

Stakeholder workshop report: Cardiff

14th November 2012



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2. Introduction

2.1. Date and location

The stakeholder workshop took place on 14th November 2012 at: Wales Millennium Centre, Bute Place, Cardiff Bay, Cardiff CF10 5AL.

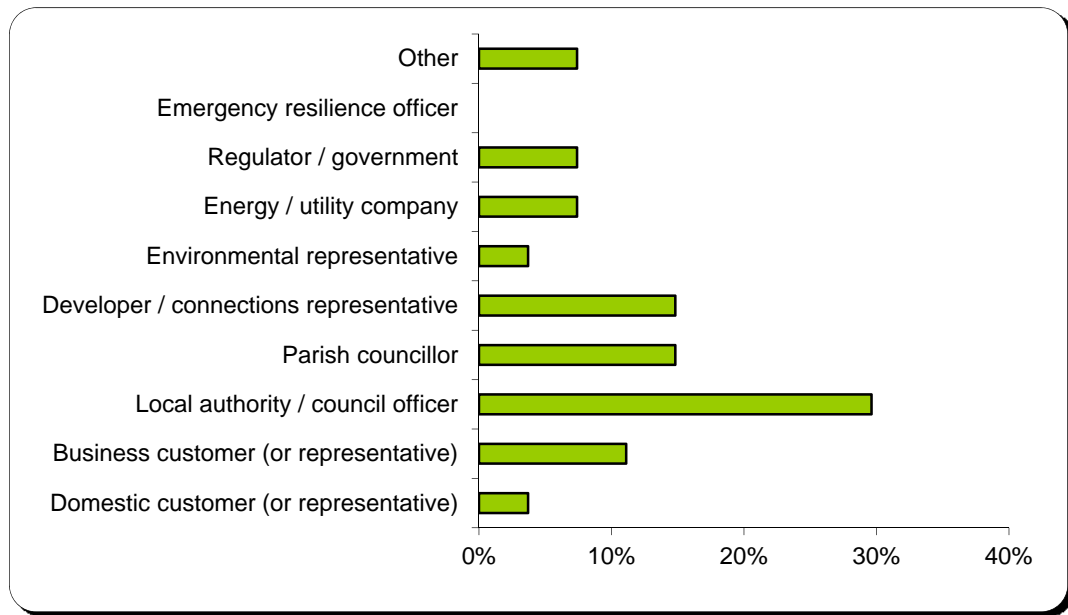
2.2. Attendees:

36 stakeholders attended the Cardiff workshop. The details of all attendees are shown below:

- Mr Alun Lowe - Planning Contributions Manager, Newport City Council
- Mr Andrew Treweek - Head of Maintenance Services, Two Rivers Housing
- Mr Andrew Nixon - Development Officer, Wye Valley Area of Outstanding Natural Beauty
- Mr Carl Lees - Technical Director, Kinetica Energy
- Mr Charles de Winton – Surveyor, CLA Wales
- Mr Craig Salter - Electrical Engineering Manager (S.Wales), Associated British Ports
- Danielle Royce - Stakeholder Engagement Manager, Wales & West Utilities
- Mr David Cann - Rhossili Community Council
- Cllr David Davies - Councillor, Llandough Community Council
- Mr David Proctor - Energy Development Manager, Dow Corning Ltd
- Cllr David Jones - Community Councillor, Llanbadarn Fynydd
- Mr David Garner - Supply Chain Development Manager, Energy Saving Trust Wales
- Eowyn Hanna - Technical Assistant, Inexus
- Mr Greg Jarvis - ICP Solutions Manager, Electrical Testing Ltd
- Cllr Guy Ingram - Councillor, Llantwit Major Town Council
- Cllr Gwyn Price - Community Councillor, Llanbadarn Fynydd
- Mr Harvey West - Chief Executive Officer, Vogen Energy Limited
- Mr Jonathan Hopkins - Regional Manager Lucy Switchgear

- Mr Joseph Hayden – Director, HAYSYS Limited
- Mr Julian Bosley - Economic Development Unit, Blaenau Gwent CBC Regeneration Division
- Cllr Julian Meek - Chairman of the Council, Abertillery & Llanhilleth Community Council
- Mr Lee Ewell - Energy Saving Trust
- Cllr Martyn Price - Community Councillor, Llanbadarn Fynydd
- Mr Matt Bajowski – Engineer, Caldicot and Wentlodge Levels 1DB
- Mr Matt Wakelam - Operational Manager, Economy and Major Projects, Cardiff Council
- Mr Michael Lord - Senior Advisor Climate Change, Environment Agency
- Mr Nathan Welch - Planning Director, Kinetica Energy
- Mr Ninan Williams - Clerk to the Council, Resolven Community Council
- Mr Paul Smith - Programme Manager, Energy Saving Trust Wales
- Cllr Ralph Cook - Deputy Leader, Cabinet Member, Strategic Planning, Highways, Traffic & Transportation, Cardiff Council
- Rhian Kyte - Team Leader Strategic & Development Plans, Caerphilly County Borough Council
- Dr Ron Loveland - Energy Advisor to Welsh Government, Welsh Government
- Cllr Roydon Collier – Chairman, Llandough Community Council
- Mr Stephen Buckley - Programme Land Agent, Forestry Commission Wales
- Mr Tom Evans - Senior Planning Policy Officer, City & County of Swansea Council
- Mr Tom Gronow - Planning Officer, City & County of Swansea Council

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
- Nigel Turvey
- Bob Parker
- Natasha Richardson
- Alex Wilkes - Stakeholder Engagement Regulatory & Government Affairs
- Paul Jewell
- Ian Lawrence
- Maurice Eshelby
- Sean Sullivan
- Paul Richards
- Colin Preece
- Gordon Downing

Green Issues Communiqué

- James Garland - Director (workshop facilitator)
- Nick Bohane – Executive Director (workshop facilitator)

- Richard Sutcliffe-Smith – Executive Director (workshop facilitator)
- Emma Webster - Associate Director (workshop facilitator)
- Victoria Cross - Director (workshop facilitator)
- Nick Carthew - Consultant (workshop facilitator)
- Kelly Edwards – Executive Director (scribe)
- Alice James - Account Manager (scribe)
- Alex Coleman - Account Executive (scribe)
- Farah Pasha - Account Executive (scribe)
- Lottie Whyte - Account Executive (scribe)
- Rob De Angeli - Account Executive (scribe)

3. Executive summary

3.1. Feedback from participants

- Every stakeholder who left feedback after the event stated that they had found the workshop to be 'useful' or 'very useful'
- All stakeholders also told us that they had sufficient opportunity to express and discuss their views
- 95% of stakeholders told us we had covered the right topics on the day and every stakeholder who left feedback told us that we had provided enough information

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

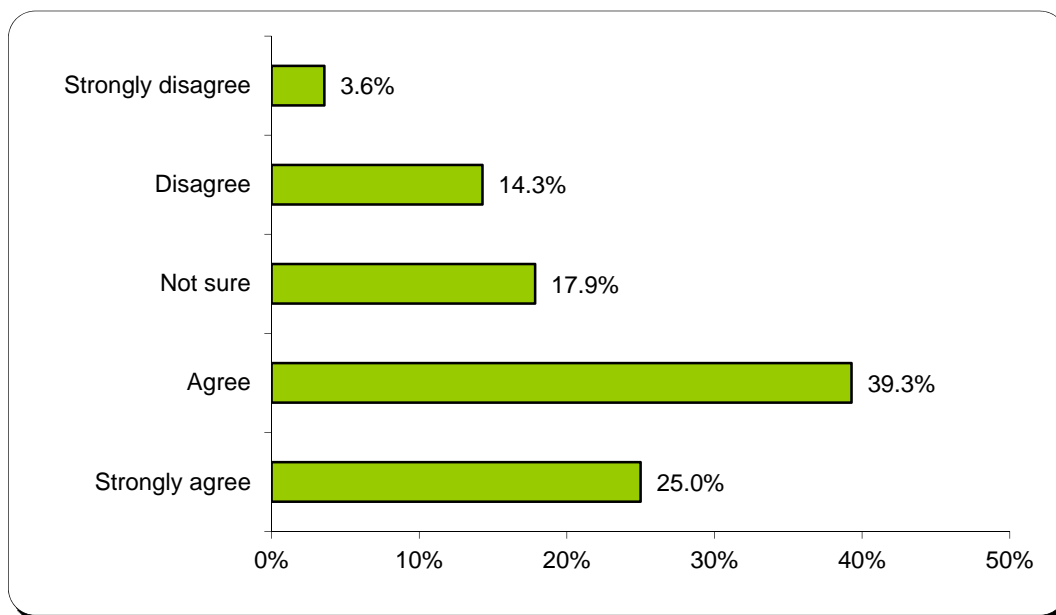
3.2. Feedback summary

- Approximately two thirds of stakeholders were of the view that reducing the frequency and duration of power cuts should be a high priority for WPD. The most popular option for the business plan period was that proposed by WPD (to reduce the average frequency to 7.75 per 10 years and the average duration to 52 minutes). One third of stakeholders were of the view that WPD should go further, although one in five actually stated that the company should 'do less'
- Opinion was split on the issue of severe weather resilience as many stakeholders were not aware that falling trees causing power cuts was a big issue. Whilst half of the stakeholders polled were of the view that this issue was a high priority, a resilience tree trimming programme of 20 years at no additional cost was supported by almost two thirds

- Stakeholders generally saw flooding as a high priority issue. Whilst WPD's proposals to remove the 100 most at risk substations from the risk of flooding were supported by more than half of all stakeholders polled, a significant proportion (over 40%) were of the view that the company should go further in its approach to dealing with this matter
- There was no real consensus on the issue of oil leaks from fluid-filled cables and SF6 gas leaks from equipment. It was commented that there were more pressing issues and that this should be looked at purely in financial terms, as addressing this issue was costly. It was also commented that WPD could make other changes to the way it operates in order to have a greater positive impact on the environment. Over half of stakeholders polled agreed with the proposal to replace the worst 1% of equipment with the highest leakage rate, with approximately one third stating that the company should go even further
- Almost 80% of stakeholders either 'agree' or 'strongly agree' that improving service for worst served customers should be one of WPD's high priorities. Although it was commented that those customers living in remote areas often expected a lower level of service, it was pointed out that these customers pay the same for their electricity as those living in urban areas. WPD's proposals to reduce the number of 'worst served' customers from 10k to 6k was supported by a quarter of stakeholders polled but opinion was split with approximately 36% stating that the company should go further and a similar proportion voting to do less
- The majority of stakeholders polled were of the view that the current process speed for new connections is acceptable. WPD's proposal for this level of service to remain the same for the price review period was endorsed by almost 80% of stakeholders polled
- Innovating WPD's methods of communication with its customers was deemed to be important by the majority of stakeholders. Some stakeholders told us that they saw social media as being important in the future but there was limited support for significant investment being directed towards this channel of communication at present. The introduction of two-way text messaging was supported by over a quarter of stakeholders polled
- With regard to WPD's assumptions for a 'best view' scenario of a future low carbon network, it was noted that this was very hard to predict due to the fact that technology is moving so fast. A number of stakeholders made the point that financial incentives and government subsidies had an important part to play in making this scenario a reality. It was also noted that easy wins such as improvements to the energy efficiency of homes had a big part to play
- Stakeholders were broadly of the view that customers would be more likely to change their behaviour with regard to energy consumption if they could see some financial benefit, although it was commented that this may lead to those people working during the day being unfairly penalised

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 local authority/council officer said that s/he *'has no major experience of power cuts despite the area being rural'* and commented that the WPD service was *'exceptional'*
- A developer/connections representative mentioned that *'in South Africa there are power cuts every day but this is not the case in the UK'*
- An energy/utility company representative commented that *'an extra £12 being added to a bill over the cost of a year is not too much to be expected'*

Table 2

- A local authority/council officer commented that s/he was not really affected by power cuts and that a 40 pence increase *'seems minimal'*
- A parish councillor was of the view that *'costs for power cuts should be fairer to the customer'*
- A local authority/council officer stated that during daylight hours most domestic customers are not significantly affected; however, businesses tend to be more affected, particularly if they are based in rural areas

- A developer/connections representative commented on the issue of power surges. S/he asked the WPD representative's views on surges. This was explained.
- A local authority/council officer stated that *'eight power outages over ten years for domestic customers isn't too bad, but for businesses these could result in wider economic losses. I think option 3 or 4 would be best'*
- A parish councillor noted that some of WPD's substations were built on flood plains. S/he said, *'so when you build your substations, why not choose a different site to alleviate the problem?'*
- A developer/connections representative questioned how WPD deals with someone who builds housing on a flood plain

Table 3

- A local authority/council officer stated s/he doesn't experience many power cuts, and can't remember the last one s/he had
- This stakeholder stated that reducing power cuts was *'not an issue'* and was unsure if the customer would notice a real benefit in the reduction in rates and frequencies suggested
- A business customer representative stated that s/he *'has seen an improvement in the number of power cuts in recent years'*. S/he added that as a representative of the rural community *'a power cut of any description has a significant impact'*
- A local authority/council officer questioned whether investing in improving power cuts will benefit urban customers or rural customers the most
- An environmental representative stated that the reduction in the average frequency of power cuts means nothing to him / her as a customer living in an urban town or city, and suggested *'there should be more focus on those customers who are affected the most by power cuts'*
- A local authority/council officer questioned whether the 40p increase would happen every year or whether it would be 40p higher overall by 2023
- A local authority/council officer suggested that the improvements that WPD are proposing in reducing frequency will be beneficial to urban customers. S/he stated *'these decreases in duration and frequency are not significant enough for rural customers to notice an improvement to their service to justify an increase in customers' bills'*
- A business customer representative stated that *'everyone pays the same amount so should expect the same in service'*
- A business customer representative added that *'it is a huge inconvenience when the power does go out'*; for example, a recent power outage in mid Wales had affected many residents

Table 4

- A business customer representative said that cutting three minutes from the average power cut *'is a bit of cop-out'*. S/he stated if there is a power cut then the result is his / her business *'losing work on computers'*
- A business customer representative stated the s/he tries to educate his / her clients that *'if they have a power dip, they are likely to have another one in the next ten minutes'*
- A business customer representative made the point that many of his / her clients are *'too small for a UPS system'*
- A business customer representative commented that *'a couple of years ago WPD didn't fault switch, now they do, so there are always things WPD can do to make it better'*
- A local authority/council officer was of the view that the business customer representative *'should be building in his / her own reserves'*
- A business customer representative replied that it would be quite difficult for him to do so
- A business customer representative added *'trying to get through to smaller business to have a little bit of back-up is difficult'*
- A business customer representative was of the opinion that *'eight in ten years is pretty good'*
- A local authority/council officer agreed, adding *'when you wrap them up in cotton wool, you take away their resilience ability. When they get close to a mini problem they see it as a massive disaster'*
- A local authority/council officer verbalised that *'six quid is not much to him, but six quid to someone else could mean a day's food'*. S/he had some concerns about people paying disproportionately more
- Another local authority/council officer revealed that his / her local authority *'is a small, rural area, with small local lines. There can be dips due to the level of usage but at 5:15 at night, generators kick in to make up the difference'*
- A local authority/council officer declared that *'to keep everyone 100% is not possible'* and that *'rural areas accept that there will be a worse service'*

Table 5

- An environmental representative wanted to discuss outages. She/he stated *'under Ofgem there are penalties when they don't meet requirements: do they come out of the profits of WPD or are they offset by the customer?'*
- A business customer representative asked, *'if the investment isn't made does the service suffer?'*
- An environmental representative questioned WPD's proposals, asking *'why should the customer have to pay for improvements and why is it not taken from WPD's?'*

- A local authority/council officer was of the view that s/he was more concerned with the improvement to the network to allow for population increase and increased usage

Table 6

- A regulator/government representative felt they *'had lost significant bids for businesses to move to the area due to there not being sufficient capacity on the networks'*
- A local authority/council officer explained *'high duration is the biggest concern in relation to power cuts'*
- A local authority/council officer said that s/he assumed that places which experience more severe weather have more power cuts. S/he was of the opinion *'it is important to target priority areas'* and views them as a high priority
- Another local authority/council officer said s/he deals *with 'overhead lines and the duration of power cuts has been reduced hugely.'* S/he felt that *'investing in one area would have a positive impact on several issues'*
- A developer/connections representative was of the view that *'this is not about the frequency, it's more about the duration of the cuts'*
- A regulator/government representative said *'we haven't mentioned smart grids. Is this captured in option 1?'*
- A local authority/council officer said s/he would choose *'option 4 because this covers the issue of duration which is an important factor'*
- A regulator/government representative felt *'option 1 is best'*
- A regulator/government representative said *'the amount of money involved and actual bang for buck with the ten years involved doesn't justify spend option 1'*

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)

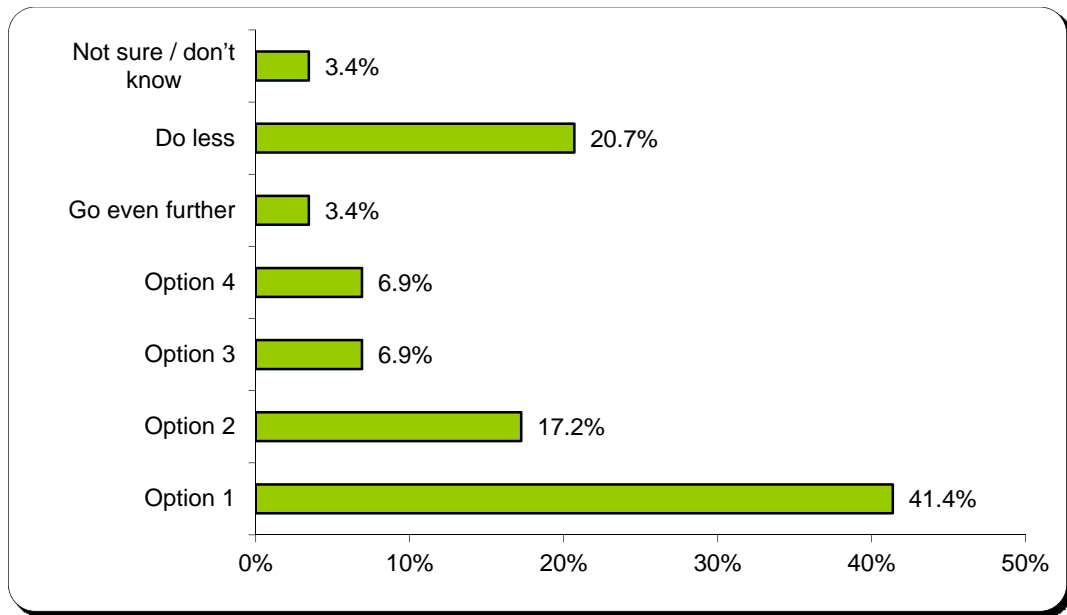
Option 2: Reduce the average frequency to 7.5 per 10 years and the average duration to 51 minutes at a total cost of £59m over the 8 year period (55p on each domestic bill per annum)

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)

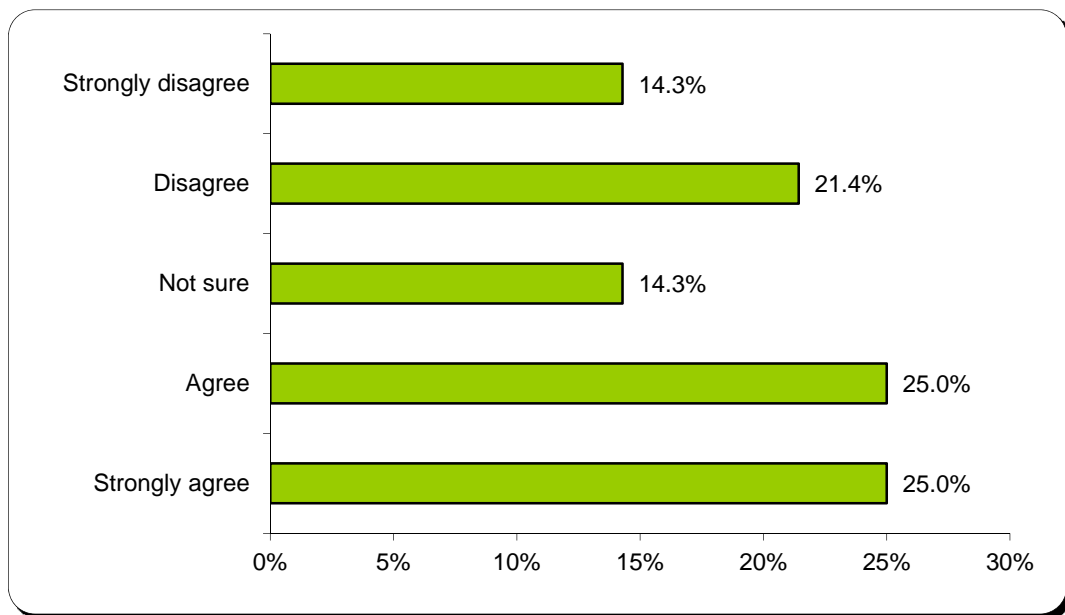
Option 5: Go even further

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

- The table felt that people were not particularly impacted by severe weather conditions and that WPD had got its priorities right on this issue
- A developer/connections representative stated that *'you are on top of your game'*

Table 2

- A local authority/council officer enquired about the annual cost implications for severe weather damage
- A parish councillor asked whether WPD has a contingency plan built into its company's finances and whether this was considered on an annual basis
- A parish councillor asked WPD whether *'it would move the power lines away from the trees'*
- An environmental representative stated that moving power lines is tricky due to the landscape implications. S/he added that, particularly in some protected areas, *'it becomes complicated'* and when dealing with older trees *'it becomes even more difficult'*

- A parish councillor enquired whether WPD has a tree planting programme in place to replace the trees cut down and *'if so, who would have to pay for this?'*
- An environmental representative questioned the scale of the impact of trees on power cuts

Table 3

- An environmental representative questioned why network resilience is only being tackled from a tree angle; *'surely there are other weather factors that impact the lines, for example, wind and lightning, that WPD needs to be considering?'* S/he suggested that this is a *'narrow approach'* to improving severe weather and emergency resilience
- A local authority/council officer discussed the length of the power outages in New York experience due to Hurricane Sandy
- A local authority/council officer wanted clarification that this investment priority is focused on tree cutting and not *'burying cables'*
- A local authority/council officer wanted to *know 'if WPD or the landowners carry out the tree cutting?'* This question was answered.
- A business customer representative stated that most landowners, particularly from his / her personal experience, are aware of tree felling as an issue that WPD is tackling, and the system *'works well'*. S/he added that as long as the area is left tidy and compensation is provided then there shouldn't be an issue

Table 4

- A local authority/council officer made the point that *'most councils and corporate organisations do not realise that cutting down trees in March, April and May is against the law'*. S/he would like to know if the acceleration will be from an increase in the number of cutting teams in the autumn months or through cutting trees all year round. S/he has *'no problem with an increase in teams in autumn months'*
- A local authority/council officer added that the *'ground quality in winter months is very poor and it is difficult to get machinery there. It is better in the summer months. It's about a balance'*
- A local authority/council officer responded with *'there is no balance, there is a law and not every council has someone like him in trying to uphold it'*
- A local authority/council officer informed the table that WPD had been on his / her property *'in the past few weeks doing this very thing'*
- Another local authority/council officer said that s/he was walking through a wood recently, saw a power line and thought that it would *'have to be dealt with'*

Table 5

- A business customer representative commented, *'there are other issues that should be discussed rather than just tree cutting such as lightning strikes on power stations and I find it strange that tree cutting is such a big issue'*

Table 6

- A local authority/council officer asked, *'is this purely to clear trees?'*
- A local authority/council officer pointed that s/he is currently *'experiencing trouble with trees and the ideal way would be to underground all cables'*
- A regulator/government representative said *'there is a huge difference between cutting down trees and undergrounding so for the same spend you have less results if you spend money on undergrounding'*
- A developer/connections representative pointed out that *'the network is ageing so we need to be undergrounding cables'*
- A regulator/government representative asked *'does WPD carries out the work themselves or hire outside companies and therefore create new jobs?'*
- A local authority/council officer was of the view that one of the options to prevent a substation from flooding would be to put it on stilts. S/he asked *'would WPD look into the option of relocating?'*
- A regulator/government representative said s/he finds WPD's current approach very strange and that option 3 would become the obvious one. S/he asked *'has WPD looked at storm searches, particularly around the River Severn?'*

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

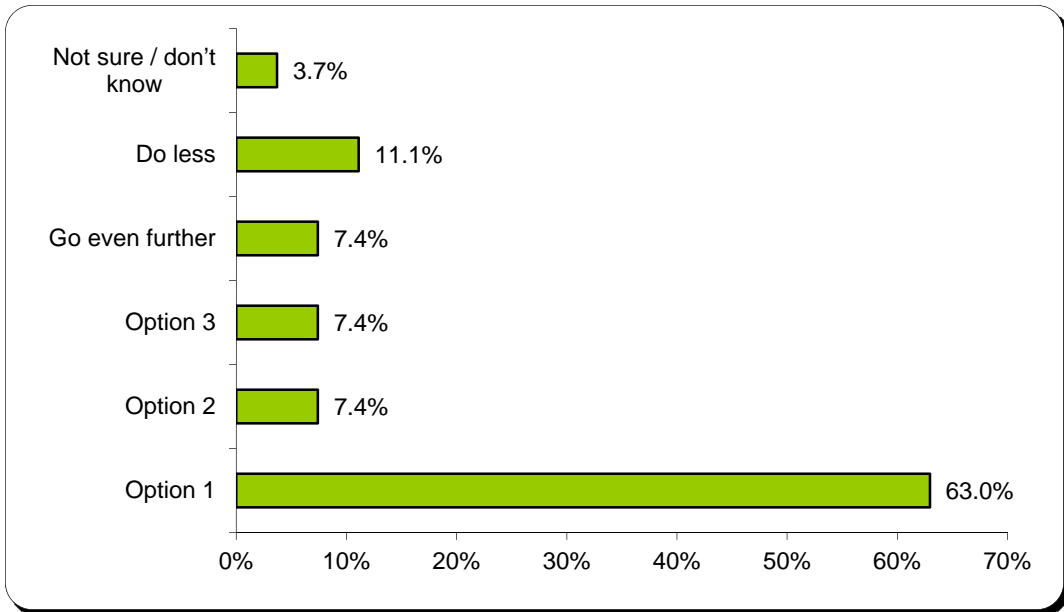
Option 2: The duration of the tree trimming programme accelerated to 20 years at an additional cost of £14.7 (14p per domestic customer, per annum)

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

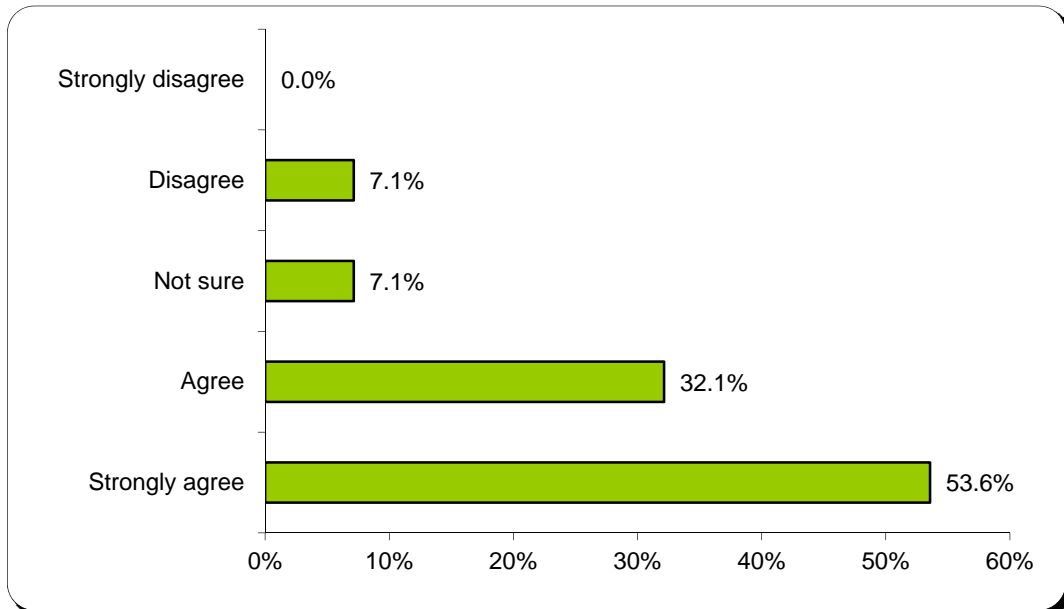
Option 5: Do less

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 local authority/council officer said there has been a considerable amount of new flood defences built along the river front in his / her area and noted that developers paid for these defences to safeguard nearby new houses. S/he asked, *'what is WPD's relationship with developers?'*
- A local authority/council officer asked *'are the substation doors water resistant?'*
- An energy/utility company representative commented that a *'twofold approach would be good.'* S/he was of the view that *'WPD should be investing in more of the portable options and warning systems to enable it to improve flood measures rather than just looking at dealing with 100 substations.'* S/he felt *'a mixed approach out of the 50p increase would be sensible'*
- A local authority/council officer asked *'what is your renewal programme in respect of flooding for these substations?. Do you replace with current technology?'*
- A local authority/council officer pointed out his / her impression is the process becomes reactive with developers rather than future planning and future proofing. S/he felt that developers should be asking themselves the question *'where do we want to build for the next 15 years? what are the implications for the energy companies?'*

- A local authority/council officer replied to the above comment and asked, *'when councils get an outline application for a large site do they automatically consult with the energy companies as statutory consultees?'*
- A local authority/council officer pointed out *'the UK is going to get more extreme weather events which will causing flooding'*

Table 2

- A local authority/council officer concluded that *'WPD needs need to assess flooding mitigation on a case-by-case basis'*
- A local authority/council officer asked WPD about the cost implications for flooded substations and whether this would be passed on to the consumer
- A local authority/council officer added that *'it makes sense to protect as many substations as possible'*
- A parish councillor asked *'is WPD covered by insurance for flooding?'*

Table 3

- A local authority/council officer stated that *'flooding is a significant issue'* for the local authority s/he represents. S/he added that they are working with multiple agencies to understand which areas are at risk. S/he suggested that it would be good to have information from WPD on which substations are at risk in his / her local authority
- A local authority/council officer felt *'co-ordination between WPD and local authorities on future plans for mitigating flood impact is important'*
- An environmental representative felt WPD's 100 substations standard is good and is actually more than the Cabinet Office is suggesting
- An environmental representative wanted to know if this priority includes protection against surface water and climate change. S/he also queried *'whether WPD is considering climate change predictions, as some substations will become more or less at risk'*
- An energy/utility company representative wanted to know what proportion of WPD's network the 100 substations represents
- An environmental representative pointed out *'if one of the substations did go down it could be weeks before power is restored'*
- A business customer representative mentioned the occasion when soldiers were sent to protect a substation. S/he stated that it is very important that WPD does what it can to make sure it is resilient to these issues as in his / her opinion *'it is a high priority that substations are protected'*

Table 4

- An environmental representative said his / her organisation works on the basis that *'those who benefit should pay'*
- An environmental representative stated that s/he *'finds it hard to believe'* that the standard of protection will be once in 1,000 years.
- Another environmental representative commented that it is *'not just an issue with raised river levels, high ground water levels are a concern. The substations can flood from below'*
- A local authority/council officer suggested that *'WPD needs to think outside the box and see what everyone else is doing'*
- An environmental representative agreed that there *'is room to work together and find more cost-effective measures'*

Table 5

- A business customer representative was of the view that *'there should be a weighted scheme for the impact on different customers'*
- A business customer representative further added that s/he didn't think it should be prioritised in numbers but in importance of how a cut would affect WPD's customers
- A local authority/council officer stated *'a strategic plan and working together with all stakeholders is the best idea'*

Table 6

- An energy/utility company representative asked *'is WPD referring to most of the primary sub stations?'*
- An energy/utility company representative said *'my reaction would be this is not a priority because we would expect you to reconfigure it so the most vulnerable customers' power is restored immediately'*
- Another energy/utility company representative said *'when I was looking at the numbers it didn't feel like there were a significant number of people who would benefit'*
- An energy/utility company representative said *'you only get 30% of value back for a lot of investment - therefore I would choose option 1'*

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

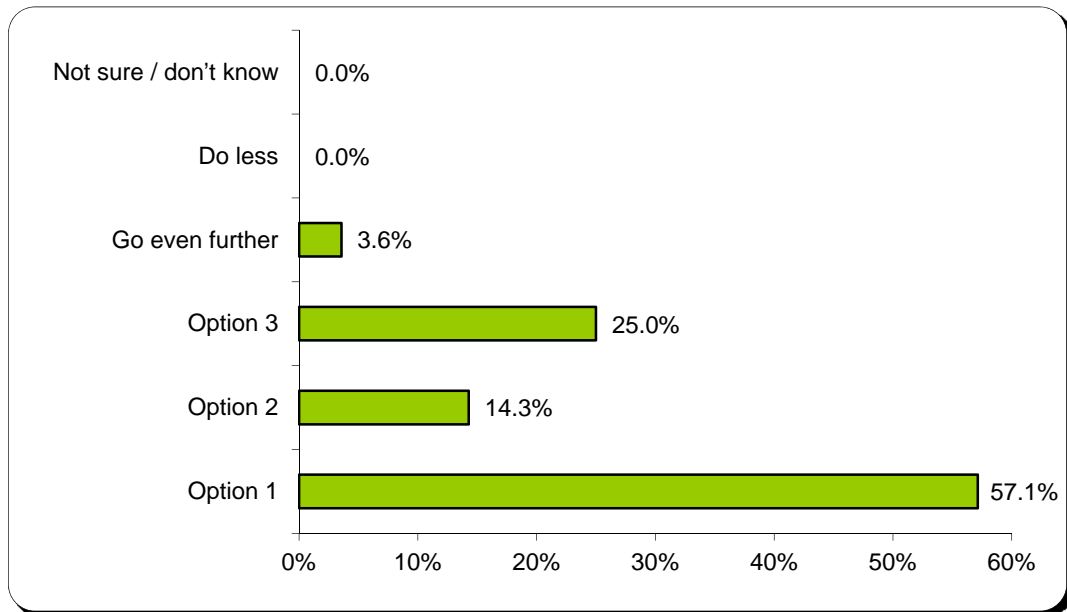
Option 2: To protect the 150 most at risk substations at a total cost of £50m (20p per domestic customer, per annum)

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

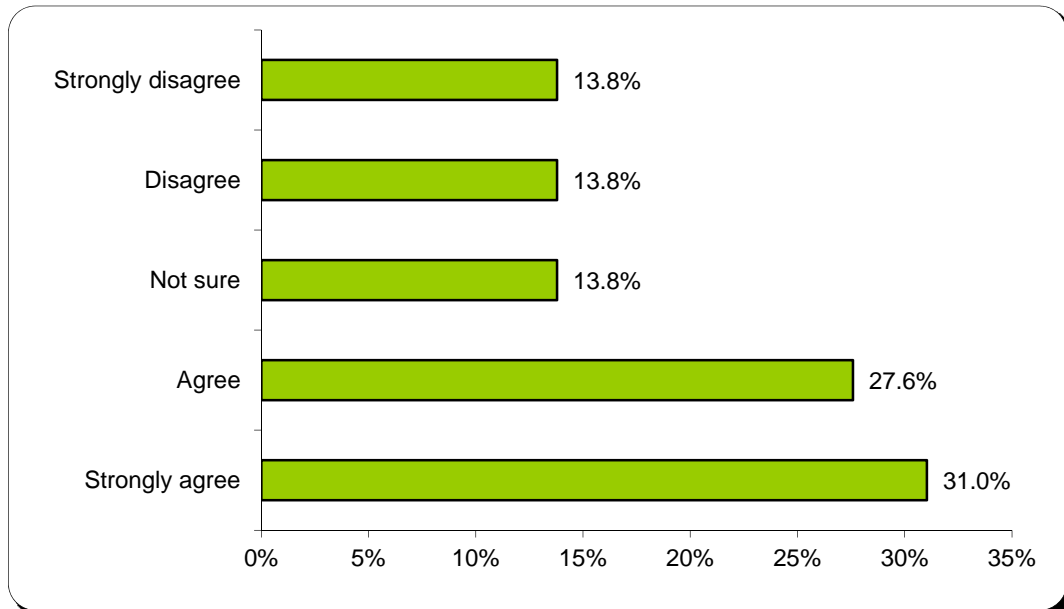
Option 5: Do less

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

- An energy/utility company representative said *'WPD should be looking at this issue.'* S/he felt *'there are wider carbon-saving measures that could be made'*
- An energy/utility company representative asked *'is there no alternative to the gas?'*
- The table agreed that this was topic was not a major priority for WPD
- An energy/utility company representative acknowledged *'many of the leaks are not down to poor maintenance but down to third party damage'*

Table 2

- A local authority/council officer stated that *'WPD is right to tackle this, you make big savings from preventing oil leaks'*
- A parish councillor questioned WPD's use of SF6 and asked whether there was anything else that it could use instead
- Another parish councillor said *'obviously you have to account for the environment and cutting down on pollution but you should be looking into eradicating this gas - if you do find something else you need to implement it immediately'*

- An environmental representative stated that he found the trade-offs with carbon efficiencies difficult to understand. S/he said *'carbon costs for replacing equipment are huge'*
- A local authority/council officer asked *'how long does switchgear last for? Is it a technology we'll use in 10 years' time?'*
- A parish councillor stated his/her *'interest is in the improvements WPD is making more generally as a company to increase efficiency'*

Table 3

- A parish councillor questioned whether the government could have any influence on the use of SF6
- An environmental representative suggested a *'cold-hearted economic look'* should be adopted when considering whether it is worth spending lots to reduce a little SF6 use. S/he suggested that as reducing SF6 leakage is so expensive it may be *'more effective to look elsewhere'*
- A business customer representative queried whether the industry is looking at an alternative to SF6
- A local authority/council officer suggested it should also be about changing the way WPD runs its business, such as changing the company's fleet of vans and improving education
- A business customer representative pointed out that WPD has moved away from using PCBs in switchgear which suggests that *'WPD is already making changes where possible'*

Table 4

- A local authority/council officer said that *'it goes back to the polluter pays argument. WPD should be addressing it already and a punishment through their own profits will encourage them to address their carbon footprint'*

Table 5

- A business customer representative said *'that seems very poor value for money, that's a very high cost for very limited improvement'*
- A business customer representative commented that s/he was *'surprised these issues are lumped together, as SF6 is an environmental issue and oil leaks are a systems issue'*
- Another business customer representative asked *'is it worth spending that money somewhere else, other than on SF6 as it doesn't seem cost-effective?'*

Table 6

- This question was not discussed

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)

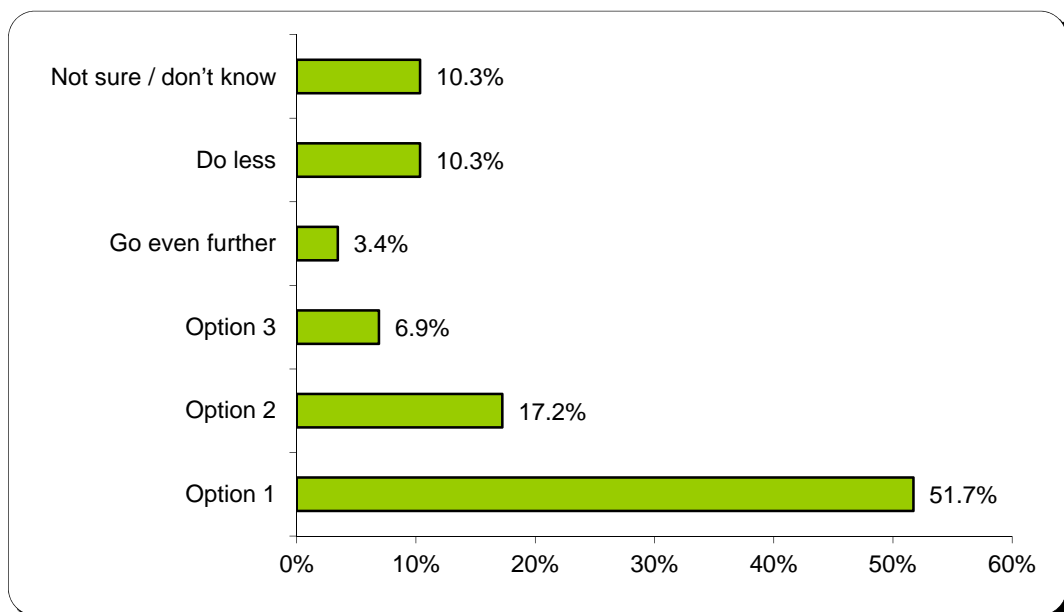
Option 2: Replace the worst 5% of equipment with the highest leakage rate at a total cost of £65m (50p per domestic customer, per annum)

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



7.4. Additional comments

Table 1

- An energy/utility company representative commented that the '*duration of interruptions has not been an issue of importance.*' S/he stated that '*looking after vulnerable groups regarding power cuts is an area of importance*'
- The table agreed with this statement and noted that for the non-average customer power cuts can be very serious issues

Table 2

- A parish councillor questioned WPD's profit margins

Table 3

- A business customer representative felt that it is important to see a reduction in power cut duration and a higher investment in increasing WPD's tree cutting activity.
- A business customer representative explained that s/he has had positive experiences of working with WPD in South Wales

Table 4

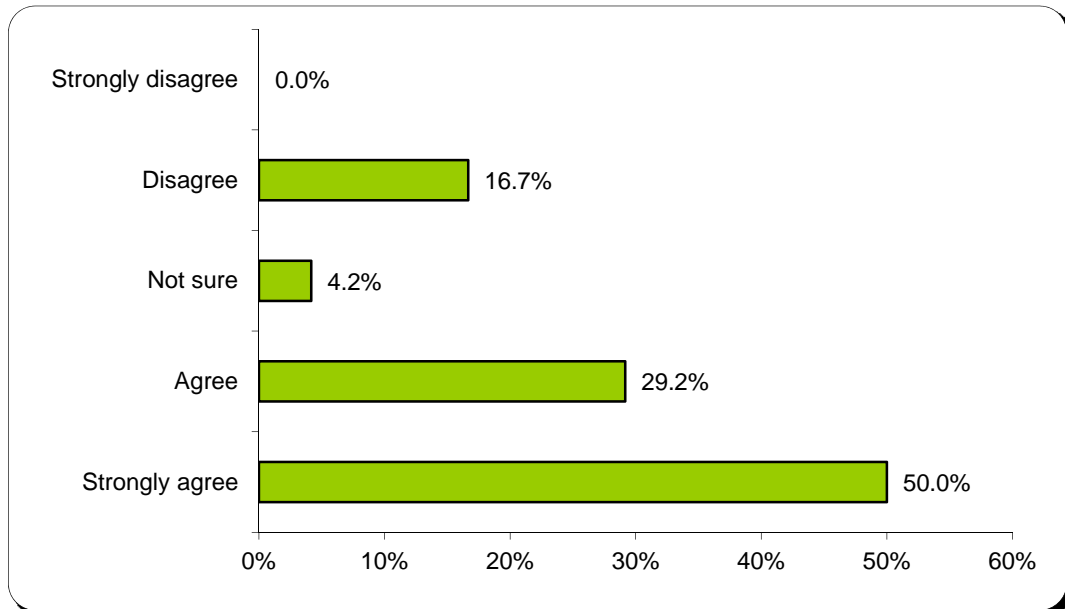
- A local authority/council officer raised his / her concerns at the premise that the cost of these changes will go to the bill payer and not from WPD's profits

Table 5

- A business customer representative was of the view that *'some of the things on the list don't affect me on a business level so I wouldn't want to pay for them'*
- A business customer representative queried, *'as WPD has a large area of service with different needs is there a different plan for the different areas?'*
- An environmental representative commented *'our communication with WPD is not the best and I don't believe WPD's contract compliance is acceptable'*
- An environmental representative said s/he found trying to speak to the right person in WPD *'impossible and trying to shut down a line is impossible, I have major issues in trying to work with WPD'*

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 local authority/council officer asked *'is the poorer service due to more extreme weather in rural areas?'*
- A regulator/government representative commented *'many trees have been cut down in rural areas to help with black-outs etc'*
- The table agreed that this topic was not a priority

Table 2

- A local authority/council officer asked whether power outages were generally becoming more frequent
- A parish councillor stated that *'we do accept things differently to urban residents, we have different expectations, we have our own generators, people are even putting up wind power'*
- The table agreed that the cost of improving the service for worst served customers should be shared by everyone

- A local authority/council officer stated that *'the service isn't to do with numbers but to do with conditions, isn't it?'*
- A local authority/council officer was of the view that investment in worst served customers *'from an ethical point of view is a good investment for the country'*
- A parish councillor added that *'if someone's bought a lovely property in the mountains, should they get the same service? They should accept that there will be some disruption'*
- A developer/connections representative stated *'everyone should be supplied, but people living in more remote areas should be prepared for other eventualities to occur'*
- A local authority/council officer said *'I think it's all well and good being part of one of the best served areas but it's a question of ethics'*
- A parish councillor and a developer were of the view that option 3 would be the best choice
- The table agreed that overall this was an important issue

Table 3

- A business customer representative explained that his / her organisation currently has a major campaign for broadband rollout to the rural community, and suggested that this investment priority is similar. S/he is keen that suitable investment is made to increase service to worst served / remote customers. However, s/he added that s/he wouldn't go for the *'Rolls-Royce option'* but there should be a modest increase
- A local authority/council officer added the comment that everyone should have the right to choose where they live as *'we are a developed country'*
- A local authority/council officer pointed out that stakeholders could be confused that *'this is concerning connecting new customers, not improving service for existing customers,*
- An energy/utility company representative stated that WPD could choose to improve a lot of worst served customer's service, *'but by not a lot'*, or could focus on a small amount and improve their service significantly
- A local authority/council officer wanted to know if WPD has considered renting out its assets to broadband providers

Table 4

- A local authority/council officer said that *'there is not enough information in front of us to make a judgment on this'*
- A local authority/council officer was of the opinion that WPD should concentrate on its worst served customers and *'not mix the issue of worst served and national parks'*

- A developer/connections representative said that s/he *'feels they should be better served'* because these customers *'pay the same price and should get the same service'*
- A local authority/council officer stated that s/he agreed that they *'should be better served'*
- A developer/connections representative made the point that *'as it did not seem like big numbers'* to him / her *'it is a little bit charitable'*
- A local authority/council officer responded saying *'we have to remember that people in very rural areas will never have a perfect service and they are aware of it'*

Table 5

- A number of stakeholders needed to leave before sessions 2 and 3 and therefore the table was disbanded

Table 6

- A local authority/council officer said *'I strongly feel that the service has improved a lot since WPD has taken over the network, but still in this day and age we shouldn't be getting cut off and therefore I feel option 4 is the best'*
- A regulator/government representative said *'I agree the key is not having people being cut off. S/he felt the best option was option 4 as 'it was investing in the customer'*
- A local authority/council officer said s/he thought *'the cost for improved communications is obscene'*
- A developer/connections representative said when *'we are looking at 10,000 customers we are talking about the real remote cases'*
- A local authority/council officer was of the view *'people don't have to be remote in terms of location but they can be remote in terms of their place on their network'*

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)

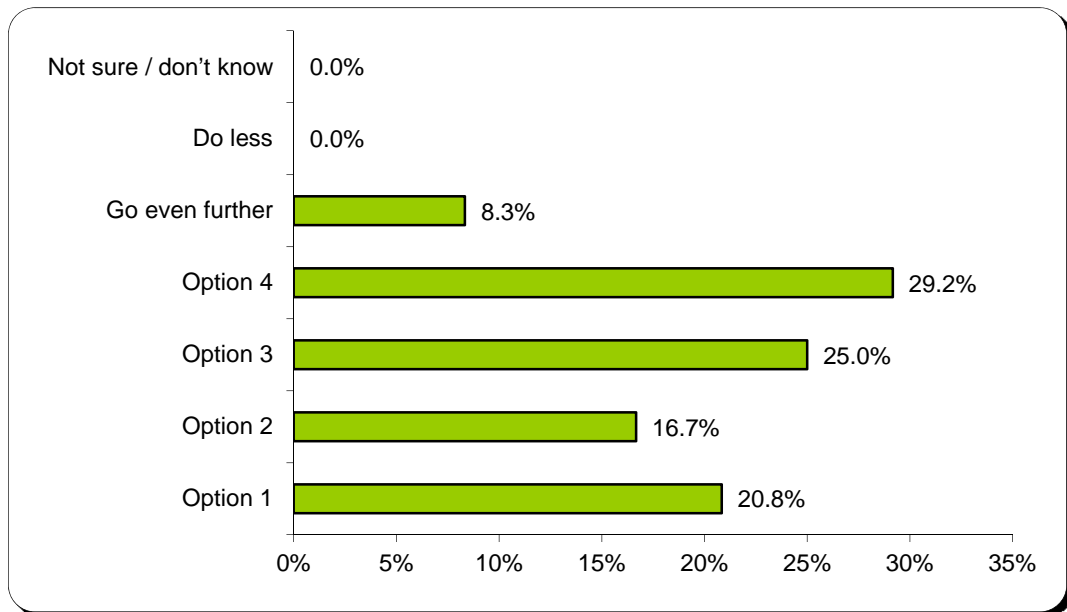
Option 3: (WPD's current view) Reduce the number of 'worst served' customers from 10k to 6k at a total cost of £3.6m (5p per domestic customer, per annum)

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

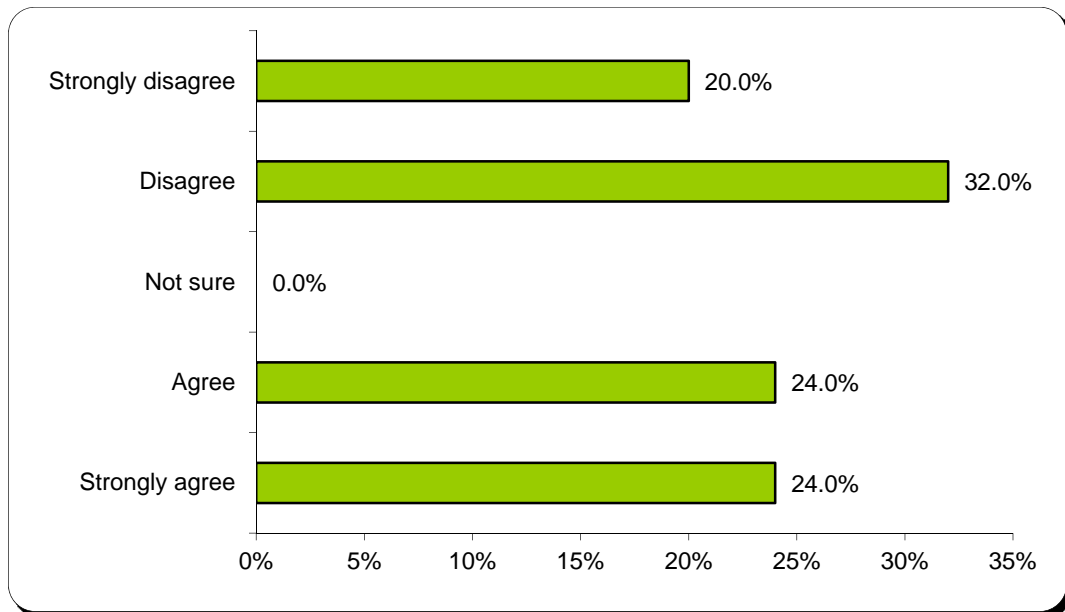
Option 6: Do less

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 local authority/council officer said s/he lived in a historic town centre *'which has lots of overhead cables.'* S/he stated s/he would like to see all overhead cables to be placed underground
- A regulator/government representative said that the network in a rural environment is *'not fit for purpose.'* S/he was of the view that *'rationalisation of the service would have a better impact than undergrounding'*
- A local authority/council officer stated *'the feedback on this issue reflects the current economic times'*
- The table agreed that, due to the economic situation, *'this topic was not a high priority'*
- A local authority/council officer asked *'are there any requirements to underground cables or is it for purely for visual amenity reasons?'* S/he stated, *'we have an issue in our local historic town, a conservation area with listed buildings which attracts visitors but has many poles and thick wires, we'd like a trial area in the town centre and would*

like to work with WPD on this, the area is. S/he thought AONB and National Parks should not be the only areas where undergrounding is considered

Table 2

- An environmental representative said *'I was impressed with WPD's presentation; they highlighted the important issues about AONBs. These areas are protected by control measures and historically network operators haven't had to comply with restrictions. So, most power lines are part of the landscape – this is not too much of an issue- but when people visit iconic sites there's an expectation that it's untouched. I agree that whilst I'd like WPD to do more, a modest increase would be useful and a large increase would be problematic'*
- A local authority/council officer asked an environmental representative how s/he would assess sites and identify priorities
- An environmental representative stated that *'a lot of resource was needed for assessment'*
- An environmental representative stated that *'I prefer modest, achievable programmes. The Central Networks team ran their undergrounding programme at full capacity and from planning to completion it took a very long time. You have to consult land owners, factor in the environmental impact; it takes a long time to come to fruition'*
- A parish councillor asked *'what would happen if a landowner refuses to comply when an undergrounding assessment needs to be carried out?'*
- An environmental representative explained that the scheme would have to stop. S/he cited an example where a landowner refused the scheme despite being offered a large sum of money
- A developer/connections representative questioned whether there would be any disruption to services when installing underground cables
- A parish councillor stated *'no one can work together, it takes ages to bring people together, we've been doing schemes for the past seven years and it's really tough. Different bodies need to get together and make sacrifices'*
- A parish councillor stated that *'it sounds like you spend a lot of money, without getting anywhere fast'*
- An environmental representative expressed some concern that too much undergrounding *'could open the floodgates for everyone wanting to remove overhead lines'*
- A parish councillor posed the question, *'when you dig trenches why don't you use boring techniques?'*
- A parish councillor was of the view that utility companies need to work together when digging trenches to minimise disruption

Table 3

- A local authority/council officer stated that public perception of undergrounding will be the undergrounding of cables on large pylons rather than wooden poles. S/he felt that *'the removal of large pylons would have more buy-in'*
- A business customer representative added that *'people are used to wooden poles; big shiny pylons have more visual impact'*
- An environmental representative wanted to know the cost difference between installing overhead cables and undergrounding cables
- A local authority/council officer discussed the issues of 'nimbyism'. S/he pointed out that urban areas have a higher number of people visually impacted by pylons compared to rural areas. *'Therefore, shouldn't WPD also consider removing poles that are in people's backyards or near houses?'*
- A local authority/council officer wanted to know how many people have been injured by touching an 11kv line, pointing out that *'there is more of issue with cables that are in close proximity to houses'*

Table 4

- A business customer representative was of the view that the *'money you would spend should be spent elsewhere'* because it is *'only poles that have been there for years and everyone is used to them'*
- A local authority/council officer agreed with this view and added *'people are more important'*
- A business customer representative said that *'when the equipment requires a change, do it'* but s/he did not want to see it done *'for aesthetic reasons'*
- A local authority/council officer stated that s/he was *'very in favour of wind turbines. If we start burying lines in National Parks, we will limit the use of wind turbines because people will say: "you just got rid of the poles and now you want to blot the skyline with something else"'*
- A business customer representative questioned *'would you want to replace a piece of kit that could have 30 years left of life in it?'*

Table 6

- A local authority/council officer said *'where we have overhead cables, other places have pylons. If you have a site with development potential where the only problem is overhead cables then the developer should take on the cost to underground them.'* S/he went on to ask, *'is there any way you can prioritise undergrounding for areas of potential development so as to assist proactively in assisting development and bearing the cost?'*
- A local authority/council officer explained that from his/her experience *'WPD shouldn't receive any great resistance when they are trying to solve this problem'*

- A local authority/council officer said *'I think as a general principle most people would want this to be underground, but where do the priorities lie?'*
- A local authority/council officer pointed out that there is a tourism aspect that needs to be considered and although the undergrounding of cables *'may only affect 250 residents but it will also impact 10,000 visitors'*
- A developer/connections representative said that undergrounding runs alongside the need to upgrade the network and therefore thought *'undergrounding should be part of general improvements'*
- A developer/connections representative said *'the preference is to get the cables underground.'* S/he felt it is *'a balancing act because underground cables are far more expensive to maintain than overhead ones'*
- A local authority/council officer pointed out that *'less damage will occur if cables are underground'*
- A developer/connections representative commented *'from a visual aspect undergrounding is great but we aren't being asked from a maintenance aspect'*

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)

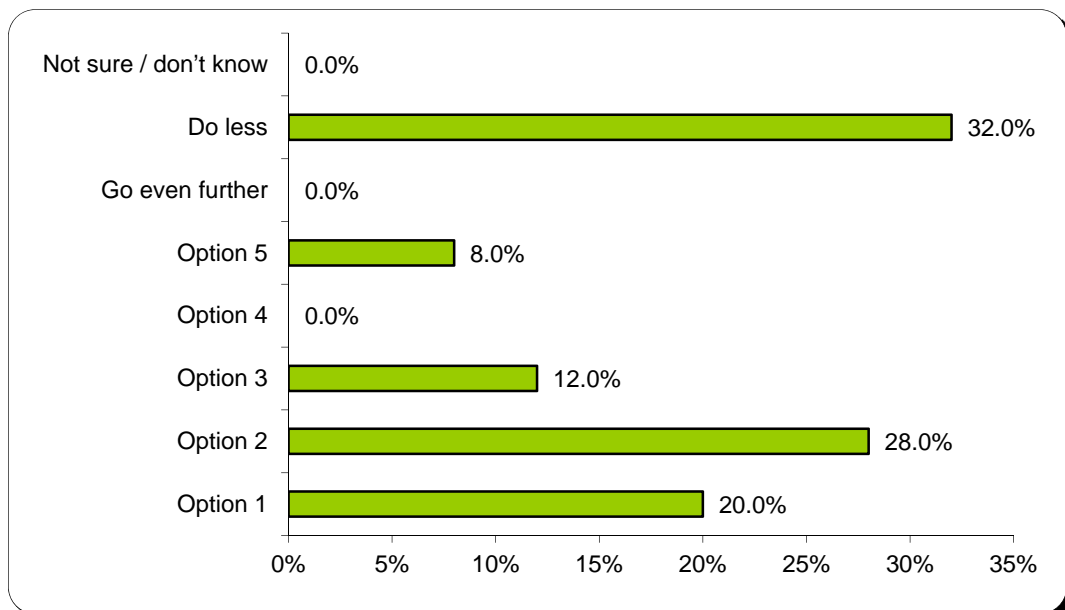
Option 4: Underground 240k of overhead lines in national parks and AONB's at a cost of £36m (56p per customer, per annum)

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

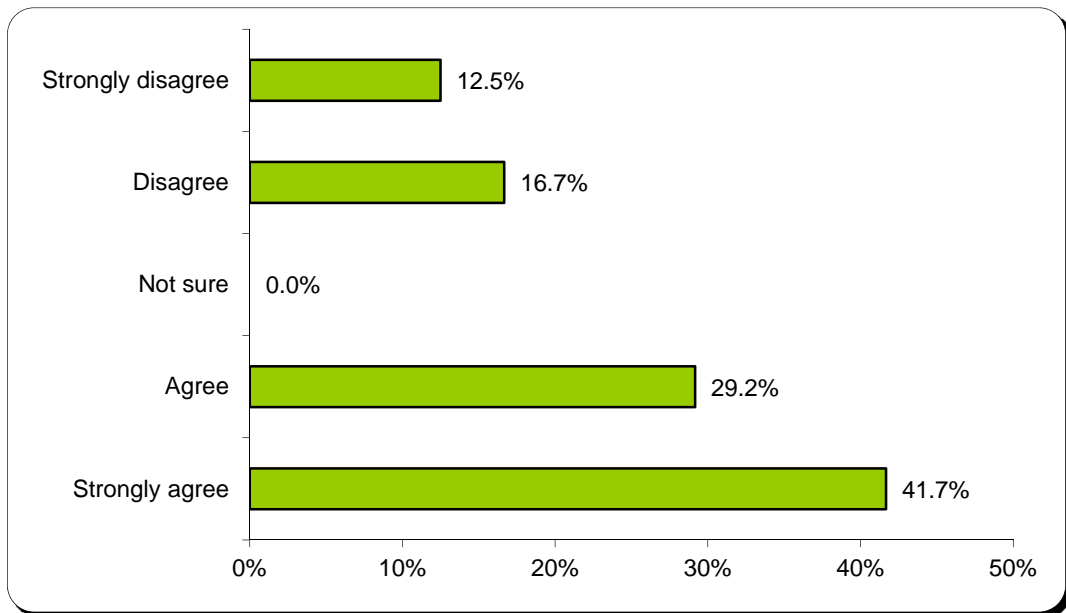
Option 7: Do less

Option 8: Don't know / Not sure

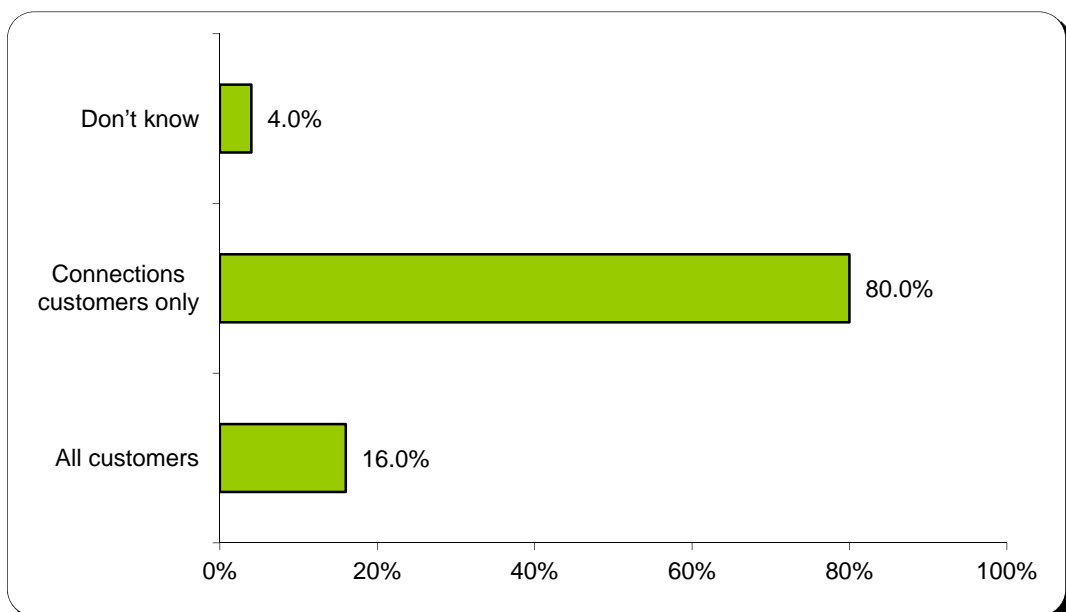


10. Issue 7. New connections – process speed

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



10.2. Who do you think should pay for new connections improvements?



10.3. Comments

Table 1

- A local authority/council officer stated that councils have to come up with a 15-year development plan as nearly 12,000 homes will be built in that period. S/he went on to comment *'I don't get the feeling the developers for the sites we have allocated have talked to you about how to deliver the scheme and that it is future proof'*
- A regulator/government representative commented on connection speed and stated *'if people are paying WPD for a service WPD should not charge them twice as it should have been paid for by the developer'*
- A developer/connections representative said that *'ICPs can connect sometimes quicker than WPD.'* S/he commented that in order to improve timescales *'WPD needs to put more resources into the service or make improvements so that it is easier for ICPs to connect'*
- A developer/connections representative commented *'WPD has a more forward way of thinking regarding working with ICPs and WPD's rates are very good'*

Table 2

- A developer/connections representative stated that *'what's interesting to me is that in the Central Networks area they have a web-based monitoring system. Is that something that could be rolled out on a domestic scale? It could be useful for someone that doesn't know the process if they have a medium by which they can access it'*
- A developer/connections representative stated that *'a lot of the stuff I do is ridiculous, so I don't see problem in paying'*
- A parish councillor queried if there was an existing connection charge
- A parish councillor stated that *'suppliers aren't putting the prices up, the standing rates have gone up but nothing's been mentioned about this'*
- A parish councillor posed the question *'does everyone pay for new connections?'*
- A developer/connections representative stated that *'I struggle with WPD charging all customers for new connections. Seems a bit over the top, I think it should be WPD who foots the bill because they're profiting from it'*
- A parish councillor was of the view that connections should be installed faster than 90 days
- Another parish councillor commented that s/he disliked getting through to automated options when s/he called WPD. S/he stated that s/he *'would prefer to speak to someone and that just one person dealt with an enquiry to ensure consistency'*

Table 3

- A local authority/council officer stated that s/he thinks the current rates are *'pretty good'*
- An energy/utility company representative explained s/he deals with connections for his / her company and doesn't recognise the figures stated by WPD for large schemes. However, s/he went on to add that out of the different DNOs s/he deals with WPD is the best
- A local authority/council officer stated that reinforcement is an issue in his / her local authority
- An energy/utility company representative stated it is important for his / her company to know the length of time a new connection will take; *'as long this is known it will allow plans to be made'*
- A business customer representative suggested that *'as the information is out there it is the customer's fault if they don't look for it'*
- A local authority/council officer felt that job tracking would be useful
- A business customer representative stated that *'pre-planning is key'* and from his / her personal experience the current service works well
- A local authority/council officer added that his / her experience with the local authority has been good. S/he had experience of a dedicated contact on certain jobs which s/he found very useful, but added that *'this happens if you are contacting WPD regularly about connections as you build a relationship with the team'*
- A local authority/council officer stated online tracking / job tracking would be useful to the non-regular customer, *'particularly as most calls are made due to the lack of knowledge of what stage their job is at'*
- A business customer representative added that from his / her experience *'WPD has been there on date that was quoted'*

Table 4

- A business customer representative said that *'WPD are brilliant'* at connections currently but *'if someone wants a 30-day installation, let them pay'*
- A business customer representative stated that s/he would like better information on his /her quote
- A local authority/council officer advised that s/he *'would not want people in his / her ward paying for it'*
- A developer/connections representative was of the opinion that the *'current times are pretty good anyway'*

- A local authority/council officer articulated that *'the normal principle is that the developer pays'*
- A local authority/council officer commented that in his / her experience *'there is great cost in the updating of transformers'*.
- A local authority/council officer made the point that s/he would like *'capacity to take electricity away as well as bring it in'*. *'S/he said small-scale wind power is impossible to do as there is not a distribution system to take the power created away from them'*
- A local authority/council officer suggested that the UK should use a similar system to the one s/he saw on the Austrian German border where a small community has its own power generation system
- A business customer representative, having made the point that s/he had attended a previous WPD event, s/he was given *'the gold number'* and is now happy
- A business customer representative questioned *'from a domestic point of view, how many people know about WPD?'*
- Another business customer representative said that *'the worst thing is, especially for older people, people are told to look at their bill during a power cut. Bills are on line these days though'*

Table 6

- A developer/connections representative said *'we used to have a contact for a manager and someone you could speak to directly who would give us a quote for a new connection'*
- A regulator/government representative said *'I think on the industrial side we would be quite happy with 90 days; in the majority of cases we don't get it anywhere near 90 days, this is not very representative of industrial users'*
- A local authority/council officer said *'30 days for small schemes is reasonable, why spend money improving that when you could improve the length for bigger projects? We must get power to those as soon as possible to encourage developers and projects to invest in the area and the current length of time it takes is affecting this'*
- A regulator/government representative said his / her impression of the main point of contact in WPD is *'not being addressed'*
- A local authority/council officer said *'this was my point, when you are planning upgrades is the spatial analysis considered in terms of areas of development priority?'*
- A regulator/government representative said *'I'm sure this is not just our areas, in planning preparation we consult you guys and you have the information but you don't respond. What you don't get is a 15-year planning idea of where we need the infrastructure for potential development'*

10.4. 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

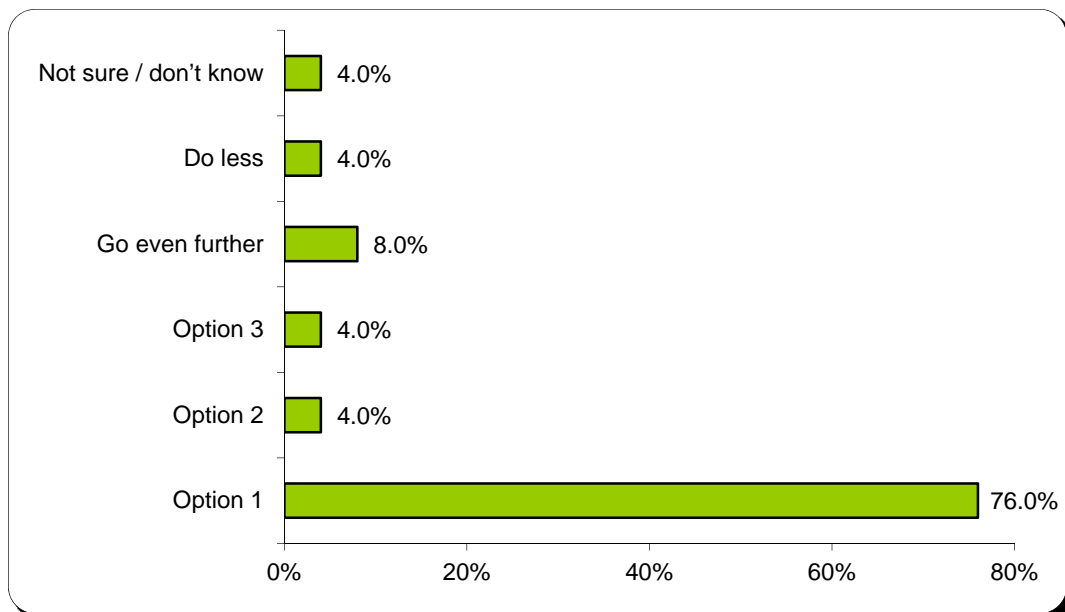
Option 2: The average time from first contact to completion reduced to 20 days for a small scheme and 60 days for a large scheme at a cost of £28.3m (22p per domestic customer per annum)

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)

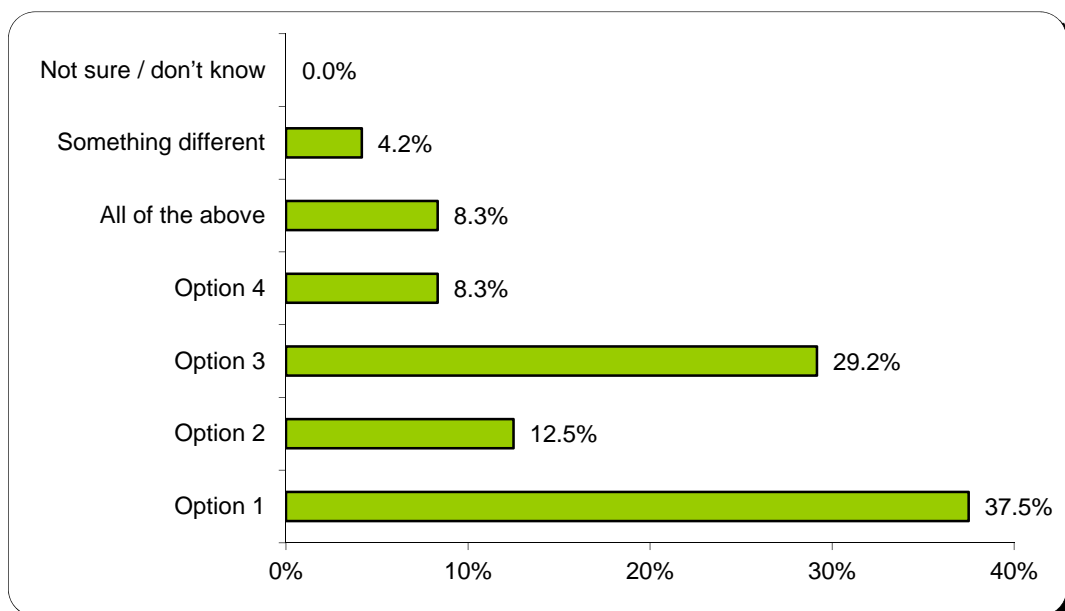
Option 3: Now plus applications, payments, job tracking etc online at a cost of £2m (1p per domestic customer, per annum)

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

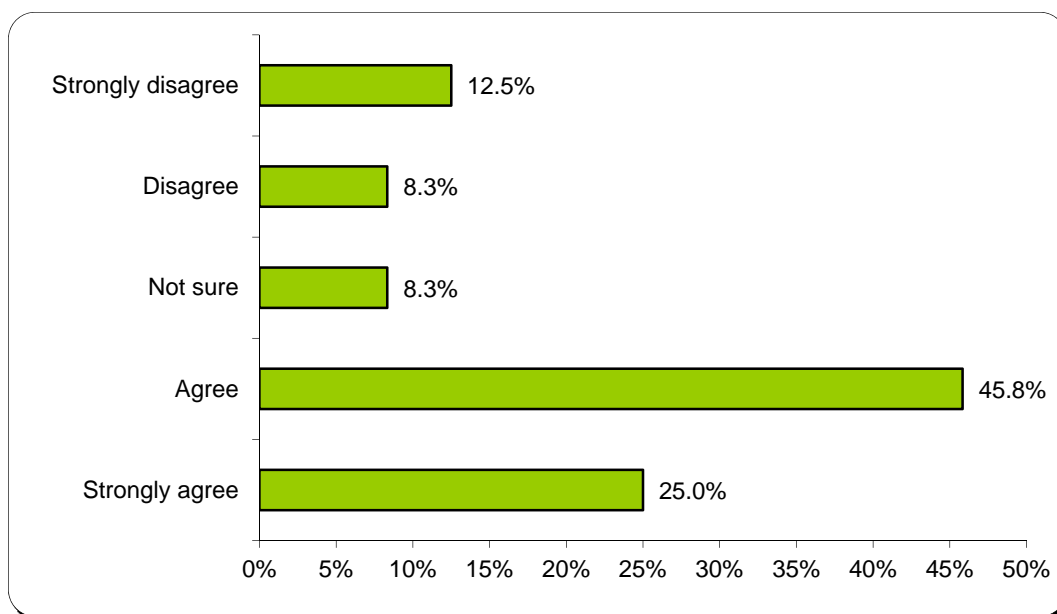
Option 5: All of the above

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 medium priority for WPD



11.3. Comments

Table 1

- A local authority/council officer said that *'email would be a good way of communicating with customers'*
- A developer/connections representative made the point *'like any service provider customers have the option to opt in or out of schemes available'*. S/he mentioned *'customers may like to receive a confirmation email to reassure them their enquiry has been received'*. S/he added *'if WPD is looking to evolve or become more accessible in the modern day market place it will have to bear the cost of innovative customer communications'*
- A developer/connections representative was of the opinion *'customers should not have to pay the extra costs in relation to both general communications and new connections'*
- A developer/connections representative added, *'rather than saying we will charge you, then step up to the plate, it is about just stepping up.'*
- A local authority/council officer made the point that when you call the call centre you do not want to speak to three different people. S/he commented *'nor do I want to be on hold waiting to speak to someone, people want real time instant response'*
- An energy/utility company representative was of the view *'emailed replies should not be automated'*
- A local authority/council officer asked *'how do you describe a complex technical problem in 140 characters if texting was to become an option?'*

- A developer/connections representative commented that even news channels have Twitter feeds as it is an instant way of getting information out to people. S/he commented *'for my company Twitter is not relevant as we have detailed enquiries but for communities at large it is suitable'*
- A developer/connections representative said that *'new generations coming through will be Facebook and Twitter literate'*
- Another developer/connections representative stated that *'Twitter, etc should just evolve as time moves on. I'd rather see money spent on serving worst served communities'*
- A developer/connections representative commented *'in relation to undergrounding in national parks they should be done on a case-by-case basis rather than a blanket approach'*
- A local authority/council officer agreed and stated *'there is a big difference between a pylon and a pole with cables'*

Table 2

- A developer/connections representative stated his/her preference for a text messaging service because it was more *'proactive than reactive'*
- A parish councillor commented that *'some people don't have computers'*
- A developer/connections representative countered that *'without power no one can access computers'*
- A local authority/council officer said *'what if you become a victim of your own success? You might end up getting extra phone calls. We went from a planning department to a call centre when we extended our communication services'*
- A developer/connections representative supported this view. S/he stated *'a lot of people want to see where they are in the process, especially when there is an outage'*

Table 3

- A local authority/council officer pointed out that *'using the WPD answerphone message to find out which areas have an outage can be lengthy, particularly if an outage covers a large area'*
- A local authority/council officer stated *'real time outage information would be appealing as well as having an alternative contact option to the phone'*. S/he added that knowing the envisaged outage time would be useful
- An energy/utility company representative pointed out that *'most outages will occur in rural areas and getting messages to these people will be difficult in comparison to urban areas'*
- An energy/utility company representative explained that *'all people want to know is the problem has been registered and it is going to be fixed'*

- A local authority/council officer added that *'it would also be good to know for how long'*
- An environmental representative felt that the table was *'too old to understand'*; and therefore unable to comment on Twitter
- A business customer representative stated s/he would choose investment options 1, 2 and 4
- An environmental representative queried why there is an extra cost for this priority when other organisations are doing it for free as part of their service
- An energy/utility company representative felt that a cost increase of £375,000 a year seems a lot for mass text or internet messages

Table 4

- A local authority/council officer queried whether or not anyone would *'object to increasing communication using any method'*
- A business customer representative said s/he has *'some concerns about using the internet. Not everyone has it. Everyone assumes they do have it though and we need to be careful'*
- A local authority/council officer agreed with the business customer representative, stating that *'it is unfair that we focus on these issues and many people do not have the internet'*
- A local authority/council officer commented that by *'2020 the internet would have been round for decades. Children leaving school would have grown up with a computer in their environment, and they will be the customers of the future. WPD needs to look to the future. By 2020 the majority of people who never had access to the internet would have passed on'*
- A business customer representative spoke about his / her concerns about penalising people who do not have access to the internet
- A developer/connections representative questioned *'how many people actually contact the provider?'* He admitted to *'having never picked up the phone'*.
- A local authority/council officer declared that if s/he had all the options available to him / her, s/he *'would use the telephone'*
- A business customer representative said *'let's have it, but do not let the other services dip'*
- A local authority/council officer was of the opinion that *'all changes should be charged to WPD and not the bill payer'*. WPD should be *'doing more with less'*, much like his / her own local authority.
- A local authority/council officer stated that s/he feels WPD can *'do better communication for less money'*

- A business customer representative was of the view that *'WPD should focus on letting people know they exist'*
- A developer/connections representative agreed, but said s/he realised *'it's a difficult one as yours is a hidden cost'*

Table 6

- A local authority/council officer said *'my view is WPD should pay for this themselves and it shouldn't be an extra cost to the customer'*
- A regulator/government representative agreed
- A developer/connections representative pointed out *'there is a cost benefit to WPD if they don't have to pay for call centre staff because they are sending out automatic messages, so this should be a WPD cost'*
- A local authority/council officer said *'I'd go for option 4 as I can't get on the website in times of a power outage'*
- A developer/connections representative said *'for the size and type of organisation you are you should pay to move with the times, this is a standard cost'*
- A local authority/council officer agreed
- A developer/connections representative said *'these comments are not aimed at you directly, they are targeted at the corporation'*
- A developer/connections representative stated *'I'm not into Facebook, etc but there is a younger generation which is and this will matter to them'*
- A regulator/government representative said *'I think there are two ways to look at it: the ability to be able to react is very important, but on the flipside there is the issue of data protection. Overall, I would say that social media is probably a worthwhile option and channel'*

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)

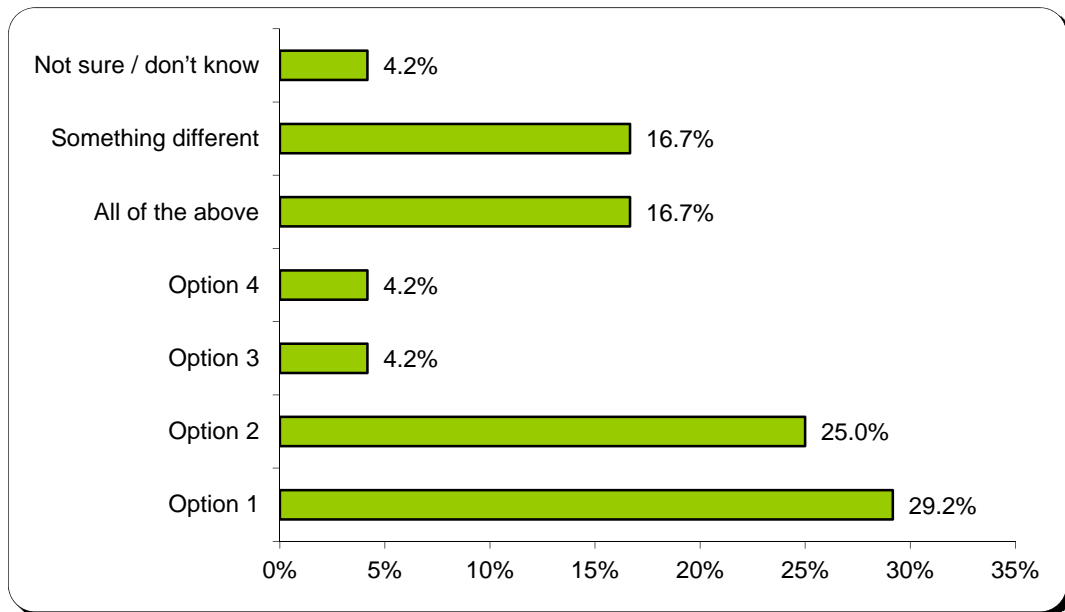
Option 3: Now plus social media channels at a cost of £3m (2p per customer per annum)

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



11.5. Additional comments

Table 3

- A parish councillor queried *'how important is it for WPD to put cables underground during replacement and upgrading works, rather than replacing poles like for like?'*
- A local authority/council officer raised the point that WPD does not duct electric cables. S/he has asked WPD to duct cables in his / her local authority in the past, but WPD did not, the result being that problems have occurred when it came to digging up roads
- A local authority/council officer pointed out that when a local authority is carrying out infrastructure works, such as digging up a road, *'it is an opportunity for WPD to update and improve its assets at the same time'*
- An environmental representative discussed the undergrounding situation in New York, where the mayor wants to see an extension of the city's underground system of cables to minimise the impact of events such as Hurricane Sandy

12. Low carbon investment

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

Table 1

- A regulator/government representative said that *'the take-up of all the new technologies will depend upon whether people can be enticed by subsidies and support.'* S/he added *'low-income families may have other things they want to spend their money on, hence the take-up of new technology will depend on many factors'*
- A regulator/government representative commented *'people will need an incentive to take up schemes'*
- A developer/connections representative stated that *'people have to make an up-front investment.'* S/he went on to acknowledge *'it can take many years to see the financial reward and people are likely to have more pressing things to spend on currently; therefore, to make people green and friendly incentives are key'*
- A developer/connections representative commented that *'electric vehicles are very expensive at the moment'*
- A local authority/council officer mentioned photovoltaic technology and stated *'there has been much positive feedback about electric cars and therefore I imagine they will take off'*
- A developer/connections representative stated that *'developers cannot get permission at the moment for wind turbines to be built in my local area'*

Table 2

- Whilst discussing the different forms of renewable energy outlets, a parish councillor stated that *'wind farms are only as good as the wind'*
- A parish councillor added that *'a wind farm should be built where the wind is'*
- A local authority/council officer stated that the Severn barrage was the *'perfect example'* of how developers are *'always going to face strong opposition from environmentalists'*. S/he asked whether wind farms were value for money
- A parish councillor stated that s/he appreciates the idea of electric vehicles, but when it comes to costs, *'more financial incentives are needed'*
- A local authority/council officer was of the view that uptake of electric vehicles comes down to *'what people can afford'*
- An energy/utility company representative stated that *'as a general rule of thumb, Wales is slightly behind on take-up of energy-saving technology. The on-going green deal, eco*

initiatives and alleviating fuel poverty are more of a priority. We don't have enough installers to fill demand for installation.' S/he explained about 'NEST', a local charity aimed at tackling fuel poverty in the valleys and North Wales

- A parish councillor commented that *'lots of people are unemployed. They're energy efficient if they're in a job, but if you're getting money for nothing then there's no real incentive to be energy efficient. The government should do more to tackle unemployment'*
- An energy/utility company representative pointed out that there were *'massive employment opportunities with the expansion of the energy market'*
- A local authority/council officer stated that *'this scenario is being forced upon us: we have no choice in the matter'*
- A parish councillor said *'what you're saying is really beneficial and I can go back and share it with other councillors'*
- A developer/connections representative was of the view that when it came to introducing new technology *'communication is key across the board because people are frightened of change'*
- A local authority/council officer stated that *'these are great aspirations to have but you need to get planning permission for them in reality'*
- A parish councillor spoke about a local wind farm application that had been on-going for seven years
- A local authority/council officer commented on *'the Tory party devolving planning powers at local level where it's the most difficult to win permission whilst they are backing tracking in Westminster, and it's usually Conservative councillors at local level that oppose it'*
- A local authority/council officer stated that *'measures to reduce carbon are great if we can get another fossil fuel source, we just need to decarbonise the tools that produce the fuels'*
- The consensus was that new technologies are a good idea in theory, but paying for them is not such a good idea
- There was very little support for the uptake of electric vehicles

Table 3

- An energy/utility company representative stated that companies are getting *'mixed messages from up above'* from government about renewable obligation certificates and tariffs
- An energy/utility company representative felt that *'WPD cannot forward plan'*, as government policies can change which will cause WPD's direction to change

- Another energy/utility company representative stated that *'the lack of clarity and long-term vision and consistency is WPD's biggest problem'*
- An energy/utility company representative stated that *'the grid is designed for energy going one way but energy could be changing direction'*
- An environmental representative stated that *'this should be centrally mandated and WPD shouldn't be deciding it'*
- An environmental representative asked *'how much does EV matter and would it have an impact on WPD?'*
- A business customer representative stated EV would be fine for him / her if s/he lived in a city *'but if you live in the countryside EV is not going to be practical'*. S/he spoke about installing a heat pump: *'the installation was expensive as the house had to be stripped out to make the heat pump viable'*. S/he felt that that *'heat pumps would work for new builds but won't take off in existing homes'*, because of the expense of fitting
- A local authority/council officer suggested *'electric vehicles would be taken up as part of a two-car household'*
- A local authority/council officer felt that LED lights will *'pick up'* due to their longer life span and better light source
- A local authority/council officer questioned whether insulation is free. A stakeholder clarified that solid wall insulation is not free
- A local authority/council officer added that s/he has seen lots of cavity wall insulation due to subsidies

Table 4

- A local authority/council officer commented that *'the technology is moving so fast we can't predict what is going to be happen in the future'* and one of WPD's problems is that it *'is guesswork'*.
- A local authority/council officer stated that s/he believes WPD is *'wrong in planning to power the electric grid in preparation for these electric cars'*. S/he thought the hydrogen car will be the future, not the electric car
- Another local authority/council officer made the point that the technology involved in heat pumps *'has already been overtaken'* in the past year and a half
- A local authority/council officer voiced his / her concern at the risk of producing more electricity than we need
- A business customer representative articulated that *'heat pumps are more appropriate for new builds'*. With regard to insulation, s/he knows *'a lot of people who have had insulation in their cavity and had nothing but problems'*
- A developer/connections representative was of the opinion that there could be growth in the electric car market. S/he already knows *'a few people driving hybrid cars'*

- A business customer representative discussed the fact that *'hybrid cars have had a lot of bad press'*. However, s/he mentioned that the Nissan Leaf is a good idea as *'most journeys are short'*, although there were concerns about the cost
- A business customer representative said that *'there have not been major improvements in batteries in years'* and that this *'is where the major problem is'*
- A local authority/council officer articulated that *'car companies are putting money into hydrogen cars because they feel they can solve the problems that come with hydrogen cars, but cannot with electric cars'*
- A local authority/council officer declared that s/he feels that potential *'for wind farms in Wales, small ones, not the large ones, is far greater than WPD thinks if the network capacity was there to take the power away'*. S/he went on to assert that *'WPD should fund the connections from solar energy and wind turbines to the main network'*
- A local authority/council officer discussed the fact that WPD is *'trying to put a project in in Lincolnshire to do exactly what the council representative is suggesting, but the farmers did not want lines running through their land'*
- A local authority/council officer made the point that *'the poles are already ok, the lines just need upgrading'*
- A local authority/council officer stated that *'what WPD needs to do is use its muscle with government and encourage them to assist'*

Table 6

- A local authority/council officer pointed out *'this isn't going to happen unless there is a massive government financial incentive '*
- An energy/utility company representative said *'energy companies have got to put a proportion of money into helping vulnerable households'*
- An energy/utility company representative commented *'energy companies have got to put a great deal of money into this so there will be some take-up but there is no chance they will hit the targets'*
- A local authority/council officer said *'to my mind option 1 is extremely optimistic, it won't happen'*
- A local authority/council officer said *'are we asking what we will aspire to achieve or what is realistic?'*
- A regulator/government representative pointed out *'it is very difficult for WPD to make the estimation as there so many dynamics and unknowns; the length of time is short in cultural change but long if there is a large price hike that could change the game'*
- A regulator/government representative said *'option 1 is potentially unrealistic but I think it will be somewhere between options 1 and 4'*

- A developer/connections representative said *'new builds are a very small proportion of the housing stock; a house is sold on the kitchen, bathroom and garden; no one is interested when they buy a property on fuel and energy efficiency, this is a cultural change that has to take place'*
- A developer/connections representative pointed out *'if there is no real impact point you will only get those who actively want to seek to change which is an environmental motivation; people won't take it up unless there is a financial incentive'*
- A local authority/council officer said *'it should be about insulating homes when you choose to buy, there are some sort of drivers where council housing stock is going to be brought up to standard to make it more energy efficient'*
- A regulator/government representative said *'there are lots of pilot programmes taking place but it is very much the demonstration phase where they are using social housing as an example; if these take off maybe targets will be made up but perhaps people are too stuck in their ways'*
- An energy/utility company representative said *'insulation and boilers are key here'*
- A developer/connections representative commented *'if we could put this into the right-to-buy schemes that may force people to engage'*
- A local authority/council officer said *'there is a scheme at work where there are incentives to buy energy efficient cars so some people are getting them'*
- A developer/connections representative pointed out *'this is down to not having a good public transport system; you go to certain parts of the country where there is no public transport system'*

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

- No one at the table had a smart meter or any experience of using one
- A local authority/council officer said that a smart meter *'would temper your use for sure: either it will temper your use down or you will use things differently'*
- An energy/utility company representative stated s/he *'used to live in a home with a smart meter and it did change their behaviour initially but after a while they reverted back to normal behaviour'*
- A developer/connections representative said *'if you have a problem with your bill and cannot afford it a meter could have an immediate effect on you but if you are a two-person family with a good income your usage is not going to be the be-all and end-all'*
- A local authority/council officer said *'it is important to get a tariff that people can understand'*

- The table agreed that smart meters could have a greater role to play in low income families
- An energy/utility company representative stated *'we talk about how much uncertainty there is out there, if the future was more certain then front-loading would be more appropriate; there are so many different incentives and options at the moment'*
- A local authority/council officer raised the point *'if there is a subsidy the result will be an uptake of the schemes if it is considered a good incentive'*
- A local authority/council officer commented the *'government is responsible for getting the solar panel industry off the ground through subsidy'*
- A local authority/council officer asked *'what happens if we want to connect parts of the borough WPD can't get electricity to?'*
- A developer/connections representative said *'in ten years' time when technology has moved on people can then maybe buy an electric car at a decent price'. S/he added s/he could not see the sales of electric cars being very high and asked 'what does charging of these cars mean for emissions in terms of generating the electricity to charge and what impact would that have?'*

Table 2

- A parish councillor said *'I can't understand the government. If they want to install smart meters they should pay for them! With my gas and electricity bills, I can check them online. I don't want it. Suppliers should pay for it. Why are they forcing us to pay for it?'*
- A local authority/council officer stated that *'the cost of electric cars is too high, we need to find alternative ways to obtain fossil fuels in a cheaper way – I think we'll follow suit'*
- A local authority/council officer stated that at present, *'there are not enough plug-in points to sustain demand and if the number of these were to be increased it could still cause congestion, particularly for recharging electric cars'*
- A developer/connections representative stated that smart meters would *'give food for thought and raise awareness of energy usage'*
- A parish councillor said *'WPD should be fighting to supply smart meters to customers'*
- Another parish councillor stated that *'the government's finishing subsidies for solar panels, it'll take 25 years to get my money back, the subsidies aren't going to benefit me – I'll be dead!'*
- A parish councillor added that *'I've got cavity installation, it's sufficient and it's saved me a lot of money'*
- An energy/utility company representative stated that *'what's interesting about smart meters is that I have one and it has altered my energy use behaviour. The economic argument is the main factor for change. For instance, household chores can be conducted at cheaper times, there's a good economic argument behind it'*

- A parish councillor countered that *'cheaper periods haven't been explained. So, if lots of people use it at the same time wouldn't it overload the system?'*
- A parish councillor stated that *'I'm already doing it myself by changing temperatures on radiators so I pay less for my heating'*

Table 3

- A local authority/council officer felt that as energy prices go up people will start making more informed decisions about their energy usage and appliance usage
- An energy/utility company representative added that *'technology prices are going down as energy costs go up'*
- An energy/utility company representative was of the opinion that *'WPD should ask the Ground Source Heat Pump Association for advice'*
- A local authority/council officer wanted to know *'does a trench need to be dug to accommodate a heat pump?'*
- A business customer representative explained that s/he *'had to get a civil engineering contractor in when installing a heat pump'*. S/he added that the heat pump is, however, very effective as it is *'constantly ticking over'* without using a lot of energy
- A business customer representative explained that as long as a house has good insulation and it is kept *'ticking over'* a heat pump will be effective
- A business customer representative suggested that if a customer is on mains gas it is hard to justify the cost of installing a heat pump when gas is cheaper
- An energy company representative explained how a smart meter works
- A local authority/council officer felt that *'smart meters are good for energy education'*
- An energy/utility company representative felt that *'there is a novelty factor when you first install a smart meter'*
- An energy/utility company representative suggested that *'a smart meter will change a customer's behaviour to a point; however, the main impact it will have is on demand-side measures'*
- A local authority/council officer added that if s/he was told it would cost half the price to use a washing machine at night it would change his / her behaviour
- A local authority/council officer compared smart meters with recycling targets. S/he explained that *'mind-sets have changed towards recycling through different targets and this is where smart meters might have an impact on targets'*
- A local authority/council officer added that s/he struggles as a general user on what tariffs s/he is being charge

- An environmental representative stated that *'people aren't on variable tariffs any more as they have gone out of fashion'*
- An energy/utility company representative agreed and added, *'15 years ago there were a lot more demand-side measures and tariffs, and it does seem to have gone out of fashion'*
- A local authority/council officer felt that if charging was more transparent it would allow people to make decisions about their energy usage
- An energy/utility company representative added that there appears to be a simplification of tariffs so customers do not know what they are paying, so therefore can't compare their energy usage
- An environmental representative felt that *'manufacturers will start to develop appliances that are more intelligent'*

Table 4

- A local authority/council officer said that it *'certainly would'* impact on his behaviour.
- A business customer representative stated that *'if you put it in the house, somewhere visible, it would make a difference. Although, like recycling, some people will never do it'*
- A business customer representative commented that the smart meters will *'really work on kids'*
- A local authority/council officer said that *'it does work with some people in my ward who have already been given them by a housing association'*. However, s/he did add that is *'not always positive because people are turning things off to save electricity that they really should not be'*

Table 6

- An energy/utility company representative said *'there's a lot more education needed in schools, simple stuff: doors shut, heating on, windows open'*
- A local authority/council officer said *'WPD is basically saying it is going to penalise those who work normal working hours; this is not practical, you have to do certain tasks at certain times'*
- A developer/connections representative said *'I wouldn't do that, I'd be too scared to leave appliances on overnight'*
- A developer/connections representative pointed out that this is a huge cultural change: *'we are introducing something that says you can't use your kettle at a certain times as this is too much of a human change'*
- A local authority/council officer commented *'if you're doing a normal 9-5 job it's going to be very ugly, how is this ever going to work?'*

- A developer/connections representative said *'we have quite a few properties that are just not on the grid; particularly for the elderly this has implications on public health'*

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

- The table agreed the levels of service should stay the same
- A local authority/council officer *replied 'once you have a certain standard of life it is hard to go backwards'*

Table 2

- There was very little discussion on this topic

Table 3

- This question was not discussed

Table 4

- A local authority/council officer said *'yes!'*

Table 6

- A local authority/council officer felt *'WPD should embrace new technologies'*
- A developer/connections representative made the assumption *'it will be piloted anyway and I suppose the people who are directly affected by this would not be in favour; it's about having sensitive use of the communication'*

12.4. Any other comments?

Table 3

- A business customer representative stated that heat source pumps and PV are expensive to install but if a grant was available people would have them installed
- A local authority/council officer suggested that PV should be included in social housing
- An energy/utility company representative added that there are lots of factors working against WPD that will affect take up
- An environmental representative added that there is a lot of uncertainty around low carbon technology. S/he asked *'what are the consequences for WPD and customers if WPD does choose the wrong scenario?'*
- A local authority/council officer questioned what impact the scenarios would have on the next price review

- A business customer representative suggested that the scenarios might happen if the government *'primes the pump'*
- An environmental representative felt that WPD needs to plan flexibly
- A stakeholder explained that low carbon heat technologies are expensive to put in
- A business customer representative stated that low carbon heat technology is expensive when it starts but then the Government *'primes the pump'* which brings equipment cost down. S/he then added that the cost of gas is cheaper and most town and city houses have a gas option and are therefore unlikely to choose to install low carbon technology
- A local authority/council officer explained that in his / her local authority they are putting low carbon technologies in their social housing and it is more cost-effective
- The table agreed that 8 million installations is optimistic
- An environmental representative suggested that WPD should talk to industry and *'if industry thinks the scenarios are optimistic then that suggests it won't happen'*
- A local authority/council officer felt that cars are going to improve as well as hybrids. S/he also felt that EVs would be viable as a second car
- An environmental representative stated that once EVs are cost-effective they will take off quickly
- An energy/utility company representative added that *'it is more about the time it takes to charge up EVs rather than the charging up'*
- A local authority/council officer felt that from a personal perspective *'an EV as a second car could be feasible'*
- An energy/utility company representative suggested that there could be a reduction in transport emissions altogether via the use of video phones and video conference calls. S/he felt that *'reducing travel rather than the means of travel'* will have an impact on emissions. S/he felt that onshore wind and large scale PV depends on when the *'plug gets pulled'* by government
- A local authority/council officer explained that wind and PV do not have much of a payback which is one of the reasons why there was an incentive, but the tariffs are always being reduced

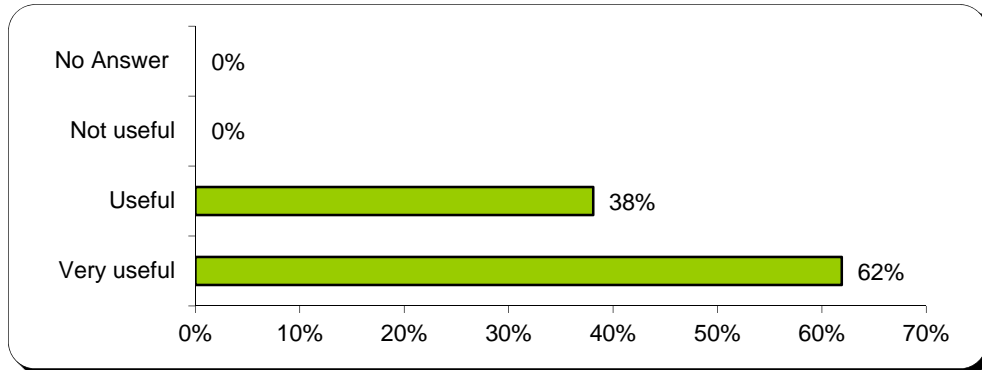
Table 5

- A local authority/council officer said that s/he *'loves the wind turbine at the end of his / her road'*
- A local authority/council officer was of the opinion that the *'generation predictions by WPD are too low. It is the capacity that is the problem'*

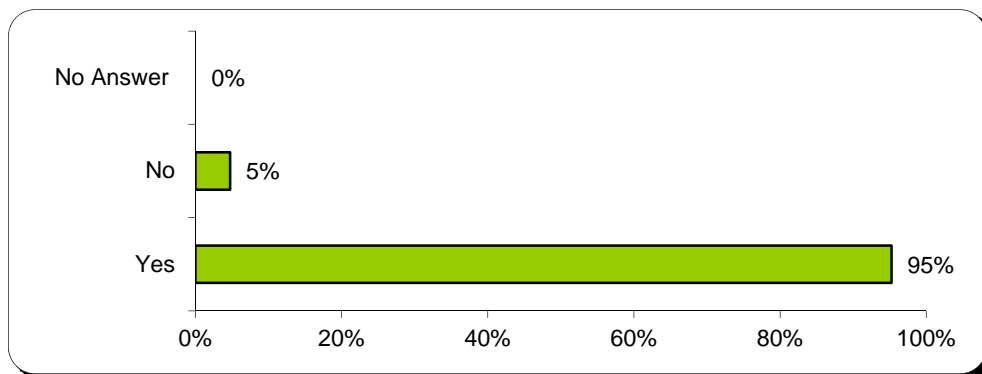
- A business customer representative agreed that the statement on Demand Side Response *'is a reasonable one'*. S/he added *'WPD's billing structure means that as a business they do not want to go online during the "red zone" but cannot see people saying they will not turn the landing light on'*
- A developer/connections representative commented that s/he cannot see Demand Side Response *'happening for a long time in residential homes'*
- A business customer representative considered that if WPD *'charges domestic customers more like business customers you may see a difference'*
- A developer/connections representative said that it *'goes back to Economy 7 again'*
- A business customer representative was of the opinion that you are *'not really saving the planet with Demand Side Response'*
- A local authority/council officer articulated that *'we should be educating people at a younger age. People get set in their ways as they get older but if we educate them earlier there will be changes'*
- A local authority/council officer said that *'we do not always have sufficient time to make these changes in a mild manner'*
- A business customer representative advised that *'it should be about being realistic about what we can achieve'*
- A local authority/council officer stated that *'we are sticking PV on all the houses in my ward'* and *'we would have to kill them to take them back'*
- A developer/connections representative made the point that *'it is the government tariffs that make PV really attractive at the moment'*
- A local authority/council officer declared that *'according to data s/he has collected, you would not need to tap in to the grid during the summer and in the winter it would only be about 20% of the time'*

13. Stakeholder feedback

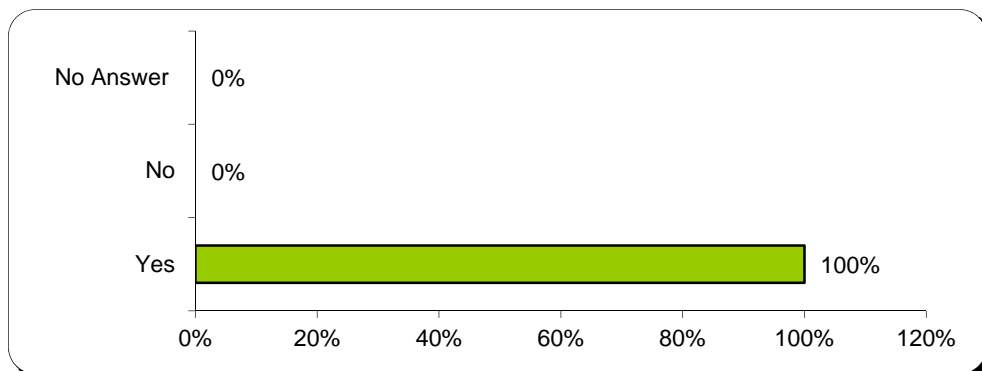
13.1. Q1. Did you find the workshops useful?



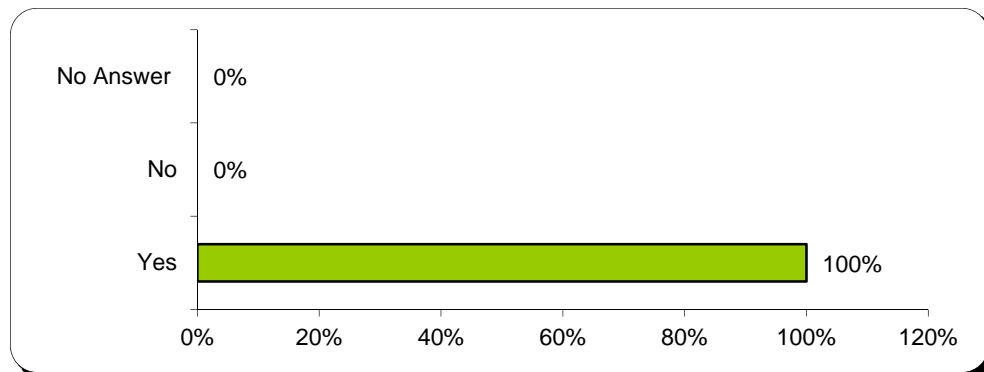
13.2. Was the venue conveniently located for you?



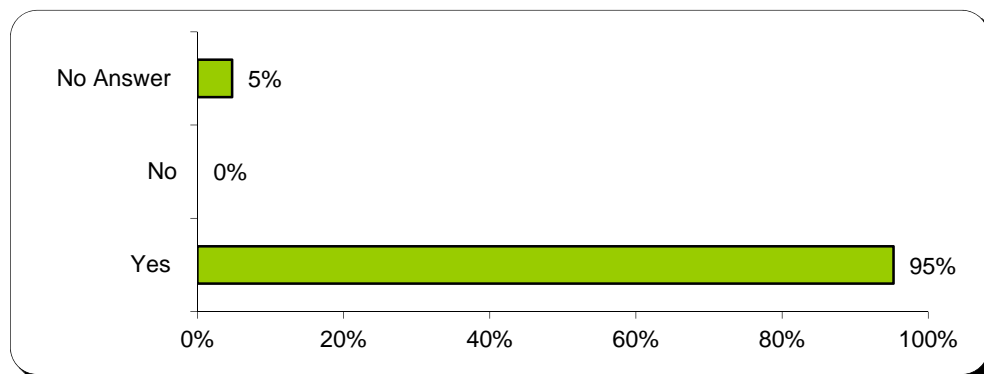
13.3. Did we provide enough information at the workshop?



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:

- *"I also took the opportunity to congratulate WPD on the professional excellence of yesterday's stakeholder engagement event - I was truly impressed"*
- *"Inevitably there were time constraints so some discussions had to be cut short. But overall I thought WPD did a very good job of chairing the table discussion and encouraging all participants to have their say"*
- *"Well organised and good interaction-found the session very useful"*
- *"It would have been good to be provided a short brief/overview stating the objectives in a bit more detail"*
- *"Good breakdown of options and prioritisation of issues. Voting system better than consensus approach-all views taken into account"*
- *"Yes learnt a good deal about WPD and an insight into the industry"*
- *"Well facilitated, right number of people at the table"*

- *"Very open and helpful"*
- *"I particularly liked the way that defined and often measurable outcomes were linked to costs"*
- *"Overall I found the day very useful and impressive. WPD set out the information and options clearly and were generally very open to comments and feedback"*
- *"Good forum for exchange views/informative exchange"*
- *"Could have been a little bit more business related"*
- *"Excellent discussion and well delivered"*
- *"Very helpful in lots of ways"*
- *"Good balance of info supporting options and knowledgeable subject matter experts to facilitate discussion"*
- *"Profit issues: fuel poverty hardly mentioned"*
- *"Good explanation at beginning around how these were decided"*
- *"Generally useful, had some concern about some of the questions on which we voted as I believe the votes will not have given full opportunities to express advanced opinions"*