

# Western Power Distribution Stakeholder Workshop: Distributed Generation



3<sup>rd</sup> November 2015

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# 1 Introduction

On 3<sup>rd</sup> November 2015, Western Power Distribution (WPD) hosted its second stakeholder workshop specifically for its distributed generation stakeholders. The event was held at Villa Park, Birmingham.

In recent years, there has been a huge increase in distributed generation (DG) connections, with the trend expected to continue. In response to this, and stakeholders' feedback on the Incentive on Connection Engagement (ICE) Plan, WPD held their inaugural DG workshop in November 2014.

The second workshop, one year on, represented an opportunity for stakeholders to raise issues they have experienced in the DG connections process over the last 12 months and comment on WPD's updated ICE Plan. The ICE Plan<sup>1</sup> and WPD's full submission<sup>2</sup> can be read on their website.



WPD appointed specialist stakeholder engagement consultancy, Westbourne (WB), to facilitate the stakeholder workshop on its behalf. WB carried out a thorough audit of all WPD's DG stakeholders, producing a database of 875 contacts, each of whom were invited to the event. In addition, relevant trade associations and membership organisations were sent an invitation and encouraged to circulate this to their members.

<sup>1</sup> <http://www.westernpower.co.uk/docs/About-us/Stakeholder-information/Connection-Customer-Engagement/ICE-workplan-Oct2015-resub-v2-for-printing.aspx>

<sup>2</sup> [http://www.westernpower.co.uk/docs/About-us/Stakeholder-information/Connection-Customer-Engagement/ICE/WPD-ICE-submission-2015\\_16-FINAL.aspx](http://www.westernpower.co.uk/docs/About-us/Stakeholder-information/Connection-Customer-Engagement/ICE/WPD-ICE-submission-2015_16-FINAL.aspx)

The format of the workshop was a series of presentations by senior WPD representatives followed by roundtable sessions. Each of the roundtable sessions was facilitated by trained Westbourne (WB) facilitators and comments were noted by scribes.

Where possible, verbatim quotes have been noted by the WB scribes. However, in order to ensure that all stakeholders could speak as candidly and openly as possible, comments were not attributed to individuals. On each of the tables, a member of WPD staff was on hand to answer technical questions. A copy of the presentation given on the day can be found on WPD's website<sup>3</sup>.

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<sup>3</sup> <http://www.westernpower.co.uk/docs/About-us/Stakeholder-information/November-2015-workshop/DG-Stakeholder-Workshop-November-2015-V10.aspx>

## 2 Overview of the workshop

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There were two discussion sessions within the overall workshop that provided an opportunity for stakeholders to give feedback on the connections process and their experience of DG applications, as well as review the ICE plan and the actions WPD had identified in it.

- **Session 1. Challenges and key areas of focus for 2015.** This session focused on the key issues facing the connections process for distributed generation.
- **Session 2. Quicker, more efficient connections – WPD’s improvement plan in detail.** This discussion focused on the six sections of WPD’s ICE Plan 2015/16.

In the afternoon there were four surgery sessions, which provided stakeholders with the opportunity to receive updates from WPD, and give their feedback, on a number of technical aspects of the connections process.

### Attendees

A total of 66 DG stakeholders attended the workshop from sectors including: community interest companies; connections companies; direct customers; developers/installers; government bodies; industry consultancies; law firms; membership organisations; technology/innovation companies; universities; and utilities companies. The organisations represented were as follows:-

- Aardvark EM Ltd
- Alstom Grid
- Anesco
- Belectric Solar Ltd
- Country Land and Business Association
- Conergy UK Ltd
- Coventry University
- Department of Energy & Climate Change
- DNV GL - Energy
- Dragon Infrastructure Solutions Ltd
- E.ON Energy
- Eaton
- Electricity North West
- ENER-G
- Excellent Consultancy Ltd
- Geldards LLP
- GF Energy
- Good Energy
- Hallmark Power Limited
- Hermes Energy Services
- Inazin Power
- J Sainsbury Plc
- Lightsource Renewable Energy
- LR Senergy
- Martifer Solar UK
- Morrison Utility Connections
- National Grid
- Northern Powergrid
- Norvento Wind Energy UK
- O'Connor Utilities
- Osborne Clarke
- Peak Gen Power Limited
- Power On Connections
- Powercon UK
- Regen SW
- Renewable Developments Wales
- Renewable Energy Association
- Renewable Power Systems

- RES
- Roadnight Taylor Ltd
- Rolton Group
- RWE npower
- S&C Electric Europe Ltd
- Siemens Transmission And Distribution Ltd
- Smart Metering Systems
- Social Power Partnerships
- SP Energy Networks
- Stephens Scown
- SunEdison
- TUSC Ltd
- UK Power Reserve
- University of Warwick

### 3 Summary of feedback

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- 66 stakeholders attended on the day and 55 provided written feedback.
- 100% of stakeholders who provided written feedback told us they found the workshop to be either ‘very interesting’ or ‘interesting’.
- 100% of stakeholders who provided written feedback ‘strongly agreed’ or ‘agreed’ that we covered the right topics on the day.
- ‘Dealing with network constraints’ was identified as the key emerging issue by stakeholders.
- 26 stakeholders (equating to 55% of those who answered the question) would consider taking an alternative connections offer, while only three (equating to 7%) said they would not.

#### Workshop 1. Challenges and key areas of focus for 2015

- Stakeholders were initially asked about their experience of applying for a connection with WPD. The response was generally positive and a number of stakeholders said they were still the best DNO to engage with on the connections and applications process.
- There is still, however, a lot of room for improvement.
- Experiences were generally better when early contact, particularly face-to-face, was established in advance of the application, helping stakeholders plan timelines and develop a direct relationship with a WPD staff member who is accountable for that connection.
- The speed of WPD’s response, in the quote and the post-acceptance stage, was flagged as an area for improvement. This has a huge impact in terms of delaying projects, particularly ‘seasonal’ energy generation, like solar power.
- The recent boom in solar technology has caused capacity problems on the network, particularly as solar developers look for grid capacity, rather than identifying a suitable site.
- The key emerging issues that WPD had identified were generally thought to be correct, although there were some issues which stakeholders felt were not identified, which WPD should be aware of or engage with:

- The role of Government policy and intervention
  - Energy storage
  - Design approval
- There were mixed views on whether an application fee should be introduced, with some stakeholders saying it would help filter out speculative applications and others concerned that it would hit small applicants, particularly community developers, disproportionately hard.
  - There was general acceptance amongst stakeholders that demonstrable milestones for an application are necessary. Otherwise, the risk is that capacity is held up in the network and the potential growth of the industry is stifled.
  - While there does need to be a level of flexibility, the applicant should be able to demonstrate signs of progress and that they are not just reserving capacity. This should include a clear plan for the project and whether land rights are secured.
  - Unused capacity was identified as an issue by a number of attendees. Developers who have unused capacity held under an original connection agreement should be forced to give it back.
  - There was general support for a standardised approach across the UK on project milestones and the point to terminate an offer. It was acknowledged by some stakeholders that this is very difficult to achieve.
  - The majority of stakeholders who had experienced the statement of works process had a very negative experience. It was, however, understood to be an industry-wide issue, with some performing more poorly than WPD.
  - A number of stakeholders identified a lack of communication between National Grid and WPD as a reason for the poor experience of statement of works.
  - While the majority of attendees preferred to have the statement of works process start at the application stage, as it would mean they would have as much information as early as possible, there were some who felt that it should begin at the acceptance stage.
  - There was strong support for a move towards individual, rather than bulk, statement of works, although there was an acknowledgement that this would cost more.



- There was general consensus that it's very difficult to get accurate forecasts because no-one has a clear picture of what is likely to happen.
- One reason for this difficulty is that technologies' shelf life is becoming much shorter.
- Additional groups that should be engaged with include:
  - Technology companies
  - Academia
  - Relevant sector groups in membership organisations
  - Generators
  - Developers
- The political climate needs to be taken into account when forecasting.
- A number of stakeholders felt there needed to be more joined up thinking across the industry.

## **Workshop 2. Quicker, more efficient connections – WPD's improvement plan in detail**

### *Communications and engagement*

- There was consensus that stakeholders prefer being able to talk to someone directly and that this needs to start early on in the application process.
- Whilst some stakeholders acknowledged that WPD was the best DNO in terms of its communications around connections, other stakeholders highlighted a lack of consistency across the different regions, with a number experiencing difficulty getting WPD staff to attend meetings or conference calls.
- There was broad consensus that the annual DG workshop was a useful way of engaging with WPD.

### *Availability of information and online services*

- There was consensus among stakeholders that whilst the heat maps are excellent, the information on the maps needs to be kept up to date otherwise they become redundant.
- Whilst the information provided was generally regarded as good (and WPD was frequently rated as one of the better DNOs), the issue was knowing where to find it.
- A number of stakeholders commented that the first time they were aware of some of the information available was at this workshop. In relation to individual schemes, stakeholders want to see early delivery of site specific information.

### *Service provided post connection offer acceptance*

- The experience of the service provided post connection offer acceptance differed among stakeholders, and many felt that there was a lack of consistency among the regions. Some felt that their points of contact lacked sufficient resource, or did not have the right project management skills.
- A number of stakeholders highlighted that it was difficult to get in touch with, or get the right information from, WPD at this stage of the process. Where stakeholders had met face-to-face, they were more positive about the service.

### *Extension of contestability*

- There was general consensus that competition in the market was a good thing although there were a range of views on whether WPD's prices were competitive or not.
- Some stakeholders wanted to have greater clarity and more information on what is contestable and what is not.
- A number of stakeholders commented that WPD provides a lack of specifications for ICPs to work with and that there could be some flexibility in what is permitted.



### *Offers and agreements*

- There was general consensus that stakeholders require more time to sign connections agreements and that e-signatures would be a real benefit in this process.
- A number of stakeholders agreed that, post-acceptance of an offer, a timeline would be very helpful and a number of others said that the offer needed to contain more information in order to help with financial modelling.

### *Innovation*

- The majority of comments on innovation were around the need to better communicate innovative projects, as stakeholders were broadly unaware of the current initiatives.

## 4 Summary of suggested initiatives and recommendations

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The majority of the initiatives and recommendations put forward by stakeholders at the workshop fit neatly into one of the areas of WPD's improvement plan. The majority have therefore been listed underneath the relevant section of the plan under workshop 2. There were, however, a number of recommendations made with specific reference to the discussions in workshop 1.

### Workshop 1. Challenges and key areas of focus for 2015

- The (1) role of government policy and intervention and (2) energy storage should be considered as emerging issues alongside the key issues that WPD have identified for connections.
- WPD should seek to engage on their approach to future forecasting with stakeholders including: technology companies, academia, generators, developers, membership organisations and wider industry stakeholders such as other DNOs, GDNs, water companies and energy companies.
- WPD should embark on a programme of engagement with local authorities on distributed generation in order to work more closely with them and to encourage them to prioritise it as a work stream.

### Workshop 2. Quicker, more efficient connections – WPD's improvement plan in detail

#### *Communication and engagement*

- WPD staff should be encouraged to hold face-to-face meetings with applicants where possible.
- Sign-up all workshop attendees automatically for WPD updates, with an opt-out clause. Send regular updates to connections customers.
- Consider whether there is any opportunity for online engagement with DG customers beyond the annual customer survey.
- Formalise the opportunity for informal conversations with WPD pre-application, potentially for a fee.
- Encourage more DG engineers and on-the-ground staff to attend the annual DG workshop and surgeries.
- Work with other DNOs to create a common approach to uploading information to websites so it is easier for customers to find.

### *Availability of information and online services*

- Make sure that applicants are clear on what information is available – and where – at the earliest possible stage in an application.
- Have one point of contact in each area who has a real-time view of what is going on with regards to offers and applications who is able to advise customers.
- Continue using website prompts updating customers when new information is available.
- Explore the potential to provide information that drills down to substation level, like SSE.
- Review the process for sharing information so that there is early delivery of site specific information.
- Confirm what date the information was published so customers can anticipate whether or not the information is out of date.
- Provide information about which elements are contestable and which are not.

### *Service provided post-connection offer acceptance*

- Consider offering a dedicated account manager for major customers or customers with a large number of applications.

### *Extension of contestability*

- Trial an individual Statement of Works to determine whether it will work on a long-term basis.

### *Offers and agreements*

- Develop a framework for identifying applications that reserve capacity. This framework should be trialled in areas of high unused, but reserved, capacity.
- Engage with other DNOs about a UK-wide framework on project milestones and the point to terminate an offer.
- Trial an application fee in an area with a track record of stalled applications.

### *Innovation*

- Do more to promote the innovative projects that WPD is undertaking to raise awareness among stakeholders.

## 5 Workshop 1: Challenges and key areas of focus for 2015

This discussion focused on WPD's approach to, and stakeholders' issues concerning, network constraints and mitigation; queue management; and statement of works.

### 5.1 What has your experience of applying for a connection with WPD been like?

Table 1:

- A utilities company representative stated that (s)he *'only applied for one connection. We would like to do a few more in the very near future. The process has been quite good in general. I found that WPD has been quite keen to engage with us when we approach them about concerns. They're keen to give us feedback, especially in regards to constraints in the South West. However, I do feel like sometimes some of the guidance (what is allowable and not allowable), especially in the South West is not clear, and it means asking the right questions.'*
- A developer/installer representative made the point that (s)he *'agreed, you have to ask the right question and be proactive to get the answer you'd like to hear.'*
- A membership organisation representative agreed, stating *'that's probably right, but sometimes people don't know the right question to ask. I know it's not WPD's job to do that, but maybe they can be more proactive about guiding them down the right path to get them to ask the right questions.'*
- An industry consultancy representative commented *'I have half a dozen applications being processed. I think doing a connections surgery really made a difference to my relationship with WPD. That level of contact was extremely valuable. It was three months later than I'd have liked it to have been, but I think that kind of access made a huge difference to understand what the constraints were. Before that, the correspondence I had was with graduate trainees, but they didn't know the process. When we got to the next level, there was a huge difference. I think the graduates gave the first feedback and then we got escalated. My first request was to put together a number of projects in rural areas. I just wanted to sit down with someone and have a chat about where we should focus on, but we had to make formal applications before we were able to do that, which was a bit backward. Being able to discuss it with someone informally before making an application would be really helpful. Looking at the maps is helpful, but sometimes it's not very accurate, so it's about managing expectations. The information can be completely out of date, and that's a bit dangerous. All information that is published should be accurate and not*

**“ I think doing a connections surgery really made a difference to my relationship with WPD. That level of contact was extremely valuable. ”**

*misleading. An hour spent sitting down with someone saves a lot of time in the long run.'*

**Table 2:**

- A developer/installer representative stated that *'it depends on each offer. Some responses can be very quick, others not so quick. Quality is usually pretty good, once you get the information.'* (S)he would *'like to see project estimates turned around more quickly'*, and complained that *'the final and real number that comes at the end is often radically different to the project estimate as there is no study attached to the initial estimate.'*
- A developer/installer representative agreed, saying *'I stopped using budget estimates for that reason, the initial number bears no reflection to the final quote. The final quote can often be three times the budget estimate. Getting a quick answer is most important.'*
- Continuing the discussion, another developer/installer representative commented *'especially in today's climate of uncertainty for energy generation, budget estimates cannot be relied upon at all.'*
- A developer/installer representative interjected stating that (s)he too *'would like to see quicker quotes coming through. Quite often we are sitting around for a few months before the quote comes in. This is problematic as hydro power is seasonal - we have tight ecology windows for instance.'*
- Returning to budget estimates, a developer/installer representative highlighted that *'budget estimates are so important as they enable us to get a better understanding of things. The quicker the better.'*
- One developer/installer representative complained that *'I've been putting in budget applications to WPD since 2010, however I have stopped since then due to inaccurate project estimates. This has happened several times.'*
- A developer/installer representative interjected that *'I think it could be improved by WPD tracking project estimates together with how many applications were received. When you apply for an offer, someone should be able to tell you if your application is likely to be successful.'*
- An industry consultancy representative disagreed, saying that he has applied on behalf of several clients for connections, and *'not one of them is interested in the accuracy of a budget quote. They want to put a stake in the ground for that capacity.'* (S)he continued *'in the North I have experience with one DNO whose estimates give you a ten day deadline to accept or reject. My customers are quite eager to go down this route.'*

- A connections company representative raised the point that *'the time scales between the project quote and actual quote could be improved.'*
- A developer/installer representative made the point that *'the process has got better since 2011, and some of the designers at WPD are good at engaging you early on to tell you that your connection will be a long time in the future. It's good they can call the scheme then and there, as this saves planners going ahead and spending their own money on a project if it's never going to be successful.'* (S)he continued *'some DNOs are still playing catch up to WPD. They have got much better at offers very quickly.'*
- A developer/installer representative agreed *'WPD is very good at communicating with stakeholders. They are honest with you; with a lot of others DNOs you can get much further into the process to be told the application will never succeed.'*
- A developer/installer representative complained that *'often WPD haven't been to the site themselves. I think they should only be able to give a project estimate if they have been to the site. Young staff often don't know the areas, whereas on an EDF patch planning officers know the network like the back of their hands.'*
- A developer/installer representative also complained that *'the industry isn't consistent, this is disappointing. We don't see consistency across DNOs.'*



**Table 3:**

- A developer/installer representative stated that *'the connection and application process is going pretty well. We're getting a lot turned over and talking to a lot of WPD people. Turning round connections has got more reliable, we have better interaction and some turn up ahead of the 65 day limit. The real bug bear is that people view the 65 days as a target rather than a limit. Ofgem doesn't want this. People at WPD put it in an in-tray and leave it until the last week before the 65 day limit. We do see some of them come back a bit before the limit, that never used to happen, I'm going back five years now, some do come out earlier, but more should.'*
- A developer/installer representative said that *'we've seen some improvements, but clearly more should be coming out earlier. We had an 11kV connection in Coventry, utterly trivial, could have gone out the same day, but it took 65 days. However, we've also had 33kV which have come out quicker. Get it out the door and do*

*yourself a favour. Clearly some stuff can be ready earlier because it's simpler, so it should just be put out. I know it's a contentious and difficult issue. If you can get it done early, get it out early, and do us all a favour.'*

- An industry consultancy representative said that *'my experience is different because we normally connect at low voltage. We've found that how long you spend depends on the local resource, it depends where you're put and the speed it happens. Going back, the most difficult bit is finding information, particularly in the early days when we didn't know what we were doing. For every installation we seem to be doing something different.'*
- An industry consultancy representative felt that *'the better websites clearly lay out what is required. All of a sudden WPD has done that, but they are not following the same procedures everywhere.'*
- An industry consultancy representative stated that *'it was more confusing a couple of years back when all the PV was going in. Every week we were putting in a new application and having to provide different things. To start, it was just a phone call, then you had to fill in forms, then you had to follow a procedure, and then WPD started to chase you for commissioning. In one area they're chasing for commissioning documents, in another they're not bothering.'*
- An industry consultancy representative felt *'it does need to be clearly stated on the website somewhere, somewhere easily accessible, where you follow set procedure and everybody knows what they're doing. It was even down to "who do you contact?" Once you know who your contacting it becomes easier. For someone connecting for the first time they need to know the procedure and who to contact. I wouldn't just apply this to WPD, it's the same across the board as I work in a number of areas. I was doing a job in Lincoln and told I was contacting the wrong part of WPD.'*
- A developer/installer representative insisted that *'we need to talk about the delivery of connections, particularly the legal side. The application process is the better bit. The delivery is a problem. We had a huge problem with interaction – WPD just don't get back to you, it just doesn't happen. A connection is being worked on, but then there's a lack of interaction, phones don't get answered, emails get rejected because the emails are oversized and then the mail box is full. It feels like a way of bouncing things off. The resourcing needs more and better people.'*
- A developer/installer representative felt that *'Geldard's are pretty poor. They put junior people on pretty menial tasks. There's no interaction from WPD to help things get over the line. We are the only people who are driving as we seem to be*

**“ We need to talk about the delivery of connections, particularly the legal side. ”**

*the only ones interested in getting it done. The senior people are pretty good about it, but Geldard's don't deliver it. It just gets lost with the associate who is on holiday or another on a job share. WPD should be taking ownership and driving it, we're the third party for both, so they need to get it sorted between them. You have to ring every day and bang their heads. It's just painful. I have an in house lawyer who tries to pull together these third party lawyers. An emerging issue is getting the legal stuff done.'*

- A developer/installer representative recounted that *'when we got to the final connection date the connection adoption agreements were not delivered and we were threatened with having the site taken down, despite us chasing for weeks and weeks. Then one turned up, for someone who wasn't involved, to take liability. We're quite prepared to take liability, that's what normally happens. In the last two months we have got two sites connected, but its skin-of-the-teeth stuff. The connection agreement should clearly be issued two or three weeks before the connection is due, so that you can iterate, get the drafting right, but it's not and you have to turn it off again. That's not right, it's unacceptable.'*
- A developer/installer representative felt *'there is poor ownership of delivery of process. There are a number of parts involved, it's not easy, but the legals have got so complicated that there needs to be the same standard. The man in the van and people on site are great, but then we have all sorts of hassles back at head office. They've got to pull the lawyers together to get it delivered.'*
- An industry consultancy representative said *'we've had none of these issues with WPD, but have with SSE.'*

**Table 4:**

- A developer/installer representative said *'WPD are good at the application stage. I think they have done a good job on front end of the process, and as a customer I have been dealt with very professionally during the quotation process. WPD seem to understand this and cope well. I think they need to improve in the post acceptance stage though. The constraints on networks have meant there have been hold ups caused by statements of works. A major challenge is understanding what drives the process and not using a one size fits all approach, as not everything is relevant for every connection. WPD need to get their head around how this will work, for example: intermittent vs non-intermittent needs. Generally I have been very happy with the quotation process and how I have been dealt with as a customer.'*
- A developer/installer representative mentioned that (s)he *'was surprised to see only five people responding to EHV WPD connections satisfaction survey as I have come across so many people who have opinions on it and I have been so frustrated myself.'*

- A developer/installer representative raised the subject of inter-tripping and said *‘I think the concepts are very broad brush. The cost of inter-tripping can be the same as the cost of connection itself. I can see where WPD are coming from, but it would be better if WPD could spread the costs out a bit.’*
- An industry consultancy representative asked *‘are these costs often passed onto developers?’*
- A developer/installer representative mused *‘I think consortiums may work well for some types of companies. My company generates around 1GW, which is still huge and I think it’s important to listen to these companies.’*



**Table 5:**

- A direct customer said (s)he *‘would really like an opportunity to discuss connections before we actually put the application in. Other DNOs call this a surgery, where you can talk to engineers and get a go or no-go signal. From WPD, the mantra is: get your application in. You waste a lot of time on this.’*
- A membership organisation representative agreed and said an *‘equal approach needs to be taken with distributed generators and customers.’* (S)he continued *‘some other DNOs are more responsive and sit down and talk about relationships with distributed generation customers.’*
- A direct customer said (s)he takes *‘part in forums where I can. Through building contacts within a number of DNOs, I get a fantastic service. The service from WPD is better than from any other DNO. That’s not because formal procedures are in place, but because of networking opportunities and contacts made.’*
- A developer/installer representative said *‘we all build up networks and relationships, but there are different ways we can expedite processes. Doing work up front and knowing what projects to take and not to take require clarity early on. You need to be proactive, know the right people and have the right informal network. There is a need to look at how formal or informal the procedure should be.’*

**Table 6:**

- An industry consultancy representative stated *‘WPD are one of the best DNOs for customer service, but a recent influx of solar projects has tightened grid constraints.’*
- An industry consultancy representative said that *‘it is difficult to understand the situation, since the industry is changing rapidly and a priority is providing information.’*

- A developer/installer representative pointed out *‘I like WPD’s good customer service record, but grid constraints are the hardest aspect of a project. When you spend money on feasibility planning but then find you have no grid connection options it can be difficult to explain things to a customer. However, if you wait for grid connection first, it can be difficult to get a project to the construction phase.’*
- A developer/installer representative commented *‘the deadlines given by WPD are reasonable, particularly since the larger megawatt projects massively impact smaller suppliers.’*
- A developer/installer representative said *‘WPD is willing to achieve the lowest cost connection, but WPD design officers are not fully aware of the transmission system scope and thresholds. There is also a problem where contractors do not know where they are in relation to the grid.’*
- A developer/installer representative added *‘the rise in applications means there have been recent clerical errors by WPD that have ranged between ridiculous and crucial. For example, a layman’s guide on a contract cover was different to the details used in the document.’*
- A utilities company representative made the point that *‘this situation is similar to cases at other DNOs due to the increase in applications everywhere. There is a lot of work that goes into a bespoke EHV document and lots of conditions must be well explained.’*
- An industry consultancy representative commented *‘I never used to be too concerned by the grid connections process, but now solar is having a massive impact by looking for grid capacity rather than a suitable solar site. This has changed the business in some respects since solar can go for big grid connections that other energy sources cannot match by scaling to meet capacity.’*

**“ I like WPD’s good customer service record but grid constraints are the hardest aspect of a project. ”**

**Table 7:**

- A developer/installer representative said *‘I find them very approachable as they are always willing to talk through issues, but they seem to hide behind the system which they say prevents them from doing different things. We find it impossible to obtain information about which parts of the network have full capacity and where there are opportunities for connections. I don’t think there are any commercial issues with that. Generally, we find WPD good to work with on individual projects, but the way it has been handled from the bulk business aspect has been very devastating for our business.’*
- A developer/installer representative agreed, adding *‘I think more transparency would be of great benefit.’*

- A developer/installer representative felt *‘there are still variations in terms of service between voltages and different teams. There seems to be great differences in the two teams and they don’t seem to be singing from the same sheet in terms of applying for a connection. I also struggle with understanding and keeping up with who deals with what area. I think it would be incredibly useful to have an organogram of who deals with what area. I have been dealing with WPD for a couple of years and I still don’t get it.’*
- A developer/installer representative considered that *‘in comparison to other DNOs, their level of communication is excellent, especially with the primary system designers. They have gone down the road of having a customer contact for each of the systems we have and it has been quite good.’*
- A law firm representative highlighted that *‘the application process is not something people are having a problem with at the moment. So much so that my clients ask me to not mention their names since they have such a good relationship with WPD. However, the consistency between the South West, Midlands and Wales isn’t always great because we get one thing back from someone and something completely different from another area. So my only connection process problem would be the lack of consistency across all regions.’*
- (S)he added that *‘they are very open to discussion and they have made massive progress. An organogram of phone numbers would be great.’*
- A connections company representative had found that *‘when we required access to that information in the past, it has been a bit of struggle to get and is often out of date. When there are team changes and team manager changes, these are not recorded properly.’*
- A connections company representative pointed out that *‘something they do well from our point of view is a very structured escalation process. One of the things I agree with is that when you go from one voltage level to the next, there is quite a big difference. When you get to the 11kV and 33kV, there is a lot of personal preference which seems to come into the equation. When you go from one WPD patch to the next, there is no consistency on the project requirements.’*
- A connections company representative added *‘we switched specifications from one kV to the next and the requirements were polar opposites. Obviously, with these projects, time is of the essence and we found that WPD took a lot of time with processing these.’*
- A connections company representative said *‘the main thing to work on is standardisation and to avoid having independent engineers dictate their personal preference so much.’*

- An industry consultancy representative considered that *‘across the organisation, systematically, they are very approachable. Basically, everybody should be talking to customers and it would be great if we could have a way of having numbers for each independent team and the engineers.’*
- An industry consultancy representative wanted *‘more visibility of what reinforcements have been triggered, what the costs are, and whether a second kind of charge is necessary. There is also no visibility as to when and whether that capacity has come back to the network.’*
- A utilities company representative stated *‘we don’t really have any problems when applying, even though the application process has got a little bit more technical over the last few years. Other DNOs ask for such detailed information before they produce an offer. We don’t get that with WPD so it still remains easier with WPD than with most other DNOs.’*

**Table 8:**

- A university representative asserted that *‘liaison on technical aspects has been good for three years and side meetings have been good. Three years ago I was struggling to get connections from central networks, but over that period we’ve built a relationship with our local contact which helped the design engineers and the feedback from them has been very good. You’ve been more flexible than you’ve ever been, particularly with our business needs, which has been hard in the past, but now you are flexible and listen to what we do.’*
- An industry consultancy representative added that *‘supply and DG connections have got better, particularly once you get talking to people. We are currently looking at a reasonably sized DG connection, and if I’m honest it has been extremely frustrating - three years ago we got a quote for £1.5 million, which has now gone up to £21.5 million. We are trying to do business planning and viability studies, but at £21.5 million it blows it out of the ground. The project was at Castle Brom and it was unfortunate that the person who did the initial estimate did have a good look and the second person didn’t have a good look. We had to push to get a meeting with WPD for the estimate, as we were getting emails saying there was no point in meeting us.’*
- An industry consultancy representative said (s)he thinks *‘early dialogue, and I know it’s difficult, would be necessary. I am fully sympathetic to the fact WPD must get a lot of calls for quotes, and I guess you have a lot of nonsense, but you need to try to find a way through that to*



*get a budget estimate for us. We are serious about it and we need to be able to talk about what the options are to make informed decisions.'*

- A utilities company representative added *'we don't directly interface in that respect. I'm ex-WPD so I think nothing negative if I'm honest.'*
- A university representative said that *'in terms of improvement, the only side I would comment on is the cost side of a new connection, for example for a new transformer. The network isn't large enough to upgrade the local transformer.'*

**Table 9:**

- A developer/installer representative said that *'this is generally good. It's interesting to hear about WPD's aims to shorten the time of applying for a connection since I have never seen offers come in 45 days! They always seem to come in after 90 days.'*
- There was a general consensus on this, particularly amongst the other developer/installer representatives.
- A developer/installer representative questioned whether *'with the industry changing, and the move from HV and EHV to LV, is there a more fast-track system for that kind of offer?'* (S)he noted that *'there will be a real demand for this. We want offers provided more quickly.'*
- A developer/installer representative said that *'WPD was very good at communication. However, sometimes I will send WPD information and it doesn't always get to them.'*
- A connections company representative said *'it was generally positive.'* (S)he continued that *'we're looking at self-determination at the point of connection for demand only projects. Is there a plan to extend that to generation products?'*
- A connections company representative said that *'client feedback wasn't very good. It's too slow, particularly in getting feedback on one's final offer, which can take a long, long time.'*
- A developer/installer representative agreed, saying *'we all want to know whether there's a scheme in a particular area and what WPD can offer. What are the options WPD have available to me in this area?'*
- There was general agreement on this point.

- A connections company representative added that *'WPD needs to tell potential suppliers what they can do, not what they can't do. There's a need for greater clarity.'*
- A developer/installer representative concurred, reasoning that *'people are repeatedly forced to apply again and again for the same applications.'*
- An industry consultancy representative contended that *'on some new sites, you put in an application, but it's not very well received. That's brought about by the fact that that's what you have to do to find out what the capacity is.'*

**Table 10:**

- A technology/innovation company representative stated that *'it was bad; we requested 2,700 homes with 3 kilowatt per house in West Bridgend (Wales) but were given back only 26 homes to connect. I was initially astonished. If we wanted to connect 300 homes, individually, we would've been allowed to do that as the regulations don't stop us. Ofgem almost had to get involved before anything could have been triggered. My experience was completely rubbish. I spoke to an Ofgem representative and phoned back a couple of times here and there but all in all, I was disappointed. It was a battle of the team and they did not know how to put in that many groups and we clearly did not see that coming. Apart from it being slow and unresponsive, there is evidently a huge risk of inconsistency in policy - maybe by January, they'll say they don't have any connections to offer.'*
- A connections company representative felt that (s)he *'faced no problems in this regard.'*
- A developer/installer representative added *'WPD were better than other DNOs on things like wind generators. They listen to things and in some situations I have had a better experience. To be honest, I believe it really depends on the region. But I also think that a government body should be directly involved in dealing with this.'*
- A connections company representative agreed that *'the Government should be leading this.'*

**Table 11:**

- A developer/installer representative started the conversation by saying that *'the application process has been pretty much the same for years, despite technology being quite competitive, the application and the kit is the same and the application method is quite antiquated. It could be sped up by allowing us to select the kit online as it is the same inverter and module each time, and this could save a lot of developers' time.'*

- A developer/installer representative added that *‘from my point of view, I would like WPD to be harsher in the level of detail required for an application. From what I’ve seen, you’ve accepted a lot of applications, where the right information was not available on the original application, but it’s gone through and clogged the system, allowing people with very little knowledge to take up a lot of time. A lot of people in the industry don’t understand what they are applying for. Also, the time to receive the quotation, 56 working days or 90 calendar days, is the most frustrating thing. There should be a cost for applying which would help filter out certain people’*
- A developer/installer representative commented *‘we make connection applications on behalf of the developer, the timeliness of applications is a problem, as people put in applications and are waiting for three years. The connection just sits there as the network becomes saturated with connections that have never been developed.’*
- A developer/installer representative raised the point that *‘the to-and-fro of changing designs is infuriating. I had three different WPD engineers change construction plans which meant thousands of pounds being wasted by knocking down doors, just because of different people’s perspectives. All of these opinions were different from the drawing plan and because of that, we ended up spending money on site when we shouldn’t have had to. Also, you can never speak to the same person twice. Somebody having accountability for an individual connection has got to be a good idea.’*

**“ I would like WPD to be harsher in the level of detail required for an application. ”**
- A developer/installer representative agreed and said (s)he had received *‘conflicting reports from the budget. A budget comes back in four weeks, but has no detail and is wildly away from the firm offer. We once had £700,000 on a budget and £1 million on the firm, which stopped the project from going through. If the budget were more accurate and detailed, then I would submit more budgets and save more time. However, bad issues with budget quotes means that I am always leaning more towards doing a full application because the budget is unreliable.’*
- There was a consensus on the table that WPD should charge for an application to filter out speculators.

#### Table 12

- A developer/installer representative commented that *‘we are so used to the process. What we want is an insight into where the process comes from and what it means for different stakeholders. A lot of people want multiple applications but we don’t want that. We want the insight and the knowledge, as we don’t have that. The system is clogged up by people chancing the application.’*

- A connections company representative complained that *'the issue with WPD's process is that they want you to tell them how many megawatts you want. We would rather they give suggestions as to how many megawatts would be required rather than the other way round. It's a nightmare for the developers and the performers. It could be improved by allowing for flexibility regarding this issue.'*
- A developer/installer representative pointed out that *'the network is constrained, people are not getting the answers they want. When you don't have to pay for your applications, it does allow for people who do not understand the process to jump in. This means that 75-80% of WPD's work is a waste of time due to the lack of application costs, allowing a lot of inexperienced developers to apply. There has to be a middle ground to help WPD effectively deal with the applications.'*
- A membership organisation representative commented that *'we ran a session with WPD where we found that the older offices are harder to challenge due to legal restraints, middle sections are not too bad and the newer ones have less constraints.'*
- A developer/installer representative agreed with the previous speaker stating that *'the things we want cannot be done along the guidelines, WPD wants to help, but they can't help along the guidelines, there's an issue with the system. There are just too many applications for an effective response from WPD.'*
- A membership organisation representative asked *'is there an option to connect to 12 megawatts with 10 megawatts allowance? Is there any leeway?'*
- A connections company representative added that in their experience *'we have been able to talk to an engineer to get 10 megawatts over 12 megawatts but that's far down the line of the process.'*

## 5.2 Do you think that WPD have correctly identified the key emerging issues?

Table 1:

- A technology/innovation company representative pointed out *'as far as I'm aware, from a national perspective, it was only WPD and UKPN that had a problem with the statement of works process.'*
- An industry consultancy representative highlighted *'you've done quite a lot in identifying areas that are constrained in the transmission network, however these maps keep changing.'*
- A technology/innovation company representative raised the point that *'there is no substitute to sitting down with a planning engineer and sorting it out in one afternoon. There is also an obligation for all DNOs to have capacity that is not contracted but connected.'*

- An industry consultancy representative commented that *‘forecasting is difficult, and you’re doing as well as you can be doing at the moment. A lot of that capacity is dependent on what happens in the next few months.’*
- A technology/innovation company representative argued *‘basically, if you have a grid connection offer and it says statement of works, and you don’t get an offer for 12 months, and when you find out that your connection takes longer and costs more, it’s no good. We need to review the Ofgem Guaranteed Standards of Performance (GSOP) standards. When you put in a clause about National Grid, in my opinion that’s misleading the customer. That’s not necessarily WPD, it’s all the DNOs. The GSOP standards need to be kept in place. The DNOs need to talk to National Grid or the customers do to ensure it is kept in place. We’ve said to all the DNOs just get on with it.’*



**Table 2:**

- A developer/installer representative felt that *‘WPD have identified the right issues.’*
- A developer/installer representative argued that queue management is a huge issue. (S)he continued *‘we want to accept an offer, but the process just drags and drags. We would like a more clinical approach. I would suggest, to get rid of the “messers” who sit on offers but never build on them, that people who have a track record of never building to completion should not be given offers again. Alternatively there could be a mandatory application fee to get rid of those developers who aren’t serious about their application.’*
- An industry consultancy representative disagreed, (s)he pointed out *‘if you have community groups trying to build small PV for example, a mandatory application fee of even a thousand pounds would be overwhelming. Raising a deposit for the connection scheme is enough of an issue for them.’*
- A developer/installer representative suggested that *‘connection offers could be linked to the size of the project.’* (S)he explained, that *‘big commercial developers who apply for lots of kW worth of connections should have to pay a larger application fee than a smaller community scheme.’*
- A developer/installer representative commented that *‘in London, when A&D fees were scrapped, applications went up by a factor of 6.’*

**Table 3:**

- A developer/installer representative felt that *'I think you know 'legals' is there as an issue and I think correctly WPD have been stricter about all the 'legals' being in place or they can't connect you. If they're taking a strict approach they have to be more on it. WPD need to be making sure the legal process follows the project - that has to be in there.'*
- A developer/installer representative said that *'statement of works should be added. It's good you've got transmission and distribution interface, but we talked to National Grid and then they have a completely different view of the world than WPD. We seem to be able to manage Grid better than WPD can. That interface and having a discussion is important for discussing the reality of what is going to happen on the network.'*

**Table 4:**

- A law firm representative said *'I think it is a bit chicken and egg, and all could be connected in some way to others. I have seen a bottle-neck in the South West region which has been seen as a big network constraint. I would suggest that dealing with network constraint is most important. I also think that future forecasting is vital but an impossible thing to do and no one has guidelines reliable enough to look forward ten years so your hands are really tied.'*
- A developer/installer representative mentioned that *'as a customer I experience queue management and queues getting very long. Future forecasting can be done but it depends on scenarios you are looking at accepting growths in, things like storage scenarios. Tweak these scenarios as you go along based on what is actually happening and keep the customer informed.'*
- A developer/installer representative concluded that *'I think that all key issues are correctly identified by WPD.'*
- An industry consultancy representative said *'I think future forecasting is interesting as it is so complex, you want to convince investors to invest off the back of the model, so it is very important to try and get it right.'*
- An industry consultancy representative said *'I think Government policy unpredictability is another important issue.'*
- A developer/installer representative concluded that *'there needs to be greater latitude from Government.'*

**“ I have seen a bottle-neck in the South West region which has been seen as a big network constraint. ”**

**Table 5:**

- An industry consultancy representative pointed out that WPD is *'implicitly referring to power, not energy when talking about net exports. There is a need to have something within the thinking that takes into account the uncertainty of where storage will be in the next few years. Market mechanisms that will encourage uptake of storage need to be thought about. Everyone was 'bit on the bum' by the growth of PV, but all it took was a bunch of Chinese people to say it's a good idea. Generically call them disruptive technologies, including demand-side management, and give more thought as to what the impact of these will be and the processes, mechanisms, and trainings that will be needed not just to account for them when they come, but encourage them.'*
- A developer/installer representative complained that *'nothing here says you're looking at Government legislation and the subsidy regimes. These will dramatically impact what this industry will do. We must be expecting a surge of activity from now until March, but after that it is unclear.'*
- An industry consultancy representative highlighted that the *'interaction between technology providers and policy-makers and impact of technologies must be showed through gaming outcomes.'* (S)he also stressed the importance of *'considering Government legislation and subsidy regimes.'* (S)he also considered the likely reduction to *'barriers to importing Chinese products'* to have a serious impact on solar development.
- A membership organisation representative commented that the impact of disruptive technologies is *'part of what's looked at in Ofgem's Sustainable Development Advisory Group. This group is looking at anticipating the technologies coming onto the grid. It's especially looking at commercial rapid uptake of energy storage.'* (S)he raised the point that *'DECC and Ofgem will be having a joint consultation on the commercial uptake of energy storage at the end of next March and this needs to be reflected by WPD.'* (S)he then argued that WPD has provided a *'sense of the meaty, chunky engineering stuff, but scenario analysis is needed to better understand positions.'*
- A developer/installer representative pointed out that *'in terms of legislation, things are coming through as fast as they can do it.'*
- A utilities company representative felt that *'Ofgem has got an awful lot of work to do, as does DECC. They are so far behind and can't even decide whether storage is demand or generation. They have got to take the lead on this and WPD and the DNOs will provide continued support.'*

- A membership organisation representative complained that *'we must not go the way of Spain and bring in draconian grid charges following successful introduction of storage.'*
- A utilities company representative commented that *'continued involvement with WPD in engaging with regulators is necessary.'*
- An industry consultancy representative highlighted that policy is *'not in a UK silo and what is happening elsewhere must be considered.'*
- A utilities company representative pointed out that *'other countries have advantages, for example Germany is able to go fully renewable by having Poland build nuclear power stations with a fully integrated grid.'*

**Table 6:**

- A developer/installer representative commented that *'WPD has identified the key issues, such as the state of works, anticipating investment, transmission interface and investigating the DSO roles.'*
- An industry consultancy representative pointed out that *'the industry is at such a turning point, I am concerned about the slowing down of renewables.'*
- A developer/installer representative added *'there is turbulence in the market since a lot of projects booked on the grid may not go ahead with grid booking, but there is still a strong future for renewables even if working under tighter financial frameworks.'*

**Table 7:**

- A developer/installer representative said that *'it is very high level. I work exclusively in the South Wales area and I think we are probably a little bit behind in pace in managing the network and it is good to see that those issues have been identified and solutions are being sought within the network.'*
- A developer/installer representative agreed that *'WPD has a good handle on the issues. I just wish that they would roll it out a bit quicker.'*
- A developer/installer representative argued that *'for us, the alternative connections and getting connections quicker is important. Urgency is probably something that could be there more.'*
- A developer/installer representative made a point that *'they have identified the high level key issues affecting the network and customers. It is good (transmission) has been recognised. I think it is one stakeholder meeting too late though.'*

- A developer/installer representative highlighted that *‘all issues are on equal footing. Some of them are dependent on others so they all have to be equally achieved for anything to be done.’*
- A law firm representative found that *‘those are definitely the key issues. There is still some conflict with what is published. The moratorium on new connections in the South West was what we were told for 3 years and we are now told we can still have a new connection.’*
- A law firm representative felt that *‘better authority when announcements are made could be better so that we are given more accurate information.’*
- A connections company representative commented that *‘from our business point of view, the biggest section of interest is dealing with network constraints and alternative connections.’*
- An industry consultancy representative pointed out that *‘dealing with network constraints should be a point on its own, rather than be bundled together with something else.’*
- A utilities company representative raised the point that *‘with the third world political leadership, what is the point of future forecasting. I don’t see the point of it. When we can have a crazy change in a day’s notice, what is the point?’*



**Table 8:**

- An industry consultancy representative felt that *‘Government intervention is missing from future forecasting. They keep dabbling and doing things creating merry hell I guess for WPD. You look at it with solar and the Government introduced an incentive, not thinking about how this will impact on the grid - it’s somebody else’s problem. One key issue is Government interference.’*
- A utilities company representative added that (s)he felt *‘the Government isn’t playing straight cards, they’re saying the grid is going to struggle to cope this year. What’s missing is the connection in the middle - Ofgem isn’t playing straight either, poor Government communication and handling. The local population too - recently we are putting cables in to support wind farms, and we were the first visible sign of change and there was sabotage.’*
- An industry consultancy representative concurred that *‘there’s a huge amount of uncertainty - future forecasting and EV charging - there was a programme on TV 2*

*weeks ago talking about EVs in Norway - 18% of cars in Norway bought last year were electric vehicles!'*

- An industry consultancy representative responded that (s)he *'went to Norway in the summer to look at an energy centre and there were 9 rapid charging points and 8 Teslas (electric vehicles) connected up to them. The UK isn't designed for that.'*
- A university representative raised the point that *'energy storage is what needs to be sorted as we need a good method of storing; we can generate energy but usually at the wrong time of the day - there's a massive national issue of where can we store this energy to deliver it at the right time.'*
- An industry consultancy representative agreed that *'it's fundamental.'*
- A university representative made the point that *'we use all the energy we generate ourselves but it is tricky to make it at more at certain times of the day - students return home at the same time of the day when demand is raised.'*
- An industry consultancy representative then added *'restricting connections or restricted connections means energy is wasted - if you could store it then you could use the energy at peak times - we are looking at it in Peterborough, outside the WPD area but offering a reduced connection from energy storage.'*
- A university representative stated that *'the highest impact and most important emerging issue must be the Government and the way they are going.'*
- An industry consultancy representative agreed, saying *'very much so, the Government have the capability of moving the market and changing the market's requirements - they can make things more attractive.'*
- An industry consultancy person pointed out *'I know why it's not on the list, you can't stand up and say "it's all the Government's fault".'*
- A utilities company representative added that *'that's some of the feedback that needs to go back, that Ofgem aren't engineers they're economists. It's the engineering solution that's missing.'*

**“ Restricting connections or restricted connections means energy is wasted.”**

**Table 9:**

- A developer/installer representative said that *'WPD seem to forget about delivery. In terms of getting to the point of where I've got an offer, network constraints have to be dealt with.'*(S)he continued that *'there's the actual boots on the ground. WPD isn't bad, nor is it the best. But the importance of deliverability is paramount.'*

- A connections company representative underscored the importance of *'design approval. Sometimes you'll use a G81 list, then you'll submit it, then you're told it's not good enough.'*
- There was a general consensus on this point.
- A connections company representative in particular agreed, stressing *'the need for uniformity across the board.'*
- A connections company representative also stated that *'design approval is a real issue that delays jobs.'*
- A developer/installer representative noted that *'we've got to be more efficient, and do things quicker, more cheaply.'*
- A connections company representative observed that *'you'll submit the design approval, but all the engineers are different, and this makes things difficult.'*
- A developer/installer representative reasoned that *'you still have the uncertainty that your project and proposal might meet the standards and still not pass.'*
- A connections company representative contended that *'in the past we've gone ahead and started to build something where we've had design approval, we've done it to the list, but then the regional engineers have come along and made us change things. This is frustrating and expensive.'*
- A connections company representative said that *'things seem to be dependent on the individual designer's decision.'* (S)he added that *'an iterative process of changing the drawings and the plans emerges, in which you have to keep going back to the manufacturer.'*
- A connections company representative agreed, stating that *'this is particularly a problem when it comes to timing.'* (S)he continued that *'the lack of consistency is very difficult. We've had a design that passed last time, and then the next time it doesn't.'*
- A developer/installer representative and a connections company representative both thought that network constraints was the key issue.
- A developer/installer representative maintained that *'queue management was a subsection of the issue of network constraints.'*
- There was general agreement on this.
- A connections company representative stated that *'if network constraints are put into place, then the other issues will follow.'*

- A developer/installer representative noted that *'you want to see innovation becoming a regular key issue a lot faster.'* (S)he argued that *'this is particularly in relation to all the talk about energy storage and the move from network distributor to network operator.'*
- A connections company representative pointed out that *'WPD runs the network and so has got to make the suitable forecasts.'*
- A developer/installer representative also claimed that *'Government policy is currently that they don't want any more offshore wind. WPD needs to be more proactive on this front. What would happen if WPD spoke about this to Ofgem?'*

**Table 10:**

- A technology/innovations company representative pointed out that *'these are all one, two year old issues. Newer issues have emerged over the span of time; some include optimisation and queue management, which although have been addressed to some extent, not in the manner they should've been. Firstly, optimisation is missing. Secondly, the storage is a problem. If a strategic allocation is made, the cost of storage could be saved.'*
- A technology/innovations representative further added *'even if not that, a 360 degree view of how the project is going is important. WPD could at least share learning on commercial economics of this in addition to the technical aspects.'*
- A developer/installer representative pointed out *'the key issue is queue management in particular to capacity management and reallocating it to people, for example what people apply for and what they get. Grid has a reserve and this is a reality. What WPD does at the moment is that they encourage people to give up if they're not going to use it. So, the next person in the queue gets it and that's the fairest thing to do. They had pending planning that was not going to happen because of the way the rules are and WPD can't be blamed as it is the Government's job to do.'*
- A utilities company raised the question *'would it not be better if the policy is refined to help the housing estates and other areas?'*
- A technology/innovations company representative stated that *'my experience of working with different DNOs is that they are not so responsive to active network management, mainly because of their regulatory period. How can they use new technology networks to counter this? Obviously one way is bringing about different ways, like when you don't have enough capacity. There are massive batteries to store next to stations - store energy and release when needed.'*

**Table 11:**

- A developer/installer representative pointed out that *‘queue management is the main issue. There is a queue but you don’t know your position. I suggest that WPD send a notification of where we are in the queue along with the initial letter. It has sometimes happened that WPD send your position in the queue around a week after the letter.’*
- A developer/installer representative agreed and raised the point that *‘capacity is probably an issue – there is a need for a more updated interactive map. In 2015, WPD probably ought to have a system that makes life easier for your primary system design engineers. You should have smart time instead of log.’*
- There was a consensus on the table that queue management was the key issue.

**Table 12:**

- A connections company representative raised the point that *‘one key issue is WPD’s understanding of their network, you can add that as a fifth issue. They need to put in more work in understanding their own network.’*
- A developer/installer representative added on to the earlier point *‘especially during the development stage where the host doesn’t understand the network, WPD simply sends a letter and that’s all. Better interface is needed to understand the generational changes. The interface when understanding the network was limited, the engineers were quite angry, there was no interface to talk through the process for the developers/engineers. There is also a lack of dialogue along potential future curtailment. They need to highlight that during the developing phase. WPD only puts emphasis on the connections but they need to start focusing on the interface where there needs to be a dialogue on future curtailment with the developers. Also, more dialogue is needed on the assets management such as poor installations and poor maintenance schedules.’*
- A developer/ installer representative stated that (s)he has only been in process for four months stating that *‘one of the constraints is on generations as the network is working normally, we have to build on that. There are certain circumstances where we won’t be able to generate energy.’*



- A membership organisation representative argued that *'all of the key issues are interrelated therefore there is no hierarchy in the importance of the issues. statement of works is becoming more and more of an issue, you get your offer, six months down the line, you have to pay x amount. There is no one issue that stands out but rather all the issues are inter- linked.'*

### 5.3 How rigidly should the rules be enforced and when is it appropriate to terminate an offer?

Table 1:

- A technology/innovation company representative pointed out that *'it's unfortunate that this meeting is today, because on the 10<sup>th</sup> the DG steering group is putting proposals to WPD. Some customers are happy that they are progressing, while some of the developers, because of their funding arrangements, would have to go back to their funders for more money and time. So yes, there should be milestones, and they should be technology specific. So if you don't go into planning, then the DNO has every right to take the capacity off them. It varies through the process about the rigidity. Once they've gone into planning, that should increase confidence. Another milestone is putting a shovel into the ground. It's about milestones.'*
- An industry consultancy representative believes *'if you have planning consent - that has milestones in it. As developers, you're perfectly happy to accept those milestones, so should be DNOs. Planning consent should be in X number of months, and what the DNO is prepared to take to appeal.'*
- A technology/innovation company representative firmly stated *'we'd like to see a common set of milestones between DNOs.'*
- An industry consultancy representative agreed, stating *'it should be agreed between the DNOs, and we do want commonality.'*
- A technology/innovation company representative made the point that *'it's getting into planning to start with, to get planning within a specific timeline dependent on technology, one appeal, in the meantime you can confirm funding and spade in the ground within a certain amount of time. If you get through the first few stages, then the fact you may take a bit longer to put a shovel into the ground, then some leeway should be allowed.'*
- A utilities company representative agreed, stating *'if you make it clear from the start what to expect from the milestones that would bring about more certainty to the process.'*

- A membership organisation representative highlighted *'you need to go into the process with your eyes open about what the process is, it would make it clearer for those who are considering going into the process.'*
- An industry consultancy representative commented *'there may be some justification about some technologies having a longer period, but the milestones should be common. You need to be careful about some things.'*
- A membership organisation representative felt that *'in terms of planning, you have to set realistic timescales. There are issues about them not meeting targets. While you can put a date to when you need to get planning, you need to have leeway for a reasonable excuse for the under-resourcing in the planning department. It's difficult to put that into a standardised process, because the process differs across regions.'*
- An industry consultancy representative highlighted *'you have to agree to extensions with the DNOs as well. That could give you mobility. It's difficult to put it into a milestone.'*



**Table 2:**

- A developer/installer representative stated that *'this is a difficult one as it's different in every instance. We have sites that have been in the planning process for two years, but other sites that have gone through in 12 weeks. What you need therefore is a degree of flexibility.'* (S)he continued to suggest that *'if there is a massive wind farm sitting on an offer for months with no progress, the offer should be withdrawn. However at front end there should be enough rigidity that a distributor can't make 30-40 applications.'*
- A developer/installer representative argued that *'we need flexibility in the offer process to accommodate issues that come up.'* (S)he admitted however *'that you get frustrated when other people are doing the same thing and having offers extended.'*
- A developer/installer representative made the point that *'other DNOs like Scottish power require far bigger deposits up front but there are all sorts of ramifications concerning liability with this approach.'*
- A developer/installer representative felt that *'WPD should be looking at planning permissions. If a planning decision has no reasonable chance of success, but a developer isn't being honest about this the network should revoke the offer or offer a deadline of 90 days for example before withdrawing it.'* (S)he continued *'WPD*

*could possibility be a little bit firmer. It benefits no one to have capacity held up in the network.'*

- An industry consultancy representative commented that *'the difference in the length of time someone has from connection application to their offer could be weeks, or years. As such it is difficult to put milestones on this, and planning is very emotive. If someone has shown genuine progress and commitment to progressing with an installation, there should be some way of looking at this more leniently than a rigid milestone.'*
- An industry consultancy representative suggested that *'if someone is paying for an environmental or ecological study as part of their application for example, this should be taken into consideration by the DNO as an extra commitment to their connection application.'*
- A developer/installer representative made the point that there *'should be a consistent approach across DNOs with regard to the offer process.'*
- A technology/innovation company representative, agreed saying that *'all DNOs are working from the same agendas right now. The topics discussed, the issues and priorities are the same. Equally they all have the same problems with interactive offers, queue management issues, and delays to planning. I don't think there is any quick solution to interactive queue management.'*
- A developer/installer representative argued that the *'offer process needs to recognise the period of transition many distributors' and developers' business models are going through in reaction to DECC changes. There almost needs to be a transition period for developments that already have had a certain level of investment but whose business models have been impacted by changes beyond their control.'*
- A developer/installer representative raised the point that *'DNOs are inconsistent in terms of how they pursue capacity that isn't used by generators. If an applicant does not use all the capacity awarded to them in an offer they should have to demonstrate what they're going to do with the extra capacity.'*

**“ If an applicant does not use all the capacity awarded to them in an offer they should have to demonstrate what they're going to do with the extra capacity.”**

**Table 3:**

- A developer/installer representative said *'I'd love for them to be enforced the other way round, we've always been ready and dragging WPD over the line. We've never*

*had a queue problem, because we're always getting on with it. My point is I would love to feel WPD were held to account on their timescale in the same way we are.'*

- *An industry consultancy representative recounted 'we've got simple answers of no, yes, or yes provided we reinforced. I receive offers directly on behalf of a client and contractor. We've only had one offer include reinforcement, but this was a chicken farm in the middle of nowhere. He wanted to stick 200kW on it, and obviously you're going to need to be upgraded there. Most of the others have been in areas where the system can obviously take it. Only had one where reinforcement works would justify so small an installation.'*
- *A developer/installer representative argued 'it's about having the right milestones. Its right they are flexed a bit, but the key point is are people getting on with things. If they are sitting in a project wanting to sell it on, then WPD needs to be on to that. I'd actually say in some ways WPD feel a bit too protective of projects that are not going to happen, which they could recall pretty quickly. If a project is in receivership, I know the receiver owns the asset, but WPD should be quicker.'*
- *An industry consultancy representative felt 'there could be other things happening, the DNO could have pulled a project when there were delays outside of our scope. They need to notify, there has to be a two way process. To just pull it would be wrong.'*
- *A developer/installer representative stated 'the test is whether your trying or not. First does the developer pick up the phone, do they appear to exist, and have you met them? Second one is can you see a planning application, does it exist and have they produced a plan which looks like they have milestones in it and have they started to achieve some of them? It's more completed to ask have they got the money, but have they got a plan and delivered something on it, would not be a bad start. I think the other test is land rights, if they haven't got land rights it's never going to go anyway. If they've got the lease it's done and if so the land registry will tell you. You can see land rights. All of these evidence options you can see these things. Especially if they've got rights to access the land.'*
- *A developer/installer representative said 'I'm not a fan of letters of authority, for one we could send it into you and we find people are very resistant to sign a simple one. The first thing we want to know is - is it connectable? From our point of view it does not give you any security at all. The answer we get when we ask people to sign letters of authority is why should we, what's it worth, we haven't got a lease in place. Don't underestimate how hard it is to get something signed off you can use.'*
- *On standardisation an industry consultancy representative felt 'it should be, when we go from one DNO to another.'*

- A developer/installer representative echoed this *‘the more standard the better, especially the paper. It’s simple the more standard the better, it’s got to be right.’*
- A developer/installer representative said that *‘some of the deposits on connections are ridiculously high for not doing any works, even though it’s known it will be 18 months before you’re doing any work. The difference in deposits is significant even when no works are being done. They should be substantial, but not frightening when something is not being done for 18 months. It only affects the bigger connections.’*
- An industry consultancy representative said that *‘UK Power Networks were one of the worst, now they’re one of the best. WPD have now done what they did, as soon as you put in an application you get an email saying it’s gone to such and such an engineer, you have a contact and know that if nothing happens that’s the person to chase.’*

**Table 4:**

- A developer/installer representative said *‘I think there should be clear markers for people so they understand and can talk to their investor community. Be clear if acceptance criteria has changed and make clear if there is a risk an offer could be lost because of these changes. WPD must keep to their rules and make it clear and fair to all.’*
- An industry consultancy representative made the point that *‘perhaps different investments could be treated on a graded approach for example, a customer contributing a significant magnitude of investment versus a single wind turbine customer, on a sliding scale.’*
- A developer/installer representative disagreed saying *‘unfortunately this brings in problems with discrimination, treating a farmer with one wind turbine differently to a massive investor will not be regarded as fair and will not be accepted. All should be treated the same and just get on with it.’*
- A developer/installer representative also commented that *‘all DNOs operate in fixed framework with very different levels of customer service. It is a case of learning to deal with it like you would in retail environment on the high street – a good firm should be able to do both but in reality there will be companies who just don’t deliver on customer service.’*
- An industry consultancy representative agreed, saying that *‘once policy is defined you can have good and bad customer service around this.’*

- A developer/installer representative commented that *‘there is a requirement for a letter of authority from the landowner which can be difficult, we need money in the connection offer to ensure money is available to link to the project plan.’*
- A developer/installer representative said that *‘I think a common approach across the whole of UK would not be a bad idea.’*
- A utilities company representative agreed stating, *‘if this is achievable then would be good but may not be possible.’*
- An industry consultancy representative added *‘alignment of the connection process needs to happen if this is to be possible.’*
- A developer/installer representative agreed, stating *‘often things that are left out cause the problems and this is where alignment doesn’t occur.’*



**Table 5:**

- A membership organisation representative asked whether rules *‘will be enforced for Hinkley Point C when it’s delayed.’*
- A utilities company representative firmly stated that *‘they will. Their connection will be terminated if they don’t hit their milestones. They have to follow a process and have requirements on them, just as any other generator would have.’*
- A developer/installer representative said *‘a lot of my networks are informal and I prefer to pick up the phone.’*
- A connections company representative raised the point that *‘developers sit on a connection with a wish and desire that they will get the connection eventually. That is the bottleneck and needs to be identified as early as possible and some kind of process put in place to identify those individuals and allow the connection to be realised.’*
- A direct customer representative said *‘you don’t hear about people being thrown off the list. You need to have rules in place and not enforcing them is slowing down development. When somebody makes a commitment, they need to move quickly. Otherwise give it to someone else who can. It is stunting the growth and development of this industry.’*
- A developer/installer representative commented that *‘we could all start thinking about how to get more transparent in conversations about what is real and what is*

*not. The tendency has been by developers to hold on to the grid because it has real value.'*

- A direct customer representative contended that *'surely you can somehow identify speculative holdings.'*
- A developer/installer representative pointed out that there is a *'need to open that dialogue up to what's the benefit for everyone.'*
- A utilities company representative said *'we experience it with all the DNOs, WPD is not particularly different. As soon as it starts getting busy, it's the same. Until the framework is changed, there will be no change. DNOs need to be able to charge early, but that makes it difficult for community-style schemes. Scattergun applications are slowing it down, as will new processes including contractualising each GSP and tracking it MW by MW.'*
- A direct customer representative suggested that *'maybe there's a way to link a bond value to your investment. Then you will have put some money in up front.'*
- A utilities company representative pointed out that *'community developers find even small application fees of £500-1,000 very difficult.'*

**Table 6:**

- A developer/installer representative argued *'communication is the most important factor in termination and a conversation on the phone can make a big difference. Planning is unpredictable and it helps when a WPD engineer is willing to wait until we know the outcome of project.'*
- A developer/installer representative highlighted *'management is important, and my ideas from speaking to other DG stakeholders are for a full list of milestones for a project to create a common approach for the whole UK. These milestones must be applied and put in all connection contracts, whilst existing contracts with no milestones must be amended. Flexibility in a deadline should relate to those milestones. Earlier stages in a project need stricter deadlines for withdrawal than later ones. There need to be questions such as if you have paid for a statement of works, got planning or started construction. Projects further down the line are more likely to be finished and so should be less likely to be terminated.'*
- A developer/installer representative contributed that *'using a financial investment as a milestone is debateable since it is difficult to define and can be biased in favour of larger companies.'*
- An industry consultancy representative felt that *'the system in Northern Ireland was a way to not do things, there is no grid application offer without planning'*

*consent first, causing a massive hiatus which stops all development and extends timelines for all parts of a project.'*

- A utilities company representative said *'we have seen similar problems, since the industry has not understood the nature of DG customers. Older offers had no milestones for planning dates with only a catch all statement that "projects are to progress in a timely manner." In new contracts when something goes wrong is very difficult to move dates from the contract position. All of this means projects with no milestones can hold up new ones.'*
- A utilities company representative raised the point that *'the whole process is steered by customers and if a decision does not progress then it is waste of a connection offer. A DNO could use payment milestones and merge a customer's programme of works with their own to give commitment to the developer with no real increase in costs.'*
- A developer/installer representative commented that *'in order to recover unused capacity 18 months is too long a waiting period before cancellation.'*
- A utilities company representative argued that *'24 months is actually more of an industry standard. A bigger problem is how strong the milestones are and how to enforce them. An example would be forcing a customer to make a separate application to increase capacity rather than holding on to spare capacity with a view to creating new generation in the future.'*
- A developer/installer representative added that *'WPD is much more explicit than other DNOs and makes a situation such as this very clear. The main culprit has been solar developers with large plans of 10 and 15 megawatt sites that are now 4.99 megawatts but never changed their original connection agreements and should really be forced to change.'*
- A utilities company representative agreed *'DNOs should go back and challenge these existing agreements.'*

**“ All DNOs should be more proactive about getting information from those who are connecting. ”**

**Table 7:**

- A utilities company representative said that *'there should be an element of reasonableness and it should be on a case by case basis. All DNOs should be more proactive about getting information from those who are connecting. I feel that the questions aren't being asked often enough and detailed enough.'*
- An industry consultancy representative commented that *'they have to be flexible. A lot of the capacity which is tied up is tied up by the big 6.'*

- A connections company representative raised the point that *‘the design and delivery time scale stages certainly seem to work well with us in terms of building out the project.’*
- A law firm representative argued that *‘the rules should be rigidly enforced subject to a number of reasons for extension. For example, with some sites we don’t know when they are coming out and I think that is a reason to extend the connection. Exceptions should be made for particular circumstances which are unforeseeable at the time.’*
- A law firm representative stated that *‘it is appropriate to terminate when reasons for extension have run out. I think the time lines which have been set out are for realistically small projects but not for large projects.’*
- A developer/installer representative felt that *‘they should be more rigid. I don’t get asked often enough by WPD if I have submitted my plans and I would be quite happy for them to know. It’s always reliant on me having to provide the information rather than asking me. I can’t remember to email the DNO each time so if they have flags which come up on my system which remind me. I do get asked, but I don’t get asked enough and not on the same frequency for every scheme.’*
- A developer/installer representative insisted that *‘they shouldn’t be terminated the SSE way because it is just ridiculous. There is no level of flexibility and no communication.’*
- A developer/installer representative said that *‘it also needs to come back to the beginning of the process so that WPD can be aware of when planning applications have been submitted. There should be a timeline when there are milestones on it. If it helps manage the system better, I think that would be acceptable.’*

**Table 8:**

- An industry consultancy representative stated that *‘it depends which side of the table you’re on, whether you’re first or second in the queue. I don’t know if there is an answer to this - I’ll be honest with you, we are only just starting to experience queues and queue management. I wish they were really rigid and we were in second position and number one would get challenged, but if I were in their shoes, it’s difficult...it needs to be fair, reasonable, consistent.’*
- An industry consultancy person stated how *‘there needs to be a flat out policy.’*
- A utilities company representative added that *‘people need to understand what the game is, and what rules operate - they need to negotiate the system.’*

- A university representative pointed out that there are *‘two sides to this - one is to have faster rules, but the other is being a flexible DNO that can respond to different needs.’*
- An industry consultancy representative said (s)he thought it was *‘difficult because you want something measurable and objective - someone can come along and sell you a scheme but it could be paper thin, then someone not so articulate comes along with a rock solid scheme. You can see if you put spades in the ground that it is difficult - you’re doing it on a subjective basis, so you’ve more chance to get it wrong.’*
- An industry consultancy representative responded *‘yes, it is what it is and some projects will sail through planning and others will struggle.’*
- A utilities company representative revealed that (s)he *‘are doing a quote for an island wind farm, and the Scottish are letting it go ahead as it’s an island but the rest of the UK think it’s an offshore...’*
- A university representative stated that *‘a lot will be basing this on business cases.’*
- An industry consultancy representative stated that (s)he thought *‘in DG, 18 months is not a lot of time.’*
- A university representative agreed that they thought *‘it is very short.’*
- An industry consultancy representative argued that it *‘depends on where in the process you are - if you’re talking operation then you’ve a better view of where capacity is. In planning stages, it needs to be a longer time frame.’*
- A utilities company representative asked *‘how does being number 2 in the queue affect you?’*
- An industry consultancy representative responded by saying *‘if you’ve got to mobilise fairly quickly for x million pounds reinforcement, it’s that sort of stuff, a bit of a juggling act.’*

**Table 9:**

- A connections company representative stressed *‘the importance of consistency from WPD.’*
- A developer/installer representative argued that *‘the dates that the rules outline are a good guide. WPD has been appropriate in the way that it has understood*

*people going through an appeal process, where you've had to provide a bit more evidence and the process has gone on for years. If I'm an investor, then these hard and fast dates might give me worries.'* (S)he did query though *'whether all these dates are realistic?'*

- A connections company representative said that *'once these dates are reached, we need to be able to go back to WPD and ask them to extend it, and to know that it is going ahead.'*
- A developer/installer representative maintained that (s)he had *'never been threatened with cancellation when the issue at hand is out of my hands, but where it is in my hands, it is my responsibility.'*
- A developer/installer representative said that *'the rules about change of technology are not so clear.'* Yet (s)he asked *'how rigidly should these rules be enforced? These rules shouldn't be rigidly enforced, and in my experience WPD doesn't rigidly enforce them.'*
- A connections company representative thought that *'the rules are grey enough to lend them to being interpreted in different ways, which can be unfair. There's nothing in the rules to guarantee that you would get the same treatment or extension a second time with the same plan.'*
- A developer/installer representative said that *'we need an ombudsmen nationwide.'*
- A connections company representative concurred, noting that his/her experience of *'working with other power distributors demonstrated the need for a nationwide system. At higher voltages we have more problems, but at lower voltages we don't tend to have too many issues.'*
- A connections company representative said that *'if you can show to the DNO that you're investing time and money, then you shouldn't have your offer cancelled. When you can't, when you're sitting on it, then it's a different matter.'*
- A developer/installer representative agreed, noting that *'there is an image of people sitting on these offers with a view to moving the land on with that offer.'*
- A developer/installer representative said that *'I want the ability to make my individual case, and sometimes it's hard to explain our case within the numbers and figures and rules given.'*



Table 10:

- There was a consensus as to whether when termination is appropriate should be decided in accordance to respective cases and the technology used.
- A technology/innovations representative stated that *'it should depend on the technology, so like solar on the rooftop takes around 3 or 6 months whereas the hydro whole analysis planning could take longer.'*
- A developer/installer representative felt that *'some regions would need more aggressive queue management as there is no need for permission or planning for roof top energy.'*
- A technology/innovations representative added that *'it makes sense, Ofgem already recognises the evolving technologies. More active role can be taken in actually engaging with local planning and Government planning. I get the point like if there is no chance of being approved, should the capacity be taken earlier? I think it is appropriate in some situations to terminate offer in some cases - it is more of a case oriented area.'*
- A connections company representative stated that *'I agree, it must be looked at from a case to case perspective, depending on the technology.'*
- A developer/installer representative commented that *'there are some schemes like wind farms are longer process. So where people are making active progress they can extend but where progress isn't being made, the grid offer should be taken back.'*
- A technology/innovations representative suggested that *'there should be a common approach across DNOs in the UK looking beyond queue management generally - DNOs learn from each other. The overall structure needs to be consistent and not aggressive, with some room for different areas, for example, where they have bigger issues, they should have the freedom.'*

**Table 11:**

- A developer/installer representative highlighted that *'planning can sometimes take longer, depending on size. You might have to mess around with the planning consent and connection works should commence within 12 months. I recommend you group in with planning the need to demonstrate that you have the legal right to the land you are planning on.'*
- Two other developer/installer representatives agreed with the aforementioned point.

- A developer/installer representative stated that *‘WPD need to determine who is serious and who is doing a scatter gun approach. To weed out the serious players, charge for offers’*
- A developer/installer representative made the point that *‘an overarching national approach would be much better, based on capacity, where all DNOs were aligned. We have to admit that WPD is the best of the bunch.’*
- All other representatives on the table agreed with the point made above.
- A developer/installer representative added that *‘when there is a tender process, multiple people submit offers from the same site. Can WPD see this and can they deal with those differently, as it is clogging up the queue?’*

**Table 12:**

- A connections company representative suggested that *‘WDP should allow for a secondary market in the connection capacity develop, you need to move it on.’*
- A membership organisation representative agreed and stated that *‘we asked the same question, the queue just keep building.’*
- A connections company representative highlighted *‘if you have something that I want to buy, I will buy it even if it is morally wrong to buy it outside WPD, it makes business sense to me.’*
- A membership organisation representative felt that *‘WPD needs to regulate the market, though there might be a dual charge which will affect our main bill.’*
- A developer/installer representative added to the previous point highlighting his/her own experience stating that *‘I have connection offer from CFD and it is unknown for us to sell it to someone else.’*
- A connections company representative highlighted *‘the delays on that are having a knock on effect, they are holding off people’s connections. The delays are inevitable and you can’t hold onto this system.’*
- A developer/ installer representative pointed out that *‘there needs to be a method to manage the queues. A controlled and managed market place is needed. This particular case had someone outside holding ransom over their land.’*



- A developer/installer representative based on his/ her own 3 month project stating that *'it's difficult as the process was taking 12 months and was not compatible with our time frame. There needs to be an open dialogue about where you are at the queue.'*
- A connections company representative raised the point that *'the planning consent is harder to understand, 12 months is quite long and the language is confusing. What does commenced mean? There is a lot of ambiguity surrounding the language'*
- A developer/installer representative added to the previous point stating that *'if you're talking solar energy, 6 months is good enough but for others it's way too short for the planning consent.'*
- A membership organisation representative highlighted *'average project for wind takes about 7 years for the planning consent bit of the project.'*
- A connections company representative felt that *'the most frustrating aspect that one knows when a project is moving ahead but the planning consent is holding them from progressing onto the other stages. There are loads of projects that are stuck in this phase, this is why there needs to be flexibility around the planning consent.'*
- A developer/installer representative argued that *'the developers are not challenged often, the WPD planners are so overwhelmed that they are not able to deal with the loopholes that a lot of developers find very easily.'*
- A membership organisation representative agreed with the previous point adding that *'you need to set to challenge the developers, you need to ask for an external evidence from the developers. There needs to be a set timescale but there should be some flexibility as long as relevant evidence is provided.'*
- A connections company representative suggested *'WPD should have common guidelines for all of UK but different guidelines of different technology. Wind and solar should not have the same planning consent'*
- A connections company representative agreed with the previous point adding that *'planning for wind is much longer than others'*

#### 5.4 What has been your experience of the statement of works process?

Table 1:

- A technology/innovation company representative made the point that *‘the problem is that WPD ‘batched’ the statement of works, which delayed the process, causing really significant problems. That has never been addressed because they fall in line with other DNOs because they said they’ve already been talking to National Grid. It’s only a problem if you don’t know what the implications are. I work with 3-4 customers now who’ve done what they were told to do, only to find days before starting that you said you can have a Grid connection but not a transmission connection. The GSOP standards must reflect the total connection charge, the total connection timeline.’*
- An industry consultancy representative highlighted *‘it is reasonable to expect that in an offer, that’s what you’ve got to pay for. Otherwise, the financing will fall through.’*
- An industry consultancy representative stated *‘the connection offer needs to reflect the true cost of the connection. There needs to be another step, before the connection has been accepted.’*
- A utilities company representative considered that (s)he *‘doesn’t know how we’d be able to accept an offer without knowing the forecast of the connection.’*
- An industry consultancy representative argued *‘there should be some sort of process which is recorded by the grid support point. There’s something about the wording of it, they’re not accepting an offer, but something else.’*
- Group consensus was that statement of works should be applied for at the time of application, not at the time of acceptance.

**Table 2:**

- A developer/installer representative complained that his/her experience *‘has been atrocious in recent months. All DNOs are running out of capacity, and everyone in the network chain blames each other. DNOs blame National Grid, National Grid blame the DNOs. There is a blame culture, and a culture of uncertainty that is no good for generators.’* (S)he continued *‘parts of Europe such as Sweden and Norway have experienced the same issues, but have fixed it. It is now the UK’s turn.’*

**“ The problem is that WPD ‘batched’ the statement of works, which delayed the process, causing really significant problems. ”**
- A developer/installer representative stated *‘we know what the 2020 targets are, how can there be uncertainty to this level.’*
- An industry consultancy representative felt that *‘at least statement of works have started appearing in the connection offers. I am doing due diligence for developers, and all are saying the same. How is developer supposed to get finance, but a*

*consultancy can't even nail down if a statement of works is necessary. There are real problems for investor confidence in generation schemes.'*

- A developer/installer representative said that, it was *'a sensible suggestion for individual statement of works', but this had come too little too late. You can connect but you can't generate, what investor in their right mind would invest in the scheme.'*

**Table 3:**

- A developer/installer representative said *'I've had it and it's not pleasant. I've one for a connection on the way at the moment, in Exeter, due in February. I've been told we've got these issues to sort or it's not going to be energised. A bit frightening it's turned up, we've paid everything all the assets are in, but told it's not going to be energised because of a third party. Seems pretty rich to say you've done all this and then something turns up. Doesn't seem fair. Done all the work and then WPD have turned up. This could have turned up anytime in the preceding 12 months. This is where the work needs to be done between WPD and the grid to identify the problems with a connection and tell me what needs to be resolved, but I'm already committed now. I'm sort of hoping it will be resolved, but if it's not it's a hell of a mess.'*
- A developer/installer representative stated *'we don't see that process, we just see an outcome. I'd say your commitment was to connect us and then if that gives problems you need to find a technical solution. If you'd told me originally there was uncertainty I'd have gone to another site, but now I'm completely committed to that site. It's one out of our control and until it's resolved, and we can't do anything about it. That's a sword of Damocles hanging over the project. You gave the offer unconditionally, yes it is conditional in a generic sense, but then you found these problems and my connection is delayed and I have to spend more money. My experience isn't great, it's a problem.'*

**Table 4:**

- A developer/installer representative said that *'My experience of the process is that it is horrible, you can accept an offer with a paragraph saying you might need to go to the National Grid. You pay money and starter delivery but get a letter to say they are now going to National Grid for a statement of works. At this point we may get an answer quickly but then find we need to go for a modification application and so now have to wait for three months before there is an answer back saying no impact or that something needs changing 30 miles away and could take 5 years.'*
- A developer/installer representative said *'it looks like this process is being considered but is taking time. To be fair to WPD, they are not as bad as other DNOs, the process is long winded and full of unknowns. As an intermittent generator I don't believe all of this applies to my needs and I would be keen to see a move away*

*from one size fits all. In the last couple of years massive growth has caused a massive application to National Grid to try and cover all bases which has thrown up masses of issues, I would like to see a more unique individualised process.'*

- An industry consultancy representative commented that (s)he understands that 'A developer/installer as an end user needs visibility which is not yet available and should be improved.'
- A developer/installer representative agreed saying that 'I would like to see the statement of works start before or after planning on a case by case basis, but most probably at acceptance if I had to decide.'
- A utilities company representative argued that 'you could go through loads of work and getting statement of works but then find it's for nothing if the work is then not accepted.'

**Table 5:**

- A developer/installer representative commented that '*statement of works issues historically used to consider large projects, but recently National Grid has come in and considered that there is an aggregated impact from small projects. DNOs – especially WPD and UKPN – are between a rock and a hard place because National Grid is looking at impact as developers are already underway. We have 7 projects underway in South Wales and the South West and no clarity on the impact.*'
- A developer/installer representative felt that '*timing sums it up. Timing kills it and we end up with sites that stop dead. Timing relates to National Grid and DNO points and particularly to construction and investment. We are facing uncertainty over bringing in investment and without investment we cannot begin construction. An individual WPD statement of works process would give clarity.*'
- A utilities company representative responded that '*we are not convinced that single submissions will speed the process up. The reason DNOs do bulk submissions is the volume of submissions. We will still need to know all the background generation that's coming live in that area. The new process of tracking MW by MW and contractualising each GSP will continue this. If all the DNOs went to single submission, the system would collapse because each application requires a contractual change at the GSP.*'
- A membership organisation representative pointed out that this is leading to '*going to a DSO-approach.*'

**“ We are not convinced that single submissions will speed the process up. The reason DNOs do bulk submissions is the volume of submissions. ”**

- A utilities company representative explained that *‘a materiality limit will be established for each GSP and a modification application will need to be filed by DNOs when the GSP reaches that limit. It won’t magic new capacity, but it will provide clarity. This could speed up the process so you can have the transmission element of the offer when you have the distribution element.’*

**Table 6:**

- A developer/installer representative said *‘our projects have been too small to go through process, but it also depends on the location you are in the country. For such a small company it is not worth the time or money.’*
- An industry consultancy representative added *‘we have worked on a few projects with WPD but not experienced a whole project in order to answer this question properly.’*
- A developer/installer representative stated *‘I have a lot more experience dealing with this and believe the main goal is to get an offer from a DNO back in good time after an application. This offer would include information on a contract, dependence on transmission works, delay costs and thresholds for entering a queue. This information for an application is needed upfront. However, I acknowledge WPD is good at putting reasonable costs upfront - maybe there is an issue with the number of applications that are actually accepted.’*

**Table 7:**

- A utilities company representative said *‘interesting I think, obviously. Since the beginning of the year, when we have been making new applications, we have been asking for individual statement of works processes and not waiting for them to be batched up.’*
- An industry consultancy representative made a point that *‘we haven’t had any bad experiences yet but I am waiting for it to happen. If there was more visibility, we wouldn’t be waiting for these issues.’*
- An industry consultancy representative stated that *‘an individual statement of works should always be the way but you are still going to have to wait and you still don’t know.’*
- A law firm representative felt that *‘it is very difficult when you are trying to build a project. I find that if they were expressed in an easier to understand way with flowcharts it would be better especially since the constraint side of things is very difficult to do. So, I think making it easier to understand would be ideal.’*
- A developer/installer representative complained that *‘we have been greatly affected by this. We have lost projects, such as those about to go into construction.’*

*Equally, we have good communication with WPD since it occurred. However, I could have done something about this by requesting a statement of works with each and every power application.'*

- A developer/installer representative agreed that *'moving into individual statement of works is a good idea.'*

- A developer/installer representative argued that *'it has been disastrous really particularly on the solar projects. I think, the way it was handled by WPD was really poor. Taking bulk statement of works initially is just really unfortunate. We have had offers in place since January 2014 and we have only been told and I am sure they could have foreseen it to some extent and avoided that situation. Since then, they have been quite approachable and we have been able to talk it through but the relationship between WPD and National Grid is really going to catch us out.'*



- A developer/installer representative pointed out that *'such delays just push back the period of response again. We can't afford that time.'*

**Table 8:**

- A university representative said that *'it would be wrong for me to comment on anything over 1MW as it's over the scale we would be dealing with to be honest.'*
- Facilitator asked *'is moving to a statement of works for everything the way to go?'*
- A university representative responded *'it seems like quite a high figure to group everyone above.'*
- An industry consultancy representative added that *'if you start applying charges like that it would force people to think about if they really want to go, if you can get something for free it doesn't take long to complete application forms.'*
- Facilitator questioned *'so you would stick with emissions approach?'*
- An industry consultancy representative answered *'possibly so, yes, I haven't had any negative statement of works experiences yet...'*
- Facilitator asked *'can you see there being issues?'*
- An industry consultancy representative responded *'transparency.'*
- Facilitator questioned *'do you think starting time of application or later?'*

- An industry consultancy representative said that (s)he thought it *‘depends what the impact is on the cost of connection - so you always want to know what the actual costs are likely to be. I guess time of acceptance then really.’*
- A university representative added that *‘I think I’d have to understand the process more to be able to comment.’*

**Table 9:**

- A developer/installer representative contended that *‘the statement of works became unfit for purpose very rapidly. It sort of crept up on people, and then suddenly became a major feature of offers. You used to get grid offers that didn’t have a statement of works, then the offers said the offer may be subject to statement of works. Then all of a sudden WPD fell over when it had to deal with actually operationalising statement of works. We need to know whether we will be subject to the statement of works. Not a good experience.’*
- A developer/installer representative argued that she/he *‘wants offers to clearly say that a statement of works may be required.’*
- A developer/installer representative thought that *‘despite the price of 3000 pounds, if an individual statement of works gives you certainty, then it would be a good thing.’*
- A developer/installer representative said that *‘the statement of works process should begin soon. The sooner the better, timing is important.’*
- A developer/installer representative reasoned that *‘if the industry, or DG, moves away from large-scale, all of a sudden the focus is going to be on that sub-1 megawatt.’*

**Table 10:**

- Attendees on the table were operating on a small scale and had no experience of this.
- A technology/innovations representative, upon asked for reflecting on the situation, commented, *‘what’s good for you is bad for the grid in general. Need to find a middle ground between the two. This could be done by co-ordinating with grid, DNOs and all different stakeholders.’*

**Table 11:**

- A developer/installer representative felt that the *‘statement of works is disgraceful.’*

- A developer/installer representative claimed that (s)he *‘supports moving towards individual statement of works. Also, you only get the statement of works, with different power factors, with the adoption agreement which is quite late.’*
- A utilities company representative added that *‘a statement of works can knock significant value off a project’*
- A developer/installer representative agreed with this and commented that *‘statement of works is absolutely horrendous.’*
- There was a consensus on the table that the process of statement of works should start at the time of acceptance.

**Table 12:**

- A developer/installer representative felt that *‘It’s a black hole, WPD don’t know either, and they just throw it out there. Wind is horrendous, especially in Scotland. There is no dialogue on this process at all. It’s horrendous.’*
- A connections company representative argued that *‘developers are extremely confused about the process, especially in Scotland. Developers are all over the place in Scotland.’*
- A connections company representative felt that *‘DNOs can improve. It is clear that the process wasn’t designed for 1 megawatt.’*
- A developer/installer complained that *‘once you get your offer accepted, you get assigned for an engineer in WPD. The problem with National Grid is that you don’t know who you are dealing with. There needs to be dialogue right through to the representative from National Grid.’*
- A connections company representative highlighted *‘you can’t finance your project because a huge question mark is the statement of works and therefore the DNO’s processes are useless.’*
- A connections company representative suggested that *‘you need to match the timelines of the DNO and the process of statement of works.’*
- A developer/installer representative put forward the point that *‘the statement of works should start at the time of the application. If you knew this capacity in the area, then there will be a legitimate developer to pay the fee and have comfort that national grid will give the statement of works.’*
- A membership organisation representative added to the previous point stating that *‘you can’t do it before the offer is made and therefore 90% don’t end up connecting.’*

**“ A statement of works can knock significant value off a project. ”**

- A connections company representative highlighted *'the issue we see is the process of referral on statement of works is not as clear as it might seem. In the past, it was quite clear from a developer's point of view. Lately, National Grid is not clear, the developers don't have the data to make comments on the stability.'*

## 5.5 Do you have any comments on WPD's approach on future forecasting?

Table 1:

- An industry consultancy representative felt that *'what this doesn't talk about is the political influences. Because they can be quite devastating.'*
- A technology/innovation company representative highlighted that *'somebody should ask Ofgem to interpret the political climate.'*
- A membership organisation representative commented that *'storage is a big problem.'*
- A utilities company representative argued *'it could be a buzz word for a few years, and it could just go away.'*
- A technology/innovation company representative felt that *'we need to know the implications of zero export considerations if we constrain them via a reverse power flow methodology. In other words we have a factory with 5 MW in otherwise DG constrained area, the answer would be no. Can any DNO stop me from backing off a customer's own demand? Which DNO will accept which technologies accept zero power frames?'*
- A membership organisation representative felt that *'dairy farms are a good example of the above.'*



Table 2:

- A developer/installer representative felt that *'there is no concrete plan. I suggest DNOs look at the 2020 targets and work backwards, at a minimum. It shouldn't be so difficult to forecast demand and generation.'*
- A developer/installer representative highlighted that whilst (s)he *'was pleased to see the National Grid Chairman say recently that they were looking at distributed generation rather than baseload in the future', (s)he had heard that at 'DECC the belief was there wasn't enough demand for this approach, and this was extremely concerning.'*

- A developer/installer representative complained that (s)he was experiencing difficulties in forecasting for 2016 because *'it is unclear if the renewables sector will have business, or be able to support jobs. DECC needs to communicate changes well in advance so DNOs can factor these in to their forecasting.'*

**Table 3:**

- An industry consultancy representative said *'people like us look to your maps to see first thing whether we can put generation in and if it looks like a problem then we get in contact with you and discuss it. If we know it's a problem area we don't want to be taken through a drawn out route, but go somewhere where it's easy or easier. Always the first question from the client is 'can we?' Then we have to go and find out, those maps help. Then the next question is how.'*
- A developer/installer representative argued *'the Grid scenarios are normally no use at all and doesn't tell you distribution level. My key tip is keep close to the money, as soon as a tariff is profitable everyone will pile in and then ask where does the sun shine? It shouldn't be a surprise. Just follow where the money is going and where the investment is. In my business there is a lot of interest in small peaking plants and they're might be an opportunity as they're not following solar.'*

**Table 4:**

- An industry consultancy representative mused *'I think tech providers should be involved.'*
- A developer/installer representative agreed and added *'I also think academia too, and I think more communications should be sent to customers.'*
- A developer/installer representative stated *'the scenarios make high level assumptions and are very broad brush. I do however agree we have to start from somewhere.'*
- An industry consultancy representative commented that *'I think we need the support of Government.'*
- A law firm representative said *'a sensitivity analysis when starting with base line data is very important and would also be very helpful.'*

**Table 5:**

- A membership organisation representative said they have *'a sector group where the views of members are pulled together. They would be very happy to support WPD's forecasting.'*
- A direct customer representative felt that *'the way we operate is so short-term and likely to change that our input would be difficult to scale up to represent other'*

*commercial businesses. Developers and connections companies can give better input as they put the schemes in. Residential schemes should be projected.'*

- A developer/installer representative pointed out that *'we may not be doing big projects for much longer – projects will potentially stop dead in March. Life as we know it now is not going to continue, that is very clear. We either stop putting in solar or find a way to make it cheaper as America is soaking up all the 'cheap' solar modules, but how low can it go?'*
- A utilities company representative commented that *'the approach taken by WPD as regards to Future Energy Scenarios is very positive. It would be great if WPD could persuade other DNOs to take such a positive and consistent approach to scenario modelling. The ENA should probably take the lead on that and if there isn't already a working group on forecasting, there probably should be.'*

**“ It would be great if WPD could persuade other DNOs to take such a positive and consistent approach to scenario modelling. ”**

**Table 6:**

- A developer/installer representative made the point that *'WPD should take note of the increase in small scale wind and I do not believe the industry is slowing down.'*
- A utilities company representative considered that *'the industry is difficult to forecast but there is a slowdown in solar. Despite this, biomass, store and wind seem to still be progressing. It is important to note that the boom and bust of solar may give the false impression that the market is dying. WPD should view what schemes progress on individual merits.'*
- An industry consultancy representative commented that *'Saudi Arabia has the biggest impact on the industry.'*
- A developer/installer representative suggested *'speaking to the generators more. National Grid has been doing similar things to predict future scenarios and perhaps WPD can use a similar methodology to the Network Development Plan Process.'*
- A developer/installer representative stated that *'it is interesting to know forecasting details from WPD and it helps in our own company strategy. We also pass this information on to our customers.'*
- A developer/installer representative made the point that *'any potential scenarios should show what reinforcements WPD will think will meet that need. This should be a range, such as where to build new lines, if at all.'*

**Table 7:**

- A developer/installer representative said *'it is really difficult to forecast. I think it would be useful to have conversations with WPD about the drivers which affect the different sectors of the industry because each one has different issues and expectations.'*
- A developer/installer representative argued that *'it is not the forecasting. It is what they do about it. It has to do with WPD and National Grid making investments upfront which is something which they don't seem to do at the moment.'*
- A developer/installer representative asked *'if things change, tomorrow, is the forecasting really applicable?'*
- A developer/installer representative commented that *'it is great to see this being undertaken. It helps WPD manage their network and it can only be of benefit to customers. Additionally, it might result in additional capacity being put on the network. However, with the different tariffs, it might be difficult to accurately forecast within a commercial environment.'*
- A developer/installer representative agreed that *'it is commercially sensitive. However, I think developers and customers have to have an interest in it and helping rather than saying it is commercially sensitive information.'*
- A law firm representative stated *'that it is not a bad idea. Had we done it 7 or 8 years, we might not be in the position we are in right now so I am all for it. I definitely think that if it is a done in a world, where we are purely looking at technology and engineering, we can identify where we can build and grow.'*
- A connections company representative raised a point that *'in order for WPD to accurately forecast or allow them to enable more generation for the future, it is to embrace customers' suggestions for either new technology or bringing forward engineering ideas which could enable them to manage voltage, more connections and look into generation and storage management. It seems to me that there is a reluctance to move to something new unless it is something which WPD has come up with themselves. Being open to having pilot schemes or trials with whomever who has suggested them appears to be fairly crucial to me.'*
- An industry consultancy representative considered that *'there are so many factors they are going to have to put into this. I don't think it is just engineering solutions but also commercial solutions.'*
- An industry consultancy representative said that *'developers and people who are applying for connections in the future should be part of it. I think for us to have visibility and input for those who want to have input is important.'*

- A utilities company representative argued that *'it is impossible for any forecast to be accurate and I don't think any DNO is going to start building networks based on the forecasts. If they did that, there might be some benefit in it but I don't think there is going to be any proactive building.'*
- (S)he asked *'do you forecast based on what the Government says it will build over the next few years and they never do it? Do you base it on experience of political promises, changed and not kept, or on experiences of political promises being kept even if they haven't been done before?'*

**Table 8:**

- A utilities company representative said that (s)he thought *'if you had the answer to this you wouldn't sit here.'*
- An industry consultancy representative agreed that *'you need a crystal ball!'*
- A university representative concurred that *'it's a tough one that one.'*
- A utilities company representative commented that *'you'd argue that graph made with best will and intention by Government economic forecasters (South West experience graph) during the time of doing the RIIO submission, theoretically the best information, but what chance have people got of that?'*
- A representative from utilities industry responded *'technology today is very quick to knee-jerk whereas 25 to 50 years ago the knee-jerk reaction was much more difficult.'*
- An industry consultancy representative added that *'Volkswagen could be ripped into a frenzy, for example the Government could say to recall all vehicles and start a scheme for electric vehicles with free parking and all of that...'*
- An industry consultancy representative commented that *'the wires can connect all that up - you could work for a major automotive company and could say we want 100 rapid charging points in rural Warwickshire, but they need to do that. The manufacturers can't just get them off the shelf.'*
- An industry consultancy representative made the point that *'we need people to work together as opposed to doing a soundbite on PMQs - the country is in a spin.'*
- A utilities company representative said *'no one looks at the whole picture, local authorities don't. Other factor is the economic side and amount of restrictions, e.g.'*



*operation hours which only give us a very short window to do the work after set up and clean up.'*

- An industry consultancy representative added that *'cost is one thing but it's the actual time to deliver. I went to a conference a couple of weeks ago and was talking to someone about leadership in this area, I don't think the Government should do everything for us but we need some cohesion.'*
- A university representative said that (s)he thought there was *'no engagement from the National Grid at all.'*
- A utilities company representative commented that *'they're only one link in the chain.'*
- A university representative continued *'they don't engage a lot, only one conference for what happens when the lights go out.'*
- An industry consultancy representative made the point *'is it their problem? All they're doing is chucking problems down the cables, but it's WPD who have to make it all stack up. There's enough potential power in the grid, it's just linking it up.'*
- A utilities company representative added *'energy and climate change - the name is on the tin - someone somewhere has to think to do the joined up thinking and start with a nucleus, there isn't any.'*
- A utilities company representative said *'they can only do so much, they can only direct within their parameters.'*
- A university representative commented that *'the water meter opening up in 2017 - I'm sure there will be difficulties.'*
- A university representative responded *'yes, we will have several people vying for your metering and all that.'*
- A utilities company representative commented that *'meter reader from Stoke to Stafford to read 6 meters.'*
- An industry consultancy representative made the point *'it should all be smart meters in this day and age.'*
- An industry consultancy expert concluded saying *'energy was so cheap for so long, but these days you have so many TVs, computers, phones on charge.'*

**“ It's WPD who have to make it all stack up. There's enough potential power in the grid, it's just linking it up. ”**

**Table 9:**

- A developer/installer representative suggested that *‘a line to the Treasury would be helpful these days.’*
- A connections company representative noted that *‘all DNOs have a duty to look after their networks in the future. Forecasting though clearly has to be done.’*
- A developer/installer representative maintained that *‘with the new technologies coming through, it’ll be interesting to see the new constraints develop, and which will affect how the business develops.’*
- A developer/installer representative said that *‘the key people are going to be customers, the end users, whether they’re domestic - are they going to go for PV storage? – or whether they’re industrial or commercial, and are they going to sign up to deals? Those are the key markets.’*
- A developer/installer representative pointed out that *‘there is going to be a fundamental change, what we have done is going to be radically different from what we’re going to do in the new few years.’*
- A developer/installer representative said that *‘there is an underlying base, the nudges on certain tariffs will affect everybody. We need to know what affects they are going to have. There are therefore important people who we need to talk to.’*
- A connections company representative noted that *‘forecasting is crucial for WPD. WPD needs it to stay ahead of the game.’*
- A developer/installer representative said that *‘we’ve traditionally gone where it’s wanted, where the host is willing, and what makes them willing is a number of factors.’*
- There was a general consensus that stakeholders would like to be kept up to date with WPD’s forecasting.
- A developer/installer representative proposed that *‘the national grid forecasts are very helpful. But we need something that go beyond this.’*
- A developer/installer representative said that *‘like National Grid, WPD needs to have different forecasts that look at technology, politics and socio-economics’*

**Table 10:**

- A developer/installer representative stated that *‘it looks good from the planner as it looks at all areas. There are more details and technicalities to this that come up on reading and going in the charts but all in all it’s a good approach. Specially, capturing the DG increase in areas as quickly as possible. But I feel it still somehow*

*vaguely represents what the actual situation would be; the demand could increase anytime and there is uncertainty.'*

- A technology/innovations representative commented that *'national grid cannot see what is going to happen.'*
- A utilities company representative added that *'it's difficult to see what is going to happen in terms of input coming in and the difference between outputs. How is it possible to create a whole network? I think WPD should be supportive of more information between the DNO and the grid station so they have better understanding and could be better coordinated- a better networking and communication. Data visibility, power flows, generation and probably forecasting as well. Better integration between the DNOs and TSO, Better info of data exchange, of power flows, supplies and customs, key customer suppliers, linear at the moment as in less separate between compartment.'*
- A developer/installer representative felt that *'Government policy has a matrix in this as well.'*



**Table 11:**

- A developer/installer representative highlighted that *'in my opinion, demand will be increasing in a couple of years of heat pumps and car charging. WPD should publish more information and feedback from their clients.'*
- A developer/installer representative added that *'storage will become more and more important'*

**Table 12:**

- A developer/installer representative argued that *'there is an asset side to this now, there is a huge amount of value in the assets. A lot of people are going to buy stocks on these assets now. Asset management needs to be taken care of and focused on. They have to at the very least comply with regulation. There needs to be more dialogue on asset management.'*
- A developer/ analysis representative said *'this is a reasonable approach, they have a long timeline. You still need an element of subsidy, especially when it's finance driven.'*

- A developer/installer representative highlighted *‘there are factors that make it hard to forecast such as growth in population. Macro elements are causing the forecasting to lag behind.’*
- A membership organisation representative suggested that *‘the National Grid’s forecasting also affects the WPD’s forecasting therefore this might be another limitation to the process.’*

“ Local councils should be made aware of whether applications will be accepted or if capacity has been reached. ”

## 5.6 Any other comments?

### Table 1:

- A technology/innovation company representative commented that *‘we have been discussing unavailability rebates. Item one is where the DNO says they will or won’t pay the rebate, the second one is where it’s applied by National Grid due to constraints.’*

### Table 4:

- An industry consultancy representative suggested *‘I think Government thinking is generally only a short term strategy and everyone needs confidence through a long term strategy. There is no long term commitment shown currently.’*
- A utilities company representative agreed, adding *‘I think a long term plan by Government is very important. Local councils should be made aware of whether applications will be accepted or if capacity has been reached.’*
- An industry consultancy representative stated that *‘Government policy is driven by voters so this doesn’t help anything that lasts longer than a four year plan from election to election.’*
- A utility company representative said *‘I’d like to bring up a wildcard of network rail Basic Asset Protection Agreements, in the context of when we come across a network rail on bridge where there is no level playing field customer to customer. There are hurdles in trying to get connections across bridges due to pricing so people are avoiding network rail owned bridges which causes headaches. I am hearing that these BAPA agreements are a national problems and am interested in hearing your views.’*

**Table 8:**

- An industry consultancy representative commented that *'going back to the connection procedure, to flip the head on that, and I know it's difficult, but early engagement is needed - I've always had budget estimate then the conversation but if you could actually sit down and say what do you want to do, how do you want to do it... instead of going through bureaucracy and time, more meaningful and early contact and opportunity to engage would be better. Would save time for both parties.'*
- An industry consultancy representative added that *'my particular frustration is that I try to stop people at work doing multiple quotations as I know it will mean they aren't very helpful next time you phone up - that to me is a real opportunity for a better experience. We did that recently for supply and put in a request, agreed to bin it and have a meeting and got great outcomes, solutions and advice and they were really helpful.'*

**Table 11:**

- A developer/installer representative mentioned that *'some large developers may be willing to fund primary substations, if they knew enough up takers would pay up for a slice of the pie.'*

## 6 Workshop 2: Quicker, more efficient connections – WPD’s improvement plan in detail

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This discussion focused on the six sections of WPD’s ICE Workplan 2015/16: communication and engagement; availability of information and online services; service provided post connection offer acceptance; extension of contestability; offers and agreements; innovation.

### 6.1 Do you have any comments on the actions for the communications and engagement section of the ICE work plan?

Table 1:

- A developer/installer representative felt that *‘the sooner I can speak to somebody and get a personal and more tailored approach, that will help me take a lot of projects off my list, rather than going through a lengthy process.’*
- A membership organisation representative commented *‘while you’ve got an increased upfront time cost, it means that going forward it could mean less cost in the future.’*
- An industry consultancy representative stated *‘I was thinking of what information to provide in advance – there’s still work to do on the tools. The heat maps need some work.’*
- A utilities company representative commented *‘the heat maps reflect the next level up, but we know that a lot of the information is not true.’*
- An industry consultancy representative pointed out *‘if you can’t get the full picture, there’s not much point in putting it online. It’s important to get an overall picture in the initial engagement stage to set up the scene for future connections. The online information needs to be valid.’*
- A utilities company representative commented *‘we know you’ve got a bit of room, just not how much room.’*
- A technology/innovation company representative pointed out *‘quote plus has been adopted, which may address the issue you are having.’*
- A utilities company representative highlighted *‘we don’t have any indications of the constraints on your side until we tell you our preferred sites and wait for you to come with a quote.’*

- An industry consultancy representative commented *'we'd be happy to pay for your time to sit down with someone. It seems like a sensible way to go forward. For a community group, paying £500 would be more difficult.'*
- Consensus is that quote plus is the best way to go forward.
- A membership organisation representative asked *'is there any way of making an exemption for a community group or delaying that payment?'*
- A technology/innovation company representative felt that *'you can't offer people preferential terms. If you're on a constrained system, you can't have preferential treatment.'*
- An industry consultancy representative raised the point that *'we have a lot of queue management and capacity becoming available. There's no way to know if someone has missed a milestone – those that are in a queue, how about some way of expressing interest in a certain area? An alert of sort that there is capacity in that area. Some of the advice that I've been given is to reapply, and that doesn't sound very sensible to me.'*
- A technology/innovation company representative commented *'do we want to know what's connected? Not really. I want to know what's spare on each BSPs and therefore on each Primary substation. I know where you're coming from. The DNOs also have a request with DECC at the moment to upfront charge. The reason people are putting in multiple applications is because one of them might be accepted.'*



**Table 2:**

- A developer/installer representative commented that *'I think the communication is good, and the workshops are good. However what I would like to see is action straight afterwards. What we find is that we come to workshops, we talk lots about a certain issue, but there is lots that hasn't moved on by the time of the next workshop.'*(S)he recommended that WPD could improve by *'introducing an account manager. When you get to a certain point in the planning process, people who are regularly interfacing with WPD should have a regular point of contact.'*
- A developer/installer representative agreed, commenting that *'the political landscape is moving quickly and we need active network management now. We have projects that are highly constrained that are going to disappear unless we are offered some form of solution. Active network management started to be talked*

*about quite some time ago, so action at WPD should be further on than stakeholder workshops discussing it.'*

- A developer/installer representative also concurred, arguing that *'we are only talking about active network management in the UK now, but in other EU countries such as Germany it has been in place for years.'*
- A developer/installer representative complained that *'at the moment, all I see is a workshop then a follow up email recording the session. You don't get a proactive communication of progress at WPD in between the workshops. I would also be interested to know what WPD are up to regarding innovation in storage for example.'*
- A developer/installer representative agreed, and said that they would appreciate *'5, 10, 15 year plans' from WPD.* (S)he continued *'this would enable much better planning for the industry. This should be led by the Government, but then replicated by DNOs.'*

**Table 3:**

- A developer/installer representative said *'communication is a great asset, no doubt about that. Face to face is good, but very difficult to achieve. Even though we're the customer, face to face communication requires us to go to WPD. Then after visiting three times there were no meeting rooms available. Where's the mutuality? They should come our way. The message is its fine to communicate as long as you come to us, but that's not quite how it should work. It wouldn't be a bad thing for people to travel both ways. I quite like teleconferences as the efficient option, but it is very difficult to get WPD guys to accept them and be available. We need a commitment that you're going to be there and make it happen. We send out an invite and get nothing and WPD don't turn up on a call.'*
- An industry consultancy representative felt that *'it varies from area to area, some are easy to get hold of, there's a point of contact. In others it's like getting blood out of a stone. I have had WPD come to one of our sites and talk us through what they think we could do and what we would have to do.'*
- A developer/installer representative agreed, *'we can get them to sites, but in terms of a meeting at a head office, that's only one way traffic.'*
- An industry consultancy representative said *'it' typical of all DNOS, they come to the first and last meetings and none in between.'*
- A developer/installer representative felt *'the trouble is they are incredibly busy, it's the trouble with a lot of the presentation slides. As long as WPD have confirmed a commitment to communicate I don't mind how they say they'll do it. They just have to commit to be at meetings or teleconferences or whatever.'*

- An industry consultancy representative said *‘Communication needs to be proportionate to the size of the project, if it’s a multimillion pound project then it will need more than a smaller one.’*
- A developer/installer representative said *‘we wouldn’t expect WPD to be at the meetings of everyone involved, so we do specific meetings on the WPD bits, and then we give the actions. At the moment WPD don’t come and we don’t know if it’s being done and then the problems build up. The only reason to get any real understanding of where things are is to get them on the call to discuss dates and delivery.’*
- A developer/installer representative felt that *‘1.10 improving statements of works, that’s got to be important.’*
- A developer/installer representative argued that *‘the general point needs to be about having a set up communications approach and this could do with reinforcing. I don’t see where we would get one about what we have been discussing; which is having a point of contact and having a regular update. We need a nominated point of contact, which I think should be a project manager that you will get a regular engagement with.’*
- An industry consultancy representative agreed saying *‘I’d back this up, you need one proportional to the size of the project and then you know who the project manager is and have a point of contact.’*

**“ Communication needs to be proportionate to the size of the project, if it’s a multimillion pound project then it will need more than a smaller one.”**

**Table 4:**

- A law firm representative said *‘all one on one events are good to get mass involvement, but is there a chance to get more instantaneous feedback from questionnaires or similar? Is there an ability to get greater information in mass form this way?’*
- An industry consultancy representative asked *‘is there a survey after a connector has gone through a connection process?’*
- A developer/installer representative agreed stating *‘as a customer, sometimes I get follow up email regarding the offer to ask if I have any comments or views. Sometimes this is sent to me as soft and hard copies, other times only one or other. Sometimes follow up emails and phone calls are given but it appears there are different interpretations from guys on the ground as to how to communicate with the customer. I believe that there may be room for interpretation in the guidelines they are given.’*

- A developer/installer representative suggested *‘I think there should be more consistency in the process of getting feedback from customers after accepting an offer and during this process.’*
- A developer/installer representative mentioned *‘in terms of UCSG workshops, there seems to be imbalance of people who attend, lots of ICPs, is this very skewed? ICPs, interested people, consultants, maybe this is not representative and should be reviewed?’*

**Table 5:**

- A developer/installer representative considered that *‘WPD is the best at providing information. WPD is the first one with the heat maps and providing access to what’s on the network. Importantly, WPD is working with designers to understand challenges.’*
- A developer/installer representative agreed, saying *‘WPD tends to be the most cooperative and interactive of DNOs. UKPN seems to be following the lead, but WPD is pulling away.’*
- An industry consultancy representative raised the point that *‘there is a gap’* in inclusion of *‘stakeholders other than community groups and industry people, such as local authorities. You will react when a LEP or local authority knocks on your door, but that requires it to knock on your door. This extends to energy management – the other side of the equation – as well. Devolution is creating opportunities to think a little bit more strategically.’*
- A direct customer representative made the point that *‘there is engagement with local authorities in the stakeholder panel. They let these panels know what happens at events like this workshop. Local government and local charities attend the stakeholder panels.’*
- A membership organisation representative highlighted that there is a *‘growing awareness in local authorities of setting themselves up as energy supply companies and using brownfield sites. WPD might want to connect with APSE Energy, which represent 55 different local authorities looking at how to get DG into local government. There is an event in February that WPD should attend.’*
- An industry consultancy representative commented that *‘stakeholder events are the most useful forum.’*



- A membership organisation representative commented that *'it is important to be aware of what else is going on in parallel and being driven by Government interventions in other areas, such as cutting local authority budgets.'*
- A connections company representative made the point that *'UKPN holds regular surgeries. Electricity Northwest and Northern Power do the same thing.'*
- A direct customer representative agreed and added that *'you also get an account manager with some of those. Dealing with DNOs can be a bit daunting and having someone you can get to know that can point you in the right direction can be very useful. With WPD I have a similar effect and benefit, but through informal networking. It would be good to have an account manager.'*

**Table 6:**

- A developer/installer representative stated *'the actions are good, and WPD obviously uses customer comments and evidence to improve the service it provides. A minor exception may be contacting the right people in terms of progressing projects which I have had problems with in south Wales.'*
- An industry consultancy representative claimed *'there has been a very positive change compared to how things used to be. Over the last 2 or 3 years communications have been good from engineers all the way to people pursuing a connection. WPD is at the top of the list of DNOs we like to deal with.'*
- An industry consultancy representative made the point that *'a more centralised approach as Scottish power does can sometimes be good.'*
- A developer/installer representative said *'I have no negative comments for WPD.'*

**Table 7:**

- A developer/installer representative said that (s)he *'was not aware of everything which was being talked about that she is saying is already available. Some sort of emailing system to communicate with regular stakeholders about the new things coming up would be good. If we come along once a year, that is great but some of the information would be great to have immediately as it happens.'*
- A developer/installer representative commented that *'a newsletter would be useful so you can be pre-briefed even for today. I find it quite good that there are quite a few energy workshops. Other than that, I think that it is pretty comprehensive.'*
- A developer/installer representative felt that *'the actions contained within the work plan are fine for communication.'*

- A developer/installer representative stated *'I have always been a huge fan about the amount of engagement that WPD does.'*
- A connections company representative made a point that *'all the information and progress made is encouraging. Just to reflect what has been said already, WPD tend to be more active than others in doing that.'*
- A connections company representative highlighted that *'in terms of communicating what has already been made available, in particular with the web base systems, WPD is lacking. As a business we are due to engage with WPD and we have not been made aware of the information they already have available. Account management seems to have fallen behind in this regard.'*
- An industry consultancy representative raised a point that *'one of the things I wasn't aware was being able to overlay the network. I do it manually on Google Earth and it is apparently there and we didn't know about it.'*
- An industry consultancy representative said that *'it is very frustrating that I did not know about it. WPD engages and they are fantastic at it. They engage at every level but there needs to be someone who shows you something new on their plan. We need visibility and we need more tools, but we also need to know when they are there.'*
- A utilities company representative commented that *'WPD are probably two years ahead of the other DNOs. Because GTC sit on the CCSG and you didn't know what GTC knows even if it is your parent company – it shows how difficult it is for DNOs to disperse the information.'*
- A utilities company representative felt that *'it is good but I also think people have to engage back with WPD as well. We cannot just sit and wait for WPD to email everybody which makes an application. Many people are one-offs. If they have customers who can be identified as stakeholders, including them in some sort of email update would be useful.'*
- A utilities company representative argued that *'I am doing this full time so I make it my business to monitor these things and it is still difficult keeping up with all the DNOs.'*
- A developer/installer representative pointed out that (s)he *'only found out about the mapping at a stakeholder information session.'*

**Table 8:**

- A university representative felt that *'connection surgeries are a good idea, not sure if that's been offered before but I've missed it if they have.'*

- A utilities company representative said that *'this is the second workshop, it's useful to understanding the environment.'*
- An industry consultancy representative added that *'there appears to be a lot of interaction there, whether it's with the right people - you can only interact with people who want to interact with you.'*
- A university representative said that *'it looks like it's programmed for Christmas, probably run by volunteers!'*
- An industry consultancy representative added *'I don't think take up will be significant! I know UK Power Networks have connection surgeries, but they are never at the right time and you have to wait three months to have a hugely unsatisfactory process.'*
- A utilities company representative stated that *'there's far more going on here than elsewhere as I work across every DLO - these are the only ones that come in to our organisation, but it's my perception that there is more going on here than anywhere else.'*
- A university representative agreed that *'we don't have the same engagement in London or Scarborough.'*
- A utilities company representative added that *'the majority of work has been with one DNO in particular, not WPD - it is subjective I but don't see it and don't hear about it, but there could be.'*

**Table 9:**

- A developer/installer representative said that *'from a communications point of view, WPD are very good at communicating when things are going on. I look after all the utilities of different organisations, but at least WPD sends someone out beforehand to give you advanced notice.'*
- A connections company representative argued that *'as with all the DNOs, you're good at sending people out. But what we would like is seeing some of the guys on the ground, the engineers to come out.'*
- A developer/installer representative said that *'the focus of all these is always up until 'the spade goes in the ground', we need a bit more focus on the spade going in the ground. WPD needs to go from their plans to segmenting the plan, and the opportunity to feedback to particular areas.'*
- A developer/installer representative said that *'WPD needs to do more progress-reporting.'*

- A developer/installer representative wondered *'whether people could drop-in online to make it more accessible? I know that National Grid do that. Then we wouldn't have to give up the whole day.'*
- A developer/installer representative said that *'WPD needs to have an online, interactive ability to feedback and for stakeholders to ask some questions. Then you could build it into your working day.'*
- A connections company representative wondered whether a *'quarterly update that's emailed out to everybody might be a really good idea. Other people do newsletters.'*
- A developer/installer representative said that *'the whole ICE program has driven a lot of commonality amongst the different DNOs.'*
- A developer/installer representative noted that *'the customer, the contractor who's building the thing, needs to know what the different documents are. There needs to be some more workshops, whether show and tell or online or real. For example when you get a guide to a 33KV substation, the information that is provided is good, but the opportunity to really show and educate people about these things in real depth could be improved.'*
- A developer/installer representative said that *'prior to submitting a design, I want a meeting with WPDs planner who makes the offer, and I want an engineer. We want to be discussing timetables. Getting that project engineer to that is very rare. The planner has the message that he's got to engage.'*
- There was general agreement on this.

**“ WPD needs to have an online, interactive ability to feedback and for stakeholders to ask some questions. ”**

**Table 10:**

- There was a consensus that WPD is doing well in this area, however, wider system issues were raised such as a proactive warning system, proactive assessment of a system to analyse limitation cost and time scales.
- A utilities company representative stated that *'these sessions are a good effort and shows that they are taking it seriously as it provides a ground for a good cross section of people – it shows WPD actually cares.'*
- A developer/installer representative felt that *'it's better to talk to people to face to face.'*
- A utilities company representative added that *'I am excited for the 15<sup>th</sup> September idea in particular. It seems pretty sensible and straight forward, they are doing well and noticing things such as surgeries, which are useful.'*

- A developer/installer representative commented that *‘WPD is engaging stakeholders which will make them better prepared for this. One thing I am surprised about that is missing from the plan is how many can we connect and how can we connect? For this, a more two way dialogue is needed. New developer and planners to focus very much on available capacity and minimise gaps and reduce connection time scales, and suggest alternatives. At the moment, it’s a very binary yes/no situation. Also a connection reinforcement balance must be maintained. I think optioneering would also help.’*
- A technology/innovations company representative suggested that *‘it would be helpful to have informal conversations before the assessment of an application. This would give an idea about potential applications to WPD. It could save us 65 working days to say the least.’*
- A developer/installer representative stated that *‘the developer should give more information on their upper and lower limit - both sides give their standings.’*



**Table 11:**

- A developer/installer representative said *‘more information should be provided about the start and estimated finish dates. What we need more than anything else is regular updates and frequent communication. Also, forums are quite useful. We just really need to have more of an idea of the timescale of the project.’*
- A utility company representative suggested a *‘project tracking platform or maybe, a GANT chart.’*
- A developer/installer representative pointed out that *‘if there is a blackout zone, for instance in the winter period (132, single circuit), we should know about that in the connection offer.’*
- A developer/installer representative felt that *‘surgeries/face to face/case by case was most helpful. An online Client Relationship Management (CRM) System would be useful to allow clients to log in and track projects.’*
- A university representative said that *‘communications are a huge issue for us, early stages with quotes and planning were fine, but now we’ve had no targets or timescale provided.’*

**Table 12:**

- A developer/installer representative commented *'no complaints with the teams who've been dealing with our connections, the designer changed over the course of our project but the changeover process of the designers was smooth and they communicated very well.'*
- A connections company representative stated that *'it was pretty impressive.'*
- A connections company representative added to the previous comment stating *'better than northern power grid!'*
- A developer/ analysis representative expressed his/her interest in attending the connections surgeries said that *'I would like to attend a connections surgery.'*
- A connections company representative complimented the connection surgeries commenting *'the connection surgeries work well.'*
- A connections company representative highlighted *'it tends be fairly high level communication, it's useful as far as it goes but inevitably you want to talk to the engineer working on your project, this is more general than a project specific.'*
- A developer/ analysis representative spoke about his/her experience with other WPD stating that *'due to the four different licences, the only interaction you want to get is the people who are dealing with it rather than talking to the higher level people. Amazing things happened when you understand who is who in the organisation. It's about the bare understanding of each of the licence areas. It's harder for the WPD Surgeries work at the higher level but when it comes to the direct contact to the people you work with on a day to day basis, it can be improved. The detail of the people working in the region is often more important than the higher level staff. The local team that work, including the engineers need to be given the same opportunity as the higher level team.'*
- A connections company representative agreed and added that *'the team structure where the lower level are quite local is a problem for us as it is quite scattered and hard to meet all of the different local staff.'*
- A utility company representative spoke about his/her experience suggesting that *'to combat that, we have booked specific days called district days where you can visit the local stations.'*
- A connections company representative added to the point stating that *'there is a certain information that the developer doesn't want to get to the public domain but this compels them to at the connection surgeries. There needs to be more opportunities for more private discourse such as district days.'*

## 6.2 Do you have any comments on the actions for availability of information and online services section of the ICE work plan?

Table 1:

- A developer/installer representative stated that (s)he *'uses PDFs to put into my mapping system. The updating monthly – I don't understand how you can make that any better to be honest. Can you provide your asset data on our maps?'*
- A utilities company representative commented that *'it's not specifically WPD. Some information is really easy to find on websites. When you're dealing with technical information, I was wondering if there was a way of making it common amongst all DNOs. Finding what is available on which website and where, is important to me. It would be nice to have a more a structured approach amongst DNOs.'*
- A technology/innovation company representative highlighted that *'within the DNOs, they see best practice amongst DNOs and they adopt it throughout if it's feasible.'*

**“ I am pleased to hear maps are being updated more regularly as I had previously stopped using them as they were out of date. ”**

Table 2:

- A developer/installer representative said *'I am pleased to hear maps are being updated more regularly as I had previously stopped using them as they were out of date.'*
- A developer/installer representative interjected that *'if the information isn't valid on the maps it is not worth anything'* and that *'it is extremely important to keep these in real-time.'*
- An industry consultancy representative commented *'I wasn't aware WPD had Google Earth maps. The older the maps get the less useful they are. It is good to hear they have gone monthly in all four areas.'*
- A developer/installer representative agreed *'there has obviously been an improvement in the mapping which I wasn't aware of.'*
- A developer/installer representative suggested the information available could be improved by *'a publication of all offers in an area. I can see on the heat map that there is capacity, but I don't know how many applications have been received, or offers made for that area. I appreciate it's difficult to keep this information up to date as it's so fluid, but this would be extremely useful.'*

- A developer/installer representative made the point that *‘if you had a single point of contact at WPD, a real-time view of what WPD are doing with regard to offers and applications in a particular area, this would help the current situation enormously.’*
  - A developer/installer representative said an *‘important part of feedback on offer applications is a detailed knowledge of the network by the planning officer. It is important the WPD official has knowledge of the relevant area in which you are applying.’*
  - A developer/installer representative highlighted that *‘there is a fine balance between inundating stakeholders with information, and a prompt by WPD outlining what’s been happening with their plan and any changes to website. This would be useful and could happen fortnightly for example. Currently the big thing that puts me off is the time it takes to go to look at website and see what is new myself, so a prompt would be better.’*
  - A developer/installer representative felt that a *‘WPD could automatically opt-in people who attend their workshops to their newsletter, and these individuals could opt out if they want.’*
- “ I would like to see a layered heat map – an overall picture that you can dig down into to get more information. ”**

**Table 3:**

- A developer/installer representative said *‘we like the UKPN heat maps, and we find that very useful. The information you give is very good on geography, but the UKPN ones are better for understanding where the busy bits are and the possibility of accessing. I’m not sure a heat map exists for the WPD areas...is it coloured in zones? I guess the general thing we need is you to just colour the country, which is what UKPN does and we find quite helpful, as this gives us a general idea of where we can work. For us that works a bit better than following down each line. Giving us upstream constraints would be helpful. Though you’ll just paint Cornwall bright red. However, if upstream is going to bite, it’s good to know that.’*
- An industry consultancy representative said *‘I would like to see a layered heat map – an overall picture that you can dig down into to get more information. When we need the information the guys want we have to go looking and often have to go to engineers. SSE have this information. We need to know what substations we are going down to at a locality and get the fault information from the substation and only have to speak to the engineer about the strengthening. With the overlay maps showing where the information is. Also, the ability to get that in CAD. You can then produce a drawing and you should be showing our equipment and their equipment. We could offer clients that service, if we could get your information. We’re often criticised for not having it.’*

- A developer/installer representative agreed saying *'there are certain things that are needed from yourselves and that is what the local fault level is, any harmonic issues, any voltage rise issues, what's the conductor size, what protection settings, it's all difficult to come across, but currently we only get it some way down the track. You should give to us what we need as we give you what you need. I guess it just comes back to an imbalance of relationship. All the power is in WPDs hands and they don't use it to great effect.'*
- An industry consultancy representative agreed, *'we're supplied later with all the fault levels, and then have to put in additional fault models. They had to put up more, that's additional cost.'*
- A developer/installer representative argued *'the trouble with websites is everything is out there, and it's very easy to dump it with generic stuff. When you have a project and project manager that should be a package of WPD giving you everything when you give them all your information. Its 6 months into the project before you agree about earthing, for example, which should be in the original design. We need early delivery from WPD of site specific information.'*
- An industry consultancy representative said *'if behind this IPG area this stuff is available the less we have to bother your guys in the initial design. It frees you up. SSE do it and they have excel spreadsheets and single line diagrams of their network. The single line diagrams are not as useful as UKPN when you can do down and see the substation, but you can then from that map see the substation go to the spreadsheet and pull up that fault meter.'*

**Table 4:**

- A developer/installer representative questioned, *'did they say what the KPIs were?'*
- An industry consultancy representative asked *'can anyone can be registered to get information including network mapping?'*
- A developer/installer representative suggested that, *'I think KPIs probably need to be clear and stated in a summarisation made from the tables in the ICE.'*
- A developer/installer representative talking on the subject of network mapping commented *'This is not just a WPD problem, it is national problem. So I think it is best just to get an application in rather than assessing heat maps as these are often out of date and not indicative of what is constrained or where is available and accessible.'*

- A utilities company representative added *‘Our senior management think heat maps are a waste of time but I believe that they are important if they are kept up to date. They must keep heat maps up to date for them to be useful. I control a specific area and like to keep this up to date within my area. I would like to see more interaction using good heat maps.’*
- A law firm representative said on the subject of online services *‘yes I think there is enough information. Sometimes I have used UK power networks and they seem to be far more driven by technical online solutions to everything and seems like overkill. I like that WPD uses the human touch rather than just tech touch.’*
- A utilities company representative agreed, stating *‘early human contact is really valued and I like that you can get directly straight to a human rather than technological systems with WPD.’*



**Table 5:**

- A connections company representative pointed out that *‘most of the heat maps we have been using are completely out of date. Ideally, they should be updated monthly at a minimum.’*
- A developer/installer representative agreed, saying *‘a live, interactive map would be ideal.’*
- A membership organisation representative said *‘we don’t bother linking to the WPD heat maps because they are out of date. We would put them on the organisation website for members to use, but they are not useful. All of our members have been calling for this – they want to know where they stand right at the start. A heat map is the first port of call they would like to have. They don’t want to have to call an independent helper, but to be able to check themselves.’*
- A developer/installer representative pointed out that *‘we tend to use it right at the start of the process to see if there is grid availability or not. It helps to not look in the wrong place.’*

**Table 6:**

- A developer/installer representative complimented *‘the technology information on WPD’s website for ICPs (which is also available to all) is fantastic and an excellent*

*resource. The recently added information on land rights is also very comprehensive and useful.'*

- A developer/installer representative commented that *'land rights we deal with can be relatively simple but we would be interested in the technology information that is readily accessible on WPD's website.'*
- An industry consultancy representative added that *'projects between 1 and 5 megawatts do not provide enough of a saving to go outside WPD to an ICP.'*
- A developer/installer representative commented that *'the competitions connections code of practice has made things easier and WPD has made a lot available to ICPs and others.'*
- A utilities company representative pointed out that *'the onus is on ICPs to register to the site and DNOs should promote the competition out there but it is on ICPs to put themselves there.'*
- A developer/installer representative considered that *'the network capacity register information must be updated monthly, as well as constraints onto network mapping.'*
- A developer/installer representative added that *'capacity is the most important information to be given on a monthly basis.'*
- A developer/installer representative said *'companies must make commercial decisions on how the situation and industry evolves so more information always helps. The connections register is a good source of information.'*
- A utilities company representative agreed stating *'the number one question we are always asked is what capacity is available.'*
- A developer/installer representative highlighted that *'we also challenge the capacity offered; we offer our own expert management or voltage response service to avoid constraint.'*

**Table 7:**

- A utilities company representative felt that *'it is bit of an unfair question because I am involved in it. So, I think it is great.'*
- An industry consultancy representative stated that *'the fact that we can overlay the network on Google Earth is absolutely fantastic. This kind of network capacity mapping is only 11kV. If it was 33kV, it would be even better. It is only at 11kV and it is a network constrained to size so it needs to move up the voltages and take account of back-stream constraints.'*

- An industry consultancy representative commented that *'if it could be like a crystal ball where it tells you how it would be in two years, that would be good too.'*
- A connections company representative said that (s)he is *'keen on seeing that WPD do not just rest on what it has made available but continue to push on to make more and more available. In terms of the competition and codes practice, there is a standard matrix for doing many small connections up to 200kVA and we need to keep expanding that quickly. To do that, more information needs to be made available.'*
- A connections company representative pointed out that *'one thing another DNO does well is a monthly email newsletter. I am not aware of one which WPD does. It is very useful in that it summarises views from workshops like this and whatever they are doing and just gives you that brief update.'*
- An industry consultancy representative agreed that *'that would definitely be useful.'*
- A utilities company representative raised the point that *'one thing WPD has to consider is how one would know how to get onto the list to receive the newsletter. It is no point just producing the newsletter.'*
- A law firm representative felt that *'it has got so much better. There did not use to be any so with the introduction of the heat maps, it was a revolutionary for DNOs to provide that information. The only thing I would like to see is for them to tackle the issue of confidentiality with queues. It would be very helpful to get information on that.'*
- A developer/installer representative pointed out that *'that is actually already there on the website.'*
- An industry consultancy representative said *'we did not know that existed. It is fantastic but we do not get informed about it enough to make use of it.'*
- A developer/installer representative highlighted that *'WPD is the only DNO which regularly updates when their technical information has changed. It is awesome and I love it.'*
- A connections company representative pointed out that *'UKPN also does that but it appears that you have to be on the mailing list for that to happen.'*

**Table 8:**

- An industry consultancy representative commented that *'certainly Google Maps is great and we started using it to create graphics for clients about where they can*

*connect in to - much easier to show them a plan instead of just saying it to them. You can see where the site is, it's much easier to do that.'*

- Facilitator asked *'are there more updates on website?'*
- A utilities company representative responded that *'we do detailed maps, but they are the same as statutory so they have to be up to date as our guys rely on them – if we put an asset in the ground for WPD, we have to have the information to them in 5 working days.'*

**Table 9:**

- An industry consultancy representative said that *'you can download information from WPD and see the power of substation and you get a number back, but it's meaningless, so when you submit the total quotation, it's completely different. There should be a way of understanding how out of date the information is.'*
- A developer/installer representative said that the *'WPD mapping is very helpful, fantastic. Still the market-leader on that is Scottish Power, their online work is excellent, being able to dig down to very reliable information from cable sizes and the transformer ratings of Scottish Power is second-to-none.'*
- A developer/installer representative said that *'anything about capacity building information has to be linked to National Grid. National Grid is going to realise information soon about its grid points.'*
- A connections company representative said that *'moving forward with self-determination, the discrepancies in the information provided online and in contracts have been signed on that basis, this will be very significant.'*
- A developer/installer representative queried *'the value of the online register and ICPs.'*
- A developer/installer representative thought that *'when there are major changes in high tech information, we need something a bit more proactive in terms of educating on these things.'*
- A connections company representative said that *'the information provided to stakeholders needs to be up to date, information that you can trust.'*
- There was general agreement on this point.

**Table 10:**

- Generally, attendees were positive about this. It was very specific to a technology/innovations company representative but as relevant to others at the table.
- A utilities representative stated that *‘WPD did quite well on this. Generally, they are good at promoting and providing good access to information.’*
- A technology/innovations company representative requested that *‘WPD should provide information in regards to section 15 like which elements are not contestable, for example a remote telecom unit which is critical to integrating and section 16, broken down by geographic location, technology type, intervention of ICPS, number of requests, connections made, DNO. The information has to be by region as it is very sensitive information. Also it should be made clearer what is contestable and what is not. My company develops a model that is based on this information. WPD currently reports to Ofgem but the information, in the form of summary and reviews, should be made accessible to stakeholders as well because Ofgem takes time and it would be better to receive it directly from WPD.’*

**Table 11:**

- A developer/installer representative raised the point that *‘the map for 33kV substation is missing.’*
- There was a consensus on the table that actions taken by WPD in this regard are comprehensive and there is nothing else that other DNOs are doing.

**Table 12:**

- A connections company representative highlighted *‘generally, pretty good. The only thing missing is the knowledge as to where to get that from? Who do we contact? It’s not the information itself but rather the problem is with the availability. Though generally good, there are times when there is some information missing due to the fact that the information that is available varies across the 4 different regions and there is a lack of standardisation among the 4 different license areas that WPD operate in. If not able to standardise then put 4 different versions with respect to the region/ company.’*
- “ WPD’s website is the best of the lot, it lets us see a lot of data and feed into our system unlike the other DNOs. ”**
- A connections company representative argued that *‘the 11kV cable routes are hard to get, the cable information doesn’t go that far and the data should be available. There needs to be online access of the 11kV cables. It’s difficult if we are in the scoping phase and I want to be able to do some homework before hand before I come to you as I’m not ready to engage with you before I have done some of my*

*homework. I want to know what would and/or generation is needed and the size of the cable. It's not just the cable routing but the policies surrounding it. Nobody is asking for a physical hard copy but rather online access which should be made available for the stakeholders.'*

- A connections company representative said *'WPD's website is the best of the lot, it lets us see a lot of data and feed into our system unlike the other DNOs.'*
- A connections company representative added *'The WPD website is quite good in comparison to other DNOs.'*

### **6.3 Do you have any comments on the actions for service provided post connection offer acceptance section of the ICE work plan?**

#### **Table 1:**

- A technology/innovation company representative raised the point that *'when we get down to knowing what queue management actually means - if we have milestones then they need to be applied consistently and fairly. It may be a bit early to say that.'*
- An industry consultancy representative commented *'perhaps some better information management.'*

#### **Table 2:**

- A developer/installer representative stated that *'WPD is miles ahead of anyone else, and very easy to deal with, in my experience.'*
- A developer/installer representative felt that *'there needs to be an ongoing two-way dialogue on progressing the project. The more dialogue you have about where stage payments are needed, how viable the project is, and the better for both parties involved.'*
- A developer/installer representative complained *'quite a few of our sites may go out of business. For us, we have gone from 24 viable sites to 8, which has now become 6, many of which have dropped due to WPD lead times. We have paid the money, how quickly can we get the connection is the real issue.'*

#### **Table 3:**

- A developer/installer representative felt *'there are a couple of good points here. The engagement post connection is how we get that project done. I would expect to see a nominated point of contact and what we expect from them. That should be a minimum. That is an Ofgem minimum standard, I think, and seems to be fairly well ignored and seems to be we have to drive it.'*
- An industry consultancy representative agreed.

- A developer/installer representative said *‘they all struggle with this as this is the bit that gets handed over and you’re chasing all over. The successful one is where you have a project manager who can see it all through. We don’t seem to have dedicated project managers whose role is to see it all together, they all have other roles. I think you’ve got to have people just doing project manager. If you just get a guy whose turn it is that day and his day job is something else then it doesn’t work. He has to have time to do it and know about it. At the moment it’s almost case on case, it depends which bit of their organisation they’re in, it varies very much from each job you get.’*
- An industry consultancy representative agreed saying *‘engineers get pinged to do project management, they’re not trained project managers. It is a specific job. The construction industry is how it should be done.’*
- A developer/installer representative said *‘they’re stretched pretty thinly and they get side swiped. A classic WPD example was where the protection guy did not decide till late that we needed protection tripping. We’d do it with a microwave, this would need to be 15m high and the planning commission wouldn’t allow it. We ended up going with a fibre optic, cost a fortune. In my view it was WPD’s fault. We didn’t know we’d need it and then couldn’t get planning for it. It’s in your bailiwick and your fault its delayed 6 months, and we’re paying a fortune for fibre optic. We need to know we need something up front.’*



**Table 4:**

- A law firm representative commented *‘we have been focusing on incremental improvements in connection times, acceptance of offer to delivery. We have developed several initiatives including one that involves money getting to the right place fast enough and another measuring own ability to open up instructions for examples ‘within 2 working days’ to improve service provided by WPD.’*
- A utilities company representative said *‘should try to get standard consent form and a standardised process and driver in place regarding this.’*
- A developer/installer representative commented that *‘there is an issue regarding lease time for sites and the length of lease term that DNOs will accept for substations. Substations used to be there “forever” this is now not necessarily the case, for example solar panels may be gone in 25 years and not replaced or replaced by something else. This needs to be considered to ensure the terms work.’*
- A utilities company representative stated that *‘yes we traditionally like to go for a 99 year lease.’*

- A developer/installer representative commented *'it's a problem for landlords mostly.'*

**Table 5:**

- A developer/installer representative commented that *'WPD has been very helpful, including by offering to take care of easements. The most difficult problem is with regard to capacity. They've offered to supply everything we've asked for, but how quickly they can supply it to us is a question.'*
- A developer/installer representative felt that *'the communication interface with individuals is generally very good.'*
- A developer/installer representative pointed out that *'ten of us are trying to get the same thing will mean long waiting times. DNOs have to give us support for the future and it's a thankless task, but we need help to understand what the future of DG is. It would help to have extra manpower with the right skills.'*
- A developer/installer representative raised the point that *'the situation is different with different DNOs. Others are not very flexible. WPD tends to be more flexible and more understanding with regard to getting connections in.'*
- A developer/installer representative felt that *'this creates a need to have a good relationship with a contact. You need that early to make sure it works.'*
- A developer/installer representative agreed, saying *'sometimes we lean too heavily on that.'*
- An industry consultancy representative commented that *'sounds like we need a WPD happy hour to build the right relationships.'*
- A developer/installer representative considered that *'it would help to have uniformity – each DNO can have the same process but with different requirements.'*
- A direct customer representative complained that *'networking slows it down for other people.'*

**Table 6:**

- A developer/installer representative emphasised *'the importance of communication for the project, the connection details, what the milestones are, what the flexibility is and what the possible changes will be.'*

- A developer/installer representative said *‘more phone calls before taking a project away are useful, as well as more warning signals, although we have had those signals from an engineer at other sites. Maybe it is more a question of consistency.’*
- An industry consultancy representative stated *‘stakeholders should get involved quickly, be aware of plans, have good communications and improve personal relationships. Localism has had a big improvement for WPD recently.’*
- A developer/installer representative made the point that *‘localism only works with transparent escalation if you are not getting the service you should.’*
- A developer/installer representative considered *‘it is easier to get a portfolio review meeting with other DNOs due to regional structures. Other companies are more experienced at dealing with clients. For example, DNO and transmission licenses are from the same person in Scotland. I think portfolio customer meetings would help for large portfolio developers but should only be offered on request.’*
- A developer/installer representative commented *‘National Grid and WPD work together with a common agreement and common messaging between all groups. Perhaps there should be more engagement at a higher level and better access overall.’*

**Table 7:**

- A utilities company representative emphasised that *‘standardisation is important as responses are not consistent across the licensed areas and sometimes even within the licensed areas.’*
- A connections company representative said that *‘one of the main things is when WPD are talking about training staff and having standards for the designers and office based staff, the South West and Wales always lag behind the Midlands for some reason. There needs to be some consistency across the entire WPD business. The Midlands seems to embrace change more easily. There seems to be a bit more of a battle between the South West and South Wales’ part of the process. The gap needs to be closed.’*
- A law firm representative agreed that *‘more consistency across the whole procedure particularly with WPD Wales is important. They are very inconsistent with their approach so you get different responses from them and different costs which we have to pay for. I see there is a standard being set up which is a fantastic idea but this has often been left to the last minute.’*
- A developer/installer representative complained that *‘addressing the consistency issues across the whole of business delivery is important. I find it very frustrating.’*

**“ Addressing the consistency issues across the whole of business delivery is important. ”**

- A developer/installer representative commented that *'the 11kV designers tend to be more bound to old systems such as agreement hard copies and post systems. I would like to have electronic communication with them.'*

**Table 8:**

- An industry consultancy representative said *'it's still early days but what we're doing at the moment is having multiple meetings with WPD, not sure what the norm is, it's an upgraded supply for a client, and that's really useful - we have one on Friday. There was a bit of push back to start off with, we meet up in Princess Park, and we are able to sort out issues around the table, there is a whole host of things to sort out.'*
- A university representative added that *'I've got one tomorrow in one of our new-build energy centres, and it's all very positive and responsive, I'm finding it far more responsive now than it was three years ago. Everyone around the table at the same time improves the flexibility, making sure we don't cause each other any problems.'*

**Table 9:**

- A developer/installer representative observed that *'the ability to get the engagement of the actual delivery early on in the process is important.'*
- A developer/installer representative argued that *'the whole design approval process needs a lot of work. All the DNOs are as bad as each other on this. An overhaul is needed.'*
- A developer/installer representative contended that *'we often ask for a staged design approval to get that process moving. You should be able to get a firm document that says that you've been approved in this and this, and not in that, and so on.'*
- A connections company representative stated that *'we always get the feedback "design not approved". But we need more feedback than that.'*
- A connections company representative claimed that *'other organisations are much better at having a meeting with everyone around the table - it's all about engagement.'*

- A developer/installer representative suggested that *‘we need an energisation date in the programme since we need to get feedback as to whether the plan is at all plausible in order to go to investors. Trying to get a simple email from WPD saying that we’ve spoken to control is too hard. That information has got to be committed to an email or letter, so that we can show it investors as an indication of the viability and plausibility of the project in question.’*
- A developer/installer representative underscored the *‘importance of getting a promise to provide us with fault level and harmonic info that we require in order to progress the design, i.e. within two weeks you will have x, y, and z.’*



**Table 10:**

- There was very little/no experience of this at the table.
- A technology/innovations company representative stated that *‘it was a good experience, although I have not been involved much, but there is some inconsistency.’*

**Table 11:**

- A developer/installer representative said, *‘it would be useful to have timelines for each section.’*
- A developer/installer representative commented that, *‘switchgear delivery times are extremely slow.’*
- A developer/installer representative questioned *‘why are time frames so off from reality? The issue is not what is causing the delay, but just that we don’t know until the final day that there is going to be a delay. We get no timeline. We are expecting energisation on such a day and it suddenly pushed months forward, which has a lot of financial implications. Then a month later, it gets changed again and we are not ready for it. Visibility of the timeline and of key milestones early can help us a lot. This would even be useful even if it is just with estimations and after all legal processes are completed.’*
- A developer/installer representative mentioned that *‘we need the DNOs to get involved in signing off the technical solutions, which right now is really hard. DNOs can give us specifications for load controls- which is very plausible.’*

- A developer/installer representative raised the point, *‘some commercial/private companies can do the work a lot faster, why?’*

**Table 12:**

- A developer/ analysis representative said *‘as far as my experiences go, I’ve been able to engage with the design teams , able to engage face to face with teams, I’ve got no reason to complain in terms of accessibility to the teams and the feedback from the team. I’ve dealt with a lot of people with South Wales and West Midlands and I can’t complain about the feedback from any discussions from these 2 areas.’*
- A connections company representative pointed out that *‘sometimes it’s difficult, we all expect something that won’t interrupt them from doing our job. They need to specify how much communication is appropriate. In essence, we don’t want to stop them from doing their job for us and others.’*
- A connections representative complained that *‘developers find statutory powers for cable routing problematic. DNOs don’t use their statutory powers to go across private lands which is very problematic for various developers. Developers assume that they will use their statutory powers but the reality is WPD don’t and this issue has to be made clearer.’*
- A membership organisation representative suggested *‘maybe you could outline the statutory process in order to provide clarity.’*
- A developer/installer representative states that *‘in our experience, WPD was reluctant to accept our help with the statutory power situation and once we had stepped into the process they were reluctant to allow the developers to help speed up the process. There needs to be more of a discussion regarding this area.’*
- A connections representative pointed out that *‘as a developer, you’re willing to throw in more money for this instance and there seems to be some resistance to accept help from developers.’*
- A developer/installer representative said *‘the process is more fixed and doesn’t fit the current commercial expectations with the developers.’*

**6.4 Do you have any comments on the actions for extension of contestability section of the ICE work plan?**

**Table 1:**

- An industry consultancy representative asked *‘are you doing convertible quotes? There’s probably a cost to WPD to doing that.’*
- A technology/innovation company representative said *‘what would be useful is an idea of timeframes for the DG bits.’*

- A utilities company commented *'I would agree with that.'*

**Table 2:**

- A developer/installer representative commented *'I don't think people quite appreciate what the implications are for changes to the extension of contestability. My understanding is that if you are an accredited contractor, they may not put any additional requirements on you. However this message isn't getting through to everyone. I wouldn't want to work on your safety network unless I was accredited with your rules. We want to work with the DNOs, but we are finding that DNOs are putting barriers up that don't need to be there.'*
- A developer/installer representative made the point that *'a lot of people in this country still don't know what an ICE is. The DNOs can't do much more, they have given that information.'*

**Table 3:**

- A developer/installer representative asked *'are we moving to convertible quotes with WPD? As that's made life a lot easier, before that we had to go back several times. That's ideal, you don't have to decide up front. Needed and makes a lot of sense. They save a lot of quotes.'*
- An industry consultancy representative said *'I second that. Last job had one and we went with WPD as it was a reasonable offer.'*
- A developer/installer representative said *'if the pricing is quite reasonable then I'm quite happy to hand the whole job over, but it needs to be delivered and we're still given the tricky bits and then we're back round the loop.'*
- A developer/installer representative argued *'there's a bit of an obsession with ICPs there. We use them, but don't hand the whole job over to them. The reason is they charge a fortune so we do some of it ourselves. The more you load the ICPs the harder you're making it for us to piecemeal it and pull it together ourselves. We know how it works and it gives us that bit of flexibility.'*
- An industry consultancy representative said *'I think that's just down to terminology, we're really talking about independent contractors rather than a package provider as often your commissioning guy is very different from your provider. I think that the use of the term ICP there is misleading.'*
- A developer/installer representative continued *'nothing says you need one ICP. I've had three on one job, who do you expect to sign it off? I'm paying one to commission, one to install the switch gear and one to put the wires in. The only person in control is me. If you ask one of them to sign, you then have an awful fudge*

**“ There's a bit of an obsession with ICPs there. We use them, but don't hand the whole job over to them. ”**

*to get the one who did the most to sign and give him back to back indemnity for the other work. The only overarching player is me. This one ICP does not exist on a project. It's us. You can check the accreditation of all the people involved, but the model does not recognise that there is not one.'*

**Table 4:**

- A developer/installer representative said *'it doesn't really do anything, it just counts volumes as a benchmark. I don't know what it is going to be, currently it is just quantitative to work from for in the future. There appears to be no qualitative aspects in there yet.'*
- A utilities company representative added *'I imagine it will develop over years, now it is too soon to tell.'*
- A utilities company representative stated, *'if ICP checks are good then there should be a reduction in checks in the future.'*

**Table 5:**

- A connections company representative complained that *'the only bone of contention I would have with WPD is that certain parts of WPD are extremely competitive to the point where an ICP or any other entrant could not compete. This goes against the Ofgem rules and regulations, but it's a grey area because it's only pockets. We just couldn't compete because of cable costs, switch gear, and other costs, and have had to walk away and encourage our client to go with WPD.'*
- A direct customer representative made the point that *'this is the first time I have heard this.'*
- A connections company representative said the problem is *'only with WPD and only in certain patches.'*
- A membership organisation representative pointed out that, with WPD, *'it's a give and take: you can't get what you want in the time period you want it, but costs are very low.'*
- A connections company representative reiterated that this *'goes against competition law.'*
- A membership organisation representative asked *'what is the law going to do? Impose standard prices for cabling and engineering kit? This is a normal situation of a small market entrant against incumbents. You can sometimes see large incumbents do things at a loss because they make money elsewhere and that should be tackled. An open book approach should be considered.'*

- A developer/installer representative pointed out that *‘WPD provides broken down prices and in most cases, WPD is more expensive than ICPs. It would be good for WPD to be cheaper generally.’*
- There was consensus on this point.
- A developer/installer representative felt that *‘there are bottlenecks in ICP certification.’*
- A connections company representative raised the point that *‘the lack of uniformity of gear is a serious issue. Even within WPD – up and down the country – there are different requirements, including copper vs aluminium.’*
- A developer/installer representative pointed out that *‘there are some differences between Cornwall and South Wales in terms of kit. The more standardisation we can get, the better. The differences between DNOs are still relevant. WPD’s specifications and requirements, however, tend to be a little more mature than the others.’*
- A developer/installer representative highlighted that *‘all the specifications are available on the website and you get an email if they change.’*
- A developer/installer representative felt that *‘we like being able to get specifications on the website.’*
- A membership organisation representative asked if this *‘should involve the ENA? Shouldn’t this be standardised? Everyone hides behind health and safety.’*
- A developer/installer representative commented that *‘we have struggled particularly with earthing. It has been quite painful.’*
- A connections company representative pointed out that *‘all projects are in process at the same time of year, usually around March.’*
- A membership organisation representative suggested *‘better training, including apprenticeships. However, ICPs can’t afford to take on internal people to do earthing designs.’*
- A developer/installer representative said *‘if you want a good chance of success, the best route still feels like complying.’*



**Table 6:**

- A developer/installer representative pointed out *‘the actions are very much welcome but we will wait for the proof of pudding – we have got to try it first.’*
- An industry consultancy representative argued that *‘any project less than 100 kilowatts is not worth using an ICP for. These new actions would encourage one to use an ICP if there was a new larger project coming up.’*
- A developer/installer representative said *‘we have never used ICPs – they have never been worthwhile to use for us, as we have never seen a substantial enough saving.’*
- A developer/installer representative claimed *‘my previous experience suggests it is not worth using an ICP, you may end up doing a project twice unless you know you are using an ICP from the start or applying to both WPD and an ICP at the same time.’*

**Table 7:**

- A law firm representative felt that *‘it is a good idea as long as there are enough ICPs to cover competition.’*
- A developer/installer representative stated that *‘we provide the internal connections and also engage other ICPs so we need to be aware of the code of practice. The self-assessment from the point of connections is something which only WPD seems to be doing.’*
- A developer/installer representative agreed that *‘it is good to see these actions being recognised and committed.’*

**Table 8:**

- An industry consultancy representative said that *‘what we’ve done to date is we’ve had a quote from WPD and from an independent DNO, and WPD have been as competitive, if not more, than the independent one.’*
- A utilities company representative commented that *‘lots of it depends on the barrier, but is it really a barrier - you know, are WPD being deliberately obstructive, is there a law of unintended consequences?’*
- An industry consultancy representative joked *‘welcome to the free economy!’*
- A utilities company representative said *‘we quoted a job in the North West for the IPC which was vile, but you can’t decline from the position we’re in so the only way*

**“ We do contestable and non-contestable work. Where does WPD draw the line between contestable and non-contestable? ”**

*you can decline gracefully is by making it cost prohibitive - that client could have said you provided barriers, that they had no choice.'*

- A utilities company representative thought that *'your point about the free market, an area like this is well served but rural areas of Wales don't have local construction companies. Instead you have to recruit local staff, whereas in your own footprint you have all of that in place whereas the DNO is already based there - an operation with a process. That's why I say it depends on how you view barriers, you can plug it in and switch it on.'*
- An industry consultancy representative and a university representative agreed that *'it depends on how you view barriers.'*
- An industry consultancy representative added *'I don't think you can regulate, I think if people think they can do a better job than WPD then by all means do it, but the easy jobs that will make them some money and cherry pick...that's life isn't it. If your central heating goes, you can call up three plumbers and they could turn around and say they don't want to do it.'*

**Table 9:**

- A connections company representative noted that *'any DNO wants to protect the network. But how far does WPD go? We do contestable and non-contestable work. Where does WPD draw the line between contestable and non-contestable?'*
- A connections company representative contended that *'if it's safely done, electrically the same, it's only good for the customer.'*
- A developer/installer representative asked, *'given that we have to have non-contestable works, how can you extend your non-contestable works? The arrangements are always informal. Will WPD eventually let a 33KVT off when it's not working on a live network to be done purely by a contractor?'*
- A connections company representative noted that *'for the customer it doesn't matter who does the work, it matters how much they're paying for it.'*
- A developer/installer representative pointed out that *'I can't think of any stand-out leader in this area at the moment. A lot of the focus of these discussions have been around LV.'*
- A connections company representative agreed.
- A connections company representative argued that *'we just need to give the customer the best product.'*

**Table 10:**

- Attendees agreed that WPD is doing the right thing and that competition is good.
- A utilities representative stated that *'it is a combination of good and bad things like what is contestable and what is not is omitted - multiple quotes for contestable works provide more transparency.'*
- A technology/innovations company representative stated that *'it should be more open and show what things are contestable. Some cheap ones should be introduced. DNOs are expensive. It is unfair for the DNOs as it gives advantage to ICPs and other sectors because they can change and we cannot, but its competition and we don't complain about it.'*

**Table 11:**

- A developer/installer representative commented that *'it is difficult to manage the ICP. Often, we are not getting feedback on how many times design submissions have failed. However, I know that WPD seem to be better than Northern Power Grid.'*
- A developer/installer representative agreed and suggested that *'there needs to be more visibility for ICPs.'*

**Table 12:**

- A developer/installer representative commented *'My view is positive! The model itself will work very well.'*
- A developer/installer representative added to the previous point stating that *'that's quite open really, it allows for more contest in the market.'*
- A membership organisation representative said *'it really depends on what comes in to the contestable category. It depends what falls into the category, make it more clear for the developers, better dialogue between the developers and WPD in order to expand knowledge on certain areas would improve the contestability section.'*
- A developer/installer representative raised the point that *'the rates of WPD are quite competitive, it's often quite hard to beat it.'*
- A connections company representative commented *'that's my experience as well. South Wales especially is very competitive.'*
- A developer/ analysis representative pointed out *'though the system might be opening up to be more contestable, their rates are already very competitive therefore this section doesn't make a huge difference to the developers.'*

- A connections company representative highlighted *‘the problem is regulating this process. The problem is the lack of specification, WPD doesn’t specify what the minimum size of cable that you’re capable of putting in and whether it could be negotiated depending on the developer’s specifications. This policy needs to allow for some leeway in decisions like that.’*
- A developer/installer representative commented *‘you have to be very careful regarding protective measures in terms of specification.’*
- A membership organisation representative considered the possible effects of this stating that *‘does it cause delays for WPD?’*
- A developer/installer representative highlighted that *‘the cable policies need to be changed.’*

## 6.5 Do you have any comments on the actions for offers and agreements section of the ICE work plan?

Table 1:

- A technology/innovation company representative asked *‘what do 5.3 and 5.4 mean?’*
- A utilities company representative asked *‘the e-signatures, are you going to extend that to connections agreements?’*
- A technology/innovation company representative stated *‘we need reasonable time to agree to the connections agreement. Timely issues and connections agreement.’*
- A utilities company representative commented that *‘we have a lot of sites now, the systems show that we don’t have connections agreements in place.’*
- A technology/innovation company representative stated *‘two days we don’t have a connections agreement, and the signatory is in USA. We’d have to fly him over. We need timely connections agreements.’*
- A utilities company representative felt that *‘e-signatures would make things a lot easier and the process quicker.’*
- A technology/innovation company representative agreed, stating *‘electronic connections agreements would be useful.’*

Table 2:

- An industry consultancy representative felt that *‘some of the content of the offers have progressed quite well over last 12 months, for example inclusion of the possible restraints the application site may experience. However, I am doing some due diligence for developers and they want a precise figure for the connection as*

*the banks are asking them. It would be nice to have a bit more context on the offer to enable a more accurate price estimate.'*

**Table 3:**

- A developer/installer representative said *'I think there should be a standard as to when connection agreements are available prior to energisation. The connection and agreement need to be in place before it is turned on. It is hopeless someone coming to turn it on and saying you haven't signed. You need those a month, four working weeks before. Lawyers get involved, that's the problem. It is a commercial document, you've got to work out whose going to sign it and debate it and the documents are a pair. WPD has to issue them a while before the site goes live. If it ends up being a tripartite process it's an even lengthier process. If you guys send it too late you can't say we'll leave the site off. It should be with the asset owner, not the ICP. This only happens with WPD and not in all WPD areas.'*
- An industry consultancy representative agreed
- An industry consultancy representative said *'I think they're fair, particularly about where you have an agreement there should be a timeline (5.4). A site I'm dealing with now agreed a capacity, only installed half, but now after two years installed the other half, there's nothing on the agreement to say that is not our capacity.'*
- A developer/installer representative felt *'it's not clear where WPD stands, I'm continually being bombarded by solar guys who want us to have the connection, and I don't know where WPD are on conversion. That's reasonable, if it needs different parameters then we need to start again, but if not then we should go ahead.'*

**Table 4:**

- A developer/installer representative said *'WPD should ask about 'have I asked for one but you are not able to offer one', not just who has accepted one.'*
- A developer/installer representative commented that *'there is an issue with interactivity in queue management before acceptance. The WPD process is quite clearly described. It is difficult the first time you have been through it but I can understand well after a few times and I am now comfortable with it as I can see where I am in the queue. The other DNOs are not clear about this and I feel left in the dark. The WPD process is clearly laid out and is good but I would like to know who else is in the queue which is not ever meant to be divulged. There should be some collaboration when several people in the queue are working in the same area and could collaborate to improve costs and logistics if it was clear who was in the queue.'*

- An industry consultancy representative added *'you can't force collaboration on your connectors but WPD could definitely encourage it.'*

**Table 5:**

- A developer/installer representative commented that *'if we have a grid offer, it'll happen and it'll happen in a certain timescale. Things evolve and move along the way, but it's about getting that clarity along the way that's been an enabler for getting the projects underway. Generally it's been OK and reasonably good. It's a relationship issue and depends on who you know at WPD.'*
- An industry consultancy representative raised the point that *'WPD will have data on post-offer timescales which could be useful for risk management. Would it not be useful for developers to have this risk data?'*
- A developer/installer representative said *'all we look for is visibility on anything we don't know about and we don't know about it until we see it. Our world revolves around certainty and financing projects. You don't have certainty until you know that the project plan will fall in line.'*
- A developer/installer representative agreed, pointing out that *'the only other interesting bit that's happened more recently is that DNOs are asking specifically for planning offers. That's a new interesting dynamic. They're taking capacity away – and fairly so – depending on planning at certain deadlines. The planning issue is a little bit of pressure, but it's reasonable. The grid offer is the first part of the process and planning is difficult. If you can show appeal processes, then DNOs are generally quite relaxed, but if you sit on it, then no.'*
- A developer/installer representative agreed and said *'there's a real risk that more developers will sit on sites.'*
- A membership organisation representative highlighted that *'this is a very difficult situation. What could be the process to get rid of "bad" developers?'*
- An industry consultancy representative argued that *'it's all to do with trust, relationships, and reputation. Business is done very often on the basis of reputation. WPD is constrained by regulatory requirements to treat "bad" businesses the same as "good" businesses – this could be something to take back to the regulator.'*



- A membership organisation representative suggested *‘a blacklist of bad developers. We have an industry code and if you don’t follow the code, you will get kicked out and won’t be able to operate in certain ways. Without this it can be difficult to rebuild trust and reputation. Other industries have learned at later stages, so why not put in the right checks and balances at an early stage.’*
- A developer/installer representative pointed out that *‘you’ll see a load of developers exit in the next months, so there is a lot of change afoot in the industry.’*
- A developer/installer representative complained that an *‘added complication is that some large projects are established as their own SPVs that are then sold. You can’t sell a grid connection, but you can sell a project. A grid connection is a big (possibly the biggest?) part of the project, but as an SPV it can be sold as it falls under the project.’*

“ There needs to be some more measurable targets such as specific actions or KPIs. ”

**Table 6:**

- A developer/installer representative said that *‘queue management is the main thing to work on, followed by the transmission distribution interface. WPD is quite good overall though.’*
- A developer/installer representative pointed out that *‘we still have no connection agreements for sites that are energised on some projects WPD have worked with in the past.’*
- A developer/installer representative stated that *‘a connection agreement given on the same day as the connection offer would be best, or at the very least a majority of the document given early with red flags that need to be filled in, especially when working with DNOs.’*
- A developer/installer representative commented that *‘these are good issues to pursue but there needs to be some more measurable targets such as specific actions or KPIs. However, it is always good to show where people can find out more, create hyperlinks on documents and direct to the right part of WPD’s website.’*
- A developer/installer representative added *‘WPD are far easier to deal with than other DNOs such as Scottish power. WPD are more straightforward to come to an agreement because of our strong individual relationship (working in Wales).’*

**Table 7:**

- A utilities company representative felt that *‘it is perhaps not as proactive as it might be in terms of not being asked questions. You would have the answers if you are asked questions but quite often you are not asked how planning is progressing.’*

- A utilities company representative stated that *‘SSE is erratic. They can do nothing or they can do something incredibly impressive without warning. UKPN are okay. I think WPD needs to be a bit more proactive than they are.’*
- A utilities company representative commented that *‘there is no problem with it. I am just surprised when offers are just sat there and no one is chasing us to see where we are progressing with it. It makes me think there that there are others there who haven’t been planning and are just still sat on the capacity.’*
- An industry consultancy representative argued that *‘it is very complex so when there is interactivity, it can be very complex. WPD has been good in updating us about their new processes. I am very happy.’*
- A connections company representative complained that *‘WPD were slow to move into the 21<sup>st</sup> century with the issuing of documents. They were slow to react to the framework adoption agreement. It was the start of this summer where we were required to sign the tri-party agreement and if we tried to change the adoption agreement in any way, you may as well throw the project in the bin. They have adopted a new framework now allowing you to pass the document around, but they have been very slow in doing it.’*
- A connections company representative pointed out that *‘Northern Power Grid has been doing it for one year already.’*
- A connections company representative highlighted that *‘we did find that we were chasing connection agreements well down the line to the point where on a lot of projects the project engineer would be questioning whether or not to cancel the connection because the agreement had not been signed by us or the customer. Is it for us to chase or is it for WPD to sort out? It is just poorly managed paper work.’*
- A developer/installer representative complained that *‘we always have to chase for them ourselves. I find myself 3 hours before the connection running around trying to sign the connection agreement, having received it late.’*
- A law firm representative pointed out that *‘on the legal side, it is telling that the formal offer is referred to as a contract. A lot of unsophisticated customers don’t realise that the formal offer can be changed by WPD because they think that it is a binding contract by WPD.’*
- A law firm representative added that *‘getting things moved electronically is very helpful. Another DNO gave me a timeline which was really great. WPD may do it but it has never been offered to me. It is really useful tool for various agreements.’*
- A connections company representative agreed that *‘if it is already done internally, then the customers should be able to have it as well.’*

- A developer/installer representative raised the point that (s)he has *‘to be more proactive with the relevant offers and agreements relevant to connection and making sure they are in place with the correct signatories.’*
- A developer/installer representative said that *‘the timeline thing is very important. Anything which speeds up this process would be great.’*
- A developer/installer representative felt that *‘there is some good stuff in here. Some of it is still ongoing. It is good to see progress.’*

**Table 8:**

- An industry consultancy representative said that *‘I think it goes back to what we were talking about earlier. If you go to an area and bag 50 MW of grid connection, you’re taking all the capacity in that area on a speculative basis. Goes back to freeing up capacity, queue management and all of that.’*
- A university representative added that *‘you would think you would have to understand your queue and demand elsewhere.’*
- An industry consultancy representative made the point that *‘further down the line, if someone bags the slot then wants to sell it off you’ve got a black market.’*
- A utilities company representative commented *‘I’m convinced it’s happening.’*
- A university representative added that *‘we get the same with properties.’*
- A utilities company representative said *‘it’s the same with properties, it’s all speculation...at the end of the day. WPD can’t be a regulator of the queue - as long as whoever is number one on paper and presents a bonafide case, that’s it.’*
- An industry consultancy representative said that *‘they need to say, we need to see progress - like “you’re a day late on planning applications”.’*
- An industry consultancy representative made the point that *‘it’s a chicken and egg situation, is there any point speaking to the land owner?’*
- A utilities company representative raised the point that *‘being a bit controversial, but if you want to reserve a cottage for a summer holiday, you have to pay a deposit. Perhaps to reduce the speculative side of it, you could use a deposit system.’*
- An industry consultancy representative commented *‘if you’re a developer you often have a limited budget upfront to roll something out - someone looking to do a small development may end up thinking, let’s not do this, even when they may be a legitimate developer.’*

- A utilities company representative responded *‘as they say, sort the men from the boys. Of course they have limited access points - you’re an island in the West Midlands.’*

**Table 9:**

- A connections company representative argued that *‘on a standard collection basis it’s quite straight forward, but sometimes I think that the connections get forgotten. At the last minute WPD would realise that a connections agreement hadn’t been produced. This hasn’t been across the board, but you do sometimes see some agreements coming across after the agreement.’*
- A developer/installer representative noted that *‘the assistant planner seems to be too busy, and that chasing agreements is still something that we do too much of. Can’t the assistant planner give some work to others in this regard?’*
- However, a connections company representative maintained that *‘often it is possible to connect without the official written agreements in place.’*
- A connections company representative asked whether *‘there’s now any chance that a connection won’t be allowed even though the legal agreement isn’t formally in place?’*



**Table 10:**

- Attendees at the table had little/no experience of this.
- A technology/innovations company representative stated that *‘the formal offer is complicated and fault level isn’t clear so we are vulnerable and have to take risks. It would also be better if a reasonable time to agree to the connections were given to us. Make available design acceptances; checking compatibility and other elements which are directly related to connections, like the feasibility of building.’*

**Table 11:**

- A developer/installer representative mentioned that *‘the one problem I have with the formal offer is that sometimes fault levels are not made clear in the connection agreement and I have to take risks. It’s written as a letter but needs to have a separate page that makes it easier to see the key information.’*

- A developer/installer representative felt that *‘availability on a single circuit connection needs to be added to the connection agreement for more visibility. We need a rough guide or some number for financial modelling.’*

**Table 12:**

- A developer/installer representative felt that *‘the land acquisition process was a straightforward process for the developers. Once you get the different parties to agree, the land offers and agreements are quite easy to follow. WPD needs to focus on solar energy with the new Government and the changing political climate. There might be potential problems with the connections.’*
- A connections company representative highlighted *‘a lot of these are covered in the previous discussions.’*

**6.6 Do you have any comments on the actions for the innovation section of the ICE work plan?**

**Table 1:**

- A technology/innovation company representative highlighted *‘funders have a problem – with innovation come constraints. With constraints, comes a lack of revenue. Unless that lack of revenue can be quantified, it’s difficult for a funder to sign on to it. It’s the knock-on effect.’*
- An industry consultancy representative commented *‘for me it’s getting the results of trials out. If there’s no evidence base, then there is a problem with funding.’*
- A technology/innovation company representative raised the point that (s)he *‘can understand the DNO’s problem, but that doesn’t help the funder.’*
- An industry/consultancy representative argued *‘from an evidence base you can warranty something. Without an evidence base, you can’t build up a recommendation to a funder. Unless there is something like that, you can’t provide the background. Innovation is great, but you need to publicise what is happening. There needs to be constraint management.’*
- A developer/installer representative highlighted *‘SPEN have a curtailment tool that they’ve trialled.’*

**Table 2:**

- A developer/installer representative stated *‘the most important thing is to communicate the innovation.’*

**Table 3:**

- A developer/installer representative said *'if I'm honest I think it's too long a list. What we've talked about this list is really simple, its motherhood and apple pie stuff. I'd rather WPD concentrate on the basic customer stuff and not have loads of resources tied up in loads of things. Being a touch cynical there's a problem that the eye is off the ball and not focused on the real problem of connecting projects in a timely and efficient manner.'*
- A developer/installer representative felt *'6.1 good, active management got to be good and 6.2 the same. 6.3 is the one we were mentioning, the stuff you have to provide, and I would add communication. In 6.3 you should add communications requirements. Dealing with BT Openreach even makes DNOs seem good. If you've got to get something in it takes time.'*
- An industry consultancy representative said *'the only thing I worry about with all this intertripping and active network management is when the client decides they're going for a PV or another bio-scheme they look at the set amount they're going to earn and if the system is not on they won't get payback and if we can't say this system will be on they won't get the same payback period and their interest will go away. They want to know they are earning a set amount each day, each month, each year and if they don't know that they will go away.'*

**Table 4:**

- A law firm representative said *'I found it quite surprising that there were so many initiatives connected with innovation and didn't know much about them. There is so little written in the work plan about this and if you went into granular detail there would be so much more to talk about on this in the plan.'*
- An industry consultancy representative agreed, adding *'it would be good to understand advantages and disadvantages to each innovation plan and areas where companies could collaborate potentially on new technologies.'*
- A developer/installer representative commented on the subject of inter-tripping stating that *'soft versus hard inter-tripping has been discussed a lot. I want more clarity on this between solar, wind and other, so that as a connector I am clear as to which inter-trip I require, all generations are currently treated the same which doesn't seem fair and is quite confusing for me as a connector.'*
- A utilities company representative commented *'we need to embrace technology rather than constraining technologies.'*
- An industry consultancy representative commented *'a strategy for this is very difficult. Working out constraints that may be put in place and the connector being fully aware of potential constraints.'*

**Table 5:**

- An industry consultancy representative felt that *‘it’s not very clear sometimes what the potential benefits will be within the energy scenarios as they evolve. We all talk about disruptive energy storage, but we need some quantitative or even qualitative data that would show how the technology would work and where it wouldn’t work. This would help in framing the techno-economic rivals in the perceived future. WPD should produce policy papers on what could work, such as on electric vehicles and what issues there are with them.’*
- A utilities company representative pointed out that *‘DNOs are already operating in the innovation space and we are tied with them. It’s about choosing those ones that are most likely to get results. There needs to be some regulatory caution about announcing innovation projects.’*
- A direct customer representative felt that *‘innovation is great because at zero cost, someone else is doing something we can look at and pick up. For example, we have put in our first battery storage and it went live two weeks ago. This is a concept project that we could roll out to other supermarkets. The innovation section is great.’*
- An industry consultancy representative asked *‘how is the connection with Innovate UK and the Energy Systems Catapult made and what is the connection?’*

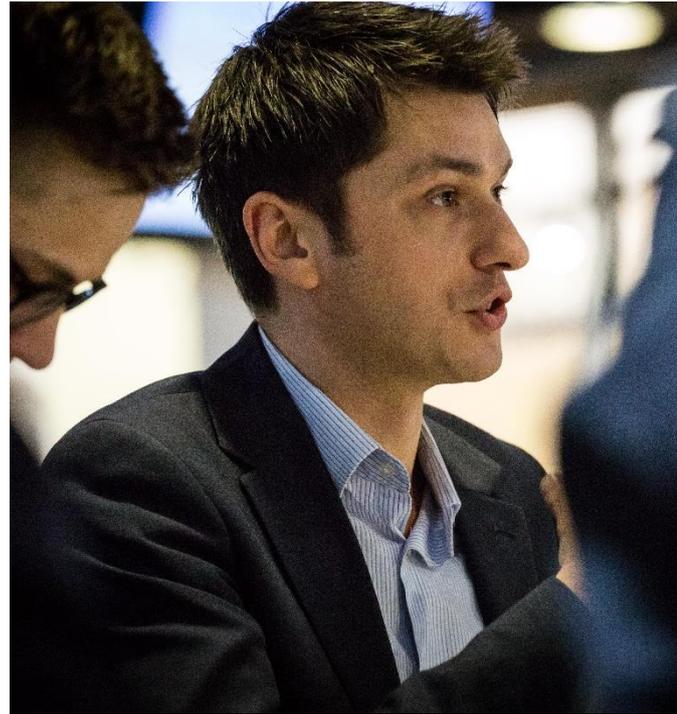


**Table 6:**

- A developer/installer representative mentioned that *‘it would be useful for all DNOs to discuss with the site engineers the things we can do to products to help out. We may be able to do things that competitors may not be able to do and the DNO should take this into account as to if our ability to do stuff is useful.’*
- An industry consultancy representative further added *‘we offered to do a connection but we should really be paid for that. There is a balance between that and the DNO reinforcing the network. There may also be scope for areas generating at different times with different forms of energy (due to sun and wind availability) to match peak/low capacity.’*
- A developer/installer representative said *‘that is true, solar is a good opportunity since it is a large demand item but is more predictable than wind.’*

Table 7:

- A developer/installer representative stated that *'it would be useful to have an explanation as to what all this is. A lot of wonderful innovation is suggested here but it is not clear how far into development they are.'*
- A developer/installer representative considered that *'maybe an explanation as to what they are and how they are progressing would be good.'*
- A developer/installer representative added that *'more detail is necessary here. I want to know which innovation projects are being implemented.'*
- A developer/installer representative agreed that *'there could be further action points about rolling out these innovations.'*
- A developer/installer representative commented *'we always try and sign up to any innovation. Anything that will get us connected quicker means that we are always engaged with any innovation.'*
- A connections company representative said that *'anything which is new technology to make that connection happen more quickly is good for us and other customers. I think the only other thing is that there are a lot of things on here which would benefit on going onto the newsletter. Just understanding what is being done from WPD's point of view is important so you are given the opportunity to feed into different projects which you might not know about. If not, it might be too late to get involved.'*
- A law firm representative felt that *'WPD has done well. They are open very much to innovation and ideas surrounding this. It is just getting the information again and being involved in the projects.'*
- An industry consultancy representative highlighted that *'they are the best DNO by far for innovation. I wasn't aware there were quite so many schemes and technologies going on so just being able to find out and take part more.'*
- A utilities company representative agreed that *'they are the best in terms of innovation.'*



- A utilities company representative complained that *'we didn't know there was a wireless highway innovation. We are doing a project with that and have engaged with WPD before but at no stage does anyone in WPD tell me that they are running this innovation. We have been excluded from that even though we have demonstrated the need and interest. So if a customer comes to us with something we are already doing, I would like them to engage us rather than tell us nothing is being done.'*

**Table 8:**

- A utilities company representative answered that (s)he *'does not see enough of the innovation and how it's turned into real projects. We try and engage with employers to do innovative projects, but we try to the do best practice that is good for everyone - we don't publicise that it is happening.'*
- An industry consultancy expert said that *'some of it could be fed back at these sort of events with some case studies.'*
- A university representative added *'it's good to have a lessons learnt approach, we've certainly done that with new technology.'*
- A utilities company representative agreed, saying that *'this is what we did, this is what we found, move on.'*
- An industry consultancy representative commented that *'most people wouldn't go on the website to find out but if you sandwich it into a day like this, you expect information to be pushed out for you, not go out for information...standard letters don't feel customer-focused.'*
- A university representative agreed.
- An industry consultancy representative concluded saying *'but there are things in there that make you ask questions about why something is in the letter when it doesn't apply to me.'*

**Table 9:**

- A developer/installer representative stated that *'there are three to four utilities that are leading the way in developing new connections that could speed things up and improve networks. You can't rush innovation through since the testing process for innovation is going to take at least a year. Manufacturers work on a global basis such as speeding up the connection of wind turbines – new improved ideas from abroad that have been proven elsewhere that could be used in the UK without going through the standard one-year proving process.'*

- A developer/installer representative suggested that *‘manufacturers can host utilities from all around the world to get together and discuss innovative projects they’ve been involved in. WPD and other DNOs haven’t gone, but would surely benefit from it. There are lots of solutions out there.’*
- A developer/installer representative observed that *‘in terms of new, say, switchgears that improve the network, WPD’s innovation agenda is probably a mixture of WPD’s and Ofgem’s, but which isn’t the same as ours.’*

**Table 10:**

- A connections company representative raised a query that *‘whom do we need to speak to showcase our problems, to propose a feasible or innovative proposition? It can’t be just one person. And once we’ve heard back, it’s better if the responses identify technological solutions as well as commercial solutions. A ‘road map’ of priorities should be published to make it clear how suppliers can approach WPD. WPD no doubt is making the market aware of what problems it has and what solutions it can offer.’*
- A technology/innovations company representative added that *‘WPD can ensure, when it shares learning from innovation projects, it includes all aspects of the projects including business case and commercial elements.’*

“ A ‘road map’ of priorities should be published to make it clear how suppliers can approach WPD. ”

**Table 11:**

- A developer/installer representative suggested an *‘innovation workshop where developers can come to the table and ask what the problem is and potentially provide solutions by working together and thereby possibly creating a win-win.’*
- A developer/installer representative agreed and added that *‘we can talk to you regarding how we can help.’*
- A developer/installer representative recommended a *‘grid steering group where we can come together and talk about the new future.’*

**Table 12:**

- A developer/ analysis representative commented on his/her own experience with the innovation section of the ICE work plan stating that *‘in one of our projects we had to retain 50% of the capacity but because we knew about it, we modelled our plan accordingly.’*

- A connection company representative suggested *'most of the innovation stuff is around curtailment which needs to be looked into further as it lacks depth and clarity.'*

## 6.7 Any other comments?

### Table 1:

- A technology/innovation company highlighted *'all my concerns have been covered off, thank you.'*

### Table 4:

- A law firm representative commented *'It might be useful if various actions completed or ongoing were put on a summary sheet. It would be really useful as a one page glance.'*
- A developer/installer representative said *'I recognise that WPD have gone into detail with the ICE plan unlike some DNOs who look on a more general broad overview.'*
- A utilities company representative commented that *'it was good to attend as a DNO and see how many people turn up to stakeholder workshops, to share ideas and thoughts and DNOs need to recognise that they need to improve and listen to their stakeholders.'*
- An industry consultancy representative agreed, stating *'it was good to see that WPD are taking on views of their customers.'*
- A developer/installer added *'it was good to see that employees in WPD are accepting problems and engaging well with customers.'*
- A utilities company representative said *'I have found it really useful and think that communications is always a positive thing for future improvements.'*
- A developer/installer representative agreed, commenting *'I thought that there was a good mixture of customers at the workshop.'*

- A developer/installer representative said *‘as an EHV type customer with more complex connections, a ring fenced team of people working just with that can work well but within WPD covering so much this perhaps wouldn’t be such a good idea. However I do think this still works okay for WPD, geography works well for the way WPD work, and customers should understand and accept this when working with WPD. Working with ICPs would offer a more targeted work group however.’*



**Table 8:**

- A utilities company representative asserted that *‘I want to emphasise about other stakeholders with the wind farm - one didn’t want the wind farm to be built, but the other farmer had his nose out of joint as didn’t get the deal on his land and had to sabotage it. We had to deal with it but felt we wanted there to be more done with the local developer - what you could have is a set of traffic lights that change to green, he goes through at one mile an hour, then there ends up being gridlock. What the problem was at first is that you have an awkward, difficult person... not understanding where he was from. It was like when we did the M6 - where the road went through you had to have line crossings, you had to shut down the local community - all hell broke loose because it was nothing to do with the supply, but a protest against the motorway.’*
- A utilities company representative commented that *‘landowner A and landowner B get offered £10 and one accepts...’*
- A university representative added that *‘in one of the workshops a couple of years ago they were showing underground lines instead of overhead cables which was great.’*
- An industry consultancy representative said *‘positive stuff people aren’t really interested in, it’s often negative stuff that they want to hear.’*
- A utilities company representative agreed that *‘the visual impact of wind farms is big news, the actual impact isn’t sexy and no one wants to know...’*
- An industry consultancy representative commented that *‘I think we picked up everything.’*
- A utilities company representative made the point that *‘the whole chain at the moment is disjointed, and needs to be joined up.’*

- An industry consultancy representative argued that *‘Government policy have a lead on it, but creating a framework means you have to look at the consequences and iron out the unintended ones.’*
  - A utilities company representative made the point that *‘one body has to be able to talk firmly to industry, local government and Ofgem - everyone has different, or lack of, objectives.’*
  - A university representative said that *‘you always need someone to pull it all together.’*
  - Facilitator questioned them on how useful Ofgem is.
  - An industry consultancy representative responded *‘you always need some kind of regulation, but you need them to do a good job.’*
  - A utilities company representative answered *‘what are we regulating here - you do need regulation but lack of engineering understanding, when Ofgem for example make WPD drive operating costs too low it has to have a knock-on effect, which as a contractor means available funds are driven down - corners are cut on safety - there is a chain there and when money is squeezed too far down.... the role needs to be more business understanding and engineering, not just the economics of it.’*
  - A university representative said that *‘they only focus on the industry in the sense of customer complaint.’*
  - An industry consultancy representative felt that *‘you don’t want 10 cables going down the road, as at the end of the day it costs money.’*
- “ You have companies making out that wind farms will supply my electricity, which is complete nonsense as it will come from a coal power station up the road. ”

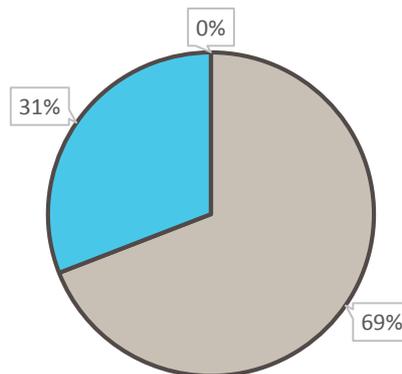
**Table 11:**

- A developer/installer representative mentioned that *‘statement of works and planning problems are the main issues in the West Midlands.’*
- A developer/installer representative added that *‘once we were told we would need a 42 metre high chimney- costing half a million pounds- in Wolverhampton.’*
- A developer/installer representative made the point that *‘if the DNO could do everything then this would be a good option, even despite the fact that most DNOs do not have a lot of experience in building substations. We are willing to pay more for this as the risk is decreasing.’*
- A developer/installer representative agreed with the aforementioned comment and added that *‘we have done this and by giving the DNO a tight timeline we were able to ensure no design changes, but paid 30% more.’*

## 7 Written feedback

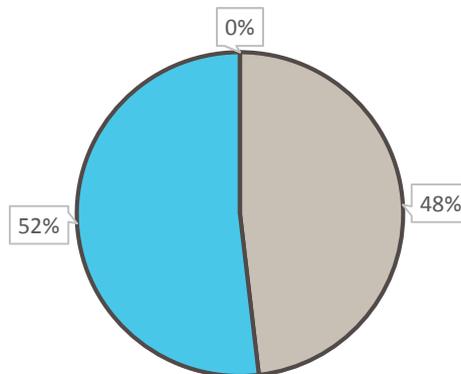
Of the 66 attendees at the workshops, 55 stakeholders completed feedback forms. Stakeholders were asked 13 questions and the responses were as follows:-

**Q1. Did you find this workshop to be very interesting, interesting or not interesting**



■ Very Interesting ■ Interesting ■ Not Interesting

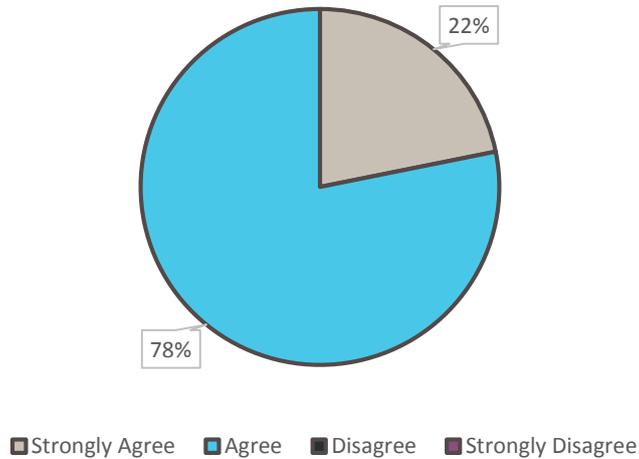
**Q2. Did you feel that you had the opportunity to make your points and ask questions?**



■ Strongly Agree ■ Agree ■ Disagree ■ Strongly Disagree

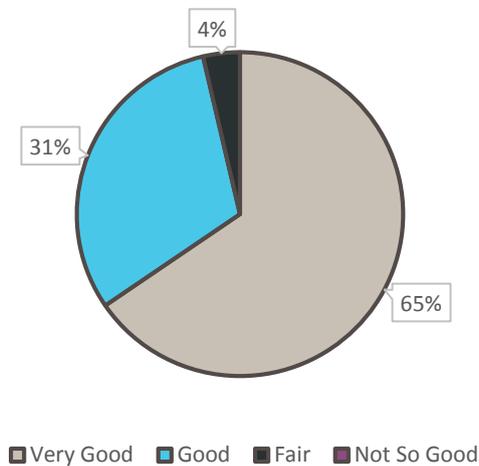
Stakeholder comments on this question included *'Good discussion, well facilitated'*, *'Excellent management of sessions and opportunity to raise issues'*, *'Very good as usual'* and *'Structural Q&A did focus away from some questions I wanted to ask.'*

### Q3. Did we cover the right topics for you on the day?



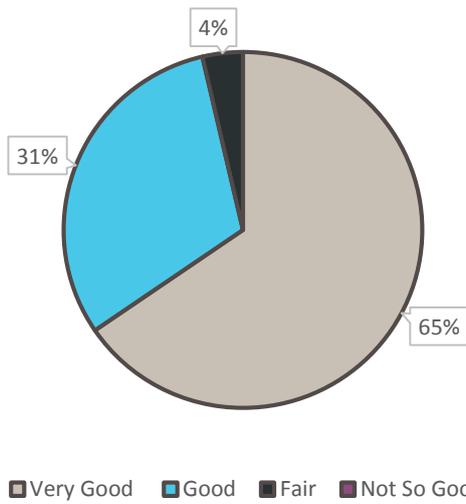
Stakeholder comments on this question included *‘Statement of works and active network management are key issues for the future’, ‘Consider innovation case studies in the future’ and ‘Would like see more focus on future developments assisting with information transfer’* and *‘Good current information’*.

### Q4. What did you think of the way the workshop was facilitated?



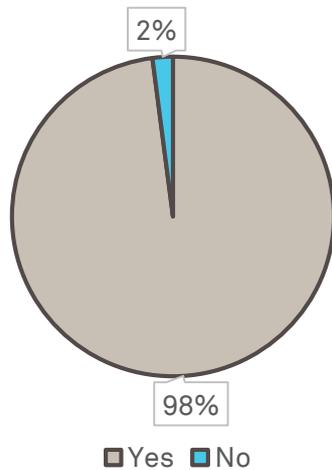
Stakeholder comments on this question included *‘Very good having the discussion guided’, ‘Well managed - but no interaction between tables’, ‘Bruce Pollard was an effective (and humorous) workshop leader. An informative and productive session’* and *‘Perhaps some info too technical for the facilitators.’*

**Q5. What did you think of the venue?**

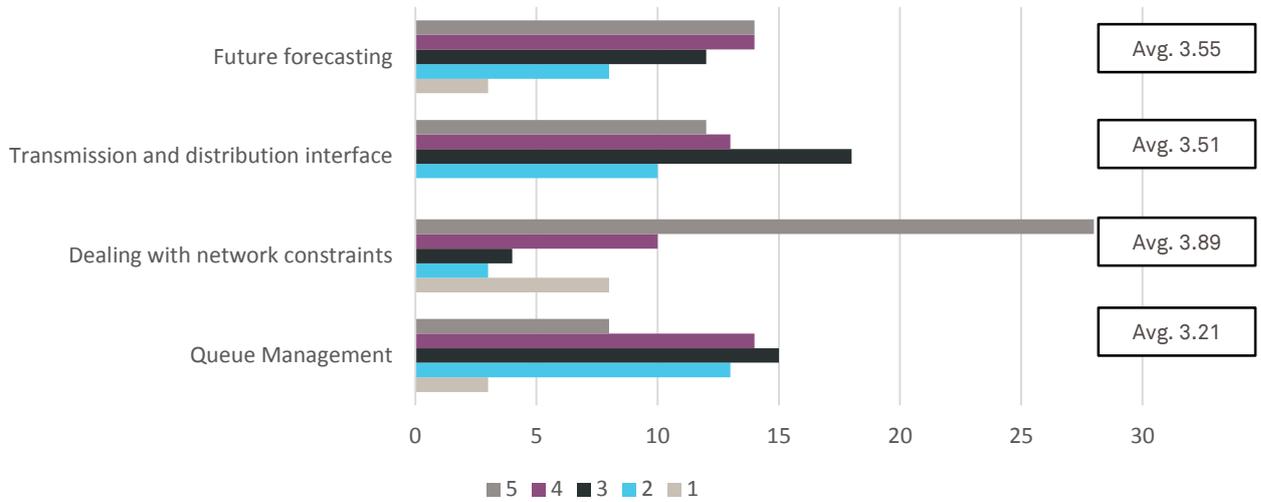


Stakeholder comments on this question included *'Always like it here', 'Poor local traffic, nice facility', 'Venue good, location difficult'* and *'room was cold.'*

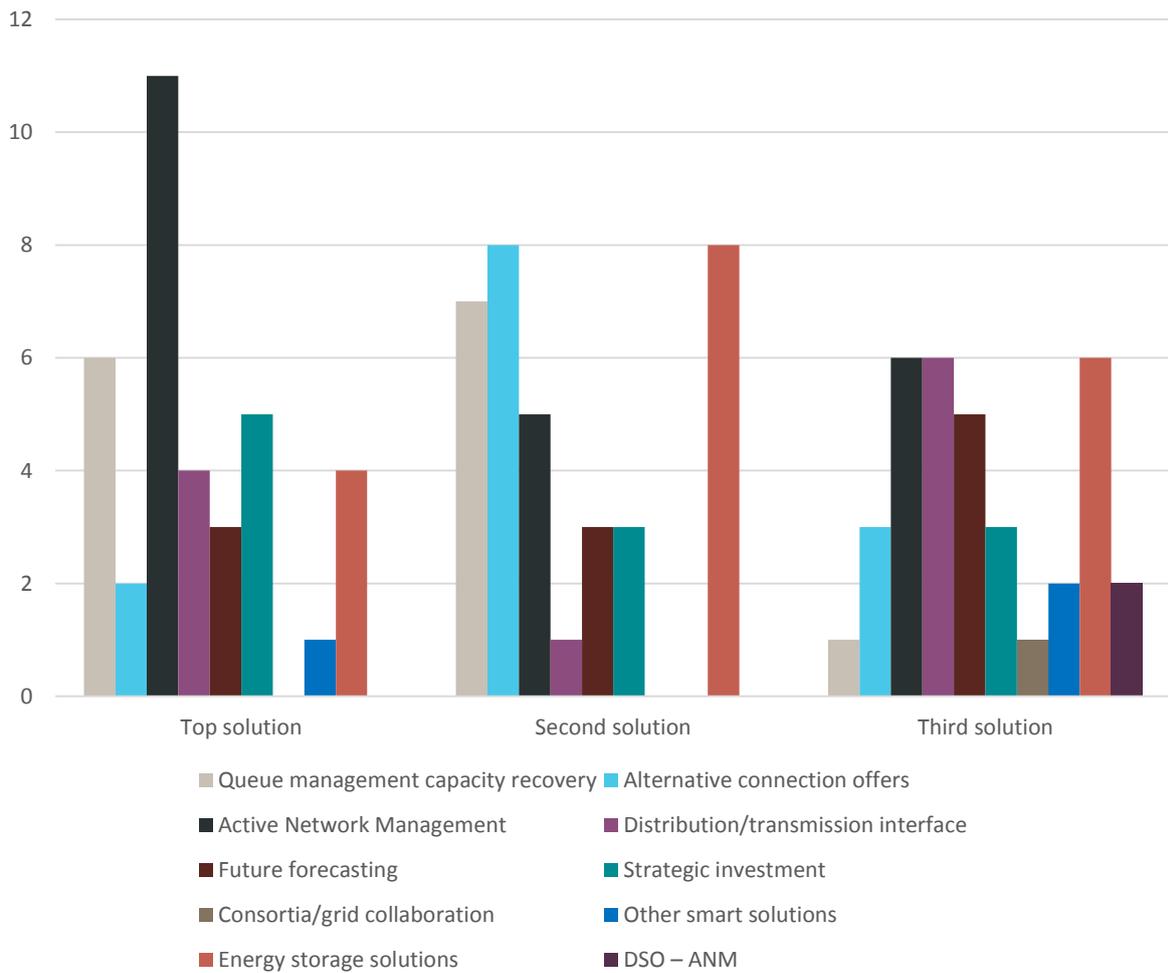
**Q6. Would you be interested in attending future workshops on this subject?**



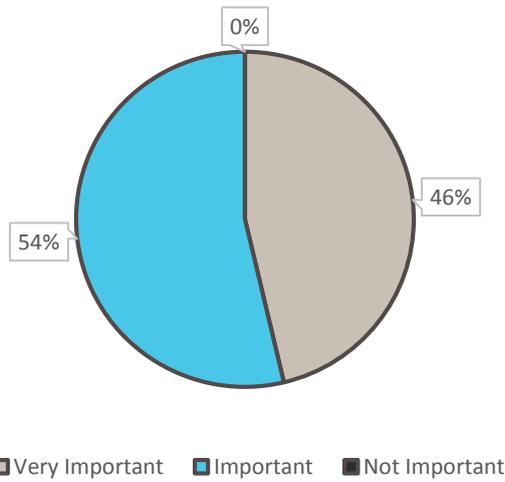
**Q7. Please rate these emerging issues in terms of level of importance? (1 is low, 5 is high)**



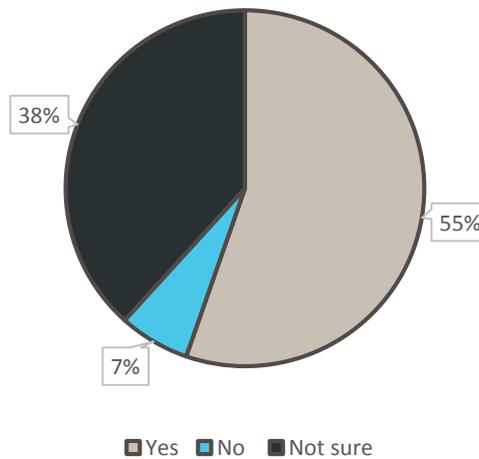
**Q8. Please rate which are the top solutions to network constraint (1,2,3)**



**Q9. How important do you think it is that enforcement of milestones in HV connections offers is balanced against customer service requirements?**



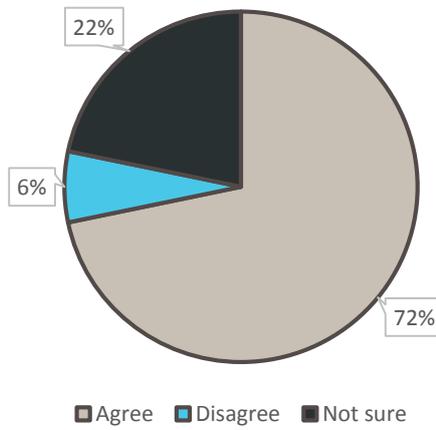
**Q10. Would you consider taking an Alternative Connections Offer?**



**Q11. What would be your main concern when applying for an Alternative Connections offer?**

Responses from stakeholders focused on a lack of clarity and available information as well as the financial risk and implications. Specific comments on the main concerns stakeholders had included *'the certainty on the amount of constraint (e.g. frequency and duration)'*, *'the clarity of response'*, *'the lack of clarity on potential increase in income'* and *'how to make the financial model work.'*

**Q12. Do you agree that WPD should move towards an individual statement of works process for sites more than 1 MW?**



**Any other comments?**

General comments from stakeholders included *'Well organised event', 'WPD need to have a robust plan for statement of jobs for all size connections (i.e. < 1 MW)' and 'good session - but still basic issues to sort before you embark on too many fancy new initiatives.'*

## 8 Surgeries on specific topics

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### 8.1 Competition in Connections

Summary: The competition code of practice was created as a response to OFGEM's concerns. All DNOs had to implement a programme by the end of October 2015. The internal transition document was made external and each aspect can be found in the presentation.

The discussion was a small, informative session with the stakeholders gaining knowledge about the processes and new regulation in regards to competition.

The key issues stakeholders discussed were:

1. The role and nature of new regulations.
2. How connections affect the end user as a customer.

Other issues that were discussed included:

- How WPD ensure they get all their data to independent connection providers (ICP).
- The flexibility around timescales for the data requested.
- Impact and repercussions if the data isn't sent on time.



## 8.2 Consortium Connections

Summary: Due to the increased constraints on availability of capacity, the cost of reinforcement can be a barrier for individual developers, so one of the options is to get developers to come together as a consortium. WPD have services available to support the development of consortiums, including from online capacity maps, a facility for sharing information on potential consortiums, generation capacity register and Generation Infrastructure Schemes (GIS). The majority of the presentation focused on GIS covering the criteria, the options available and the offer and acceptance process.

The discussion was a small, informative session with the stakeholders discussing the risks and practical issues of forming consortiums.

The key issues stakeholders discussed were:

1. The implications of one party dropping out. If the group are able to replace them with another development of similar size, it could contravene the fair use policy in grid queueing.
2. War-gaming could test the impact of any potential new rules around queue management.
3. Determining whether an applicant is reserving capacity or investing in their asset by overbooking the amount of available capacity.

Other issues that were discussed included:

- If it would be possible for a first-comer to cover the cost and the second-comer to effectively 'buy' the capacity off them. This could, however, encourage developers to reserve space.
- Whether the technology can be changed once a consortium has been formed and approved. It was confirmed it could not be changed.
- WPD could end up as a broker between parties interested in forming a consortium. It was clarified that this was not a role WPD were looking at developing.
- Developers are very supportive in principle of the development of consortium agreements, but there is a huge amount of financial risk for them.
- To who independent DNOs would be socialising their risk to. It was confirmed that this would be across their portfolio of developments.

### 8.3 Statement of Works

Summary: A DNO is required to request a statement of works from National Grid where it believes that a connection or group of connections may have an impact on the transmission network. The statement of works process is about to go through a series of changes and this session was used as an opportunity for WPD to get feedback on the process and these changes from its stakeholders.

The key issues stakeholders discussed were:

- Whether the power factor range capability was location specific.
- Whether or not DNOs and National Grid needed a completely new way of working, rather than making improvements to the existing process.
- Whether it would be possible to speed up the process by ensuring that once the DNO makes an offer this already includes the statement of works.
- How to deal with those offers that have already been made at the time that the changes go live.
- That the process starts too late and is taking too long – and specifically that 90 days is too long to wait for information.



### 8.3 Consents and Legals

Summary: The surgery on consents and legals was facilitated in order to give stakeholders a greater understanding of the process, introduce new actions being undertaken by WPD and take feedback on any areas that could be improved, based on their experience.

The discussion was a small, informative session led by a WPD representative with opportunities for stakeholders to ask questions.

The key issues stakeholders discussed were:

1. WPD's proposals for streamlining the consents and legals process.
2. New facets of the WPD website with an explanation of how to navigate it.

Other issues that were discussed included:

- How important it is that wayleaves specialists are appointed at an early stage in the process.
- WPD's lawyers being given power of attorney as a way of saving time on the process.
- Sharing information so that all parties are made aware of any issues that may cause delays.
- It was agreed that WPD's interface with wayleaves and consents has been good.
- The need for regular updates throughout the process, including updates from WPD's lawyers on their correspondence from third party landowners.

## 8.4 Alternative Connections

Summary: A representative of WPD talked the group through the need for alternative connections and the different types that are available - Active Network Management was the 'all singing all dancing version', but there were many other forms. Curtailment was expected to reduce generation by about 11%. So WPD's aim is to 'optimise as much of the network's capacity as possible', while being as 'flexible as possible' in working out bespoke and specific contracts.

The discussion consisted entirely of questioning about the specific technologies involved around the different types of alternative connection. There was very little discussion of WPD's role or the broad principle of alternative connections.

The key issue stakeholders discussed was energy storage. The key points focused on:

1. The desire for a scheme where generators that could store energy were offered a cheaper connection for exporting energy when WPD wanted and storing energy at times of peak demand.
2. Whether storage could be fitted to a timed connection without reopening the connection agreement, as long as absolute limits are maintained.
3. The role WPD could play in the future as a broker – if a generator was prevented from exporting then WPD could get a customer to take and store that load.
4. Whether WPD was looking for storage to take peak load or for PV to store the generation.

Other issues were that were discussed included:

- What the drivers for hard and soft intertripping were.
- The timetable for WPD's rollout of ANMs and if people would automatically be offered an ANM.
- Whether there were equipment specifications provided for connecting to an ANM and whether documentation showing ANM compliance could be done centrally rather than having to go through each office.