

Meeting	Do	ager Bank Crevke Beck Converter Station Working (Group - Mee	ating 3		
title	Dogger Bank Creyke Beck Converter Station Working Group – Meeting 3					
Location	Cottingham Methodist Hall, Hallgate, Cottingham HU16 4BD					
Date/ time	Thι	ırsday 25 th October 2012, 18:30 – 20:30				
Originator	For	ewind				
Attendees	Attendees:- Cllr Kevin Casson - Cottingham Parish Council Gordon Scaife - Cottingham Wild Spaces Group Cllr Stephen McCloud - Rowley Parish Council Cllr Nick Hart- Woodmansey Parish Council Cllr Tony Galbraith - ERYC Dale Ward Cllr Ros Jump - ERYC Cottingham North Ward and Chairperson Steve George - Beverley Minster Ian Booth - St Marys Church James Taylor - Beverley Local Nature Reserve Doug Jennings - Cottingham Civic Society Rod Mackey - East Riding Archaeology Society Stephen King - Local Access Forum Scott Royal - National Grid Liaison Officer Jayne Williams - SSE Nikki Smith - Forewind - Onshore Consent & Stakeholder Manager John Hughes - Forewind - Dishore Developer Jon Allen - Royal Haskoning (Forewind) Sam Oxley - Land Use Consultants (Forewind) - Landscape Architect Andrew Acum - Mercury - Group Facilitator					
Apologies	Ruth Atkinson – Humber Archaeology Partnership Susan Hunt – ERYC Planning Department Amanda Beal - Woodmansey Parish Council Cllr Gary Cooper - Cottingham Parish Council					
Purpose of meeting	To discuss the progress of the Dogger Bank Creyke Beck converter station environmental impact assessment and selection of the AC cable corridor					
Agenda	<u>Ite</u>	<u>m</u> :	<u>Owner</u>	<u>Timing</u> (from – to)		
	1	Tea and Coffee	Mercury	18.30-18.45		
	2	Chair's Welcome	Chair	18.45-18.50		
	3	Previous meeting's actions and updates	Forewind	18.50-18:55		
	4	General update on project	Forewind	18:55-19:00		
	5	Current EIA progress including archaeology, traffic, landscape and visual impact and public rights of way	Forewind	19:00-19:35		
	6	AC corridor update	Forewind	19:35-19:45		
	7	AC Cable corridor – access options	Forewind	19:45-20:00		
	8	Q&A session	Group	20:10-20:25		
	9	Chair's closing remarks	Chair	20.25-20.30		



Meeting record	FOREWIND						
Inputs to meeting	<u>Input</u> Agenda AC cable route update		<u>From</u> Forewind Forewind				
Outputs from meeting	<u>Output</u> Meeting notes		<u>From</u> Forewind				
Forewind Meeting Protocol							
Distribute agenda before meeting		Fix responsibilities for each item					
Start on time		Finish on time					
Set out your ground rules		Publish minutes / actions					
Stick to the agenda		Continuous improvement					



KEY DECISIONS/NOTES 1. Chair's welcome, apologies and introductions 1.1 Jayne Williams of SSE was introduced to the group as SSE's community liaison officer who would be observing the meeting.



2. Update on Forewind's actions from the previous meeting

- 2.1 Three meetings were held in august between Forewind and the parish councils along the direct current (DC) cable route and these meetings provided helpful feedback. Forewind is currently updating and refining the route and so the final DC route may be slightly different as a result.
- 2.2 Scott Royal of Local Dialogue was introduced to the group as a representative for National Grid. Scott explained that he may not be able to answer technical questions but was happy to take any points raised back to National Grid.
- 2.3 Burial of the converter station as a potential mitigation for landscape impact had previously been raised by the group. Forewind explained the volume of excavated material that would be generated from 1 m burial and the number of heavy goods vehicle movements necessary to remove this material from site. It was concluded that this additional traffic would generate an unacceptable impact on the local area and as a result this option has been ruled out.
- 2.4 Beverley Minster asked why it would be necessary to remove the soil from the site. The answer was that this material poses a flood risk owing to the height of the water table in the area and the pluvial (rain related) flooding. In addition, the flat nature of the surrounding landscape means that mounding would be out of character with the area.
- 2.5 The alternating current (AC) Cable Route update was circulated to group members prior to the meeting. Forewind currently has two options for the AC cable route from the converter stations to Creyke Beck substation, with Option 1 being Forewind's preferred route. Forewind received a couple of written responses supporting the selection of Option 1, but no further comments. The group was asked if there was any additional feedback. The answer was that there wasn't.



3. General Project Update

- 3.1 Forewind is now well into the detailed Environmental Impact Assessment (EIA) and hopes to have a draft Environmental Statement (ES) ready by the end of the year. The second stage of statutory consultation will take place early next year and this will include further public exhibitions. Forewind invites any comments and feedback on the project so that they may be considered before submission of the final application in Q2 2013.
- 3.2 It was noted that the dates for the second stage of statutory consultation may have altered slightly from those originally issued, a result of additional offshore work which is currently underway.
- 3.3 Forewind highlighted that the terms of reference for the community working group allowed for one further meeting. Forewind asked whether the group would prefer the next meeting to be before or after Christmas and, in addition, whether they would like to further continue meetings after the final application had been submitted. Forewind would ideally like to come back to the group for comments in Q1 2013 when the draft ES will be available to allow the group to have sight of it before the final stage of public consultation. The response was that this would be revisited at the end of the meeting



4. Environmental Impact Assessment

- 4.1 Forewind's Landscape Architect updated the group on the current status of the landscape and visual impact assessment. Forewind is considering a number of key features in relation to the siting of the converter stations, including the Beverley 20 public right of way (PRoW), existing woodland, nearby residences and major infrastructure routes which border the site.
- 4.2 In addition, Forewind is capitalising on existing areas of mature woodland and hedgerows in the area in order to screen views as a form of embedded mitigation.
- 4.3 A recap of the converter site locations was given. In a worst case scenario the building would be 20 m in height with lightning rods up to 30 m high. The converter station height is similar to that of the surrounding woodland. This is a deliberate design to help reduce negative visual impact.
- 4.4 Development considerations such as landscape planting are still being negotiated with landowners.
- 4.5 The converter station footprint also includes an external AC yard. This will be lower in height and will involve some fencing along the external perimeter for health and safety and security purposes. This area is likely to be akin to the existing Creyke Beck substation.
- 4.6 A question was asked on behalf of Rowley Parish Council querying if the building would be illuminated at night. The answer was the building would have to be lit for health and safety reasons but that the lighting would be reduced as much as possible. For example, cut off lighting and motion triggered lighting could be used to ensure the building is only illuminated as necessary.
- 4.7 A question was asked on behalf of the Local Access Forum about the size of footprint of the converter station. The answer is that it is a 2 hectare plot per converter station, so 4 hectares in total.
- 4.8 A question was asked on behalf of the Local Access Forum regarding whether assessments had been done into the land quality and soil grade. The answer was that detailed analysis of effects on the soil had been carried out and would be available as part of the ES.
- 4.9 A question was asked on behalf of East Riding Archaeology Society enquiring if there has been any guarantee from the owner of the nearby woodland that he would not fell this area of woodland as this provided key screening of the converter stations.

ACTION: Forewind will look into this and speak with the relevant landowner.

4.10 A question was asked on behalf of Beverley Minster about whether building of the converter stations would alter the planning status of the area and attract further development to the area as a result. Councillors Galbraith and Jump explained that this was very unlikely as the land is not marked for development in the Local Development Plan. The converter stations are part of a Nationally Significant Infrastructure Project which is a separate planning and consenting regime.



- 4.11 A question was asked on behalf of Beverley Minster about whether it was likely that more converter stations would be built in the area as it was mentioned in a previous meeting that this project was only the first quarter of the Dogger Bank development. Forewind confirmed that the next 4 GW of development would be located in Teesside and any further development was still subject to the grid application process. Forewind do not expect any further projects connecting to the Creyke Beck substation.
- 4.12 A series of photomontages were provided as visualisations. These compare the landscape as it is today to the landscape including a modelled version of the converter stations. The locations have been chosen to highlight worst case scenarios. The roofline of the converter buildings will be seen in between the trees and the colour and choice of materials of this roofline will be decided post consent by architects.
- 4.13 The converter stations are more visible from the South. Forewind will look to maximise planting along the southern edge of the converter station sites however space on the site is quite restricted.
- 4.14 The external electrical infrastructure around the converter stations is visible from the A1079 looking to the East. Drainage issues mean that this view may not be screened in its entirety but scattered trees will be planted to remove view of the lower infrastructure. A view of Beverley Minster, especially at night, is also visible from this viewpoint. The converter stations do not interrupt this view.
- 4.15 A point was raised on behalf of Cottingham North Ward that the colour of the converter station buildings and periphery fence are particularly important in visual impact mitigation.

ACTION: Forewind will ensure that this is taken into consideration and that the building material is non-reflective and non-illuminated.

4.16 A question was asked on behalf of Cottingham Wild Spaces about whether it would be possible to introduce additional planting for screening in the Beverley Parks Nature Reserve itself.

ACTION: Forewind recognises that this is a potential mitigation opportunity and will look into this further. As this constitutes offsite planting, Forewind would need to hold discussions with the landowner.

4.17 A point was raised on behalf of Cottingham Wild Spaces group that the existing landscape features small blocks of woodland connected by hedgerows and that any new planting should look to mimic this. This also encourages wildlife in the area.

ACTION: Forewind will continue to ensure that any proposed landscaping echoes the local landscape. Regular inspections and audits during the operational phase will ensure that planting is correct and as specified.

4.18 A question was raised on behalf of Cottingham Civic Society about why the converter station buildings were pictured as a simple box structure, following the third working group meeting in which the design of the converter buildings had been discussed. The response was that these visualisations provided a worst case scenario and that the detailed design would be carried out post consent. Forewind has met with the Design Council CABE and architects to discuss the possibility of including design principles in the consent application. These could include the type and colours of materials used, as well as the landscape mitigation but would not go as far as to present a detailed design.



ACTION: Forewind will feedback to the group on what level of architectural design principles and guidance can be included in the consent application.

- 4.19 A question was raised on behalf of Beverley Minster querying if the converter buildings could be half the height and double the footprint to minimise visual impact. It was explained that Forewind has already reduced the roof height from 30 m to 20 m but technical requirements mean that the roof height cannot be reduced any further without requiring a much larger footprint. The site that has been selected is quite constrained in size so this would mean selecting another site.
- 4.20 A question was raised on behalf of Cottingham Civic Society about how planting for screening would be possible when the site is so close to the A1079. It was explained that it may be possible to move the converter buildings northwards slightly to allow for maximum screening.

ACTION: Forewind to consider moving the converter stations slightly further north to allow for additional planting around the southern edge of the site.

4.21 A point was raised on behalf on the Local Access Forum stating that a Yorkshire Water waste treatment site near Scarborough has been built to look like a farm building and would something similar be possible at Creyke Beck. Forewind explained that the key worst case parameters such as height and footprint would be assessed in the ES as part of the consent application. The final design of the converter station (which must be within the consented parameters) will be carried out post consent by architects, ideally with input from the local community. An important point to note is that the converter station site will be very well screened; therefore additional design and build costs would have to be commercially viable.

ACTION: Forewind will look into the design of this building to see if it could inform the design principles.



5 Environmental Impact Assessment – Archaeology, Traffic and Noise

- 5.1 Forewind's EIA Co-ordinator updated the group on the archaeological work currently taking place. Geophysical surveys are underway over the whole onshore cable route in order to identify potential risks and develop a targeted trial trenching approach. 30 trail trenching sites have been identified for further investigation and this work is ongoing.
- 5.2 A question was raised on behalf of Cottingham North Ward regarding whether it was possible to see a photomontage of the view from St Marys Church, Cottingham towards Beverley Minster as this is a very sensitive viewpoint in the area.

ACTION: Forewind will show them to the group at the next meeting.

- 5.3 A question was asked on behalf of Woodmansey Parish Council regarding whether the noise generated from the converter stations would be a similar type of noise to that of Creyke Beck substation. The response was that the type of noise is likely to be similar to that from Creyke Beck and would likely consist of hums, clicks and buzzes. Where possible noise will be shielded at source and screening may be used to ensure noise is at an acceptable level for the area.
- 5.4 A question was asked on behalf of East Riding Archaeology Society about the likely effects of the additional noise generation on the local wildlife. The response is that this is being considered as part of the ecological assessment currently underway which looks to identify any noise sensitive species present in the local area.
- 5.5 A question was asked on behalf of Rowley Parish Council regarding whether the noise levels were likely to fluctuate as a result of fluctuating wind strength and so turbine electricity generation. The response was that the main noise associated with the converter station results from fans and cooling equipment therefore if the turbines are not running due to a lack of wind resources, no noise should be generated.
- 5.6 A question was raised querying what percentage of the cable route had been covered by trial trenching. The answer was that 30 trial trenches have been investigated along the 30 km cable route and at the converter station site. The approach to trial trenching has been approved by the Humber Archaeological Partnership.



6	AC cable corridor update					
	6.1	John Hughes provided an update on the AC cable route selection. Forewind has two options for the AC cable route leading from the converter stations into the Creyke Beck substations. Option 1 is Forewind's preferred route.				
	6.2	Feedback from the working group to date has also favoured this option.				
	6.3	No additional feedback was provided by the group.				
	6.4	The potential archaeological impact of Option 2 on an Iron Age settlement in the area is the most significant risk which must be avoided and on this basis Option 1 has been chosen.				
	6.5	The key risk associated with Option 1 is the potential impacts on the nearby residential properties at Lawn Farm. Appropriate mitigation measures will be identified and the noise generated will be temporary in nature during the construction period only.				
	6.6	Construction is likely to last around 4 months.				
	6.7	A question was asked on behalf of Beverley Minster querying whether the cabling was over ground or underground. The answer was that the AC cable route will be buried, and once installed will not be visible.				



7 AC Cable Route – Temporary Construction Access Options

- 7.1 Forewind currently has four options for temporary construction access options for the AC cable route. Forewind's preferred option is Option 1.
- 7.2 Feedback from the group also unanimously favoured Option 1. It was concluded that Options 2 and 3 would affect a greater number of landowners, including a local livery business, as well as having greater impacts on public rights of way. Option 3 would require works at the junction with the A1174 as this is currently not suitable for large vehicles and the level crossing would probably need to be upgraded. Option 4 would generate unacceptable traffic in Cottingham centre and would likely increase congestion on Park Lane where there is already a problem with car parking blocking access to the businesses located there. Park Lane is also used by a number of cyclists and pedestrians.
- 7.3 A question was raised about whether it was possible to move a small part of Option 1, the new section of road providing access from the south of the A1079 to the AC cable corridor, closer to the A1079 so it had less impact on the farmland.

ACTION: Forewind will conduct further investigations into the micro-siting on the AC construction access to see if this possible.

7.4 A question was asked about whether the existing bridge which crosses the A1079 (and which is utilised in Option 1) would be suitable for construction vehicles.

ACTION: Forewind will now begin surveys on the existing infrastructure along the AC access route. Forewind will feed back to the group at the next meeting.

7.5 It was also mentioned that this bridge is a Public Right of Way which may be impacted if the bridge is closed. A diversion rather than a closure would be preferred by the group.

ACTION: Forewind will liaise with PRoW officer to identify temporary diversion routes if necessary. Feedback will be provided to the group at the next meeting.



8 Question and Answer session

- 8.1 A question was raised on behalf of East Riding Archaeology Society questioning the value of the trail trenching method. It was suggested that unless trail trenches are very dense they are likely to miss a great deal and a watching brief method may be preferable. It was also raised that East Riding Archaeology may be able to provide some additional data to inform the desk based element of the work. The response was that the trial trenching method adopted by Forewind aims to identify the risks in the area and their results are used to confirm if a watching brief is necessary. All archaeological works carried out by Forewind have been approved by the Archaeology Manager for Humber Archaeology Partnership (Archaeology Advisor to East Riding of Yorkshire council).
- 8.2 A question was asked on behalf of Rowley Parish Council enquiring if the converter stations would still be built even if the wind farm did not gain consent. The response was that they wouldn't, there is no need for the converter stations if there are no offshore turbines.
- 8.3 Forewind was asked to explain how DC is converted into AC. The answer is that, at its simplest 6 pulse converters are the building blocks of HVDC systems. These converters can use semi-conducting diodes to alternatively switch current on and off to create output patterns which when combined produce a flat direct current. Modern HVDC systems use more sophisticated devices and more frequent on off switching to produce a smoother output. This requires less filtering equipment, less footprint and results in lower capital costs than early generations of HVDC converter stations.

9 Next meeting

9.1 The proposed date for the next meeting is February 2013. The exact date will be circulated when it is clear when the draft ES will be available. The group a chance to view the draft ES prior to the public exhibitions.

10 Chair's Closing Remarks

The chair thanked the group for their contributions.



Action No	Action description	Owner	Date set	Target date			
Update	Update details						
b u: fc	orewind will speak to the landowner of the existing lock of mature woodland in the area that is to be sed for screening to ensure that there are no plans or this to be felled and will consider how to ensure hat it is not felled in the future.	MT	25.10.12	On-going			
Update							
p th	orewind will feedback to the group on how design rinciples such as the colour and material used for he converter stations and ancillary structures can be ncorporated into the consent.	MT	25.10.12	On-going			
Update							
B di e	orewind will look further into landscape works within everley Parks Nature Reserve and if necessary hold iscussions with the landowner. Forewind will also nsure any landscape works echo the existing andscape.	JA	25.10.12	On-going			
Update			·				
M S	orewind will look into the design of the Yorkshire Vater waste treatments works building at carborough to assess if such a design would be uitable at Creyke Beck.	SO	25.10.12	On-going			
Update							
a th	orewind will contact Ian Booth in order to arrange ccess to the roof of St Marys so photomontages from his viewpoint can be prepared. These will be shown o the group at the next meeting.	SO	25.10.12	On-going			
Update							
th as of	orewind will conduct thorough investigations along he route of the preferred access option in order to ssess the existing infrastructure and the micro siting f new access routes. These findings will be reported ack to the group at the next meeting.	MT	25.10.12	On-going			
Update							
S	orewind will contact East Riding Archaeological ociety in order to obtain any data useful for desk ased elements of the archaeological work.	JA	25.10.12	On-going			