Visual Impact Provision

Cotswolds Conservation Board 22 May 2014

Hector Pearson National Grid Planning Policy Manager



Our UK network



UK Transmission*

- Scottish electricity transmission system
- English and Welsh electricity transmission system

Approximately 7,200 kilometres (4,470 miles) of overhead line, 1,400 kilometres (870 miles) of underground cable and 329 substations.

- Gas transmission system

Approximately 7,690 kilometres (4,760 miles) of high pressure pipe and 23 compressor stations connecting to eight distribution networks and third party independent systems.

- Terminal
- LING terminal owned by National Grid.
- ▲ LNG terminal
- ++ Electricity interconnector
- ++ Gas interconnector

UK Gas Distribution*

Gas distribution operating area

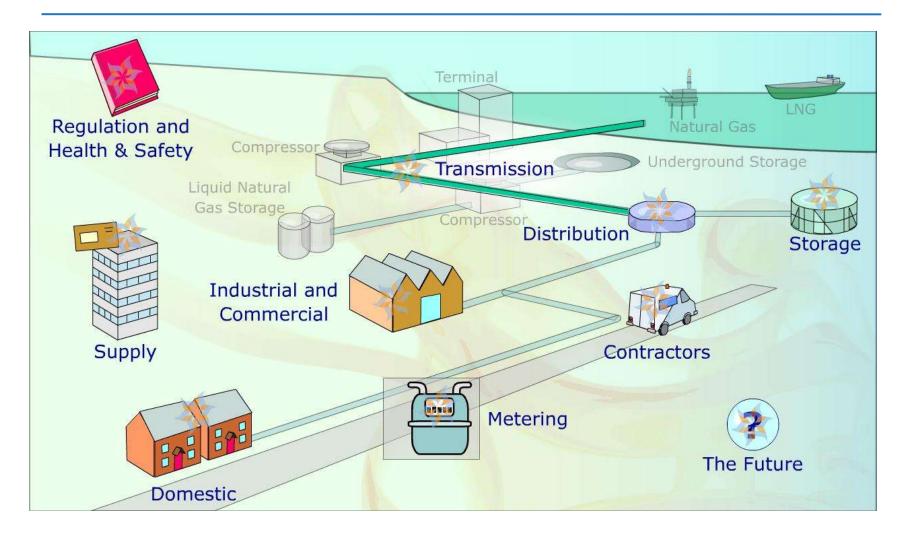
Approximately 131,000 kilometres (82,000 miles) of gas distribution pipeline owned and operated by National Grid.

Principal offices

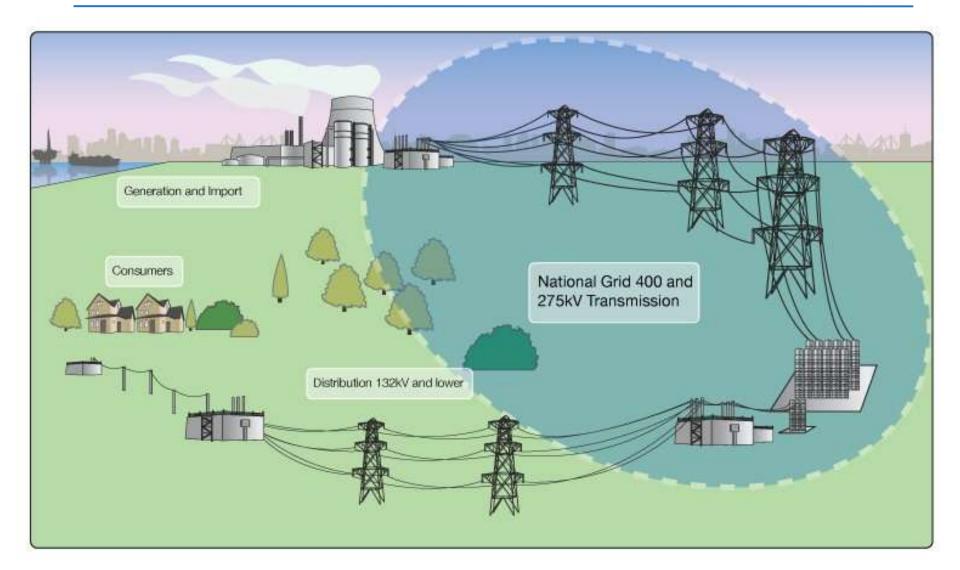
- Owned office space: Hinckley, Warwick and Wokingham
- Leased office space: Solihut and London

Leased office space totaling 14,100 square metres (151,700 square teet) with remaining terms of three to 10 years.

The gas system - from generator to consumer



The electricity system - from generator to consumer



National Grid electricity transmission network



- Covers England & Wales
- 84 major power plants connected (~85GW installed capacity).
- Peak demand ~60GW (daily cold winter)
- 400,000 and 275,000 Volt transmission lines
- 7,200 km of overhead line,
 750 km of underground cable and 337 substations at 244 sites.
- The largest centre of demand is around London.

The future energy challenge



Security of supply



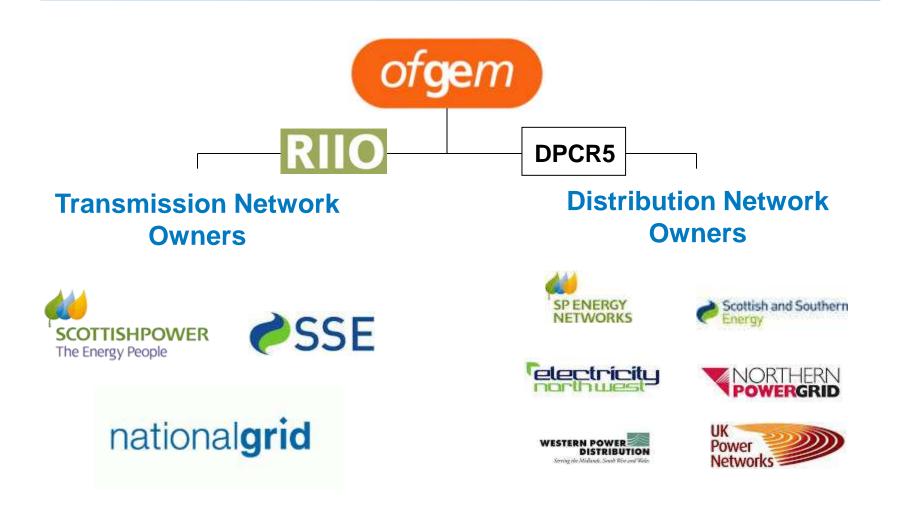
80% reduction in CO2 emissions by 2050







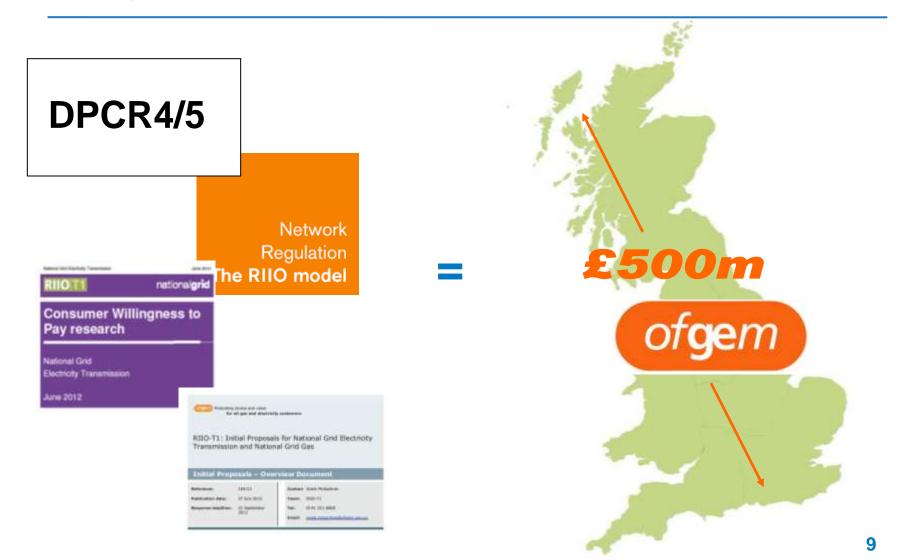
We are a regulated industry



Background to the allowance

- Started back in 2005 with the Distribution Network Operators
- The allowance provided money to underground existing infrastructure (electricity poles and lines) in National Parks and AONBs
- Following on from the success of this scheme, Ofgem, under the new RIIO price control included a similar allowance for Transmission Owners.

Background to the allowance



Special Condition 6G

Sets out the procedure which transmission owners (TOs) need to follow, in order to apply for funding under the allowance.

Prior to making any requests, TOs have to:

• submit a Policy to Ofgem for approval, setting out our objectives for delivering outputs, engaging with stakeholders, prioritising and assessing proposals etc.

The process for applying for funding is:

•TOs makes a request to Ofgem to determine allowed expenditure on a specific Output, including a specification, supporting evidence, forecast costs, feasibility analysis and programme.

•Ofgem determines whether the Output is a) consistent with our Policy, and b) economical and efficient.



Visual Impact Provision

Is National Grid's approach to securing funding under the allowance.

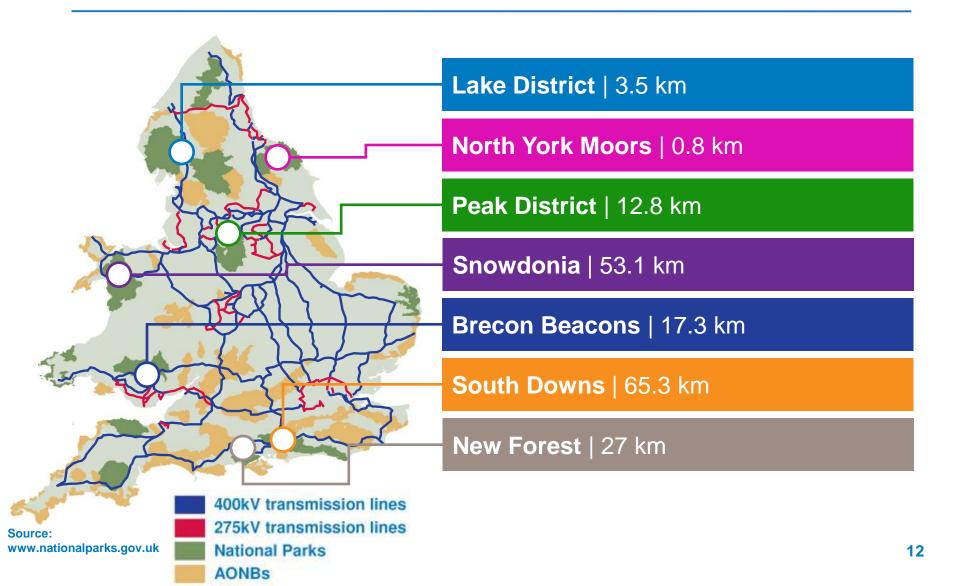
It applies to:



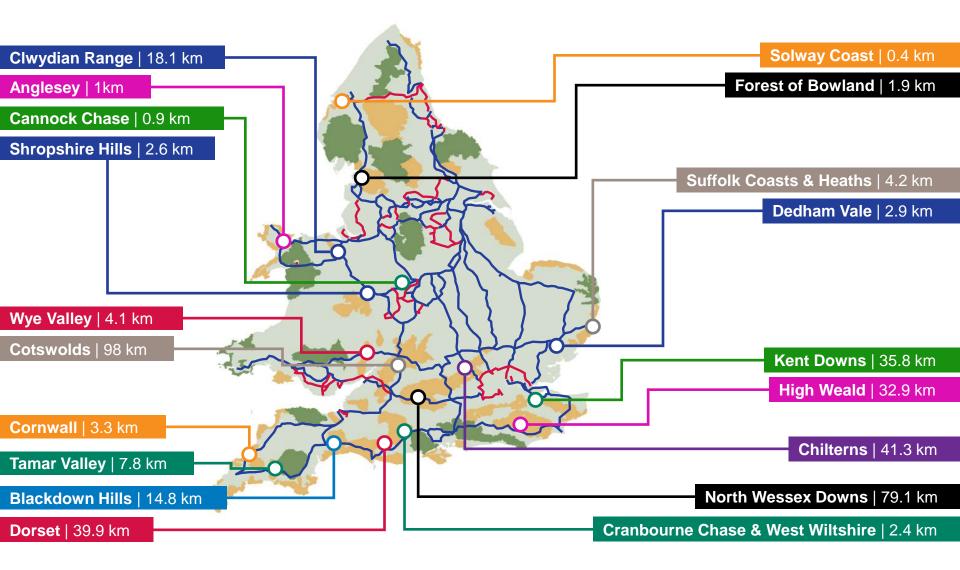
National Parks & AONBs

Existing lines only

Our lines in National Parks



Our lines in AONBs



Lines in National Parks and AONBs

National Park	OHL (km)	Cables (km)
Brecon Beacons	17.3	-
Dartmoor		1
Exmoor	-	÷
Lake District	3.5	14 C
New Forest	27	2
North York Moors	0.8	· · · · · · · · · · · · · · · · · · ·
Northumberland	-	
Peak District	12.8	5
Pembrokeshire Coast	-	1
Snowdonia	53.1	(a)
South Downs	65.26	
The Broads	-	4.
Yorkshire Dales		
TOTAL	179.76	5

AONB	OHL (km)	Cables (km)
Anglesey	1	-
Arnside and Silverdale	2	16
Blackdown Hills	14.8	-
Cannock Chase	0.9	*
Chichester Harbour		1
Chilterns	41.3	-
Clwydian Range / Bryniau Clwyd	18.1*	
Cornwall	3.3	Sec
Cotswolds	98	
Cranbourne Chase & W Wilts	2.4	12
Dedham Vale	2.9	
Dorset	39.9	-
East Devon	*	
Forest of Bowland	1.9	
Gower (Gwyr)		-
High Weald	32.9	
Howardian Hills	-	
Isle of Wight		
Isles of Scilly		1
Kent Downs	35.8	6.2
Lincolnshire Wolds		-
Llyn (Lleyn)	-	
Malvern Hills	4	5. C
Mendip Hills		
Nidderdale		-
Norfolk Coast	4	
North Devon		
North Pennines	-	
North Wessex Downs	79.1	2.85
Northumberland Coast		-
Quantock Hills		
Shropshire Hills	2.6	
Solway Coast	0.4	
South Devon	-	
Suffolk Coasts & Heaths	4.2	
Surrey Hills	7.6	
Tamar Valley	7.8	
Wye Valley	4.1	2.5
TOTAL	391.40	11.55



VIP in numbers

571km

7%

Approx: £1.6m per OHL/km £16.7m per UGC/km

Undergrounding the Cotswolds AONB = £1.6bn

What have we been doing?



July to Sept 2013 – We held an 8 week public consultation on the draft policy for using the provision

Sept to Dec 2013 – We analysed the responses and managed to reflect most of the comments in the revised version

Sept to Dec 2013 – Developed a landscape assessment methodology to provide greater clarity around how decisions would be made

Dec 2013 – We submitted the final policy to Ofgem for review

Feb 2014 – Ofgem published a supportive response and consultation is opened

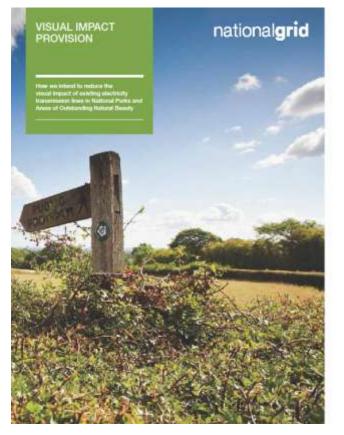
March 2014 – Ofgem confirm the policy fulfils its purpose and support its implementation without any changes

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.



The Stakeholder Advisory Group





NATIONAL PARKS WALES Britain's breathing spaces



nationalgrid





















National Trust







Guiding principles

Prioritise proposals which...

Result in the greatest landscape enhancement	Result in the greatest opportunities to conserve and enhance natural beauty, wildlife and cultural heritage	Result in the greatest opportunities to encourage public understanding and enjoyment of the	Are technically feasible in context of the wider transmission system	Are economical and efficient
landscape sensitivity; impact of lines	ecology; historic environment; water; local air quality; noise and vibration; soils and geology	protected landscapes	network performance; technical complexity; construction / project delivery issues etc.	Value-for-money; early asset write-off

Landscape Assessment Methodology

Alongside the policy, we have published a Landscape and Visual Assessment methodology which, we propose to use as the basis for prioritising landscape impacts.

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

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

MENANT PROVIDEN AND Landscape and Visual Impact 100

This document accompanies hidomal Grid's policy to use the Vauai impact Provision for the baseful of national parks and ACNEs/. It ants out a summary of the process and methodology that will be used to identify writing National Gird infratinucture that has the greatest impact on Netonal Parks and ACNOs strd offers the greatest opportunities to arbanzonent. The amphasis is on the their stage of Hereday, which is to make a comparative amountant of the intelexperand visual impacts of the transmission impact that for within designation) areas. Third reference is also made to subsequent stages of the work, but these are not considered in detail here

This document is likely to worke, as superfusions and the Ebeleficitier Advisory Group become method, and es protessarel viput la received. It has been principally prepared by Phril, Garya Swarwick, a leading landscape separt released by National Ontil for this project. Any further versions or additions will be published on the Netronal Ord a solution of

frequenced photonic

For the purposes of the work "Value Impact" will be integrated as meaning landscape and visual impacts. (or effects), as commonly understand in the process of landscape and sinus impact assessment EVAP, where · Invetocope impacts revers impacts or effects on "the lendscape as a resource in its own right". (CLWA) Para 2.21

· visual impacts risura impacto or affects on "specific. stews and on the general views amonty separanced by people", #32443 Pers 2.211

The terms impacts and effects are considered to be interchargedate for the paraboses of this shady but in genoral the term impacts will be used because of its pointmence in the tills of the Vecal Impact Picalaury

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Prohestering isotgement to key to assessme lenthcapy and visual impacts but there is a need for the judgements that are marke to be resecrable and based on one and transparent mollexity. Suitably spatified and experienced intellection professionals will be invited to carry out the indocase and visual impact assessments for the VF but even as there may be differences in the polyaments meth, aspectally as the scale of the work required in a relatively short timescale means that it will result to be split between a runtitien of clifforent perdomic rule. A here part of the pricess will therefore by to develop a shared understanding of the proposed method and its specific anglication to the VP. This will be achieved through one or more milial excitations and benchmarking, valuating a joint allo will, then by independent pose review of the culpute from the studies and finally by involvement of the Talenteider Advanry Grags in revening the conclusions



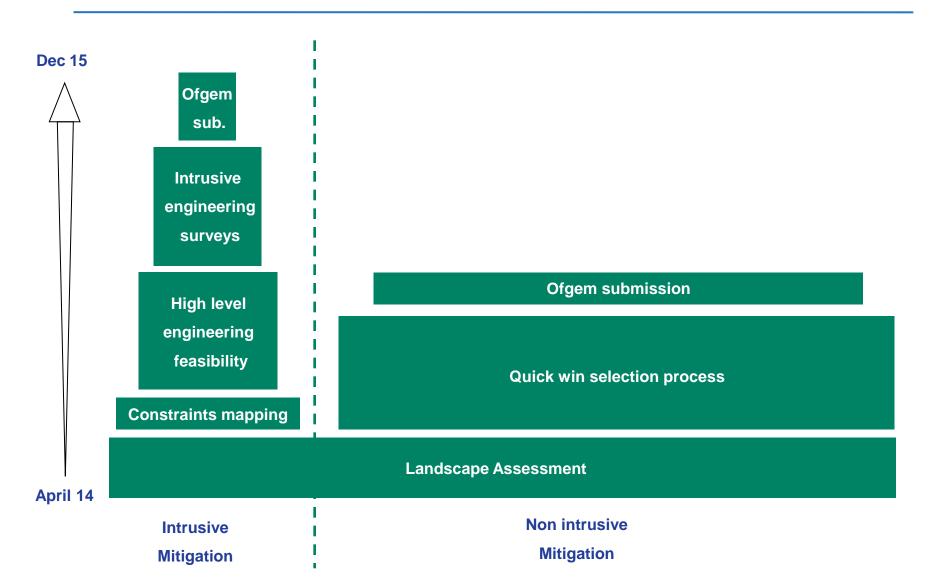
Current Activities

- Carys Swanwick appointed to develop and oversee the landscape and visual assessment work
- first Stakeholder Advisory Group meeting held in London on the 1 & 2 April
- landscape consultancies LUC and Gillespies have been appointed to conduct the landscape and visual assessment field work – due for completion mid July
- second Stakeholder Advisory Group is planned for the 24 & 25 July
- final report and results from the landscape assessment work are due in October

Long term programme

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Public Consultation on draft policy		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -		- - - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - - -			- - - - - - - - - - - - - - - - - - -
Establish stakeholder advisory Group			, 1 1 1 1 1 1 1 1	, 1 1 1 1 1 1 1	, 1 1 1 1 1 1 1 1	, 1 1 1 1 1 1 1 1	- - - - - - - - - - - - - - - - - - -	, 1 1 1 1 1 1 1	, 1 1 1 1 1 1 1 1
Developing & Refining Options				 	 	 		 	
Output Selection & Ofgem Sanction		 			 	 	1 1 1 1 1 1	 	
Detailed Routing & Siting		 	 		 		1 1 1 1 1 1 1	 	
Scheme development & consent applications		 	 					 	
Construction		1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 	1 1 1 1 1 1 1				

Project selection



What can the fund be spent on??





What can the fund be spent on??







Questions

