

Stakeholder workshop report: Cheltenham

8th November 2012



1. Contents

1.	Contents.....	2
2.	Introduction	4
2.1.	Date and location	4
2.2.	Attendees:	4
3.	Executive summary.....	7
3.1.	Feedback from participants	7
3.1.1.	Topics for discussion	7
3.2.	Feedback summary.....	7
4.	Issue 1. Power cuts.....	10
4.1.	Q1. Reducing the number and average duration of power cuts should be one of WPD's highest priorities.....	10
4.2.	Comments.....	10
4.3.	Q2. Power cuts: Which of the following options would you like to see in WPD's plan?	13
5.	Issue 2. Severe weather / emergency resilience	14
5.1.	Q3. A tree trimming programme to reduce the risk of power cuts during storms should be a high priority for WPD	14
5.2.	Comments.....	14
5.3.	Q4. Severe weather resilience: Which of the following options would you like to see in WPD's plan?	16
6.	Issue 3. Flooding:.....	17
6.1.	Q5: Protecting substations against the risk of flooding should be a high priority for WPD:	17
6.2.	Comments.....	17
6.3.	Q6. Protection against flooding: Which of the following options would you like to see in WPD's plan?	19
7.	Issue 4. Oil and gas leaks	20
7.1.	Q7. Acting to reduce the risk of oil leaks from fluid-filled cables and SF6 gas leaks from equipment, should be a high priority for WPD?	20
7.2.	Comments.....	20
7.3.	Q8. Reducing oil and gas leaks: Which of the following options would you like to see in WPD's plan	22
8.	Issue 5. Worst served customers	23
Q9.	Improving service for our worst served customers should be one of WPD's high priorities:	23
8.1.	Comments.....	23
8.2.	Q10. Service to remote customers: Which of the following investment options would you support?	27
9.	Issue 6. Undergrounding in national parks and AONBs	28

9.1.	Q11. Replacing overhead lines with underground cables in National parks should be a high priority for WPD (no supply reliability or carbon reduction benefits)	28
9.2.	Comments.....	28
9.3.	Q12. Which of the following options would you like to see in WPD's plan?.....	30
10.	Issue 7. New connections – process speed	32
10.1.	Q13. The current time taken from first contact to completed connection is acceptable.....	32
10.2.	Comments.....	32
10.3.	Q14: Which of the following options would you like to see in WPD's plan?	35
11.	Issue 8. Innovative customer communications	36
11.1.	Q15. Which of the following options would you like to see in WPD's plan?.....	36
11.2.	Q16. Innovating the methods by which customers can communicate with us should be a medium priority for WPD.....	37
11.3.	Comments.....	37
11.4.	Q17. Which of the following options would you like to see in WPD's plan?.....	40
12.	Low carbon investment	41
12.1.	Issue 1. Are our assumptions reasonable for a 'best view' scenario?	41
12.2.	Issue 2. If you had greater visibility of your energy use (e.g. smart meters), what impact do you think it would have on your behaviour?	44
12.3.	Issue 3. Do you agree that customers should not see an increase in power cuts as a result of introducing smart grid technologies??	46
13.	Stakeholder feedback	48
13.1.	Q1. Did you find the workshops useful?	48
13.2.	Was the venue conveniently located for you?	48
13.3.	Did we provide enough information at the workshop?	48
13.4.	Did you feel you had sufficient opportunity to express and discuss your views today?.....	49
13.5.	Did you feel we covered the right topics?	49
13.6.	Written feedback	49

2. Introduction

2.1. Date and location

The stakeholder workshop took place on 8th November 2012 at: Cheltenham Racecourse, Cheltenham GL50 4SH

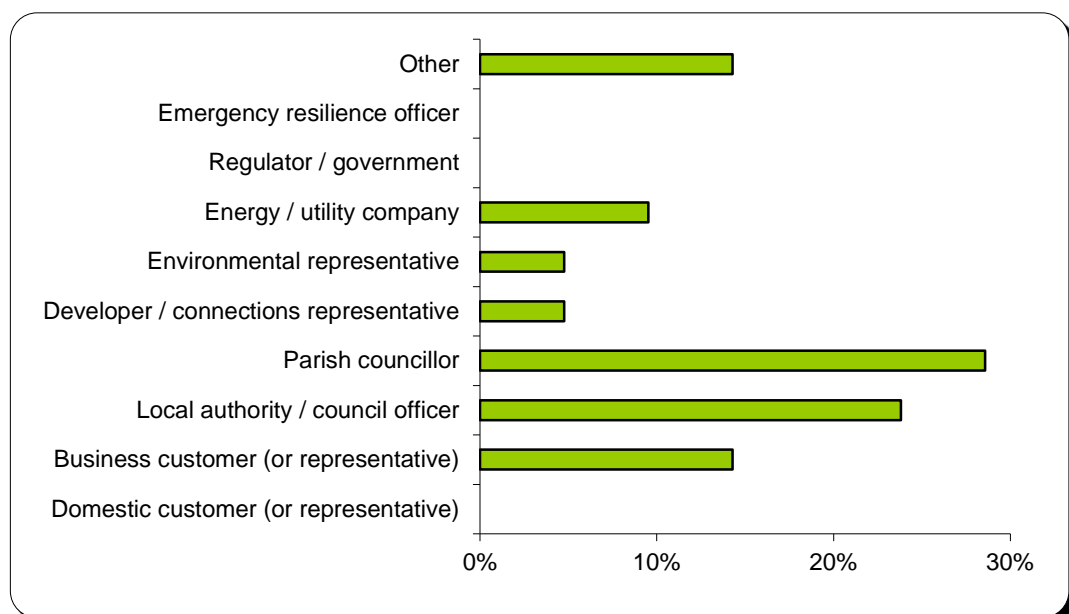
2.2. Attendees:

24 stakeholders attended the Cheltenham workshop. The details of all attendees are shown below:

- Mr Alex Spreadbury - Energy Manager, B&Q Plc
- Alex Troth – Analyst, Opus Energy
- Mr Ben Horovitz - Principal Planner (Sustainable Development), Worcestershire County Council
- Mr Charles Birchall - UK Sales Director, CG Power Solutions
- Mr Chris Poulton - Director of Asset Management and Development, Stafford and Rural Homes
- Mr Denis Murray - Vice Chairman, Twyning Parish Council
- Cllr Fred Wood - Parish Councillor, Gretton Parish Council
- Mr James Lloyd - Climate Change - Business Adviser, Cotswold Conservation Board (AONB)
- Mr John Morgan - Principal Planning Officer, Cannock Chase District Council
- Mr Julian Brown - Managing Director, Nortech Management Ltd
- Mr Michael Binks – Councillor, Kemble and Ewen Parish Council
- Mr Nigel Shaw - Pitchcombe Parish Council, Mill Orchard
- Cllr Peter Lightfoot – Councillor, Bishops Cleeve Parish Council
- Mr Paul Wragg - Operations Manager, Power On Connections
- Cllr Penny Wride – Chairman, Ham and Stone Parish Council
- Prof Peter Crossley - Head of Electrical Energy and Power Systems, University of Manchester

- Mr Peter Wiggins - Outcome Manager Commissioning, Gloucestershire County Council
- Mr Ray Raychaudhuri - Key Account Manager, Alstom Grid
- Cllr R.C Bowley – Chairman, Kempsey Parish Council
- Mr Richard Moore - Key Account Manager, CG Power Solutions
- Mr Robin Drake - Strategic Infrastructure, Gloucestershire County Council
- Mr Stephen McDonnell - Environmental Co-Ordinator, Gloucester City Council
- Mr Steve Gist - Parish Councillor, Luddington Parish Council
- Mr Stewart Bailey - Managing Director, Virtual Viewing Ltd.

The split of stakeholders according to the type of organisation they were representing on the day is shown below:



Western Power Distribution

- Alison Sleightholm - Regulation and Government Affairs Manager
- Bob Parker - Planning & Regulation Special Projects Manager
- Natasha Richardson - Regulatory & Government Affairs Adviser
- Alex Wilkes - Stakeholder Engagement Regulatory & Government Affairs
- Paul Jewell - Design Policy Manager
- Lee Wallace - Network Services Manager (West Midlands)
- Neil James - Distribution Manager, Gloucester

Green Issues Communiqué

- James Garland - Director (workshop facilitator)
- Nick Bohane - Executive Director (workshop facilitator)
- Ian Biddulph - Consultant (Workshop Facilitator)
- Alice James - Account Executive (Workshop Facilitator)
- Laura Edwards - Account Executive (scribe)
- Alex Coleman - Account Executive (scribe)
- Farah Pasha - Account Executive (scribe)
- Debbie Fowler - Account Executive (scribe)

3. Executive summary

3.1. Feedback from participants

- Every stakeholder who left feedback after the event stated that they had sufficient opportunity to express and discuss their views
- All stakeholders who attended the workshop and submitted their comments told us that they found the event to be 'useful' or 'very useful'
- Every stakeholder who submitted feedback stated that we covered the right topics on the day

3.1.1. Topics for discussion

- Power cuts
- Severe weather / emergency resilience
- Flooding
- Oil and gas leaks
- Worst served customers
- Undergrounding in national parks and AONB's
- New connections – process speed
- Innovative customer communications
- Low carbon investment

3.2. Feedback summary

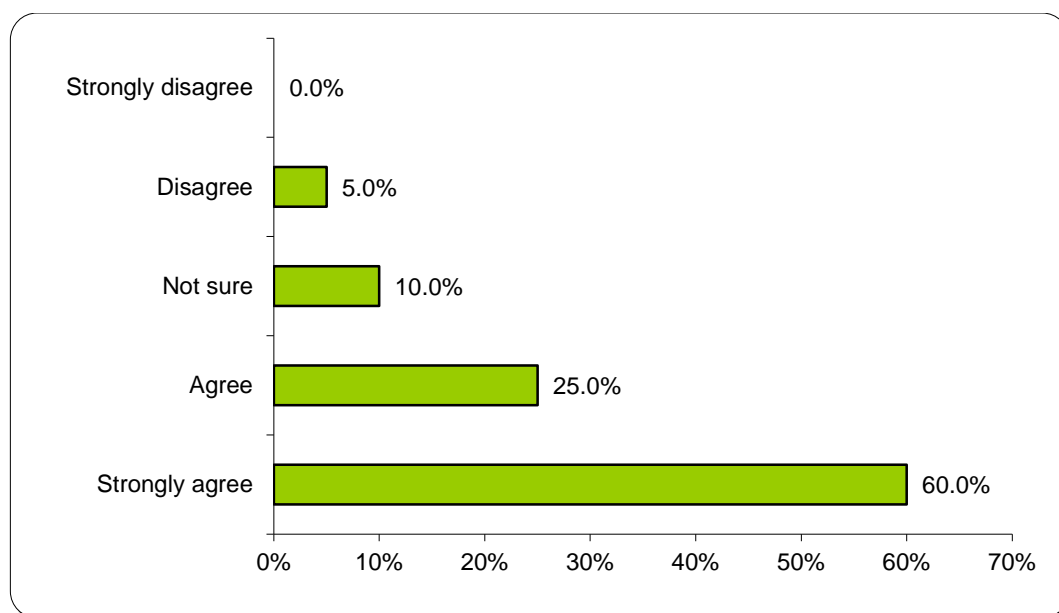
- The majority of stakeholders were of the view that reducing the number and average duration of power cuts should be one of WPD's highest priorities
- Over half agreed that WPD's proposed approach (Option 1) was appropriate, although a quarter believe that WPD should go further. It was commented that communication is very important when there is a power cut and that power cuts affect some people (including vulnerable customers and business customers) more than others
- 90% of stakeholders polled either 'agreed' or 'strongly agreed' that tree trimming programme to reduce the risk of power cuts during storms should be a high priority for WPD. Significantly, no one disagreed with this statement
- Only a quarter of the stakeholders in attendance agreed with WPD's proposed view with regard to tree trimming. 70% stated that WPD should go even further

- Almost every stakeholder 'agreed' or 'strongly agreed' that protecting substations against the risk of flooding should be a high priority for WPD. None of the stakeholders polled disagreed with this
- Although 40% of stakeholders agreed with WPD's proposals with regard to flooding, the remaining 60% were of the view that the company should go even further. None of the stakeholders polled told us that WPD should do less
- Three quarters of the stakeholders in attendance either 'agreed' or 'strongly agreed' with the statement: 'Acting to reduce the risk of oil leaks from fluid-filled cables and SF6 gas leaks from equipment, should be a high priority for WPD'. It is fair to say that, for many, this was one issue where there was a lack of prior knowledge
- Over half of the stakeholders polled agreed with WPD's proposed approach with regard to reducing oil and gas leaks from its assets. Less than 40% believed WPD should go further
- Although a number of stakeholders described themselves as 'worst served', many of these accepted lower levels of service due to the fact that they lived in rural areas. It was, however, noted that all of WPD's customers paid the same for their electricity supply and that, given the trend towards homeworking, this may present more of an issue in the future
- Over 60% of stakeholders polled were of the view that WPD should go further than planned with regard to reducing the number of 'worst served' customers
- Of all the topics discussed, it was the subject of replacing overhead lines with underground cables in national parks and AONB's where opinion was most divided. 45% either 'agreed' or 'strongly agreed' that this should be a high priority for WPD; 35% either 'disagreed' or 'strongly disagreed' and 20% were 'not sure'
- Half of the stakeholders polled agreed with WPD's proposed approach with regard to undergrounding in AONB's and national parks. Although almost a third of stakeholders stated that WPD should go further, 11% were of the view that the company should actually do less
- There was broad acceptance of the speed that WPD processes new connections and the proposed approach for the price review period was deemed appropriate by over two thirds of stakeholders. It was commented that this process speed is acceptable as long as DNO's work closely with developers and local authorities to enable them to plan new connections
- A number of stakeholders spoke positively about the way WPD communicates with its customers. There was broad agreement that moving with the times was important when it came to communications. The inclusion of real-time outage information on WPD's website was viewed positively, as was two-way text messaging, telephone operators and automated text messaging. There was little appetite for WPD investing money in social media channels
- Many stakeholders were of the view that the scenario put forward by WPD as a 'best view' was not achievable, particularly regarding the take-up of electric vehicles

- Although a number of stakeholders were of the opinion that the introduction of smart meters would alter customers behaviour, the point was made that this would be more effective with greater incentives
- Generally, stakeholders told us that it would not be acceptable to suffer lower levels of service as a result of the introduction of smart grid technology

4. Issue 1. Power cuts

4.1. Q1. Reducing the number and average duration of power cuts should be one of WPD's highest priorities



4.2. Comments

Table 1

- A parish councillor was of the opinion that *'having a planned power cut for 12 hours is more of an issue than an unplanned power cut'*
- A stakeholder stated the *'average duration of a power cut of 5 minutes every 10 years in Birmingham is acceptable'*. S/he compared that statistic in Shropshire which *'is 5 minutes in 1 hour on a regular basis and described it as an inconvenience but not a problem'*
- A stakeholder commented on the value of customer minutes lost. S/he asked *'how much should WPD pay to a customer if the blackout is WPD's fault?'* S/he pointed out *'having a power cut at different times of the day means different problems arising and there are different levels of inconvenience'*. S/he felt to ensure a high reliability system is in place *'WPD should always financially compensate customers'*
- It was commented that power cuts have a very real impact on businesses. It was noted that anything that can be done to reduce the number and duration of power cuts could only be a good thing for *'UK Plc'*
- A parish councillor said an incentive for WPD would be to *'lower power interruptions and duration'*. S/he pointed out the fewer the blackouts the less WPD has to pay out and the more revenue they can keep which means increase of income

- The general consensus amongst the whole group was power cuts are the highest priority
- A parish councillor commented that his / her council thought *'power cuts should be a priority'* and *'WPD should be aiming to create a culture of continuous improvement for the general public'*. S/he pointed out s/he was not aware of the four licensed areas WPD covers. S/he went on to say that WPD has a good record and WPD's predecessor was not very good. S/he commented the difference of service is already noticeable such as overhead lines maintenance. Lastly, s/he was of the viewpoint *'customers don't want to see bills rise when income is not'*

Table 2

- An energy/utility company representative commented that in his / her village residents are *'used to short interruptions and occasional long ones'*, but made the point that, *'most importantly they want information; want to know what's going on and how quickly it can be mended.'* S/he added that, when experiencing an extended outage, residents *'need to know how to get an update'*
- A parish councillor drew attention to the fact that in his / her village there were *'many elderly people and we rely on neighbourhood partners to check on people'*, adding that *'we experience lots of lapses and the averages are not important, it's the length and the big all-day ones'*; s/he considered that *'one to five minutes was manageable'*. S/he recommended that WPD should invest in communication
- A local authority/council officer commented that if one lived in an urban area, like Gloucester City *'cuts are very rare and usually down to human error, which is difficult to eradicate'*; s/he stated that WPD needed to keep customers informed during cuts but highlighted the difficulties of communicating with the customers during a power outage, and suggested sending messages to customers' mobiles
- An energy/utility company representative recommended that *'WPD should provide a more detailed level of information to contractors if requested'*
- An energy/utility company representative highlighted, *'given that the average duration used to be 90 minutes, how impressive the current figure was, but warned WPD that it was important to keep up the momentum and to use communication across all media'*
- A business customer representative drew attention to the distinction between built-up and urban areas, and considered that, when looking at the statistics, it would be worthwhile for WPD to *'split out between the two areas to understand them better'*; and suggested that WPD *'will need a whole set of new rules'*
- A business customer representative asked if WPD was *'focusing resources on the worst served customers'* and how that would *'affect its averages'*
- A local authority/council officer stated that s/he supported Option 4 but made the point that if WPD asked residents the same questions, *'the councils would go for Option 1'*
- An energy/utility company representative recommended that WPD should use the £20m on the option where it gets the *'most cost-effective outcome'*

- An energy/utility company representative made the point that there *'isn't a "do nothing" option and current status isn't an option'*
- A business customer representative supported this view, adding that s/he did *'not think that doing nothing was wise'*; s/he also made the point that WPD was *'very strong in the league table'* and *'committed to improving its service'* and, therefore, would want to *'keep that position'* and went on to mention the *'law of diminishing returns'*

Table 3

- A parish councillor said *'I think it comes down to the fact that there is no average customer, it's difficult to interpret those figures in terms of what they mean for our parishioners. For example, we had 5 power outages on the 29th July. Although I spoke with WPD and he was very helpful, it didn't actually resolve the issue'*
- Another parish councillor added that *'we get at least 8-12 outages a year, not for long periods of time but it's still highly inconvenient. Also, it continues to happen even without extreme weather conditions'*.
- Another parish councillor believed that a reduction in frequency of power cuts from 8 to 7.75 would make *'absolutely no difference'* to them, adding that WPD should *'go further'*
- A parish councillor explained that in 2002 there was a severe storm in his/her local area and that *'the entire village had an outage for 2 days.'* S/he stated that a generator had to be hired as his / her village relies heavily on electricity and oil fire over gas
- Another parish councillor explained that as a representative of small rural communities affected by regular outages, tackling power cuts was a high priority for all of them
- A business customer representative stated that it might be worth considering the use of CHP and alternative technologies to help reduce the *'absolute reliance'* on the network. S/he felt that working in partnership with housing developers to encourage the use of innovative technology would be a good way of reducing reliance on the network
- A parish councillor agreed that there was a huge reliance on the network in his / her parish area

Table 4

- A local authority/council officer stated that *'if it does not cost you anymore to do more, then why would you not do more?'*
- An energy/utility company representative said that there *'is no difference between 60 minutes and 50 minutes'*. As a rural customer s/he *'does not want to hear that WPD have saved me 15 minutes from cuts over ten years but would like them to minimise the longer cuts'*
- An energy/utility company representative commented that s/he *'assumes that WPD will be focusing on those customers that are most severely affected'*

- An energy/utility company representative declared that s/he would be *'interested to know if WPD had looked at the National Grid's level of risk in designing their plans'*

4.3. Q2. Power cuts: Which of the following options would you like to see in WPD's plan?

Option 1: Reduce the average frequency to 7.75 per 10 years and the average duration to 52 minutes at a total cost of £39m over the 8 year period (40p on each domestic bill per annum)

Option 2: Reduce the average frequency to 7.5 per 10 years and the average duration to 51 minutes at a total cost of £59m over the 8 year period (55p on each domestic bill per annum)

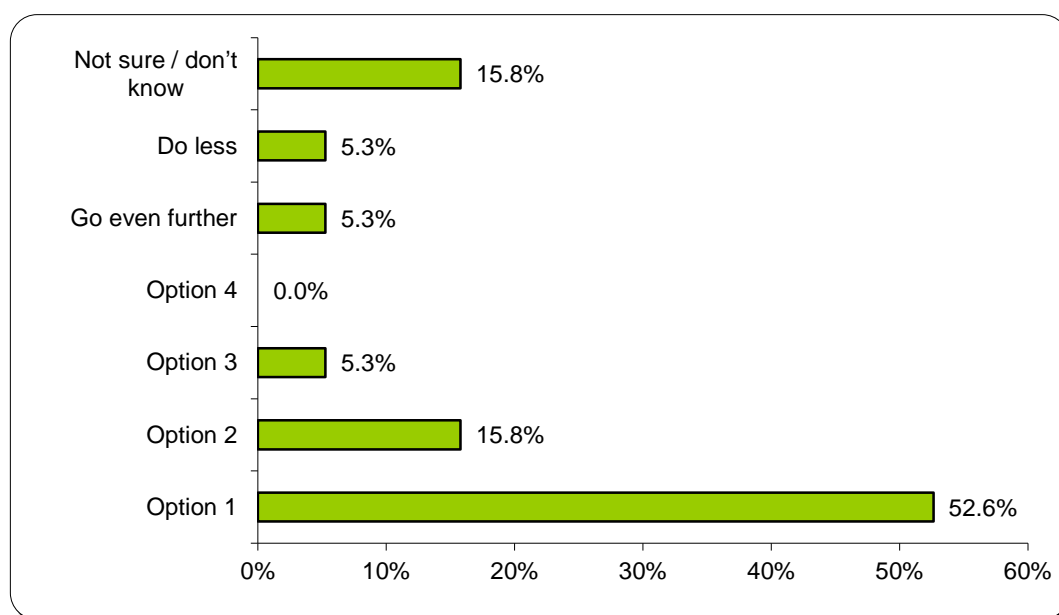
Option 3: Reduce the average frequency to 7 per 10 years and the average duration to 48 minutes at a total cost of £130m over the 8 year period (£1 on each domestic bill per annum)

Option 4: Reduce the average frequency to 6 per 10 years and the average duration to 41 minutes at a total cost of £310m over the 8 year period (£2.20 on each domestic bill per annum)

Option 5: Go even further

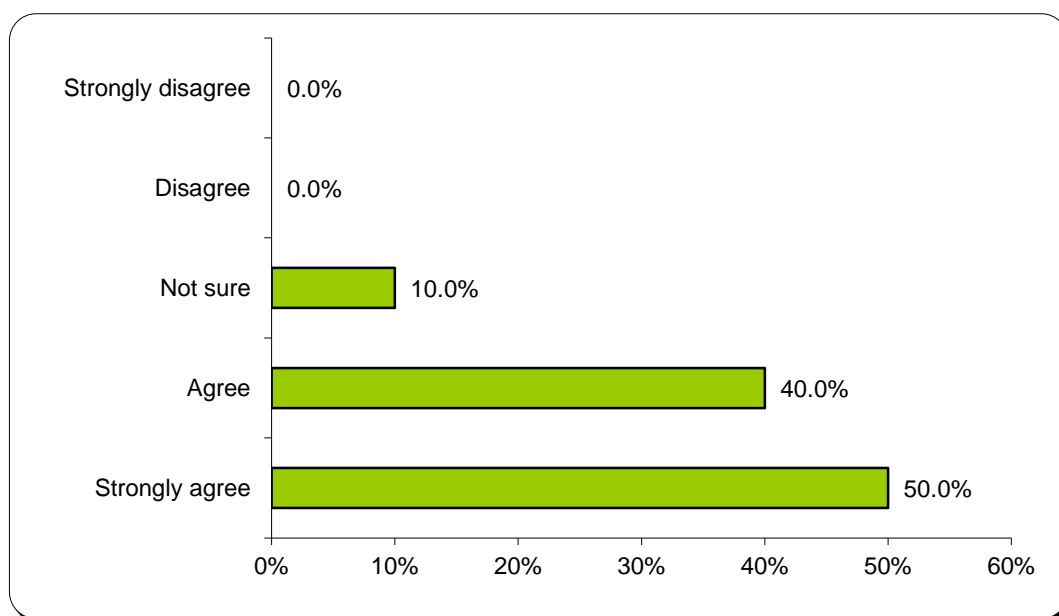
Option 6: Do less

Option 7: Go even further



5. Issue 2. Severe weather / emergency resilience

5.1. Q3. A tree trimming programme to reduce the risk of power cuts during storms should be a high priority for WPD



5.2. Comments

Table 1

- A stakeholder was of the opinion *'tree trimming is the best way to reduce outages'*. S/he felt it was a *'logical option for WPD'* and *'it should not be an issue up for discussion but should be business as usual'*
- A stakeholder commented that *'trees are very popular'* so it a difficult problem to address. S/he also commented *'it is a difficult situation from a planning perspective and also from a power utilities company.'* Overall s/he was of the opinion *'it is best to have trees'*
- A stakeholder considered *'WPD should go further than what is planned'* and that *'trees are attractive'*
- A stakeholder said *'due to weather conditions becoming more extreme, if a major storm hits the country it means society as a whole will pay'*. S/he commented on the possibility of *'another black-out in Gloucester'* and it could cost the economy 100's of millions. S/he asked *'should the National Grid pay and should they have paid in the past?'* S/he questioned whether *'WPD is only appeasing the regulator or is it going further?'*

- A parish councillor stated the cost of undergrounding cables can be as much as *'8-10-16 times more than overhead cables'*. S/he was of the opinion *'the cost to society is never factored in and nor is the maintenance costs over the next 50-100 years'*
- A parish councillor pointed out more faults on cables are due to 3rd party's actions, not always WPD's fault

Table 2

- An energy/utility company representative mentioned that s/he was involved in putting together budgets and commented that it would be *'interesting to see what the result is if WPD accelerate their tree-cutting programme'*
- A parish councillor added that it would also be *'interesting to see what amount of falling trees are responsible for outages'*
- An environmental representative cited that s/he thought it was *'similar in this country'* to Northern Ireland which *'suffers badly with severe weather and outages'*
- An environmental representative made the point that it was *'all about being a cost benefit'*
- An energy/utility company representative stated that s/he *'would like to see the programme accelerated'*
- A parish councillor disagreed and was of the belief that WPD should *'stay as they are'*
- A local authority/council officer was of the view that WPD should *'accelerate the programme to 15 years'*
- A business customer representative and an environmental representative both supported Option 2

Table 3

- A parish councillor asked whether WPD inspect power lines regularly to see where trees are blowing. S/he also asked whether WPD's predecessor conducted checks on a similar cycle as WPD do at present. S/he said *'I would favour increased tree trimming if it's preventative'*
- Another parish councillor stated that *'I was surprised at the percentage of cuts caused by trees, I would support an increase'*

Table 4

- An energy/utility company representative was of the opinion that if *'70-80% of issues are caused by trees then WPD should accelerate the plans to option 3'*
- A parish councillor made the point that WPD *'need to explain to the landowners why they are having to do it'*

- A parish councillor said that *'part of the problem is that there are too many over-ground cables. If we had less over-ground cables then there would be less issues with trees falling on them'*
- A parish councillor commented that s/he *'does not much like talking in statistics'*

5.3. Q4. Severe weather resilience: Which of the following options would you like to see in WPD's plan?

Option 1: (WPD's current view). A resilience tree trimming programme of 20 years at no additional cost

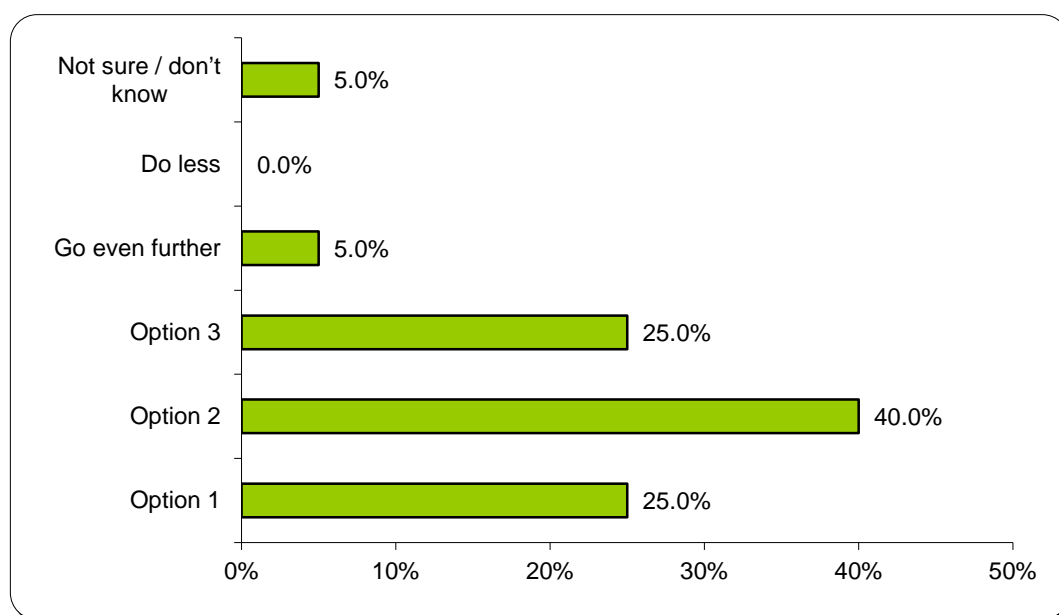
Option 2: The duration of the tree trimming programme accelerated to 20 years at an additional cost of £14.7 (14p per domestic customer, per annum)

Option 3: The duration of the tree trimming programme accelerated to 15 years at an additional cost of £45.7 (45p per domestic customer, per annum)

Option 4: Go even further

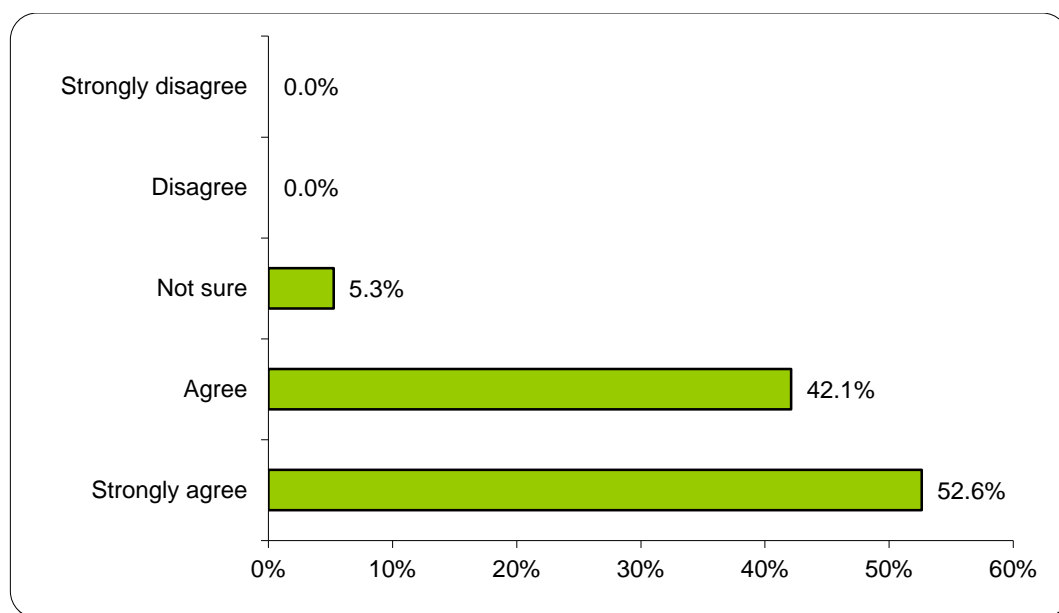
Option 5: Do less

Option 6: Not sure / don't know



6. Issue 3. Flooding:

6.1. Q5: Protecting substations against the risk of flooding should be a high priority for WPD:



6.2. Comments

Table 1

- A stakeholder pointed out that many years ago *'Scottish Power moved many power lines to better positions to avoid conductor clashes.'* S/he praised this move and commented WPD should look at *'lightning hot spots'*
- A parish councillor commented many of his / her constituents were of the view that a lot of the current problems they are facing are not down to WPD. S/he stated the general opinion is *'regulators are restricting what WPD can and can't do as being the problem.'* S/he was also of the view that *'utility companies speaking to customers will enable voices to be heard'*
- A parish councillor commented that *'companies borrow to invest and one of the drivers of privatisation was to be able to borrow in the market so the hit is not always taken by the customer'*
- A stakeholder said *'networks which were built in the 1950s were given a lifespan of 50-70 years and the idea of privatisation was to reduce costs to the customer.'* S/he commented that the new world of changing networks should be planned for the next 20-40 years. S/he said *'in Britain we have had it easy due to low growth up to the 1970s, we then discovered gas, but now as gas goes up in price places like Birmingham will have to go back to electricity'*

Table 2

- A business customer representative asked *'how many primary assets WPD owned?'*
- An environmental representative raised the question of asset protection and asked WPD if the main method of protection was bunding
- An energy/utility company representative asked *'what was WPD's view was following the flooding that occurred in Gloucestershire during 2007?'*
- A parish councillor wanted to know if WPD was *'Government-funded'*
- Overall there was general consensus that WPD should select Option 2
- A local authority/council officer made the point that *'Gloucester would go for Option 3 as it would want the 'most investment possible', adding that s/he considered that flooding in Gloucester was a 'political hot potato'*
- An environmental representative opined that it was a *'very tough'* decision but that s/he would *'probably go with a 20p increase'* and explained that this was because of future *'climate change'*
- An energy/utility company representative highlighted the importance of *'keeping in touch'* with the Environment Agency, adding that it would be *'very useful'* if WPD provided *'flood plans'*

Table 3

- A parish councillor was of the view that the *'some of the options laid out for flooding investment appeared to be out of proportion in terms of what WPD and its customers would save'*. S/he believed that there has to be a balance with expenditure and added *'I'm quite happy with Option 1'*
- Another parish councillor stated that *'the biggest threat is the National Grid when it comes to flooding'*
- A parish councillor said *'we don't have a problem with electricity going out with flooding'*
- The table agreed that option 1 was the best choice

Table 4

- A local authority/council officer said that *'if the asset is already there, then there is no need to move it'*. However if it is being replaced *'WPD need to look at other concepts rather than just like for like. Perhaps lots of smaller, local stations'*
- An energy/utility company representative stated that the *'one the thing WPD has to do is look ten years ahead. If we choose nil now, they cannot make up the difference with a huge injection later. WPD's customers may need to pay a little more now than they would like'*

- An energy/utility company representative commented that *'as a bill payer now, s/he wants to pay nothing'*. However, s/he will also be a bill payer in 10 years time and does *'not want a larger bill then'*
- A parish councillor questioned whether option three would cover all the substations that may be affected
- A local authority/council officer declared that s/he would go for option 3 for both flooding and severe weather, this was because s/he believes that *'national advice on changes to climate and flooding do not go far enough. Conditions may well be worse'*

6.3. Q6. Protection against flooding: Which of the following options would you like to see in WPD's plan?

Option 1: (WPD's current view) to protect the 100 most at risk substations at a total cost of £34m but at no additional cost to customers over the 8 year period

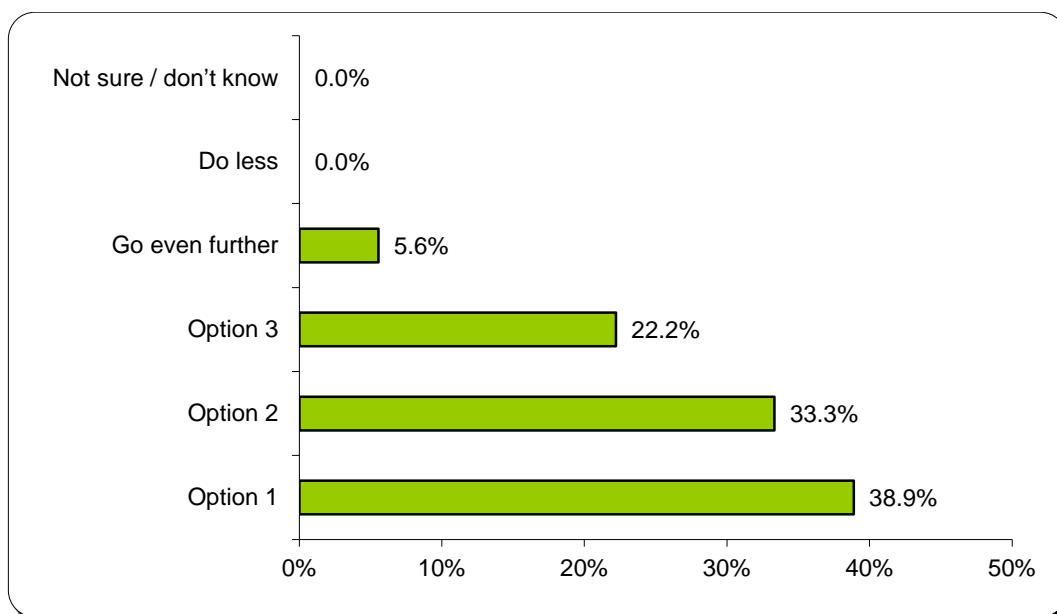
Option 2: To protect the 150 most at risk substations at a total cost of £50m (20p per domestic customer, per annum)

Option 3: To protect the 200 most at risk substations at a total cost of £67m (50p per domestic customer, per annum)

Option 4: Go even further

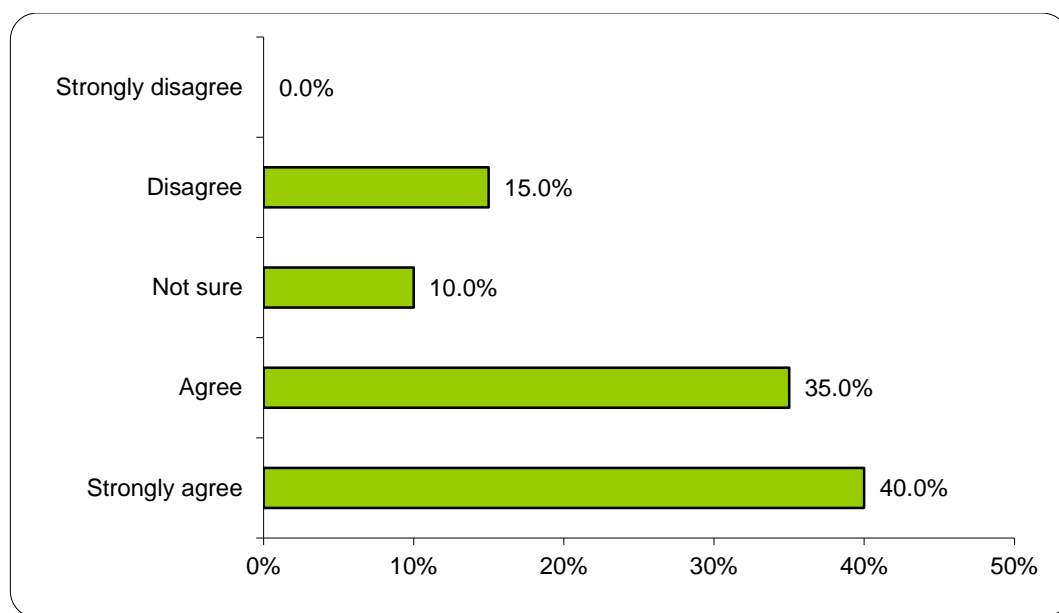
Option 5: Do less

Option 6: Don't know / not sure



7. Issue 4. Oil and gas leaks

7.1. Q7. Acting to reduce the risk of oil leaks from fluid-filled cables and SF6 gas leaks from equipment, should be a high priority for WPD?



7.2. Comments

Table 1

- A stakeholder commented on vacuum technology and SF6 vapours. S/he was of the view that *'there is a need to create a policy to move to a safer vacuum policy, this should be achieved by European Directives being reviewed'*
- A parish councillor pointed out *'the use of SF6 is a generally unknown factor'*
- A stakeholder stated *'SF6 used to be in trainers'* and is now banned in Europe for that use due to health concerns
- A stakeholder pointed out there is a *'PR opportunity for WPD to promote gas changes to vacuums'*. S/he commented that *'WPD cover 27% of the English and Welsh power supply so there is a strong need for WPD to raise its profile'*

Table 2

- An energy/utility company representative drew attention to the importance of *'early recognition of the problem'* of leakages, explaining that, as WPD had *'so much to do'*, s/he believed that this *'could stop'* WPD's routine programme; s/he added that *'unless there was an acceleration in leakages'*, WPD should concentrate on *'doing more testing'*

- An energy/utility company representative questioned why, *'if European regulation is expected'* that *'customers should have to pay for it now'*, and suggested WPD defer the investment for *'four to five years'*
- A parish councillor requested more information from WPD on what it plans to do about leakages
- An environmental representative stated that it was *'difficult'*, adding that the *'overall problem'* for stakeholders was the *'lack of context'* with which to make an informed decision
- A business customer representative agreed and added that, *'while WPD talked about assets and reducing emissions'*, s/he wanted to know how many oil cables there were as a proportion of all cables, and made the point that it was *'all very well reducing by x% if oil cables are a small percentage of the total but it needs to be regarded in context'*
- A parish councillor commented that, if WPD had the budget for testing and repair for its *'life cycle'*, and was *'already doing things'*, s/he was at a *'bit of a loss'* to understand why WPD wanted to accelerate the programme
- An energy/utility company representative raised his / her concerns about the SF6 problems, stating that this necessitated a *'whole list of different priorities'*

Table 3

- A parish councillor said *'I wouldn't have thought oil and gas leaks would have been an issue for WPD before attending this event'*. S/he asked whether other industries also suffered leaking equipment. S/he also enquired about the cause of leakages and what the total UK SF6 leakage is.
- A parish councillor felt that due to SF6 figures, somewhere between options 1 and 2 would be *'optimum'*
- A parish councillor commented that s/he would vote for Option 2 because s/he believed that it offered the prospect of *'a worthwhile reduction'* which might therefore help mitigate long-term damage
- The table agreed that Option 2 was best suited to most people's needs

Table 4

- A parish councillor said that the *'most important thing is to lessen environmental impact'*
- An energy/utility company representative enquired whether or not *'WPD use gas switchgear, rather than vacuum for cost reasons'*
- An energy/utility company representative suggested that when the switchgear was purchased *'environmental issues were not as big an issue'*
- A parish councillor stated that s/he would like to know what would happen to the SF6 if WPD were to change all of its switchgear

7.3. Q8. Reducing oil and gas leaks: Which of the following options would you like to see in WPD's plan

Option 1: Replace the worst 1% of equipment with the highest leakage rate at a total cost of £14m (10p per domestic customer, per annum)

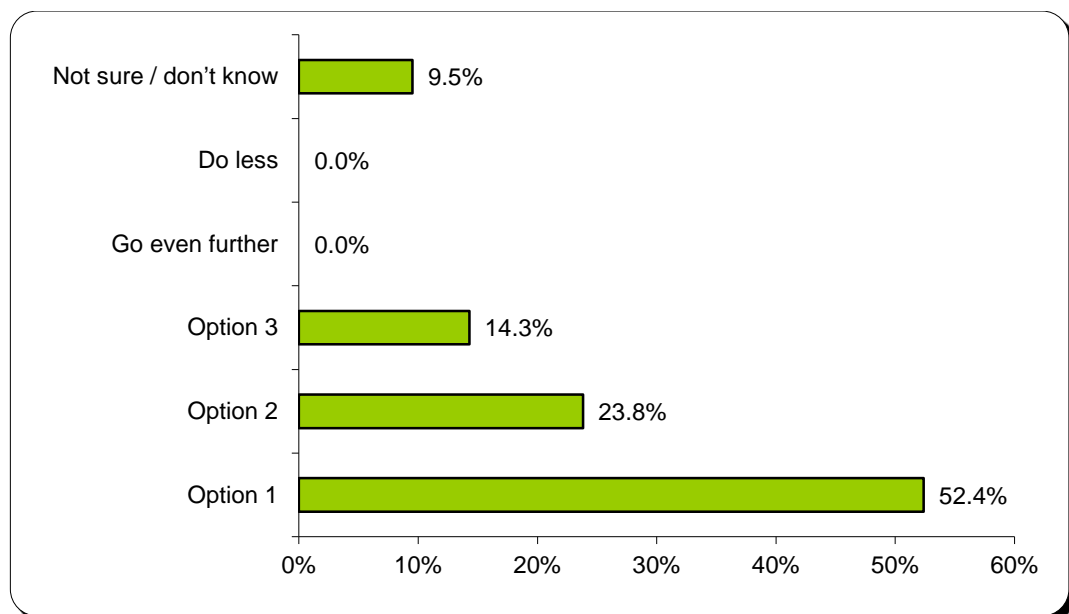
Option 2: Replace the worst 5% of equipment with the highest leakage rate at a total cost of £65m (50p per domestic customer, per annum)

Option 3: Replace the worst 10% of equipment with the highest leakage rate at a total cost of £132m (£1 per domestic customer, per annum)

Option 4: Go even further

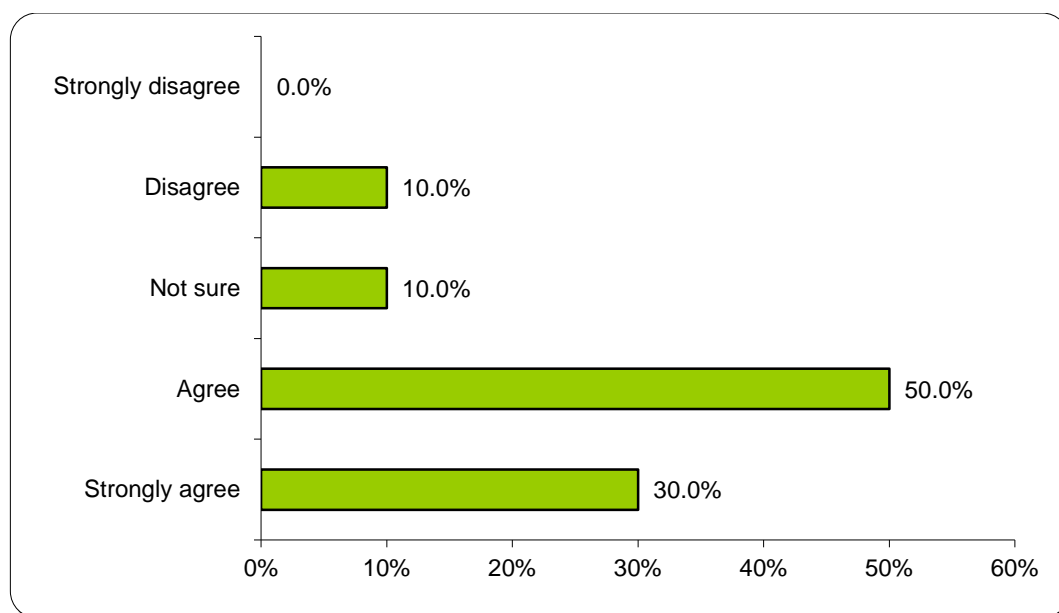
Option 5: Do less

Option 6: Don't know / not sure



8. Issue 5. Worst served customers

Q9. Improving service for our worst served customers should be one of WPD's high priorities:



8.1. Comments

Table 1

- A parish councillor stated s/he fell into the worst served customer category. S/he said they *'had experienced overhead wires falling and the collapse of poles due to fallen trees'*. S/he felt the level of service s/he had received had been *'quite good'*. S/he went on to point out people who live in the country *'don't complain as much as townies as they are more tolerant of power outages as well as to roads and gritting where all these problems are taken with a pinch of salt'*
- A stakeholder commented that *'everyone in the country is affected on many different things e.g. petrol'*
- A stakeholder questioned whether or not *'those who live in the country should pay more for electricity?'*
- A stakeholder pointed out *'the cost for WPD to supply central Birmingham is cheaper than to supply those in rural areas'*
- A parish councillor stated 80% of the people who live in his / her constituency are over 80 years old and regular power cuts are significant to most as they suffer a lot more than younger generations e.g. electric blanket

- A stakeholder said in *'Staffordshire outages are common and therefore all back-up methods are set-up/bought by individuals'*
- A parish councillor commented that villagers are prepared for power outages but the key problem is *'the house going cold in times of power cuts'*
- A stakeholder was of the view the scenario being discussed was *'an extreme one of where electricity isn't delivered often'*

Table 2

- A parish councillor questioned what WPD would achieve by investing in Option 4, and declared that *'I don't know what you're eliminating doing it'*. In addition, s/he recommended that it would be helpful if WPD provided a map *'showing where these customers are'*, adding that it was *'important to know which trees'* and explained that *'we will be discussing trees at the next council meeting and we need to know where we can self-manage'*
- An environmental representative considered that there was *'lots of low voltage stuff kicking about'*
- A parish councillor explained that s/he had lived in both cities and rural areas and reported that there was *'evidence that there are few outages in a city'*; s/he added that while rural people have an *'acceptance of outages'* they *'can still'* find it *'very frustrating'* and s/he raised concern about the fact that there were *'more elderly people living in rural areas'* who were vulnerable to outages
- The table agreed that WPD's use of averages was not helpful to the stakeholders in making informed decisions
- A local authority/council officer did not consider that this question *'particularly affects people in Gloucester'* and therefore would *'probably'* vote for Option 1; however s/he would *'support what WPD is trying to do'*
- An energy/utility company representative declared that it was *'impossible'* for WPD to offer the same service levels to all customers
- A business customer representative concurred, adding that there was a *'need to recognise physical constraints'*
- An energy/utility company representative considered that WPD should *'have a physical map'* and enquired if WPD was using, or could use, a similar method to the *'hotspot mapping'* employed by broadband providers
- An energy/utility company representative asked how WPD had broken down levels of risk, specifically *'at what level'*, and *'how it differentiated between customers and risks'*, and raised the point that a *'farmer is only one customer but his need is very urgent'*
- There was general agreement among the stakeholders that this would be *'so useful'*, particularly for local and parish council planning

- An environmental representative concurred that it would be helpful to have *'grouping by types of customers'* in an area
- A business customer representative pointed out that this was *'classic risk management'*
- A parish councillor stated that any risk assessment of power outages should consider how it will affect the vulnerable and that this was also a *'council responsibility'*
- An energy/utility company representative raised the issue of the *'differing expectations'* between vulnerable customers and business users
- A parish councillor pointed out that there was an *'increasing trend of homeworking'*
- A business customer representative considered that, although s/he did not have a *'lot of experience'* in this area, s/he would *'agree with most of what's been said'*
- A parish councillor stated option 1 was best
- An energy/utility company representative enquired how power cuts affecting the worst served customers would be addressed through work already planned; s/he recommended that WPD should conduct a *'granular analysis'* and *'look at it historically to decide how to use the pot of money'*
- A parish councillor declared that this was *'almost like saying - WPD come to my village, do the risk assessment and state a price for making it safe and I'll put it to the council then we're sure of getting our risks sorted out'*
- An environmental representative pointed out that it was called being *'demand led'* and that WPD *'already do this but on a mass scale'*
- A business customer representative considered that WPD was taking a *'very proactive view'*
- An environmental representative stated that s/he was not aware that *'people know you do that'*
- A business customer representative advised that s/he was also aware of other councils *'who say WPD it's your view to do this/that but it's not my job'*; s/he added that there was a *'huge spectrum'* and while it would be *'positive if WPD can motivate parishes to do this but not all want to do it'*

Table 3

- A parish councillor commented that *'I'm not a worst served customer, but we have more than the average frequency'*
- Another parish councillor agreed that as a customer s/he was also *'definitely below average'*
- A parish councillor stated that his/her area might fall within the *'worst served'* bracket, however this was not true for the parish that s/he represents

- Another parish councillor asked whether additional resilience tree surgery would be beneficial for worst served customers
- A parish councillor stated that *'it's very easy to say cut down all the trees, but it's difficult to justify why'*
- A parish councillor concluded that *'being realistic, I find it difficult to argue less for anything more than Option 1'*
- Another parish councillor was of the view that an addition of 5 pence to everyone's bills to help worst served customers might not be fair to everyone
- A parish councillor thought that WPD was in an *'awkward position'* because unlike with energy suppliers, customers have *'no other alternative to choose from other than WPD'* when it comes to DNOs. S/he decided that *'it's not an easy decision, so I'd plug for Option 2'*

Table 4

- A local authority/council officer said that his / her initial thoughts were that *'option three is less than 50% of those affected, which does not seem like a massive improvement'*. S/he went on to say that s/he *'would like to see WPD go further'*
- A local authority/council officer made the point that the statistic *'one in 700 sounds worse than 10,000 customers'*
- A parish councillor stated that it is the *'longer cuts that really matter. The occasional glitch is not that important because people get used to it'*
- A parish councillor commented that his / her village experiences power cuts once every two months. S/he went on to say that it has *'got to the point that people don't even report the outages'* and that s/he is *'trying to encourage people that they need to report it'*
- An energy/utility company representative observed that even if WPD chose the cheapest option they will be *'spending six times as much on that customer as they make on them'*. S/he added *'whilst it is reasonable to ask people to pay for some worst served customer, how wide do you want the curve?'*
- An energy/utility company representative was of the opinion that the places affected are mainly rural areas, so s/he suggested that they are more *'suitable for renewables and that they can be supplied with them'*
- A parish councillor stated that his / her *'political view is that most people are happy to fund worse served customers'*. However, s/he would *'like to meet one to hear their experiences'*

8.2. Q10. Service to remote customers: Which of the following investment options would you support?

Option 1: (Now) Keep the number of 'worst served' customers at 10k, at no extra cost to customers

Option 2: Reduce the number of 'worst served' customers from 10k to 8k at a total cost of £1.2m (2p per domestic customer, per annum)

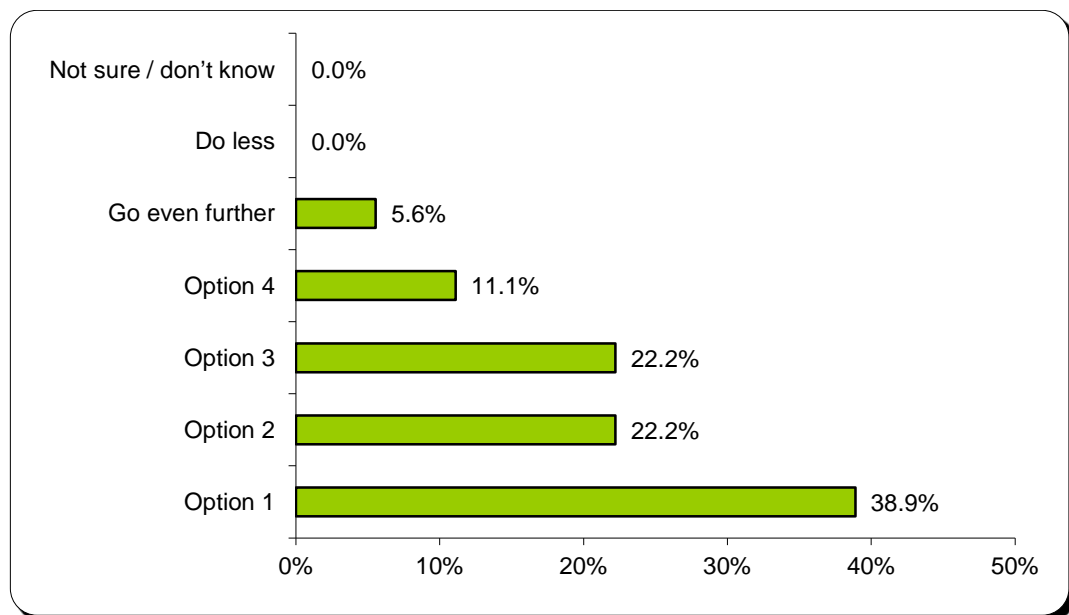
Option 3: (WPD's current view) Reduce the number of 'worst served' customers from 10k to 6k at a total cost of £3.6m (5p per domestic customer, per annum)

Option 4: (WPD's current view) Reduce the number of 'worst served' customers from 10k to 4k at a total cost of £8.1m (15p per domestic customer, per annum)

Option 5: Go even further

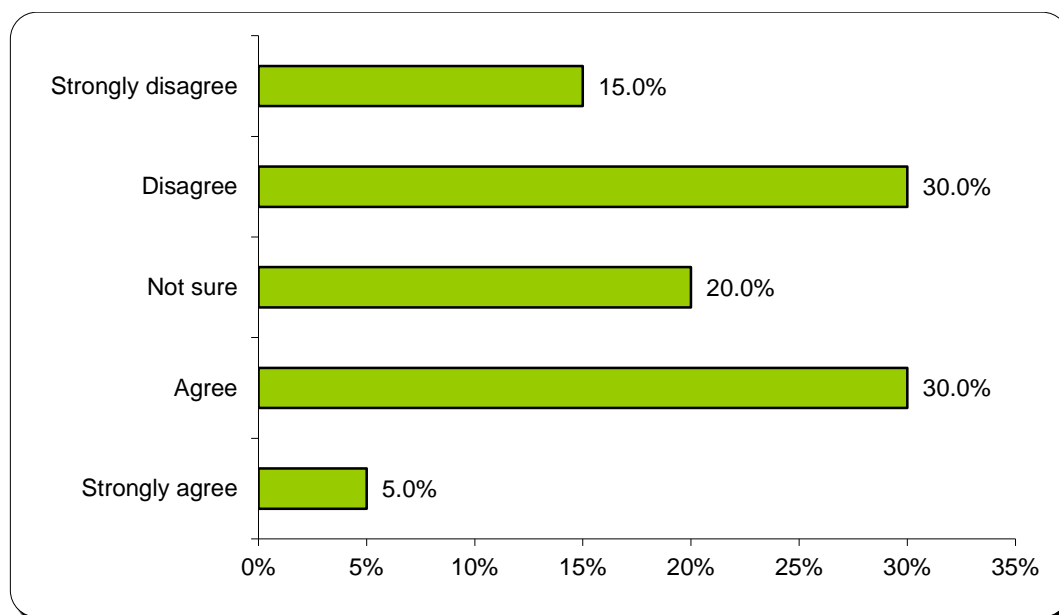
Option 6: Do less

Option 7: Don't know / not sure



9. Issue 6. Undergrounding in national parks and AONBs

9.1. Q11. Replacing overhead lines with underground cables in National parks should be a high priority for WPD (no supply reliability or carbon reduction benefits)



9.2. Comments

Table 1

- A parish councillor commented it was not a concern in his / her village
- A stakeholder stated that *'wooden poles aren't that visible'*
- A parish councillor felt it was *'difficult to generalise the decision.'* S/he was of the view *'it shouldn't be about where the power lines run rather than how they run e.g. across the river than road. S/he asked who decides the cut off area for AONB?'*
- A parish councillor asked *'who do we lobby regulator-or WPD?'* S/he commented on village churches and the ruins where *'Shakespeare wed having lines running across the sites.'* S/he raised the concern that *'it is unfair that landmarks are not protected from having overhead lines built but a hill is'*
- A stakeholder was of the view that *'careful route planning'* is needed
- A parish councillor pointed out *'past routes were built due to desperation in the need to have electricity'*

- A parish councillor stated *'routes could run underground'*
- A stakeholder commented that *'having substations and transformers next to schools is more of an emotional issue than a science one'*
- A stakeholder pointed out *'lines in school playground would not be laid across the area.'* S/he stated from a cost point of view it is better to change the routes rather than spend money placing them underground
- A parish councillor agreed and said s/he would not like to see *'roads being dug up'*
- A parish councillor countered that *'AONB and conservation areas have a large tourist element attached to these areas'*
- The table all agreed the issue of overhead cabling is not as important as it once was
- A stakeholder felt that better alternatives such as more *'beautiful pylons'* could be an option

Table 2

- An environmental representative was of the view that although WPD had a *'statutory role'* in protecting and managing the landscape, the same as the National Parks, this had to be balanced with the *'business and commercial needs in the parks, and that tourism and economy were also drivers'*
- An energy/utility company representative was of the opinion that there was *'value in doing some projects'* but that s/he would *'rather use the money for the worst served customers'*
- A local authority/council officer agreed that this was the *'same for Gloucester'*
- An environmental representative asked if there was an *'Ofgem budget for this work'*
- A local authority/council officer highlighted that there was *'major deprivation in Gloucester city'* and questioned if *'they would elect to pay more to make a nicer view wherever'*; s/he added that *'it's not a high priority even though it's a nice idea'*
- A business customer representative concurred, saying that *'if it was based on a hierarchy of needs, then the worst served must come first'*

Table 3

- A parish councillor commented that pylons do not provide an ideal backdrop for hiking activities. S/he added that his/her preference was somewhere between Options 1 and 2
- Another parish councillor was of the view that Option 1 was preferable despite the fact that residents in his/her parish were *'conservative by nature'*. S/he felt that at times his/her parish's views were not necessarily driven by logic but motivated by self-interest and echoed a *'not in my backyard'* style mentality

- The table agreed that undergrounding needed to be carefully targeted as it was not a necessity
- A parish councillor stated that *'the trouble with this wording is that it's open to so much individual opinion, for example, what is an iconic site? I'm not that bothered by undergrounding, it's something that's nice to have but not essential'*
- Another parish councillor supported WPD's current approach to undergrounding

Table 4

- A parish councillor said that it is *'a big issue'* for his / her council *'especially the day-glow yellow stickers on them'*
- A parish councillor asked if the WPD expert could explain how a council can request undergrounding in their area
- A parish councillor responded that s/he *'can guarantee the landowner in my village would be amenable'*
- A parish councillor declared that s/he would like to see more undergrounding outside of AONBs
- An energy/utility company representative commented that s/he *'quite likes the wooden poles'*. S/he added that s/he *'would not like one in my garden but there is a functional beauty to them'*
- A parish councillor reiterated his / her point from the discussions about tree cutting that *'WPD need to sell it correctly to the people'*
- An energy/utility company representative made the point that *'in the US it is all overhead, as ugly as you like, cables. Even in some beautiful places. We have a good mix here in the UK'*
- A local authority/council officer suggested that WPD should help *'in bringing people together to move forward undergrounding projects'*

9.3. Q12. Which of the following options would you like to see in WPD's plan?

Option 1: (Now) Underground 40k of overhead lines in national parks and AONB's at a cost of £6m (9p per customer, per annum)

Option 2: (WPD's current view) Underground 70k of overhead lines in national parks and AONB's at a cost of £10.5m (16p per customer, per annum)

Option 3: (Now) Underground 120k of overhead lines in national parks and AONB's at a cost of £18m (28p per customer, per annum)

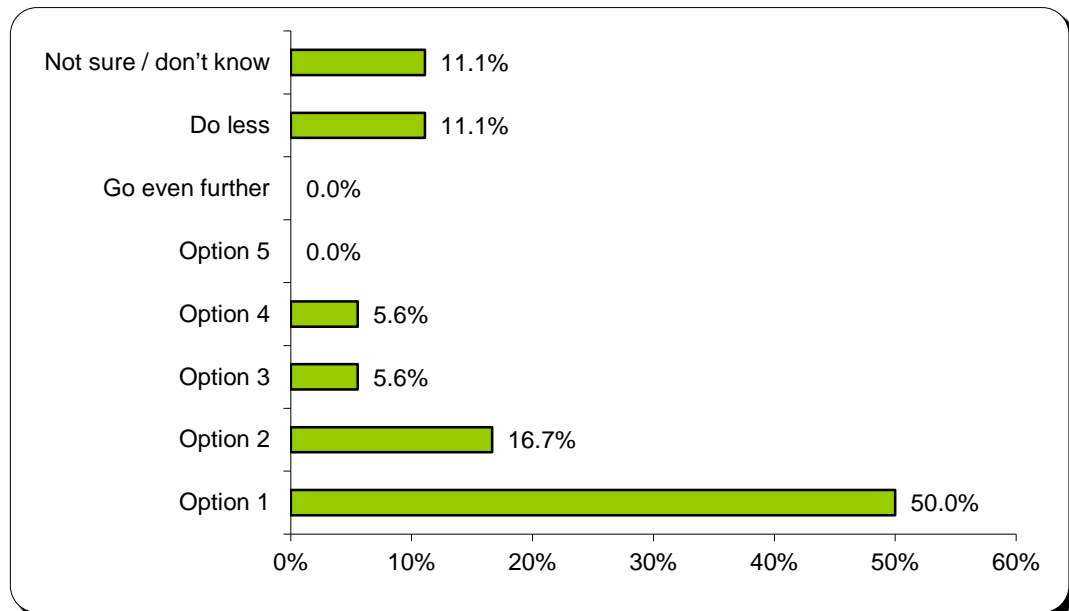
Option 4: Underground 240k of overhead lines in national parks and AONB's at a cost of £36m (56p per customer, per annum)

Option 5: Underground 480k of overhead lines in national parks and AONB's at a cost of £72m (£1.12 per customer, per annum)

Option 6: Go even further

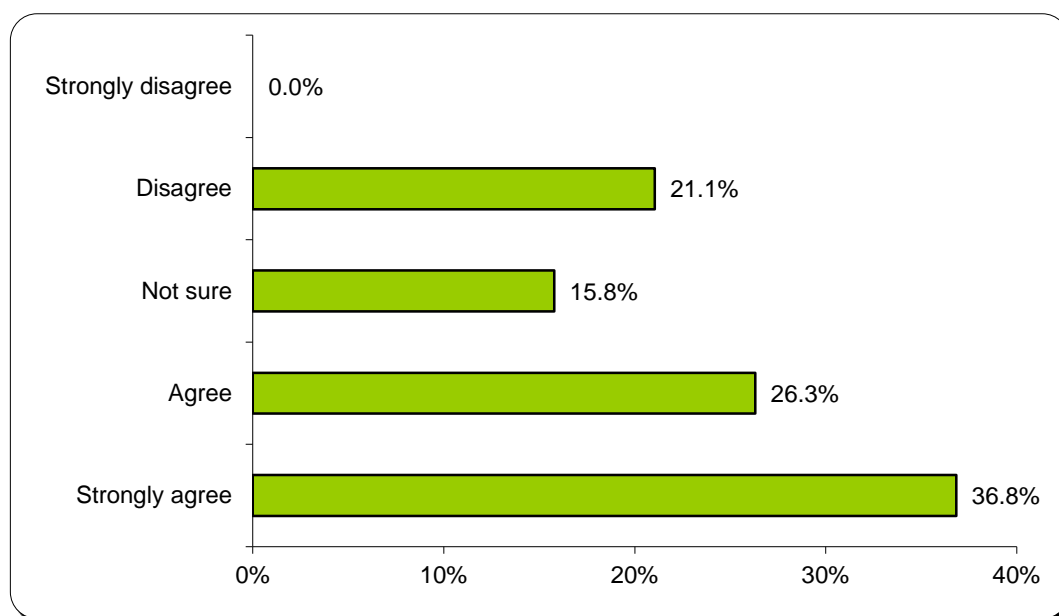
Option 7: Do less

Option 8: Don't know / Not sure



10. Issue 7. New connections – process speed

10.1. Q13. The current time taken from first contact to completed connection is acceptable



10.2. Comments

Table 1

- A parish councillor commented on a village pub having to go through 3 phases for a new connection due to a limited grant which meant a 1 phase connection was not possible. S/he pointed out the overhead cable was 1.5 miles long so it could connect to the main line and that is an *'eye-sore across fields'*
- A parish councillor felt *'the question oversimplified the point.'* S/he pointed out *'customers don't have to go to WPD to get a new connection, only for a point of connection'*. S/he went on to state *'WPD subsidise the connection and under s16 of the Act WPD cannot turn anyone down'*
- A parish councillor agreed the question was *'oversimplified'* and that the options are too simple so therefore s/he felt they were unable to give an opinion
- A stakeholder commented on *'new connections in individual houses'* and asked *'does it matter for small schemes?'*
- A stakeholder asked *'why do the general public have to pay for new connections?'* S/he expressed the view that *'those who need a new connection should pay for one'*

- A parish councillor was of the view that *'house builders are the main group who would want the connection time to be decreased'*
- A stakeholder asked *'can you charge for the service to create the new connection?'* S/he was of the view *'WPD shouldn't pay for the extra connections'*
- A parish councillor was of the view that his / her constituents *'wouldn't want to pay extra for others to have new connections installed free of charge'*
- A parish councillor was of the opinion the current rule that 4 or more houses should be classed as a large scheme should not be the case

Table 2

- An environmental representative supported Option 1, expressing a belief that people would display a *'nimby response similar to that for the Localism agenda of "why should I fund development of the road as a bill payer"'*
- A business customer representative opined that it was not *'necessarily'* the speed of the overall process that needed to be improved but rather that some of its *'key parts had broken down.'* S/he explained that when *'we need to give a developer the price, we need that information quickly from WPD, that it was 'all about upfront costs' and 'keeping in touch with WPD when getting ready for connection',* summing up that *'it's the front end and last bit that's crucial'*
- A local authority/council officer stated that this was an *'internal issue for WPD'* and asked how the company performed against other networks
- An environmental representative raised the issue that *'you're getting revenue out of it so what's the problem?'*
- A parish councillor pointed out that there was a *'huge amount of new housing in Gloucester'* and that *'people won't move in without being connected';* adding that s/he was of the opinion that it was more of an issue *'if you're building yourself'*
- An energy/utility company representative questioned why, as there were *'already regulatory standards',* WPD should *'better themselves'*
- An environmental representative further questioned *'why should it be an issue about the bill payer picking up the tab for improving yourselves'*
- A business customer representative stated that resources would be *'diverted'* if WPD was to continue with its improvement programme, and believed that WPD *'could take issue with Ofgem'* and *'claim discrimination'*
- An energy/utility company representative declared that the *'options don't divide into what I'm interested in';* adding that s/he believed it was *'personally for the bill payers to fund if it was my own garage connection'*
- A business customer representative was of the opinion that it was a *'conversion rate issue',* stating that, whereas *'thousands ask for a connection rate'* only a *'fraction go for connection.'* S/he posed the question of how WPD could *'advertise all the prices for'*

providing and equitably charging out, and made the point that *'if the conversion rate was higher, it would lead to more transparency of charges*

- A business customer representative made the point that there was a *'misperception by the consumer on the speed of connection'* and recommended that WPD could *'help manage expectations'* by providing more comprehensive information; s/he acknowledged that *'electricity is more complicated than gas and water'*
- An environmental representative considered that greater transparency of charges was a *'hot potato'*

Table 3

- A parish councillor asked WPD how long it takes to get a new connection. S/he was of the view that *'it's a matter of planning; if the people managing the scheme can't plan it properly, they will have to wait for it'*
- A parish councillor argued that when it comes to the question of who should pay *'it is the developers who should foot the bill'*
- Another parish councillor agreed that it is customers or those that benefit from the service that should pay
- The table agreed that the end customer should pay for new connections
- A parish councillor said *'I don't see why we should be paying if other people can't plan ahead properly'*
- A parish councillor agreed that *'it's just a question of people using their common sense and thinking ahead'*

Table 4

- A parish councillor said it is a *'difficult one'* as there are properties in his / her area that have never been connected
- An energy/utility company representative was of the opinion that *'if someone wants to build a house next to me they have to pay for all the other things such as bricks and Sky TV. They should pay for connection too'*
- A parish councillor commented that it takes six months to build a house, *'so it's fine as it is because you would plan it in'*
- An energy/utility company representative stated that s/he expects *'to be able to track information online'*
- An energy/utility company representative articulated that s/he would expect a system in place that when s/he *'calls a call centre they are all looking at the same information'*. S/he would also expect them to know *'what the end date and key dates are along the timeline'*

- A local authority/council officer declared that s/he *'would not expect this cost to go on the general bill'*

10.3. Q14: Which of the following options would you like to see in WPD's plan?

Option 1: (WPD's current view) The average time from first contact to completion at 30 days for a small scheme and 90 days for a large scheme at no extra cost

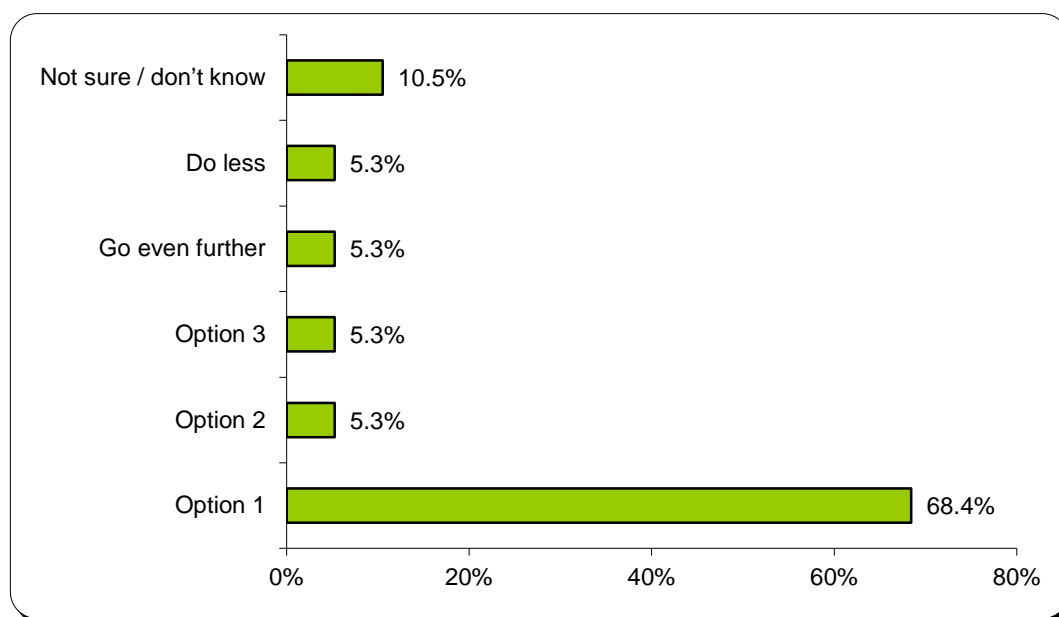
Option 2: The average time from first contact to completion reduced to 20 days for a small scheme and 60 days for a large scheme at a cost of £28.3m (22p per domestic customer per annum)

Option 3: The average time from first contact to completion reduced to 10 days for a small scheme and 30 days for a large scheme at a cost of £56.6m (44p per domestic customer per annum)

Option 4: Go even further

Option 5: Do less

Option 6: Don't know / not sure



11. Issue 8. Innovative customer communications

11.1. Q15. Which of the following options would you like to see in WPD's plan?

Option 1: (Now) A separate point of contact at each stage: enquiry, application, wayleaves / consents, on-site works/construction at no extra cost

Option 2: Now plus a dedicated contact number (with better expertise at first contact) at a cost of £3.2m (3p per domestic customer, per annum)

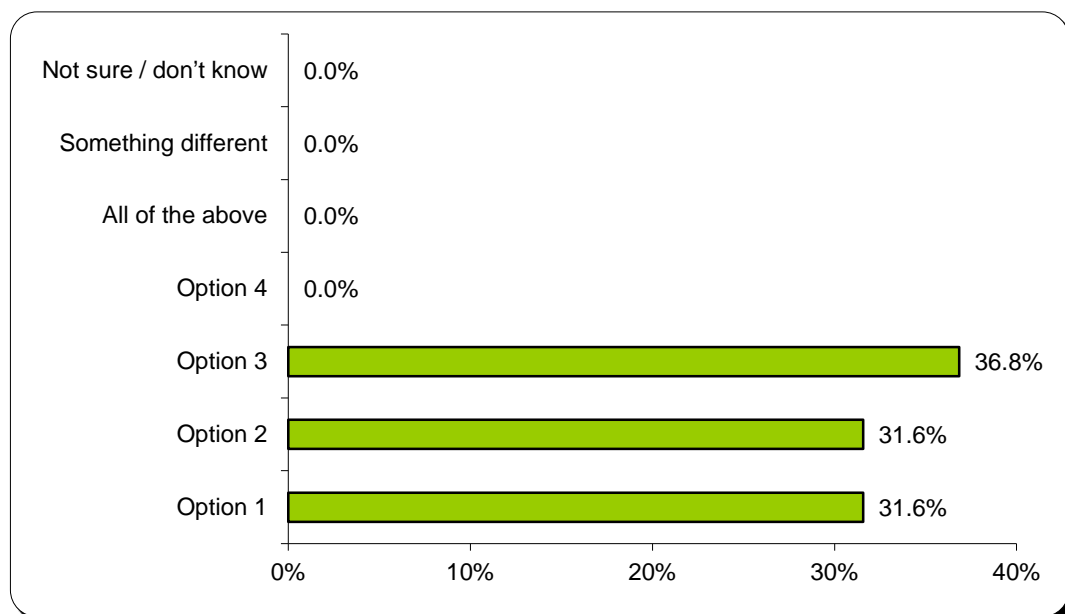
Option 3: Now plus applications, payments, job tracking etc. online at a cost of £2m (1p per domestic customer, per annum)

Option 4: Now plus a single account manager at a cost of £50m (35p per domestic customer, per annum)

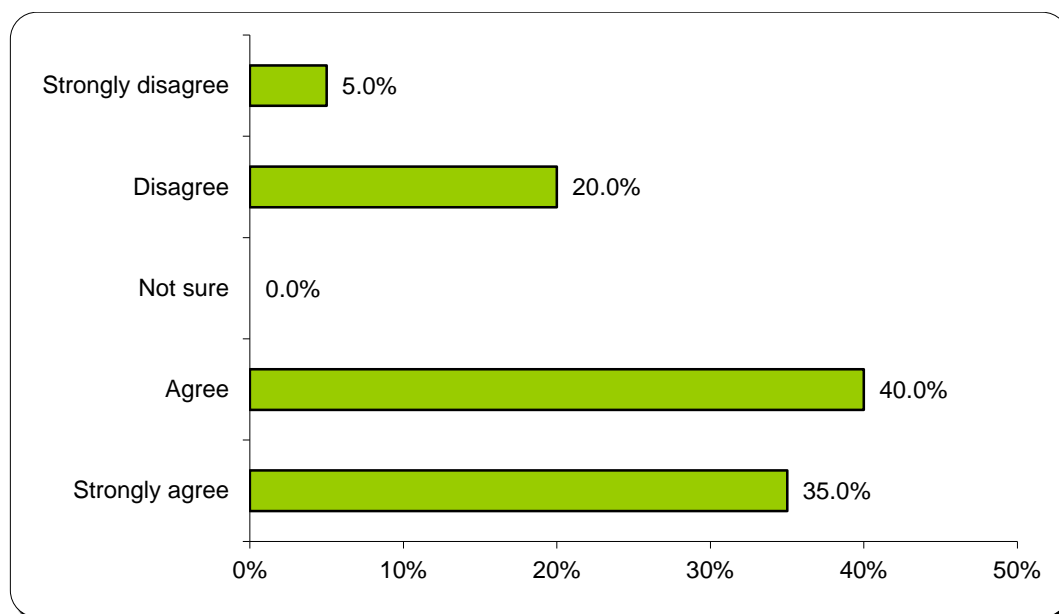
Option 5: All of the above

Option 6: Something different

Option 7: Don't know / not sure



11.2. Q16. Innovating the methods by which customers can communicate with us should be a high priority for WPD



11.3. Comments

Table 1

- A parish councillor pointed out that his / her neighbour rated *'WPD 9/10 for good service'*
- A local authority/council officer felt that *'the relationship between WPD and councils could be improved.'* S/he would like to see from WPD a more *'specialised team'* who will help councils by informing them of the benefit schemes/incentives available
- A stakeholder commented that *'good engagement from the early stages and liaising with councils for planning applications is needed'*. S/he stated there is a need for *'clearer answers from WPD as well as a need for a good contact'*
- A local authority/council officer stated the relationship between his / her council and WPD *'has improved'*. S/he felt there is *'still confusion and difficulty in knowing about the different types of team and who to contact within WPD'*
- A stakeholder asked a local authority/council officer *'do you get an honest response from WPD?'*
- A parish councillor asked if WPD served telecoms. S/he was confused as to why fibre connection broadband had not been discussed as it is a big problem due to telephone and mobile service being so bad. S/he was of the view WPD needs to touch on this
- A parish councillor pointed out *'villagers would accept more of the critical points if they could see how they are benefiting in other ways/areas.'* S/he stated an example would be the con being having overhead lines but the pro would be better phone service

- A parish councillor was of the opinion *'less is more for villagers meaning if it works people aren't bothered about what they haven't got'*

Table 2

- An environmental representative declared that WPD should *'bring it on'*
- An energy/utility company representative was of the view that WPD *'should start straight away'* and advised that while there would be *'more smart phones'* in the future, WPD should *'still maintain existing methods'*, adding that email had already proved to be a *'a useful method as 'quick when out and about'*
- An environmental representative made the point that schools were already using text messages to contact parents and said *'I think you've got to do it'*, adding that *'value for money wise, 2p is not bad.'* S/he further commented that *'it's a win win option'*, explaining that *'both customers and you benefit'*
- An energy/utility company representative warned WPD to *'keep the steam driven system for the older and/or vulnerable customer'*, citing the example of an *'elderly person who didn't know she was entitled to money and a representative knocked on the door, apologised for the outages and explained about the refund'*; however, s/he acknowledged that it was *'very difficult to keep records current'*

Table 3

- A parish councillor explained that s/he had always found dealing with anything that required contacting a call centre and having to speak to several different people a frustrating experience; for this reason s/he was in favour of Option 2
- Another parish councillor added that Option 2 would still mean having to speak to different people
- A parish councillor joked *'so we won't be getting through to a call centre in India?!'*
- Another parish councillor felt that in his/her capacity as a parish councillor, a single account manager would not be of interest
- A parish councillor was of the view that Option 2 was *'the most practical for most people'*. S/he felt that Option 3 might be more suitable for business customers. S/he said *'I just want to stop them (his/ her parishioners) ringing the parish council about these issues, especially as we've already given them a list of who to contact in the event of an outage, they call us regardless!'*
- A parish councillor said *'recently there was a substation fire in my local area; it would have been useful if real time information had been provided on to the website. I can't track incidents in the area and there was no record of the call I made'*
- A parish councillor added that *'we need to be confident that when ringing WPD the messages have been updated'*
- Another parish councillor said *'the more ways you can get this information out the better'*

- Another parish councillor was of the view that WPD should consider improving its website. S/he suggested that it should add a facility which enables customers to check on their local area's status by simply entering a postcode and using a traffic light system to designate real time information
- A parish councillor stated that s/he was not involved with the outlets discussed and it was therefore *'irrelevant'* to his/her interests
- Another parish councillor felt that although social media was *'fashionable at the moment'*, it might not be useful on a daily basis, but s/he acknowledged that it might be valuable in times of emergency
- A parish councillor asked whether WPD was able to use mobile phone networks in times of emergency
- A parish councillor suggested that WPD could do more to work with broadcast media such as BBC Radio Gloucestershire to keep customers updated
- A parish councillor commented that *'communication is key, it gives you peace of mind to know that there's a real problem, that WPD is doing something about it and that there's a timescale and if we don't know about it, WPD can let us know. After all what gets measured gets acted upon'*
- Another parish councillor added that *'I know then that it's not just my imagination, that there's a real problem'*
- A parish councillor asked WPD about the level of automatic reporting received
- The table concluded that clear and efficient communication is a high priority

Table 4

- A local authority/council officer said that s/he would anticipate that over the next ten years technology will *'massively evolve and WPD have to try their upmost to keep up'*
- An energy/utility company representative stated that s/he would already expect option three and option four to be available. S/he went on to say that *'as long as I have a phone I can call someone with a computer and they can look it up for me'*
- An energy/utility company representative commented that while *'two-way text messaging is handy today, in ten years time it's going to be obsolete'*
- A local authority/council officer raised his / her concerns about the ability to use a phone during a power cut
- An energy/utility company representative declared that *'if all communications have failed, we've lost and we can't communicate with you anyway so you just need to focus on giving us what you can'*
- An energy/utility company representative articulated that *'the interesting thing about communication methods is that the changes are so fast. The horizons you are looking at are much closer than the 13 years we are talking about here'*

- An energy/utility company representative was of the opinion that *'phone lines will probably be embedded still so stick with that. But social media could be the wrong direction. We just don't know'*
- A local authority/council officer queried why it would cost to have outages on the WPD website because *'the data is already available on your phone system'*

11.4. Q17. Which of the following options would you like to see in WPD's plan?

Option 1: (Now) Telephone operators and automated messages to respond to calls at no extra cost

Option 2: Now plus 2-way text messaging (report a problem & receive information) at a cost of £3m (2p per customer per annum)

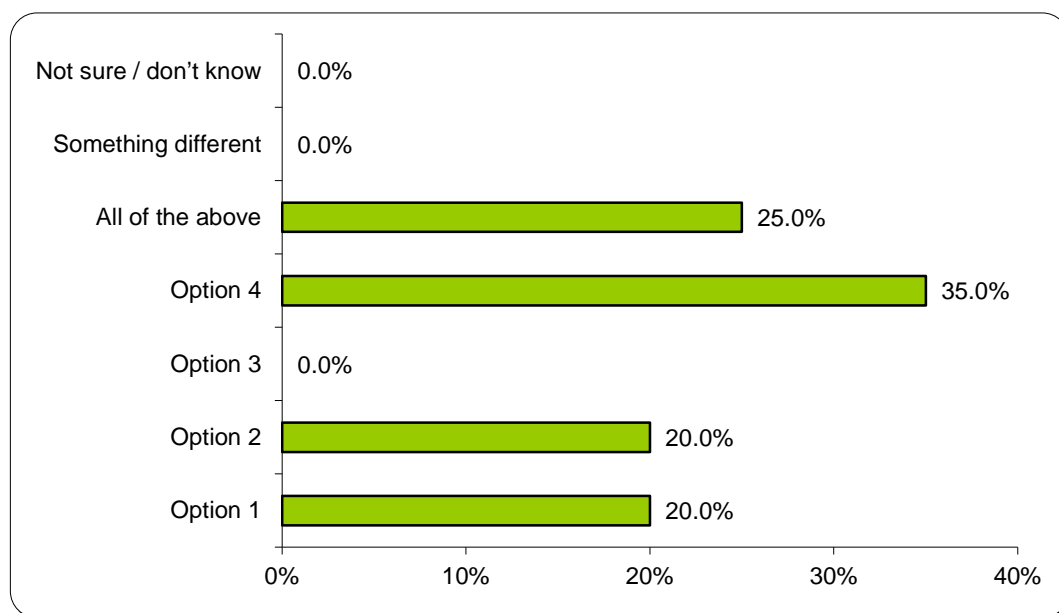
Option 3: Now plus social media channels at a cost of £3m (2p per customer per annum)

Option 4: Now plus real-time outage info on the website at a cost of £2m (1.5p per customer per annum)

Option 5: All of the above

Option 6: Something different

Option 7: Don't know / not sure



12. Low carbon investment

12.1. Issue 1. Are our assumptions reasonable for a 'best view' scenario?

Table 1

- A parish councillor stated s/he was not very interested about the situation but felt it was *'too ambitious'*
- A stakeholder commented on the congestion charge which may be rolled out in many cities. S/he pointed out that *'if only electric vehicles are allowed in cities then it will have expensive implications for those who live in rural areas.'* S/he stated that *'due to electric vehicles constantly needing to be recharged those living in rural areas will be forced to have a petrol vehicle and an electric one for when they wish to drive to a city'*
- A stakeholder agreed and was of the opinion *'local authorities in cities will be first to convert to electric vehicles'*
- A stakeholder also agreed and added that in the future *'people living in more affluent areas will have to have an electric car to get to the city jobs'*
- A stakeholder said s/he was *'a fan of the congestion charge and it should be introduced more despite anti public opinion'*
- A stakeholder stated when PV took off the price was 10 times the commercial rate and this could happen with the cost of electric cars
- A parish councillor commented s/he was surprised *'shale gas was not mentioned'*
- A parish councillor pointed out that wind energy was given a target to provide 50% of renewable energy by 2015. S/he felt this *'target then became an aspiration and then disappeared.'* S/he was of the view all *'goal posts will be changed to suit the government'*
- A stakeholder countered that *'targets should look to be achieved as they come from the EU and failure to meet them could result in penalisation'*
- A stakeholder was of the view the south west area is good for PV. S/he thought it would be the same cost to run wind farms. S/he stated the south west of England offers a lot of advantages that WPD should take advantage of
- A parish councillor commented s/he was concerned about *'carbon footprints and the aims in place to reduce it are rubbish'*
- A stakeholder disagreed and pointed out *'nuclear power stations are low carbon footprint and over a long period of time they will help to reduce the footprint'*

- A parish councillor asked *'will nuclear power stations ever bring the carbon footprint down to 0?'*
- A stakeholder said *'PV are able to semi conduct electricity and this process is constantly improving'*
- A parish councillor pointed out *'the amount of metal and size of carbon footprint created to use PV and nuclear stations is extremely high and may not be the best idea'*
- A parish councillor asked *'what is the conversion rate of a windmill?'*
- A parish councillor was of the opinion *'WPD should be focusing on taking carbon out rather than aiming to reduce carbon levels'*
- A stakeholder asked *'what is WPD's utilisation of assets and average over a year?'*
- A stakeholder commented on the ability of electric vehicles and heat pumps to reconfigure the network and switch it at fixed level transmission. S/he asked *'if other companies continually change flows of power over lines why can't WPD do this?'*

Table 2

- A business customer representative considered that the Government had *'grasped this scenario and hope people jump into EVs'*; however, s/he doubted that this would happen, and reported that feedback indicated that *'not everyone will go for the EVs as people think they will'*
- A business customer representative stated an example that in central London there was a *'reluctance to take up EVs, even though the planning authorities are still going ahead with this'*, adding that *'developers don't have a role but local authorities possibly do as they frame the planning infrastructure'*
- An energy/utility company representative believed that there should be *'cars suitable for business users'* and that once *'they see a taxable advantage'* this would encourage take-up
- A parish councillor suggested it should be the responsibility of the Government to *'redefine the targets'*
- A business customer representative stated that DECC were *'pretty much saying what you should choose, without actually saying'*, and was of the view that *'it was so expensive, unless prices change for EVs, and subsidies don't touch the surface'*
- An environmental representative raised the point that the *'infrastructure was not there in rural areas for EVs'*
- A business customer representative considered that the Government's *'perception'* was *'wildly over-optimistic'*
- A parish councillor was of the opinion that *'insulation probably won't take off'*, and suggested that, in cases where there was no pre-existing cavity, it would be *'cheaper to knock down the house and build brand new'*

- A parish councillor agreed, and pointed out that insulation was *'not cost-effective for consumers'*
- In addition, an environmental representative questioned how a *'historical rural building in the Cotswolds'* could be insulated and raised the issue of condensation in old houses
- An environmental representative added that *'I don't think there will be a massive rush for a heat pump'*
- A parish councillor countered this, commenting that s/he was *'looking for alternative energy to heat our village hall'* and that a heat pump would be *'an option'*
- A parish councillor raised the issue that *'some planning developers like to go for zero carbon emission houses, even though the customer isn't demanding this'*
- A business customer representative stated that it was the *'Government's aspiration to go to level/code 6 for new builds'* and that s/he considered this was *'very tough'*
- A parish councillor suggested that there should be *'Government legislated ground source heat pumps'* and stated that *'cost comes secondary as we've got to conserve energy'*
- An environmental representative questioned whether a ground source heat pump in existing build would be *'workable'*, stating that it would *'use a lot of electricity as heat escaping'*
- A business customer representative made the point that there was a *'huge amount of housing stock existing and it refreshes very slowly.'* S/he additionally recommended that WPD should *'spend time and effort on what the green issues/triggers are and put in monitoring equipment'*
- A parish councillor enquired if all the scenarios had a similar investment cost

Table 3

Due to a number of stakeholders needing to leave before session 3 tables 2 and 3 were merged.

Table 4

- A local authority/council officer said that s/he feels the *'other scenarios are more likely than scenario one'*
- A local authority/council officer stated that s/he was concerned there would be *'a long uptake period'*
- An energy/utility company representative was of the opinion that after the success of the PV installations due to the Feed In Tariff, *'with the right investment these can be worked too'*

- A parish councillor raised his / her concern that there will be a lot of resistance from residents with regard to insulation. S/he went on to add *'people are going to want to see others in their street getting it done before they get their own done'*
- A local authority/council officer commented that the Renewable Heat Incentive is *'due to come in to play soon and it will be full head of steam during this period'*. S/he did add, however, that s/he envisages *'medium levels during this period rather than high'*
- A local authority/council officer made the point that has the *'biggest effect on heating and emissions is weather'*
- A local authority/council officer discussed the view that it has *'come to a point where it will be financially attractive to switch vehicles. It will be slow though because we need to sort the infrastructure out first'*
- A parish councillor said that we are making the assumption that people are going to *'keep our 2.1 cars per house. If we all end up working at home and public transport improves, we will only need one car per house'*
- A local authority/council officer made the point that WPD are not risking financially if they invest in the infrastructure for vehicles because *'the cost would be passed to its customers'*
- A local authority/council officer raised the possibility of electromagnetic charging points in the road and smart chargers in the car. S/he went on to say that this was a positive step because *'people could charge anywhere, without having to plug in and then be charged to their homes'*
- A parish councillor was of the opinion that this *'there would be a big spike in electrical use when everyone comes home from work'*
- A local authority/council officer stated that s/he had *'gravitated to scenario three'*. However, s/he was *'worried at being over optimistic and not investing enough'*
- A local authority/council officer commented that s/he does not think scenario four is probable because *'the credits will not be available to the UK as other countries would need them first'*

12.2. Issue 2. If you had greater visibility of your energy use (e.g. smart meters), what impact do you think it would have on your behaviour?

Table 1

- A parish councillor stated s/he *'only knew one person who has one and they don't understand it'*
- A parish councillor believed it would alter his / her behaviour if they had one
- A stakeholder felt that *'it could encourage people to get rid of the hot water tanks and switch to immersion water heaters.'* S/he said non-essential loads will be switched off and people will look to store energy. S/he stated *'a good method would be to use PV in*

the summer and store the energy for winter. S/he was of the view new houses should have storage mechanisms under the house

- A stakeholder agreed and stated *'it is a planning issue for the future of house building'*
- A parish councillor commented it *'would be good to see schools educating pupils on smart meters'*
- A stakeholder pointed out *'it is not possible to buy a kettle which only boils 2 cups of water'*
- A parish councillor was of the view that *'house builders will resist installing PV as it will increase house prices'*

Table 2

- A parish councillor considered that this question *'depends on the type of person'* and considered that while *'Government initiatives help'* it was down to *'personal responsibility'*
- An energy/utility company representative suggested that having *'meters on the wall would keep up a keen interest'*
- However, a business customer representative made the point *'but not if you're not the bill payer'*
- A parish councillor considered that it was a *'generational view'*
- An environmental representative made the point that smart meters would not help those with PV and own generation; s/he also questioned *'how smart will these meters be'*,
- A parish councillor stated there was *'no standardised spec for these meters'*
- An energy/utility company representative queried WPD's role, as a network operator, in *'helping customers'* to reduce costs and energy consumption
- A parish councillor was of the opinion that *'if there's a cost incentive'* it would encourage people to use meters more
- A business customer representative made the point that *'it's two things we're discussing here, energy display inside the home and a smart meter with two-way information'* and reported that during trials, *'people really noticed meters at the beginning and then started ignoring them'*
- An environmental representative raised the issue of the *'debate over who pays for it'* and stated that it would *'cost a fortune'*
- A business customer representative suggested that meters should have the *'ability for suppliers to access remotely'* and that this could include *'remote disconnection by the smart meter'* and *'allow remote change of tariff'*

- An environmental representative highlighted the issue of price tariffs and suggested that they could be used to *'incentivise customers to use energy at off peak times'*
- A parish councillor questioned why it was necessary to *'have so many tariffs'*

Table 4

- An energy/utility company representative was of the opinion that *'if you can see your usage then you would see an improvement'*. S/he went on to add that teenagers would see the biggest improvement because *'they are good at heart but just need reminding by an iPad in the corner of the room'*
- A local authority/council officer responded saying that *'you do have a tail off effect. After six months the novelty has worn off'*
- An energy/utility company representative countered this point saying *'his family still recycle years after it was introduced'*
- An energy/utility company representative stated that *'a smart meter would be far more visible than a quarterly bill'*
- A parish councillor said that s/he was *'worried about the big brother aspect'*. S/he *'likes the idea of the smart meter, but there is a potentially sinister idea that they could manipulated'*
- A parish councillor suggested giving *'it to a chartered accountant and they would get people using'*
- An energy/utility company representative declared that s/he does not *'think the tools to lower his energy via a smart meter are there'*
- An energy/utility company representative said that s/he would *'buy a smart appliance'*
- An energy/utility company representative questioned the point that if *'you can get washing machines with timers and Economy 7 tariffs, why add more?'*
- An energy/utility company representative was of the opinion that *'there needs to be a way of getting people to use more load when there is more generation'*
- A parish councillor commented that it is unlikely that *'in the future we will be running round the house turning lights off'*
- An energy/utility company representative was of the opinion that some of the changes will come through by financial incentives such as cheaper bills. However, *'people are generally nice people and will feel socially responsible to lower their consumption'*

12.3. Issue 3. Do you agree that customers should not see an increase in power cuts as a result of introducing smart grid technologies??

Table 1

- A parish councillor said *'the method of moving energy should be looked at and all black-outs are caused by key problems which need to be addressed'*
- A stakeholder commented *'the use of electricity is key and affordability is a problem.'* S/he pointed out *'those who can't afford top white goods and PV will end up paying more for their energy'*
- A stakeholder was of the view that *'the elderly will struggle to cope in the new world'*
- A stakeholder pointed out *'short-term power interruptions are not a problem if you have back-up e.g. a battery.'* S/he stated long-term power interruptions are the key problem
- A stakeholder said *'WPD need to look at reconfiguring transformers and the network in an acceptable way'*

Table 2

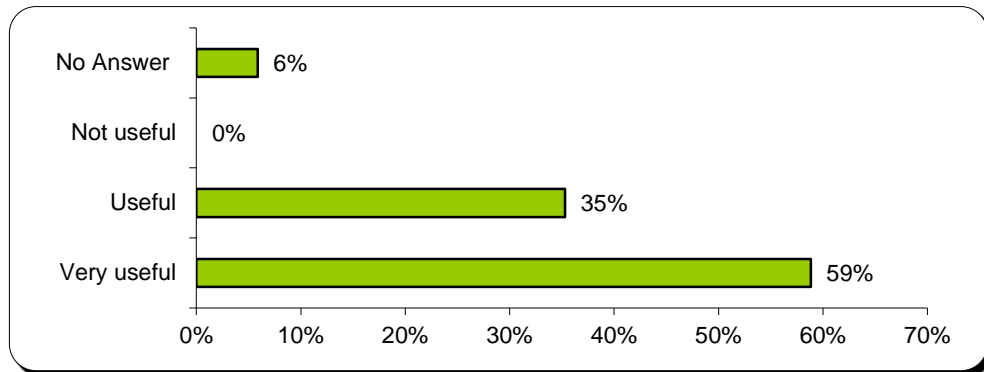
- All the stakeholders agreed that customers should not see an increase in power cuts as a result of introducing smart meters
- However, a parish councillor added the caveat that some customers may accept an increase if smart grid technologies resulted in *'cheaper electricity'*
- A business customer representative made the point that peaks occurred during *'autumn and winter tea time at 5pm'*
- An environmental representative raised the issue of increased *'vulnerability'* due to power station closures
- A parish councillor highlighted that this could be *'especially difficult if we have another hard winter again'*
- A parish councillor asked about the nuclear input
- An energy/utility company representative raised the subject of *'cascade tripping'*
- An environmental representative highlighted that *'renewables don't work during an outage'* and explained that during a power failure *'the solar panels stop working as the inverter needs a power source'*, adding that *'it's a big issue'*

Table 4

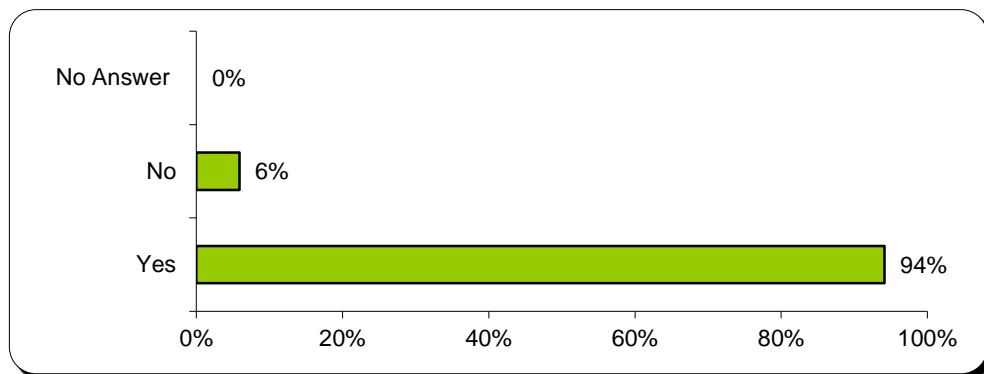
- The table was in agreement that customers should not see an increase in power cuts as a result of introducing smart grid technologies
- A parish councillor said *'it would be fun to disagree though'* and went on query whether there was an upside to disagreeing with this the statement

13. Stakeholder feedback

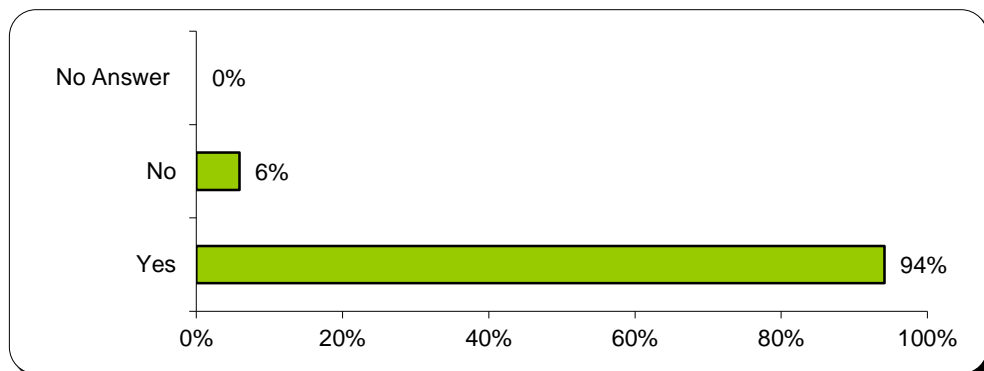
13.1. Q1. Did you find the workshops useful?



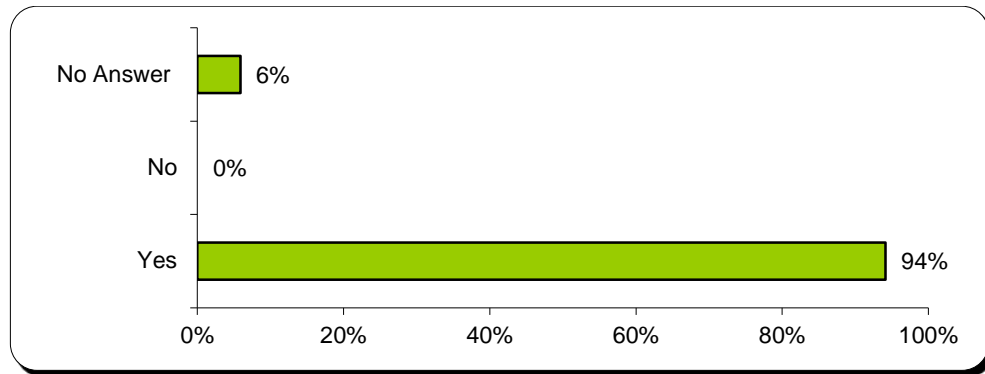
13.2. Was the venue conveniently located for you?



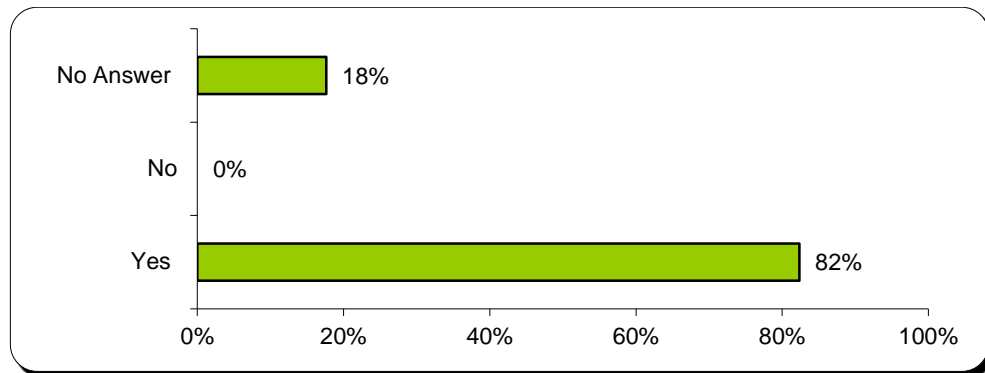
13.3. Did we provide enough information at the workshop?



13.4. Did you feel you had sufficient opportunity to express and discuss your views today?



13.5. Did you feel we covered the right topics?



13.6. Written feedback

A number of stakeholders left written comments on their feedback forms. A selection of these comments is shown below:

- *"Very informative"*
- *"The general introduction to what the business does was a useful precursor to the discussion"*
- *"Voting was just as good as the discussion"*
- *"Some issues, decision making/voting was difficult having only seen 'averages.' such numbers are very misleading"*
- *"Well-structured and good debate"*
- *"Raised interesting idea"*
- *"Hope the results help drive the business plan"*
- *"Excellent"*
- *"Very useful to better understand the drivers, options and costs"*

- *“The facilitator ensured discussions focused on the key questions and that all areas were covered”*