nationalgrid

IED Investments: Initial Consultation Stakeholder Feedback

16th January 2015

I. Introduction

On 17th November we published our IED Investments: Initial Consultation. This consultation detailed the impact of the Industrial Emissions Directive (IED) on our compressor units and outlined a series of options for each of our non-compliant compressor units with an indication of the costs this would incur. In the consultation we asked you to respond to a range of questions covering our stakeholder engagement process; the options for compliance at each affected site and what, if any, further information we could provide to you.

The consultation closed on Friday 19th December 2014. We received 6 responses to the consultation from the following companies:

- SGN
- Centrica
- RWE
- Total E&P UK
- E.On
- Energy UK

The following sections summarise the feedback received from the written responses and also the verbal feedback at the workshop on the 19th November, at which the consultation was discussed.

II. Stakeholder engagement process

The respondents were complimentary of our stakeholder engagement process by saying that we have run an "effective, collaborative consultation process, setting out the range of options and associated costs available for the NTS compressor fleet to comply with the IED". The workshops were described as "very informative" and that "the presentations, coupled with workshops, approach has aided understanding of the technical requirements, investment options and decision-making process".

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"The format of the stakeholder engagement including presentations and roundtable discussions has worked well and has facilitated informed discussions of the issues and options." Energy UK

One of the respondents stated that they thought we should improve our engagement with the Gas Distribution Networks as the work required for our compliance with IED could have an impact on their customers. All of the distribution networks were invited to our workshops with regular attendance from SGN and National Grid Gas Distribution. Subsequent bilateral meetings have been held between ourselves and all the distribution networks. During the bilateral meetings we have discussed developing a suitable forum to provide the opportunities to regularly discuss long term distribution and transmission network development areas. We are working with the DNs to consider how best this is developed and taken forward.

Although the engagement has been very positive, respondents stated that they have been disappointed by the level of attendance at the workshops. They suggested that in order to raise awareness we could provide updates on the key discussion points at Transmission Workgroup which may help increase the profile of this topic. Originally we had invited all parties who are on the Joint Office's mailing list to attend our workshops, however as a result of this feedback we raised the topic at the Transmission Workgroup in January and have been requested to provide an update to the February meeting.

III. Legislation

In the consultation document we included a section giving an overview of the IED, the prior legislation it consolidated and the requirements it includes. We also sign-posted legislation that we expect to materialise in the near future, the Medium Combustion Plant (MCP) directive and the introduction of the BAT Reference (BREF) documents.

We asked you whether you would like to know more about how the IED affects our compressor fleet. The respondents felt we had covered the LCP and IPPC elements of the IED and the implications in sufficient detail. However, respondents did tell us that they would like more information on the MCP directive and the BREF documents and how we have taken account of the potential impact this may have on our decisions. To address this in our Proposals consultation we intend to

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"National Grid set out a good overview of the IED legislation, the impact on the compressor fleet and the range of options available to achieve compliance." RWE

publish more information on the MCP directive and the BREF documents including what we envisage the impact of this may be on our compressor units.

One of the respondents raised the point that there is a further derogation in the IED in Annex V, paragraph 6 that we should clearly explain why this hasn't been considered as an option. This derogation states that for gas turbines (including CCGT) which were granted a permit before 27 November 2002 which do not operate for more than 1,500 hours per year as a rolling average over a period of 5 years, the emission limit value for NO_x is 150 mg/Nm³. The limit for CO remains at 100 mg/Nm³. We did not include this derogation in our Initial consultation because our affected units are unable to meet these NO_x limits, without abatement. However we recognise that we should have outlined this option in the Initial Consultation document along with why we are unable to use the derogation; we will do this in our Proposals Consultation document.

IV. Assessment of the options

LCP

In one of the stakeholder workshops we asked attendees to help us to develop the Gas Transmission Network Strategy Scorecard to identify the most important criteria in developing the options to ensure our compressors are compliant with the LCP element of the IED. In the Initial Consultation document we used this scorecard and what attendees had identified as being important to them to develop the range of possible options to achieve compliance at each of our affected sites.

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"...the development of a Gas Transmission Network Strategy Scorecard has been helpful in providing a consistent reference point of important criteria". RWE

In the Initial Consultation document we asked whether you agree with our assessment of the options. Respondents broadly said that they did agree with our assessment. One respondent expressed the view that "given the relatively low cost impact per consumer then, arguably, National Grid should replace the affected compressor units." However it was also identified that given the upcoming MCP directive it may be most appropriate to use the available derogation options in order to delay the final decision. This was also a sentiment expressed at the workshop on the 19th November. At some sites we do not believe that MCP will have an impact. However, at others it could do and we have taken this into account when assessing the options available at each site and will endeavour to make this clearer in our Proposals Consultation document. If we were to delay the decision taken at the sites that may be affected by MCP this would jeopardise delivery of the works due to the outage programme. In our Proposals Consultation document we will provide further information on our proposed outage programme required to deliver the IED works.

One of the respondents stated that it is not clear why the catalytic converter being developed at Aylesbury could not be a cost effective option elsewhere. The units at Aylesbury which are affected by the LCP element of IED are a prototype version of an upgraded Rolls Royce Avon engine fitted with Dry Low Emissions technology to reduce emissions. These are the only engines of this type in our fleet. These engines are able to achieve the NO_x limits but are unable to achieve the CO limits set out in the IED. The catalytic converter only treats emissions of CO. As the engines at Aylesbury are the only ones of their kind in our fleet that meet NO_x limits but not CO limits, we are able to use the catalytic converters on them but not on engines at other sites. To address NO_x and CO

requires a much more complicated an expensive approach of Selective Catalytic Reduction. We will provide further information on this in our Proposals Consultation.

In our "Initial scoping of options section" we included a table for each site which outlined the options available and scored them using a red, amber, green methodology against the elements that you told us are important to you in the development of the Gas Transmission Network Strategy Scorecard. We received the feedback from respondents that although this is a useful way to communicate a large amount of information sometimes it is not clear what we mean by the colours. Therefore, in our Proposals Consultation we plan to include a clearer explanation of what the colours mean.

At Hatton one of the options we proposed in the consultation document was to install 3 medium new units. Regarding this, one particular stakeholder stated; "in the case of Hatton the decision appears to be clear cut – it's a vital site and new units should be installed".

IPPC Phase 4

In the Initial Consultation we proposed three sites under the IPPC element of the IED at which investment would most likely provide the greatest emission reduction based on running hours over the previous 5 years, recent and planned investment and future supply and demand patterns. As a result of this the sites that we propose to undertake work at are St Fergus, Peterborough and Huntingdon.

Respondents said that these sites seemed appropriate based on the running hours of the sites. One of our stakeholders expressed the view that the running hours for Wormington look "highly variable" however, as stated in the Initial Consultation it is likely that the situation will stabilise with the running hours of the two Avon units reducing due to the increased confidence in the electric drive unit and the commissioning of the Felindre gas compressor. Compressor usage will then largely be dependent on Milford Haven flows.

One of the respondents stated that the interaction between what we have currently received an allowance for and our proposals for IPPC works is currently unclear. We propose to provide further clarity on this in our Proposals Consultation.

V. System Flexibility

When developing the Gas Transmission Network Strategy Scorecard in the workshops, attendees told us that an important aspect is that any option should take account of future flexibility (average score of 9 out of 10). Therefore, when considering all the options available at each site one

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"System flexibility has featured as a key consideration during workshop discussions and is one of the most important factors to be considered...when you make your proposals..." Centrica of the key considerations was whether the specific options allowed us to meet future flexibility requirements.

Through the Initial Consultation, and during the workshop on 19th November, respondents told us that we need to give more consideration to the issue of system flexibility when developing our options for each site. In particular respondents said that the within-day system flexibility currently available to system users should be maintained and wanted further information on how we plan to deal with much more variable within-day system utilisation. Respondents stated that they need a better understanding of the impact of investment decisions on system flexibility and that any proposals taken forward need to be consistent with at least maintaining current levels of flexibility. In assessing the options available at each site we have taken into account the impact on system flexibility, however, in our Proposals Consultation document we shall highlight this assessment and provide more details where appropriate. As we progress the wider debate on system flexibility, we will take account of and consider what additional services could be provided by the market.

VI. Costs

In the Initial Consultation document we included information about the impact a like for like compressor replacement programme will have on end consumers' bills. Furthermore a financial summary was also included to provide guidance on the total cost for a full replacement programme and the total costs of following a programme of lower costs. One respondent stated there is nothing further they would like to see on this and that "the

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"Another criterion for assessment could be the possible impact on unit transportation charges – would any of these change significantly?" Centrica

information provides a good high-level view of the possible costs involved with the various options". As mentioned in the Initial Consultation document, we are currently working with an engineering consultancy to develop a budget price for both capital and on-going asset health works; we expect to be able to include this information in our Proposals Consultation document.

One of the respondents stated that it would be "useful to understand how decisions might impact on transportation charges" and another said they would like to understand new NTS tariffs. We are currently undertaking a piece of analysis work to establish the impact on transportation charges and NTS tariffs and expect to be able to share the results of this with you in the Proposals Consultation document. In the Proposals Consultation we will also include any information on how our work on the affected compressor units may provide other cost savings, for example with regard to EU Emissions Trading Scheme (EU ETS).

VII. Conclusion

We received very useful feedback from you through your responses to our Initial Consultation. As a result of your feedback we will be carrying out further work and analysis which will be included in our Proposals Consultation document to answer the points you have raised, these are summarised in the table below.

You said	We will do
Improve engagement with GDNs's	Looking to establish a new or modify an existing group
	to improve engagement with GDN's.
Provide updates on key discussion points	Raised the topic at January's meeting and will provide
at Transmission Workgroup	an update in February's meeting
Like more information on MCP directive	Will publish further information in the Proposals
and BREF	consultation including what we envisage the impact to
	be on our compressor units
1,500 hours derogation should be	Will outline the option and explain in the Proposals
considered	consultation why we are unable to use this derogation
Due to the forthcoming introduction of the	Decisions will take this into account but delaying may
MCP it may be most appropriate to use	jeopardise the delivery of works due to outage
available derogations to delay the final	constraints. In the Proposals Consultation we will
decisions on the sites affected by the LCP	provide further information on our proposed outage
element of IED	programme
In the table included in the "Initial Scoping	In our Proposals Consultation we plan to include a
of Options" section it was not clear what	clearer explanation of what the colours mean
we mean by red, amber, green	
methodology	
Interaction between our current allowance	We will provide further clarity on this in our Proposals
for IPPC Phase 4 works and our proposed	Consultation
works is unclear	
More consideration to system flexibility.	In the Proposals Consultation we will highlight how
Consider market services	system flexibility has been taken into account when
	assessing the options and provide further detail where
	appropriate. We will consider additional market
	services as we progress the wider debate on system
	flexibility.
Useful to understand how decisions might	Currently undertaking analysis to establish the impact
impact on transportation charges, to	on transportation charges and NTS tariffs which we
understand new NTS tariffs and other cost	hope to share in the Proposals Consultation along with
savings.	how our work may provide other cost savings.

In the Initial Consultation we stated that we would publish our Proposals Consultation in February. However, due to the subsequent work and analysis we are carrying out as a result of your feedback we will now publish our Proposals Consultation document in March 2015. We feel it is imperative that we address the points that you have raised and moving the publication date of our document will enable us to do this more thoroughly.