out pylous in (maintain raw water quality + landscape - Peak + nationally Manage That visk - Wallingness to pay studies supposed (would must in new water people would pay up to 6200. quality treatment. + Pases structural assets bridges, culverts en

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 25

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	United Utilities Key
	Suzannah Lansdell		Issues

United Unlines - key takes the A U.U. Kay Issuer #3 Call donking water yield \$200m cost closes not unclude pombs minhaphan costs which would - Raw water supply pass on (from un = NG) Gadley LEEDODD WIDOMES (Woodbood - o sole supply - offetting - Rock - changing operational risk (MSK manogt, allemative source - While loss of a trail-could A supply during any VIP use Northern Horse hail, but WOrk would require Throstment. * Investment into public access Clandscape, the planting, Ongoing landscaping handscape improvement - how does Coperators obligation. Californative provision for access That sit with ULL wanting b So not as intravolutionward as Improve access night appear

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Table
	Suzannah Lansdell		Recommendations



Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 27

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Recommendations
	Suzannah Lansdell		Discussion

our Recommendation #1 @Recommendations #2 -4203-4204 stretch. * Kemore pullons in -Should have a net improvement - if underground not Longendate Valley + determent to trail. explore options Should enhance the trail. Llockat Nork alloady Tonte quality renhanced visitor expense - Mechanism for how adviewed notdone L checking back yet defined. - Difficult but how it is 'finished' forme (but Things like undergroundup, -how far North canget? turnelling, toughs. - Where how cressing done - different nontes. * Care That what is put in mstead Is there are option to do some is no in line with National Park of the volte only technically Lie restoration of the trail. with temporary I any infrastructure would be pormanaet regulation Rec 19 Kecanmondations H3 - obas much as Can It stop at S. end of Rec reservoir because of scaling and possible, beacon - End woodhoad Turnel - South of Rottons Resources (priority - Rec - a portion parts) - Group View That wherever VIP chosen should be least inspired - But Should it tell stry has to make decision * NOT ROSONOW to East of Park (group suggest that this is a biggerschone, but having to choose for this VIP (preameor bree) long form aim to resolve phylous - monupoint Parc + it's setting .

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 28

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Recommendations
	Suzannah Lansdell		Discussion & Draft
			Recommendation Text

Recommendations suggestions. S Dunsford Bridge O hongendate Valley Preference - Maderate scoring C.some debate about how - 4207 (high sconing) L Stop at reservoir or before - Rithautty is where you put The Stateghad Ba 76ndge as can S.E.C. WITCH IS Why L location of S.E.C. * In his with overall and to also coundar Dunsford Bridge di-+ challenge of where to stop. 2 DELT CONSIDER CO Draft Reconvendations (i) dot and down whether That The overall arin of These would mean a schome extendo Sakeholders is to reduce the across the reservent + N towards vishal inspact of lines Through the boundary of the Park if No SE the NP whilst enhancing to consider altomatice The physical enjoyment + methods begind then chege + accessibility of the park to use " groundup along existing & + The landscape - the tability of the landscape - the landscape - the landscape - the 10 Le - of contraction A 628 and (1) Res. Phonthise removal of the The MOUN 0/H towar botween 4203-0 Explore further The potential 4204 in Longendale Valley for nemoring thinks ++ 4202 L taking into account hav to + underground \$ Itaztehead or funding a slopping point " stop" inthat damaging where appropriate the emporment further.

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 29

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Draft
	Suzannah Lansdell		Recommendation
			Text, Way Forward &
			Actions

Draft Ree (2) Way Forward Is There further endence It recognise that the SAG + NG need to talk to UU spiller now to achieve opertives + about fritigation + not Shildes can provide + what about moluement of local communities The needs of ull tothows (lide Lo East - will replicate what done in other areas - technical spulde to meet Their statutory meetups + pattic workshop price to Sopt ' Shig. alligations. (to Further innertigehous on (1) on what possible + rosts 1 need to check back with this group to check support. Suggestido a 'duop-un' on Western side ACTIONS Way Forwards C -note work over Summer WHEN WHO WHAT will be high level - not level PH/ of detail of Long Term Futures Photokeport + 1/4/15 SL Sumary Lepist Studies. - Matonal Gond Diafi Neport to 13/4/15 Canal purficipants for any neview where do not add Report published ou VIP nuebsile Fechnolal + public Eugagement @ Dunsford + in west public drop in

Peak District Visual Impact Provision Workshop 24-3-15: Summary Report Page 30

Date	24/03/15	Project	VIP – Peak District
Facilitators	Pippa Hyam and	Task	Actions
	Suzannah Lansdell		

C ACTIONS WHAT	+2 Wito	WHEN		
WRAT		MIGN		
In process of never up recommendations get in touch with stakeweller to optimer teatback + cuidence as per other anens	Grange Ish	Sand all		
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		-		
-	1			

Appendix 2: Presentation Slides

Hector Pearson, National Grid



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Background

 Under the new RIIOTT price controls, ofgen has agreed a provision of £500 million for electricity transmission owners to mitigate the visual impact of existing electricity infrastructure in nationally protected landscapes in Great Britain.

This provision can only be spent on existing lines through Areas of Outstanding Natural Beauty and National Parks

For nationalgrid this equates to 571km of Overhead Line, around 7% of our network



Our lines in National Parks



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Lines in National Parks and AONBs



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Our Approach

Our Policy

The policy document sets out our plans for using the allowance. These include:

 setting up an independently chaired Stakeholder Advisory Group to help National Grid set the priorities for spending the £500m;

 substantial engagement with organisations and communities not on the advisory group; and

 decision making based on a series of Guiding Principles.





Guiding principles

Prioritise proposals which...



Landscape Assessment Methodology

Alongside the policy, we published a Landscape and Visual Assessment methodology.

Used as a basis for prioritising landscape.

A shortlist of the worst affected areas will be taken forward for further assessment, to look at the potential for undergrounding or other mitigation.

For the rest, less intrusive mitigation options such as tree screening will be considered.

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Landnicape and Hexai Impact Motivatalogy	Ser. 1
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What have we been doing?



- Completed the landscape and visual impact assessment on 571km of overhead line during the summer of 2014.
- Published the findings of the study on the 10th November 2014
- · A major media pick up of the 12 shortlisted sections
- Engaged with all 8 shortlisted designations
- Announced the Landscape Enhancement Initiative

Sections of line with the highest landscape and visual impact

	Designation	Substations	Towernumbers
Peak District	TemerVelloy	Landuph to Langage	004-0019
Territor Tream National Park	Peak District (West)	Stalybridge	211-255
STOP A PATRICE STOP AND A STOP		10	200-210
	Posk District (Bast)	Thorpe March	155-154
Snowdonia	Deract (LLC)	Chickerell	170-177
National Park		bro tor	195-210
Brecon Bescons	Securitoria (Gil)	Pombroko to Walham	181-199
National Park	Snowdonia (Gill)	Pentir to Travolynydd	094-052
North Wessex Downs ADNB	High Weald (LIC)	Dungeness to Ninfield	118-155
High Weald AONB	Donact (LUC)	Chickorell to Marnington	025-059
Tamar Valley National Park AONB Dorset AONB	New Porest (LUC)	Newloy to Memoglon	055-065
AONB	North Weater Downs	Bramicy to Malksham	82-104

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What next?

Capital-intensive mitig	ation		
Further work to assess	Landscape enhancem	ent initiative Innovation projects	
shortlisted areas Tamar Valley taken forward to more detailed options – template for others	Mechanism in development £24m over six years Open to all 30 AONBs / NPAs Launch in summer 2015	Project looking into innovative ideas – new waysof reducing visual impact?	

Long term programme



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Process

- We will progress options for each site, testing these with local Stakeholder Reference Groups
- Preferred options will be taken to the VIP Stakeholder Advisory Group meeting in September, for decisions to be made on which schemes to progress.
- · Preferred schemes will progress through:
 - Design
 - Public consultation
 - EIA if appropriate
 - · Planning and environmental consents
- Local input / support is critical. We would prefer to work in partnership with the National Park Authority / AONB.



Steve Knight-Gregson, National Grid

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Re-cap

- Study context
- 2008 scoping

■ 2009 interim update

- Underground option
- Overhead option
- 2010 construction feasibility

2011 draft report

- Findings
- Further work
- 2012 pause



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Study context (~2006)



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2008 scoping

- Draft scoping report issued for comment (July 2008)
- Stakeholder meeting to discuss scoping (Sept 2008)
- Final scoping report issued (March 2009)

Stakeholders consulted

- Purpose
 - Assist consideration of long-term future options for Stalybridge to Woodhead route
 - Identify/evaluate issues and relative pros & cons of alternatives:
 - physical, planning & environmental; (ii) technical, engineering & design-related; (iii) health & safety; (iv) potential social impacts; & (v) economic/cost
 - Inform & assist discussions with key stakeholders
 - Inform & assist decision about option to take forward

Peak District National Park Authority PEAK High Peak District Council Derbyshire County Council . Tameside Metropolitan Borough Council Tameside **Kirklees** Oldham Borough Council Kirklees Council . n#n Oldham Barnsley Metropolitan Borough Council RITAGE I MARKED IN BARNSLEY Campaign for the National Parks Natural England (Derbyshire, West Yorks & South Yorks) English Heritage (Derbyshire, Greater Manchester & Yorkshire) 200 Environment Agency Campaign for National Parks Department **JGLAND** Friends of the Peak District . for Department for Transport Transport Agency Network Rail The Northern Way Network Rail Moving Forward: PLACE . The Northern Way Charlesworth & Tintwistle Parish Councils . United United Utilities Utilities Trans Pennine Trail Officers ramblers Ramblers Association

Options considered & 2009 Interim nationalgrid Update

- 1. Replacement of existing towers in situ
- Temporary direct overhead line from Woodhead Tunnel to boundary of Peak District National Park to facilitate in-situ permanent overhead line replacement
- Permanent replacement overhead line from Woodhead Tunnel to boundary of Peak District National Park & dismantle existing
- Direct buried underground cable installation
- 5. Surface mounted trough cable installation
- Combined submarine (via public water supply reservoirs) & terrestrial underground cable
- Direct deep tunnel from Woodhead Tunnel to boundary of Peak District National Park
- Overhead line north around Peak District National Park
- Rising bore from Woodhead then direct bury across moor (10km)



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2010 construction feasibility

- Topic based workshops for stakeholders (November 2009) overhead lines and underground cables
 - Options 4 and 5 discussed in more detail constructability checks needed for both and thermal resistivity of backfill material needed for option 5
- Site walkover with stakeholders (October 2009)
- Construction feasibility completed Feb 2010, looking at:
- routeing options
- ii. available width on Longdendale Trail
- iii. bridge and road crossings
- iv. land features (old rail bed, cuttings, embankments, slopes, etc)
- water features (longitudinal water flow on many stretches and two ponds along the route)

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2010 construction feasibility

Main findings

- Only practical to direct bury cables along about 50% of the route (lack of available width key constraint)
- Surface troughs feasible for remaining 50% of the route
- Considerable further work necessary to 'finalise' a route including:
 - Development of a cable construction methodology for the Longdendale Trail covering trench spoil haulage and storage, construction traffic and access, sequence of works, site storage, crossing designs, further geotechnical studies, mitigation options, etc
 - Feasibility study and a construction methodology required for the route from the Longdendale Trail to north of Bottoms Reservoir. Agreement from United Utilities would be required. Technical issues (induced voltages, high circulating currents and reduced current ratings).

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2010 construction feasibility

Main findings (continued)

- Width restrictions on Longdendale Trail (down to 9m in extremely constrained places) mean that reduced swathe widths would be required
- Indicative swathes from 26m down to 9m were considered
- Negative impacts on construction speed, cost and traffic movements (both on and off site) increase as swathe width is reduced
- Hybrid underground solution emerged direct bury where practical with surface troughs elsewhere
- Assume Bottoms reservoir can be crossed by directional drilling but considerable further engineering required and if not possible, an alternative would need to be found

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2010 construction feasibility

- 12 cables would have to be connected to the 6 cables in the Woodhead Tunnel (which have the benefit or air cooling)
- Existing Woodhead tunnel cable sealing end compound would be replaced
- An indoor, above-ground building would be required to house the specialised bifurcating joints required to connect the two cables into one at this transition joint
- Transition joint building footprint ~18 m(L) x 24 m(W) x 5 m(H)...considerably less than that occupied by the existing sealing end compound and 4ZO200 terminal tower at the Woodhead Tunnel
- Joint bays at 750m. Joint positions difficult with width constraints
- Sealing end compound locations need evaluating

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2010 construction feasibility – environmental impacts

- Construction of the cable route would require the removal of vegetation along the Longdendale Trail and north of the reservoir to the point where the cable connects back with the 4ZO line
- Removal of semi-mature to mature trees and scrub will impact on potential habitat for bats and nesting habitat for birds (mid-February to August)
- Removal of heather, grassland and bracken will impact on potential habitat that supports reptile species
- There are four areas of open water (ponds) along the Trail that would need to be drained/filled in. Whilst these provide habitat for amphibians there are no records of any protected amphibian species



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2011 draft report

Overhead line rebuild Woodhead to Stalybridge

 Replacement in situ feasible using predominantly single circuit outages. Indicative capital cost (including dismantling) - £55M.

Underground cable Woodhead to National Park boundary then overhead to Stalybridge

- Direct buried in combination with surface mounted troughs (at constrained places) feasible. Not possible to avoid the Longdendale Trail. Indicative capital cost (including overhead line from National Park to Stalybridge) - £184M to £203M
- Surface mounted troughs feasible, but two cores per phase. Not possible to avoid the Longdendale Trail. Indicative capital cost - £208M to £238M

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2011 draft report

- Draft report issued for comment (Aug 2011)
- Stakeholder feedback meeting (Sept 2011)
- Meetings with PDNPA and PLACE (October 2011)
- Walk with PLACE to Bleaklow on Dark Peak (November 2011)
- Further areas of work discussed
 - HDD at Bottoms reservoir more work necessary, but starting to look unlikely
 - Other options...
 - Cable to SEC south east of 4ZO227 and cross reservoir overhead
 - Cable bridge major structure (weight of cables and span length)
 - Tunnel from south east of 4ZO227 to north of A628 and cable to one of the SEC locations north of Arnfield Reservoir
 - Before' and 'after' visualisations
 - Locations for photomontage fixed viewpoints discussed

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2012 pause

- Long Term Future Study on hold pending outcome of RIIO process
- If there are monies available under RIIO for undergrounding...revisit LTF taking account of monies available

Schematic overview of sections and initial options

