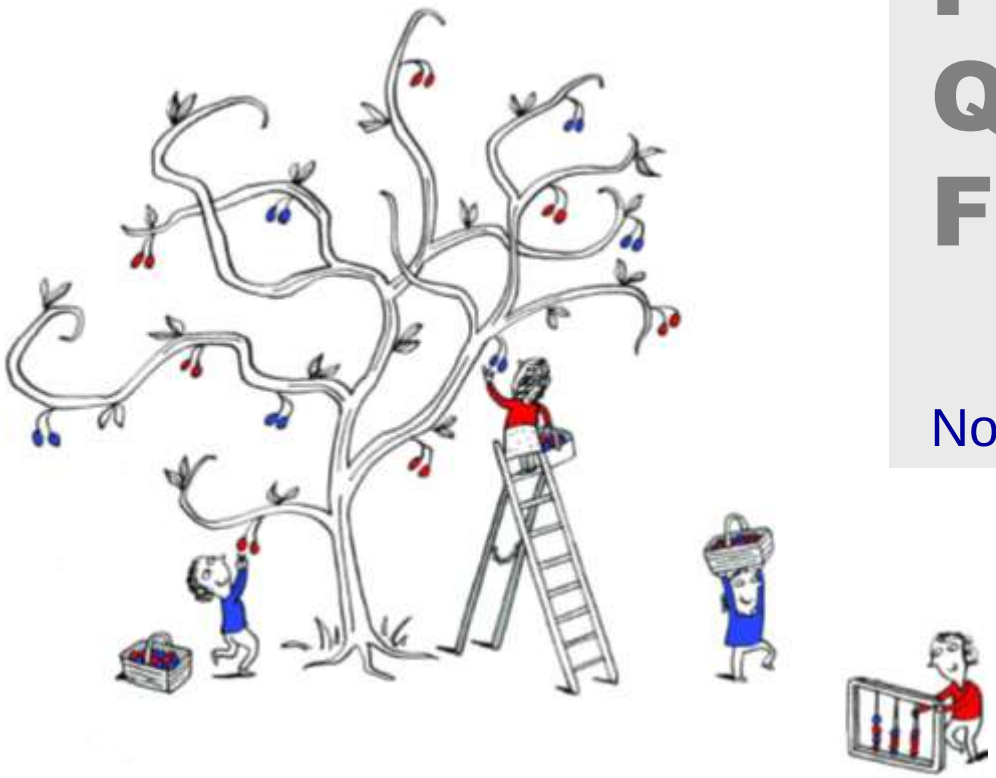
Willingness to Pay Research: Quantitative Findings

November 2012

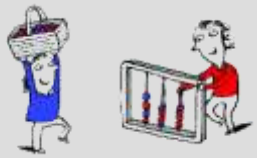


UK Power Networks

Accent

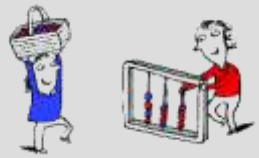
Agenda

- Context
- Approach
- Prioritisation & Willingness to Pay Findings
- Appendices – Background Findings



Study Objectives

- UK Power Networks is required to consult with customers and other stakeholders in preparing their business plans
- Research is therefore required to ensure that UK Power Networks' business plan takes into account customer priorities and the value placed on the elements that make up the plan



Four key elements to the research

Across UKPN's three licence areas

12 deliberative focus groups
Domestic customers

18 tele-depth interviews
Business customers

1200 Phone-post-phone SP interviews
Domestic customers

300 Phone-post-phone SP interviews
Business customers

Pilot interviews were also undertaken for both the qualitative and quantitative phases. This presentation relates to the findings from the 1200 domestic and 300 business telephone interviews undertaken between 6 September and 23 October 2012.

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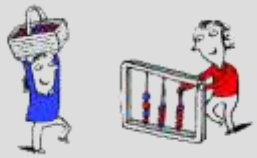
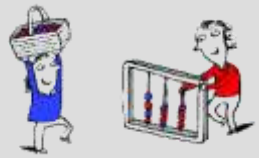
The research was undertaken in compliance with the market research standard ISO 20252:2006.



Methodology

- Stage 1 – Setup and design of qualitative research:
  - 2 pilot groups and 3 tele-depths
- Stage 2 – Qualitative fieldwork:
  - 12 extended (2-hour) focus groups: 4 in each of UKPN's licence areas:
  - 18 45-minute tele-depths with business customers: 6 in each of UKPN's licence areas:
- Stage 3 – Design of quantitative research:
  - 160 domestic pilot interviews and 160 business pilot interviews:
- Stage 4 – Quantitative fieldwork (This presentation):
  - 1200 domestic Phone post Phone interviews: 400 per licence area
  - 300 business Phone post Phone interviews: 100 per licence area.
- Stage 5 – Analysis and reporting



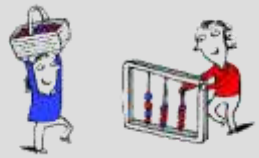
Quotas

Domestic:

Age Band	LPN	EPN	SPN
18-44	Min. 180	Min. 140	Min. 140
45-64	Min. 80	Min. 110	Min. 110
65+	Min. 80	Min. 60	Min. 60
SEG			
ABC1	Min. 150 per area		
C2DE	Min. 150 per area		
Total target	**400**	**400**	**400**

Business:

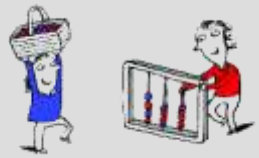
Size	LPN	EPN	SPN
Small	Min. 65		
Medium	Min. 12		
Large	Min 5		
Total target	**100**		



Questionnaire

- Structured to include:
  - Background, contextual questions
  - Stated preference (SP) exercises:
    - 3 lower level & 1 packaged exercise
  - Contingent Valuation (CV) & follow up questions
  - Key demographics

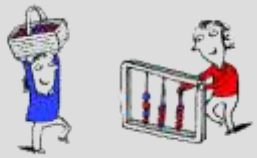
- Average duration was 38 minutes (domestic) and 22 minutes (business)
- Piloted through 151 domestic and 135 business interviews
- Respondents were sent (by email, fax or post) show material to refer to during the interview (explanatory information about services tested and the SP choice experiments)



Stated Preference Methodology

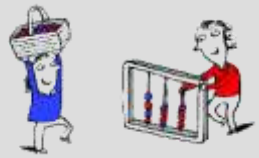
Summary of Design & Analysis

- Stated preference was designed & analysed by Accent using a programme called Biogeme:
  - the attributes tested (as shown in subsequent slides) were those found to be priorities to customers in the qualitative research
- 3 lower level exercises and 1 packaged exercise; 4 choice sets for each, 6 choice sets for the package:
  - all respondents had a copy of their customised choice sets in front of them when they were interviewed as well as showcards explaining the context – ie current situation for each service tested
- Prior to analysis responses were removed where:
  - bill values did not seem realistic
  - respondents who chose the same option for the four choice sets presented (known as non traders)
- The relative values of all attributes were derived from the lower level exercises and scaled by the package exercise/CV questions



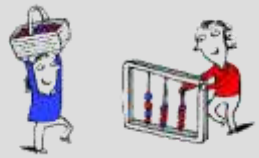
Attributes & Levels Tested: Exercise 1

- **Timescale for provision of quotations for simple, low voltage new connections work:**
  - *Within 15 working days (base)*
  - Within 10 working days
  - Within 7 working days
  - By date agreed with customer
- **Time of any new connections work:**
  - *As now, ie work undertaken in normal business hours (08.00-17.00) (base)*
  - As now, ie work undertaken in normal business hours (08.00-17.00) and in the evenings
  - As now, ie work undertaken in normal business hours (08.00-17.00) and in the evenings and at weekends
  - Work is undertaken within a banded time, ie morning or evening in normal business hours, evenings or at weekends
- **Contact for any new connection work:**
  - *As now, telephone or e-mail to general call centre (base)*
  - Phone or email contact via dedicated new connections call centre
  - Phone or email contact via a named coordinator
  - All contact through an on-line web portal
- **Time to complete simple, low voltage new connections work:**
  - *As now, ie within 90 days (base)*
  - 30 days quicker than now, ie within 60 days
  - 60 days quicker than now, ie within 30 days
  - 75 days quicker than now, ie within 15 days
- **Type of new connections service offered :**
  - *Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician (base)*
  - A menu of services available from UKPN allowing the customer to choose who completes which elements of the work
  - All elements of the work completed by UK Power Networks



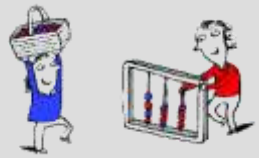
Attributes & Levels Tested: Exercise 2

- **Investment in infrastructure to enable UKPN to detect loss of supply:**
  - *No investment (base)*
  - Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises
- **Investment to enable greater uptake of electric vehicles:**
  - *No specific infrastructure investment (base)*
  - Investment in infrastructure required to support take up of electric vehicles
- **Investment in infrastructure to enable greater uptake of low carbon electric heating technologies:**
  - *No specific infrastructure investment (base)*
  - Investment in infrastructure required to support take up of low carbon electric heating technologies
- **Investment to enable large scale renewable generation (eg onshore wind farms, biomass plants etc):**
  - *No specific infrastructure investment, each new connection charged at cost (base)*
  - Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity
- **Investment to enable uptake of micro-generation eg solar panels etc:**
  - *No specific infrastructure investment; use traditional network investment as needed (base)*
  - Investment in infrastructure to support uptake of micro-generation technologies



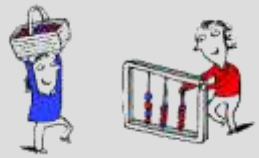
Attributes & Levels Tested: Exercise 3 LPN

- Frequency of power cuts (over 3 mins) - average number:
  - *1 every 36 months (base)*
  - 1 every 42 months
  - 1 every 48 months
- Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected
  - Within 180 minutes
  - Within 60 minutes
  - *Within 20 minutes (base)*
  - Within 10 minutes
- Information during a power cut:
  - *Information available on contacting call centre (base)*
  - Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates
  - Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over
  - Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc
- Contingency service:
  - *Customer responsibility for any back-up services (base)*
  - Provision of generator hire e.g. for an event
  - Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems



Attributes & Levels Tested: Exercise 3 EPN and SPN

- Frequency of power cuts (over 3 mins) - average number:
  - *1 every 13 months (EPN) / 15 months (SPN)*
  - 1 every 18 months
  - 1 every 24 months
- Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected
  - *Within 180 minutes (base)*
  - Within 120 minutes
  - Within 60 minutes
- Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected
  - Within 180 minutes
  - Within 60 minutes
  - *Within 20 minutes (base)*
  - Within 10 minutes
- Information during a power cut:
  - *Information available on contacting call centre (base)*
  - Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates
  - Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over
  - Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc
- Contingency service:
  - *Customer responsibility for any back-up services (base)*
  - Provision of generator hire e.g. for an event
  - Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems

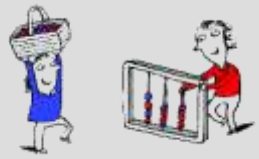


Example of a lower level choice set

Looking at Choice Card A1, which Option do you prefer, A or B?

	Option A	Option B
Timescale for provision of quotations for simple, low voltage new connections work:	Within 15 working days	By date agreed with customer
Timing of any new connections work:	As now, ie work undertaken in normal business hours (08.00-17.00)	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends
Contact for any new connections work:	All contact through an on-line web portal	As now, telephone or e-mail to general call centre
Time to complete simple, low voltage new connections work:	As now, ie within 90 days	75 days quicker than now, ie within 15 days
Type of new connections service offered:	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	All elements of the work completed by UK Power Networks

○ 1. Option A ○ 2. Option B



Example of packaged choice set

Q54. Looking at Choice Card P1, which Option do you prefer, A or B?

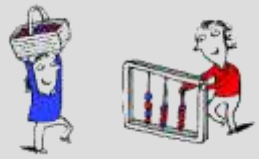
	Option A	Option B
Timescale for provision of quotations for simple, low voltage new connections work:	By date agreed with customer	Within 15 working days
Timing of any new connections work:	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	As now, ie work undertaken in normal business hours (08:00-17:00)
Contact for any new connections work:	All contact through an on-line web portal	As now, telephone or e-mail to general call centre
Time to complete simple, low voltage new connections work:	70 days quicker than now, ie within 15 days	As now, ie within 85 days
Type of new connections service offered:	All elements of the work connected by UK Power Networks	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician
Investment in infrastructure to enable UKPN to detect loss of supply	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	No investment
Investment to enable greater uptake of electric vehicles	Investment in infrastructure required to support take up of electric vehicles	No specific infrastructure investment
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	Investment in infrastructure required to support take up of low carbon electric heating technologies	No specific infrastructure investment
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	No specific infrastructure investment, each new connection charged at cost
Investment to enable uptake of micro-generation e.g. solar panels etc:	Investment in infrastructure to support uptake of micro-generation technologies	No specific infrastructure investment, use traditional network investment as needed
Frequency of power cuts over 3 mins - average number:	1 every 24 months	1 every 12 months
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers:	Within 60 minutes	As now, ie within 180 minutes
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers:	Within 10 minutes	Within 100 minutes
Information during a power cut:	Information available on contacting call centre plus provision of additional information services such as real time information on internet, use of social media, customer service staff knocking on doors etc	Information available on contacting call centre
Contingency Services	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	Customer responsibility for any back up services
THE CHANGE IN YOUR ELECTRICITY BILL IN THE 8 YEARS FROM 2015 to 2023 to provide the service quality above The new bill level will also apply in all later years	No change £1,200.00 in 2015 to **£1,200.00 in 2023**	Increase of £2.70 each year for 8 years, from £1,200.00 in 2015 to **£1,221.60 by 2023**

○ 1. Option A ○ 2. Option B

Domestic Stated Preference Findings: Customer Priorities & Willingness to Pay

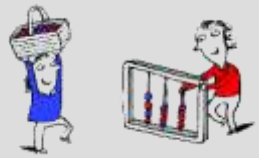
Summary of Domestic Findings

- The research identified willingness to pay for the majority of improvements; there was also some willingness to accept a deterioration in service levels
- Willingness to pay ranged from a 0.58% increase in their distribution bill by 2023 for the lowest valued service level to a 2.90% increase for the service level valued most highly:
  - LPN: 0.58%-2.25%
  - EPN: 0.76%-2.89%
  - SPN: 0.60%-2.90%
- Overall willingness to pay by 2023, as a proportion of the average distribution bill, was:
  - LPN: 16.7%
  - EPN: 20.3%
  - SPN: 20.4%



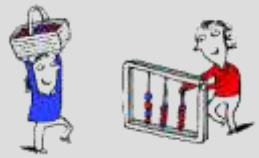
Domestic Customer Values: Exercise 1 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0
	Within 10 working days	-0.0130	-2.38
	Within 7 working days	0.0070	1.34
	By date agreed with customer	0.0137	4.01
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	0.0005	0.06
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0188	2.3
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0273	8.35
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0
	Phone or email contact via dedicated new connections call centre	0.0015	0.24
	Phone or email contact via a named co-ordinator	0.0107	1.73
	All contact through an on-line web portal	-0.0007	-0.21
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0
	30 days quicker than now, ie within 60 days	0.0080	1.05
	60 days quicker than now, ie within 30 days	0.0140	1.86
	75 days quicker than now, ie within 15 days	0.0172	5.21
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	0.0032	0.45
	All elements of the work completed by UK Power Networks	0.0154	5.46



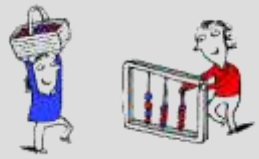
Domestic Customer Values: Exercise 2 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0429	9.39
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0147	3.51
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0366	7.99
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0481	10.67
Investment to enable uptake of micro-generation e.g, solar panels etc:	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0408	9.22



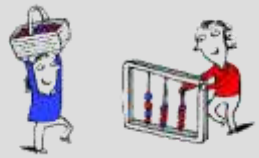
Domestic Customer Values: Exercise 3 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Frequency of power cuts over 3 mins - average number	1 every 36 months	0.0000	0	
	1 every 42 months	0.0004	0.06	
	1 every 48 months	0.0193	5.69	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0503	-7.63	
	Within 60 minutes	-0.0400	-7.48	
	Base: Within 20 minutes	0.0000	0	
	Within 10 minutes	0.0035	0.54	
Information during a power cut	Information available on contacting call centre	0.0000	0	
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0077	1.16	
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0071	1.03	
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0124	3.15	
Contingency Services	Customer responsibility for any back-up services	0.0000	0	
	Provision of generator hire e.g. for an event	0.0150	2.42	1.00
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0187	5.48	1.24



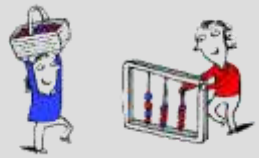
Domestic LPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0481	3.90
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0429	3.47
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0408	3.30
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0366	2.96
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0273	2.21
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.0193	1.56
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0188	1.52
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0187	1.51
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0172	1.40
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0154	1.25
Contingency Services: Provision of generator hire e.g. for an event	0.0150	1.21
Investment in infrastructure required to support take up of electric vehicles	0.0147	1.19
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0137	1.11
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0124	1.00
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0130	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0400	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0503	



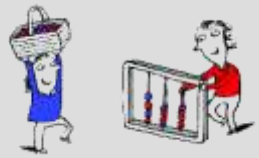
Domestic LPN Customer WTP

Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.25
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.00
Investment to enable uptake of micro-generation e.g, solar panels etc	1.90
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.71
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.28
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.90
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.88
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.87
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.81
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.72
Contingency Services: Provision of generator hire e.g. for an event	0.70
Investment in infrastructure required to support take up of electric vehicles	0.68
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.64
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.58
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.61
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.87
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.35



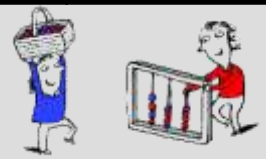
Domestic Customer Values: Exercise 1 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0	
	Within 10 working days	-0.0151	-2.81	
	Within 7 working days	0.0063	1.17	
	By date agreed with customer	0.0169	5.29	
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0	
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	0.0055	0.69	
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0211	2.74	1.19
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0177	5.72	1.00
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0	
	Phone or email contact via dedicated new connections call centre	0.0019	0.31	
	Phone or email contact via a named co-ordinator	0.0110	1.81	
	All contact through an on-line web portal	-0.0119	-3.54	
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0	
	30 days quicker than now, ie within 60 days	0.0093	1.25	
	60 days quicker than now, ie within 30 days	0.0107	1.43	
	75 days quicker than now, ie within 15 days	0.0139	4.28	
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0	
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	0.0092	1.43	
	All elements of the work completed by UK Power Networks	0.0138	4.91	



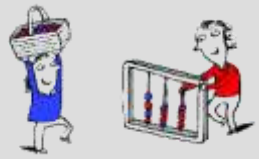
Domestic Customer Values: Exercise 2 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0338	11.67
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0115	4.32
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0185	6.36
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0332	11.46
Investment to enable uptake of micro-generation e.g, solar panels etc	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0180	6.47



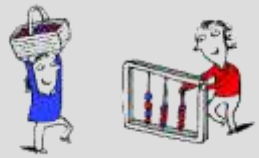
Domestic Customer Values: Exercise 3 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Frequency of power cuts over 3 mins - average number	1 every 13 months	0.0000	0
	1 every 18 months	0.0057	1.62
	1 ever 24 months	0.0137	5.21
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	As now, ie within 180 minutes	0.0000	0
	Within 120 minutes	0.0082	1.86
	Within 60 minutes	0.0202	7.81
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0290	-7.67
	Within 60 minutes	-0.0172	-5.39
	Base: Within 20 minutes	0.0000	0
	Within 10 minutes	-0.0039	-0.96
Information during a power cut	Information available on contacting call centre	0.0000	0
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	-0.0007	-0.15
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0001	0.03
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0089	2.88
Contingency Services	Customer responsibility for any back-up services	0.0000	0
	Provision of generator hire e.g. for an event	-0.0056	-1.27
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0041	1.57



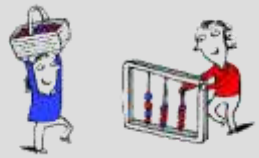
Domestic EPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0338	3.79
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0332	3.72
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0211	2.37
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0202	2.27
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0185	2.07
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0180	2.02
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0177	1.99
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0169	1.90
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0139	1.56
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0138	1.55
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0137	1.54
Investment in infrastructure required to support take up of electric vehicles	0.0115	1.29
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0089	1.00
Contact for any new connections work: All contact through an on-line web portal	-0.0119	
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0151	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0172	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0290	



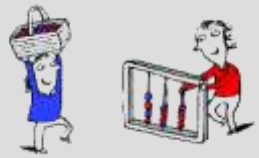
Domestic EPN Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.89
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.84
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	1.81
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.73
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.58
Investment to enable uptake of micro-generation e.g, solar panels etc	1.54
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.52
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.45
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.19
Type of new connections service offered: All elements of the work completed by UK Power Networks	1.18
Frequency of power cuts over 3 mins - average number: 1 every 24 months	1.17
Investment in infrastructure required to support take up of electric vehicles	0.99
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.76
Contact for any new connections work: All contact through an on-line web portal	-1.02
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-1.29
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.47
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.48



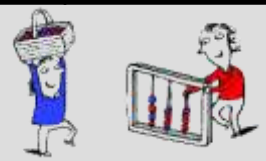
Domestic Customer Values: Exercise 1 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0	
	Within 10 working days	-0.0059	-0.85	
	Within 7 working days	0.0179	2.68	1.00
	By date agreed with customer	0.0271	6.16	1.51
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0	
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	-0.0066	-0.65	
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0125	1.26	
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0244	6	
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0	
	Phone or email contact via dedicated new connections call centre	-0.0081	-0.99	
	Phone or email contact via a named co-ordinator	0.0065	0.82	
	All contact through an on-line web portal	-0.0086	-1.97	
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0	
	30 days quicker than now, ie within 60 days	0.0227	2.37	1.00
	60 days quicker than now, ie within 30 days	0.0269	2.79	1.18
	75 days quicker than now, ie within 15 days	0.0288	6.68	1.27
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0	
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	0.0088	1.08	
	All elements of the work completed by UK Power Networks	0.0119	3.3	



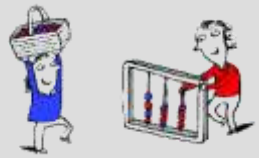
Domestic Customer Values: Exercise 2 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0576	11.69
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0317	6.73
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0342	6.96
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0577	11.28
Investment to enable uptake of micro-generation e.g, solar panels etc	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0390	7.93



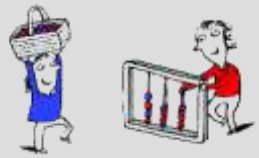
Domestic Customer Values: Exercise 3 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Frequency of power cuts over 3 mins - average number	1 every 15 months	0.0000	0	
	1 every 18 months	-0.0019	-0.44	
	1 ever 24 months	0.0149	4.32	
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	As now, ie within 180 minutes	0.0000	0	
	Within 120 minutes	0.0059	1.06	
	Within 60 minutes	0.0259	7.55	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0340	-7.21	
	Within 60 minutes	-0.0248	-5.74	
	Base: Within 20 minutes	0.0000	0	
	Within 10 minutes	0.0001	0.01	
Information during a power cut	Information available on contacting call centre	0.0000	0	
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0127	1.99	1.00
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0205	3.27	1.61
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0144	3.59	1.13
Contingency Services	Customer responsibility for any back-up services	0.0000	0	
	Provision of generator hire e.g. for an event	-0.0048	-0.82	
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0131	3.85	



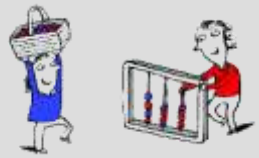
Domestic SPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0577	4.84
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0576	4.84
Investment in infrastructure to support uptake of micro-generation technologies	0.0390	3.28
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0342	2.87
Investment in infrastructure required to support take up of electric vehicles	0.0317	2.66
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	0.0288	2.42
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0271	2.27
Time to complete simple, low voltage new connections work: 30 days quicker than now, ie within 60 days	0.0269	2.26
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0259	2.17
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0244	2.05
Time to complete simple, low voltage new connections work:30 days quicker than now, ie within 60 days	0.0227	1.91
Information during a power cut: Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0205	1.72
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0179	1.50
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0149	1.25
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0144	1.20
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0131	1.10
Information during a power cut: Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0127	1.07
All elements of the work completed by UK Power Networks	0.0119	1.00
Contact for any new connections work: All contact through an on-line web portal	-0.0086	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0248	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0340	



Domestic SPN Customer WTP

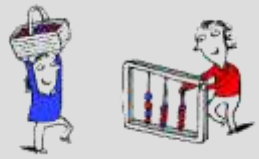
Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.90
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.89
Investment in infrastructure to support uptake of micro-generation technologies	1.96
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.72
Investment in infrastructure required to support take up of electric vehicles	1.59
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	1.45
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.36
Time to complete simple, low voltage new connections work: 30 days quicker than now, ie within 60 days	1.35
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.30
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.23
Time to complete simple, low voltage new connections work:30 days quicker than now, ie within 60 days	1.14
Information during a power cut: Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	1.03
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.90
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.75
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.72
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.66
Information during a power cut: Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.64
All elements of the work completed by UK Power Networks	0.60
Contact for any new connections work: All contact through an on-line web portal	-0.43
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.24
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-1.71



Summary: Domestic LPN, EPN and SPN Customer Priorities and WTP

	LPN	EPN	SPN
• Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity	2.25%	2.84% [2]	2.90%
• Investment in infrastructure to detect loss of supply from individual/small premises	2.00% [2]	2.89%	2.89% [2]
• Investment to enable uptake of micro-generation	1.90% [3]	1.54% [6]	1.96% [3]
• Investment in infrastructure to support low carbon electric heating technologies	1.71% [4]	1.58% [6]	1.72% [4]
• Timing of new connections work to be undertaken: – In normal business hours, evenings & weekends	0.88% [7]	1.81% [3]	N/S

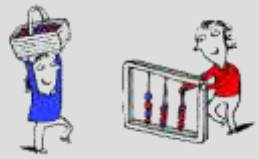
- **Other key points to note:**
- SPN Domestic Customers were typically willing to pay more for changes in services
- LPN domestic customers were typically willing to pay less for changes in services



Summary of Key Findings By Socio Economic Group (SEG) – LPN

- Highest priorities:
  - Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity
  - Investment in infrastructure to detect loss of supply from individual/small premises
  - Investment in infrastructure to support low carbon electric heating companies
  - Investment to enable uptake of micro generation
  - New connections work to be undertaken within a banded time

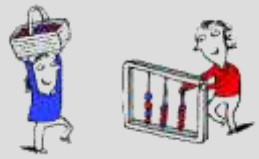
	ABC1	C2DE
Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity	2.35%	2.49%
Investment in infrastructure to detect loss of supply from individual/small premises	2.12 % 2	2.05% 3
Investment in infrastructure to support low carbon electric heating companies	2.08% 3	1.38% 5
Investment to enable uptake of micro generation	1.73% 4	2.17% 2
New connections work to be undertaken within a banded time	1.25% 5	1.46% 4



Summary of Key Findings By Socio Economic Group (SEG) – EPN

- Highest priorities:

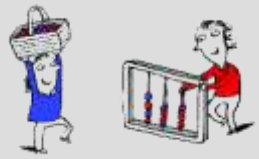
	ABC1	C2DE
– Investment in infrastructure to detect loss of supply from individual/small premises	3.36%	2.36% 3
– Rural customers affected by power cuts longer than 3 minutes, power restored within 1 hour	1.54% 7	2.66%
– Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity	2.94% 2	2.64% 2
– New connections work to be undertaken in normal business hours (08.00-17.00), in the evening and at weekends	1.98% 3	N/S



Summary of Key Findings By Socio Economic Group (SEG) – SPN

- Highest priorities:

	ABC1	C2DE
– Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity	3.21%	2.47% 2
– Investment in infrastructure to detect loss of supply from individual/small premises	2.79% 2	2.84%
– Investment in infrastructure to support take up of electrical vehicles	1.98% 3	0.98% 11
– Investment in infrastructure to support low carbon electric heating technologies	1.41% 5	1.98% 3



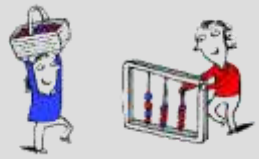
Business Stated Preference Findings: Customer Priorities & Willingness to Pay

Summary of Business Findings

- The research also identified willingness to pay amongst businesses for the majority of improvements; again, there was also some willingness to accept a deterioration in service levels

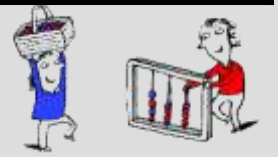
- Willingness to pay ranged from a 0.65% increase in their distribution bill by 2023 for the lowest valued service level to a 3.01% increase for the service level valued most highly:
  - LPN: 0.94%-2.39%
  - EPN: 0.65%-2.94%
  - SPN: 0.75%-3.01%

- Overall willingness to pay by 2023, as a proportion of the average distribution bill, was:
  - LPN: 18.0%
  - EPN: 21.8%
  - SPN: 21.0%



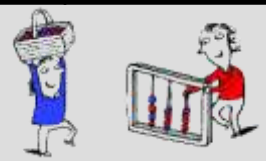
Business Customer Values: Exercise 1 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0	
	Within 10 working days	-0.0030	-0.17	
	Within 7 working days	0.0351	2.06	1.00
	By date agreed with customer	0.0366	3.2	1.04
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0	
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	-0.0365	-1.21	
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	-0.0184	-0.61	
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0277	2.77	
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0	
	Phone or email contact via dedicated new connections call centre	-0.0251	-1.18	
	Phone or email contact via a named co-ordinator	0.0012	0.06	
	All contact through an on-line web portal	-0.0067	-0.61	
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0	
	30 days quicker than now, ie within 60 days	0.0228	0.98	
	60 days quicker than now, ie within 30 days	0.0161	0.67	
	75 days quicker than now, ie within 15 days	0.0273	2.41	
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0	
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	-0.0144	-0.64	
	All elements of the work completed by UK Power Networks	0.0045	0.46	



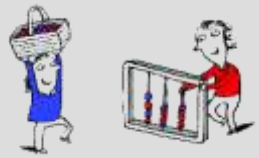
Business Customer Values: Exercise 2 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0557	5.4
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0255	2.74
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0303	2.95
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0381	3.77
Investment to enable uptake of micro-generation e.g, solar panels etc:	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0440	4.58



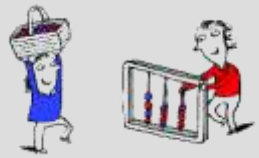
Business Customer Values: Exercise 3 LPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Frequency of power cuts over 3 mins - average number	1 every 36 months	0.0000	0
	1 every 42 months	0.0003	0.02
	1 every 48 months	0.0254	2.65
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0877	-4.33
	Within 60 minutes	-0.0538	-3.71
	Base: Within 20 minutes	0.0000	0
	Within 10 minutes	-0.0031	-0.17
Information during a power cut	Information available on contacting call centre	0.0000	0
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0036	0.19
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0109	0.54
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0060	0.51
Contingency Services	Customer responsibility for any back-up services	0.0000	0
	Provision of generator hire e.g. for an event	0.0202	1.13
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0220	2.25



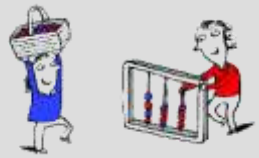
Business LPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0557	2.53
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0440	2.00
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0381	1.73
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0366	1.66
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0351	1.60
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0303	1.37
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0277	1.26
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0273	1.24
Investment in infrastructure required to support take up of electric vehicles	0.0255	1.16
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.0254	1.15
Contingency services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0220	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0538	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0877	



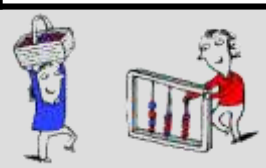
Business LPN Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.39
Investment to enable uptake of micro-generation e.g, solar panels etc	1.89
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	1.64
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.57
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	1.51
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.30
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.19
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.17
Investment in infrastructure required to support take up of electric vehicles	1.10
Frequency of power cuts over 3 mins - average number: 1 every 48 months	1.09
Contingency services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.94
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-2.31
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-3.76



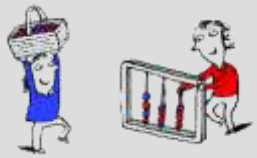
Business Customer Values: Exercise 1 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0
	Within 10 working days	-0.0167	-2.35
	Within 7 working days	0.0064	0.96
	By date agreed with customer	0.0099	2.14
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	0.0164	1.29
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0231	1.89
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0165	3.9
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0
	Phone or email contact via dedicated new connections call centre	-0.0158	-2.03
	Phone or email contact via a named co-ordinator	0.0015	0.2
	All contact through an on-line web portal	0.0009	0.18
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0
	30 days quicker than now, ie within 60 days	0.0087	0.83
	60 days quicker than now, ie within 30 days	0.0118	1.13
	75 days quicker than now, ie within 15 days	0.0168	4.2
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	0.0111	1.35
	All elements of the work completed by UK Power Networks	0.0139	3.42



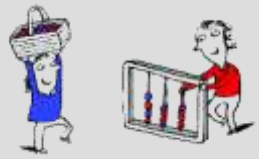
Business Customer Values: Exercise 2 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0432	5.66
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0261	3.56
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0218	2.83
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0447	5.44
Investment to enable uptake of micro-generation e.g, solar panels etc	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0403	5.11



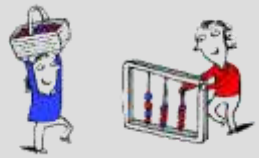
Business Customer Values: Exercise 3 EPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Frequency of power cuts over 3 mins - average number	1 every 13 months	0.0000	0
	1 every 18 months	0.0005	0.06
	1 ever 24 months	0.0139	2.31
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	As now, ie within 180 minutes	0.0000	0
	Within 120 minutes	0.0011	0.1
	Within 60 minutes	0.0169	2.74
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0302	-3.32
	Within 60 minutes	-0.0375	-4.92
	Base: Within 20 minutes	0.0000	0
	Within 10 minutes	-0.0080	-0.86
Information during a power cut	Information available on contacting call centre	0.0000	0
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0016	0.13
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0148	1.15
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0154	2
Contingency Services	Customer responsibility for any back-up services	0.0000	0
	Provision of generator hire e.g. for an event	-0.0075	-0.63
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0213	3.4



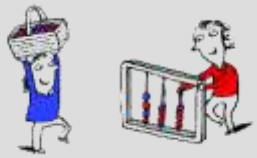
Business EPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0447	2.54
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0432	2.64
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0403	2.39
Investment in infrastructure required to support take up of electric vehicles	0.0261	1.66
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0218	1.32
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0213	1.59
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0169	1.28
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0168	1.96
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0165	1.82
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0154	0.93
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0139	1.60
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0139	1.08
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0099	1.00
Contact for any new connections work: Phone or email contact via dedicated new connections call centre	-0.0158	
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0167	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0302	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0375	



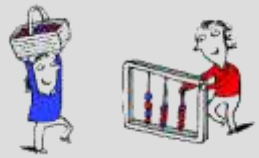
Business EPN Customer WTP

Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.94
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.84
Investment to enable uptake of micro-generation e.g, solar panels etc	2.65
Investment in infrastructure required to support take up of electric vehicles	1.72
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.44
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	1.40
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.11
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.11
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.09
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	1.02
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.92
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.92
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.65
Contact for any new connections work: Phone or email contact via dedicated new connections call centre	-1.04
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-1.10
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.98
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.47



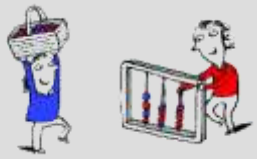
Business Customer Values: Exercise 1 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)	Indexed coefficient
Timescale for provision of quotations for simple, low voltage new connections work	Within 15 working days	0.0000	0	
	Within 10 working days	0.0022	0.12	
	Within 7 working days	0.0425	2.21	1.43
	By date agreed with customer	0.0296	2.6	1.00
Timing of any new connections work	As now, ie work undertaken in normal business hours (08.00-17.00)	0.0000	0	
	Work undertaken in normal business hours (08.00-17.00) and in the evenings	0.0372	1.37	
	Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0788	3.14	3.04
	Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0259	2.76	1.00
Contact for any new connections work	As now, telephone or e-mail to general call centre	0.0000	0	
	Phone or email contact via dedicated new connections call centre	0.0316	1.21	
	Phone or email contact via a named co-ordinator	0.0602	2.3	
	All contact through an on-line web portal	-0.0164	-1.54	
Time to complete simple, low voltage new connections work	As now, ie within 90 days	0.0000	0	
	30 days quicker than now, ie within 60 days	-0.0345	-1.23	
	60 days quicker than now, ie within 30 days	-0.0026	-0.09	
	75 days quicker than now, ie within 15 days	0.0492	4.81	
Type of new connections service offered	Standard service, with UKPN defining what they will do and what activities remain the responsibility of a customer's builder or electrician	0.0000	0	
	A menu of services available from UKPN allowing the customer to choose who completes which elements of the work	0.0146	0.76	
	All elements of the work completed by UK Power Networks	0.0286	3.13	



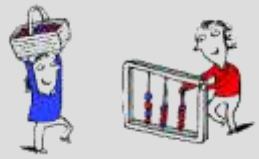
Business Customer Values: Exercise 2 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Investment in infrastructure to enable UKPN to detect loss of supply	No investment	0.0000	0
	Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.1043	6.16
Investment to enable greater uptake of electric vehicles	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of electric vehicles	0.0323	2.06
Investment in infrastructure to enable greater uptake of low carbon electric heating technologies	No specific infrastructure investment	0.0000	0
	Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0750	4.07
Investment to enable largescale renewable generation (e.g onshore wind farms, biomass plants etc)	No specific infrastructure investment; each new connection charged at cost	0.0000	0
	Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0811	4.54
Investment to enable uptake of micro-generation e.g, solar panels etc	No specific infrastructure investment; use traditional network investment as needed	0.0000	0
	Investment in infrastructure to support uptake of micro-generation technologies	0.0672	4.21



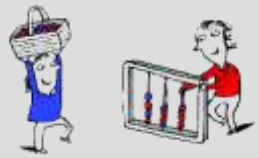
Business Customer Values: Exercise 3 SPN

Attribute	Levels	Factored coefficient	T-Stat (Robust = 1.95+)
Frequency of power cuts over 3 mins - average number	1 every 15 months	0.0000	0
	1 every 18 months	0.0133	0.78
	1 ever 24 months	0.0440	3.44
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	As now, ie within 180 minutes	0.0000	0
	Within 120 minutes	0.0057	0.32
	Within 60 minutes	0.0460	3.81
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers	Within 180 minutes	-0.0799	-4.81
	Within 60 minutes	-0.0475	-2.88
	Base: Within 20 minutes	0.0000	0
	Within 10 minutes	-0.0017	-0.09
Information during a power cut	Information available on contacting call centre	0.0000	0
	Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0120	0.52
	Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0089	0.41
	Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0306	2.06
Contingency Services	Customer responsibility for any back-up services	0.0000	0
	Provision of generator hire e.g. for an event	0.0133	0.57
	Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0349	2.87



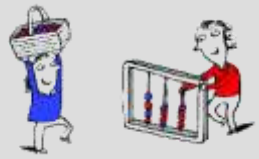
Business SPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.1043	4.03
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0811	3.13
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0788	3.04
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0750	2.90
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0672	2.60
Contact for any new connection work: Phone or email contact via a named co-ordinator	0.0602	2.32
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	0.0492	1.90
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0460	1.78
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0440	1.70
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0425	1.64
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0349	1.35
Investment in infrastructure required to support take up of electric vehicles	0.0323	1.25
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0306	1.18
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0296	1.15
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0286	1.11
Timing of any new connection work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0259	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0475	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0799	



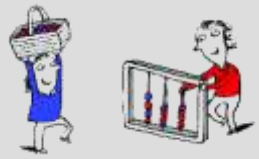
Business SPN Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	3.01
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.34
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	2.27
Investment in infrastructure required to support take up of low carbon electric heating technologies	2.16
Investment to enable uptake of micro-generation e.g, solar panels etc	1.94
Contact for any new connection work: Phone or email contact via a named co-ordinator	1.73
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	1.42
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.33
Frequency of power cuts over 3 mins - average number: 1 every 24 months	1.27
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	1.22
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	1.01
Investment in infrastructure required to support take up of electric vehicles	0.93
Information during a power cut: available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.88
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.85
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.83
Timing of any new connection work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.75
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.37
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.30



Summary: Business LPN, EPN and SPN Customer Priorities and WTP

	LPN	EPN	SPN
• Investment in technologies to allow cheaper and quicker connection of low carbon generators of electricity	1.64% [3]	2.94%	2.34% [2]
• Investment in infrastructure to detect loss of supply from individual/small premises	2.39%	2.84% [2]	3.01%
• Investment to enable uptake of micro-generation	1.89% [2]	2.65% [3]	1.94% [5]
• Provision of quotations for simple, low voltage new connections work: timescale/date agreed with customer	1.57% [4]	0.65% [13]	0.85% [14]
• New connections work to be undertaken in normal business hours, evenings & weekends	N/S	N/S	2.27% [3]

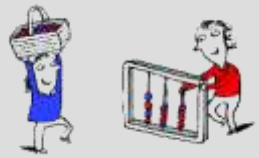


Summary of Key Findings by Size – LPN

- Highest priorities:

- Investment in infrastructure to detect loss of supply from individual and small premises
- New connections work to be undertaken within a banded time
- Provision of quotations for simple, low voltage new connections work:
  - by timescale/date agreed with customer
  - Within 7 working days
- Investment to enable uptake of micro-generation

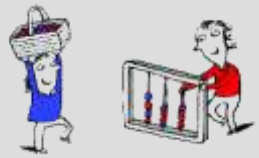
	Small	Medium/ Large
Investment in infrastructure to detect loss of supply from individual and small premises	2.59% [2]	7.64%
New connections work to be undertaken within a banded time	7.72%	N/S
Provision of quotations for simple, low voltage new connections work: by timescale/date agreed with customer	N/S	2.55% [2]
Provision of quotations for simple, low voltage new connections work: Within 7 working days	N/S	2.29% [3]
Investment to enable uptake of micro-generation	2.10% [3]	N/S



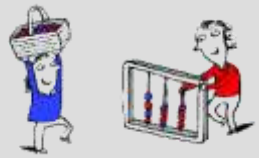
Summary of Key Findings by Size – EPN/SPN

- Highest priorities:

	Small	Medium/ Large
Investment in infrastructure to detect loss of supply from individual/small premises	2.15% [4]	5.91%
Investment to enable uptake of micro-generation	2.80%	N/S
Investment in technologies to allow cheaper and quicker connection of low carbon electricity generators	2.54% [2]	3.40% [3]
Investment in infrastructure to support low carbon electric heating technologies	2.28% [3]	N/S
New connections work to be undertaken in normal business hours, evenings and weekends	N/S	3.97% [2]



Overall Summary



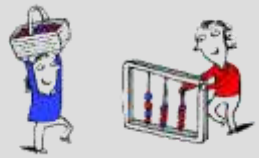
Overall Summary of Priorities & WTP

- Domestic customer priorities are varied but are strongly focused towards:
  - investing in infrastructure to:
    - detect loss of supply
    - allow cheaper and quicker connection of new low carbon generators of electricity
    - to support take up of low carbon electric heating technologies
    - Enable the take up of microgeneration.

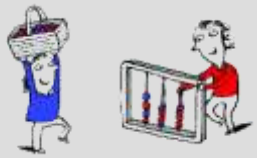
- Business customer priorities also identify a strong desire to invest in infrastructure to:
  - detect loss of supply
  - to allow cheaper and quicker connection of new low carbon generators of electricity

- Average WTP by 2023 is:
  - Domestic LPN: 16.7%
  - Domestic EPN: 20.3%
  - Domestic SPN: 20.4%

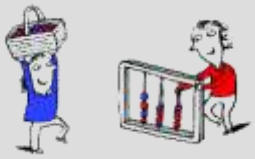
  - Business LPN: 18.0%
  - Business EPN: 21.8%
  - Business SPN: 21.0%



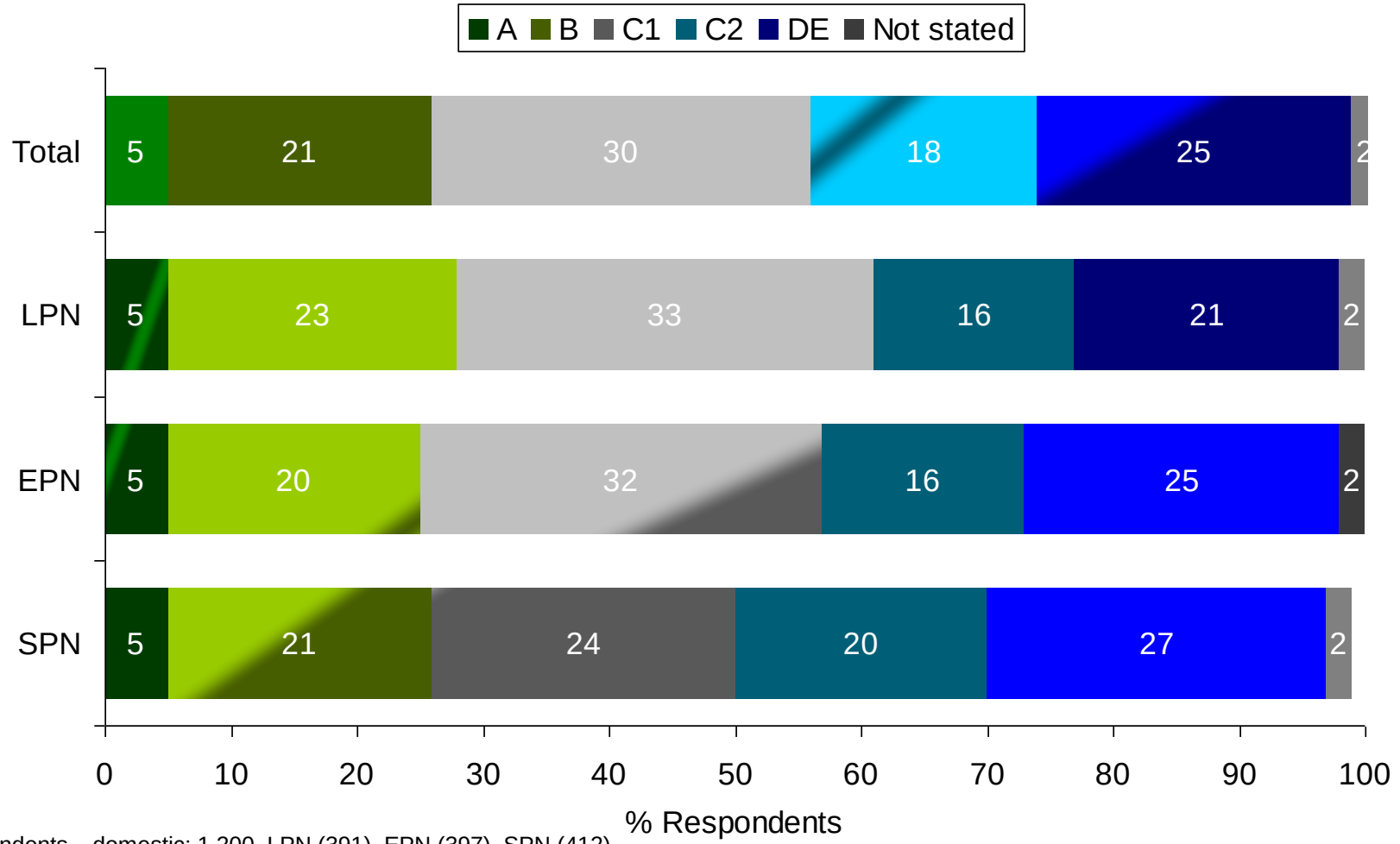
Appendix A – Background Findings



DOMESTIC



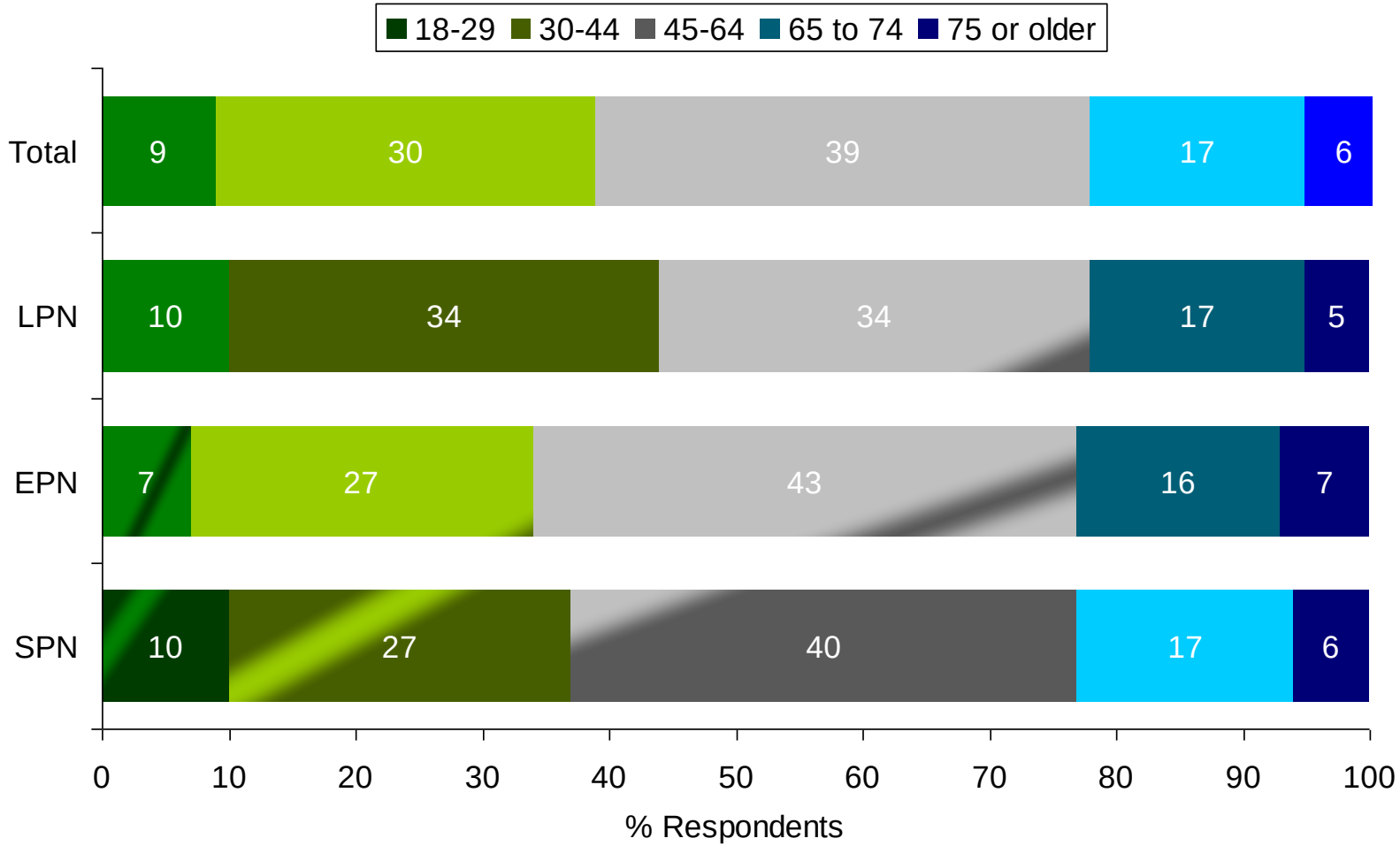
The profile by socio-economic group was similar across DNOs



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Qseg. Socio-economic group

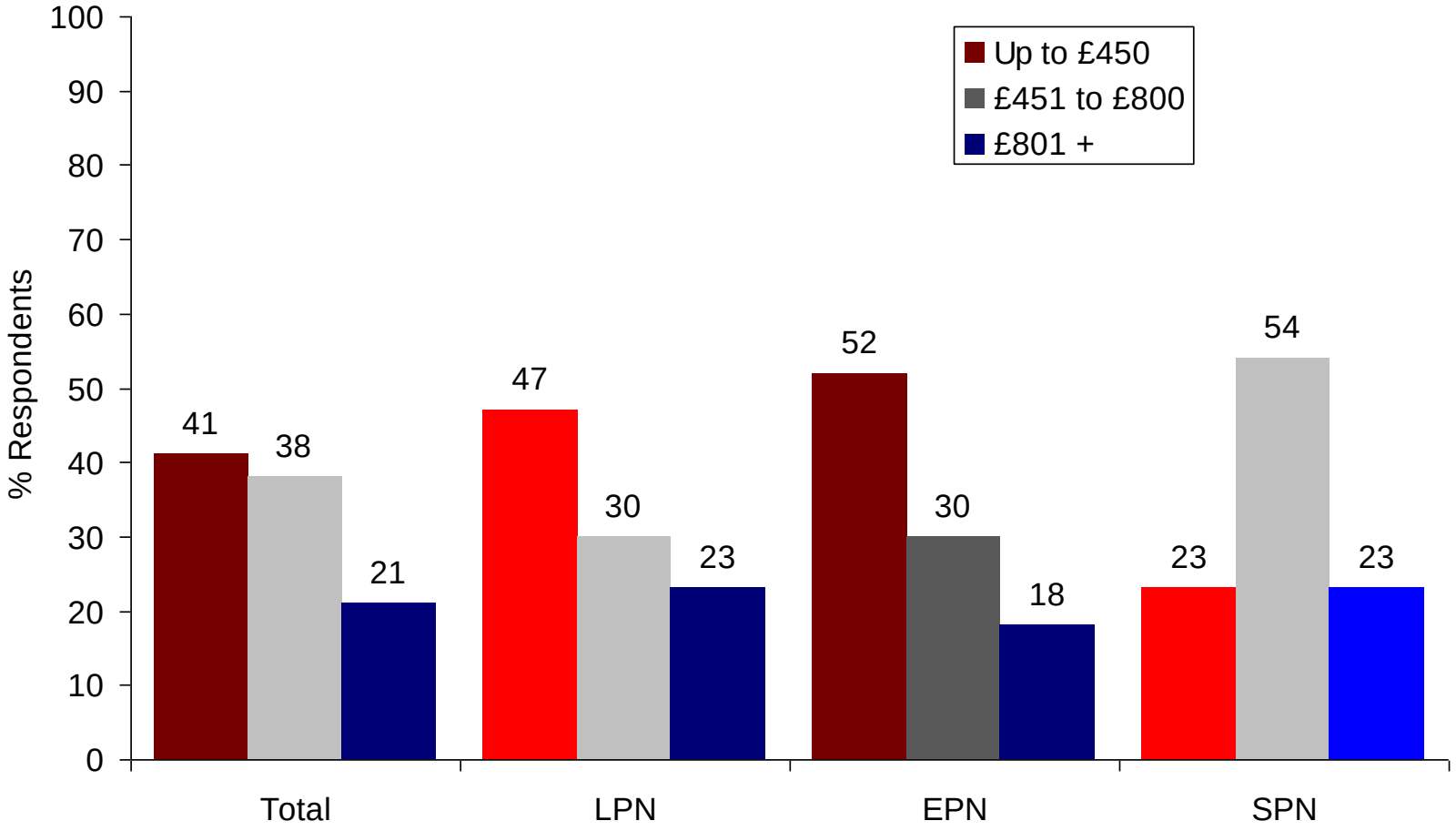
The age profile was also similar by DNO



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q3. Which of the following age groups do you fall into?

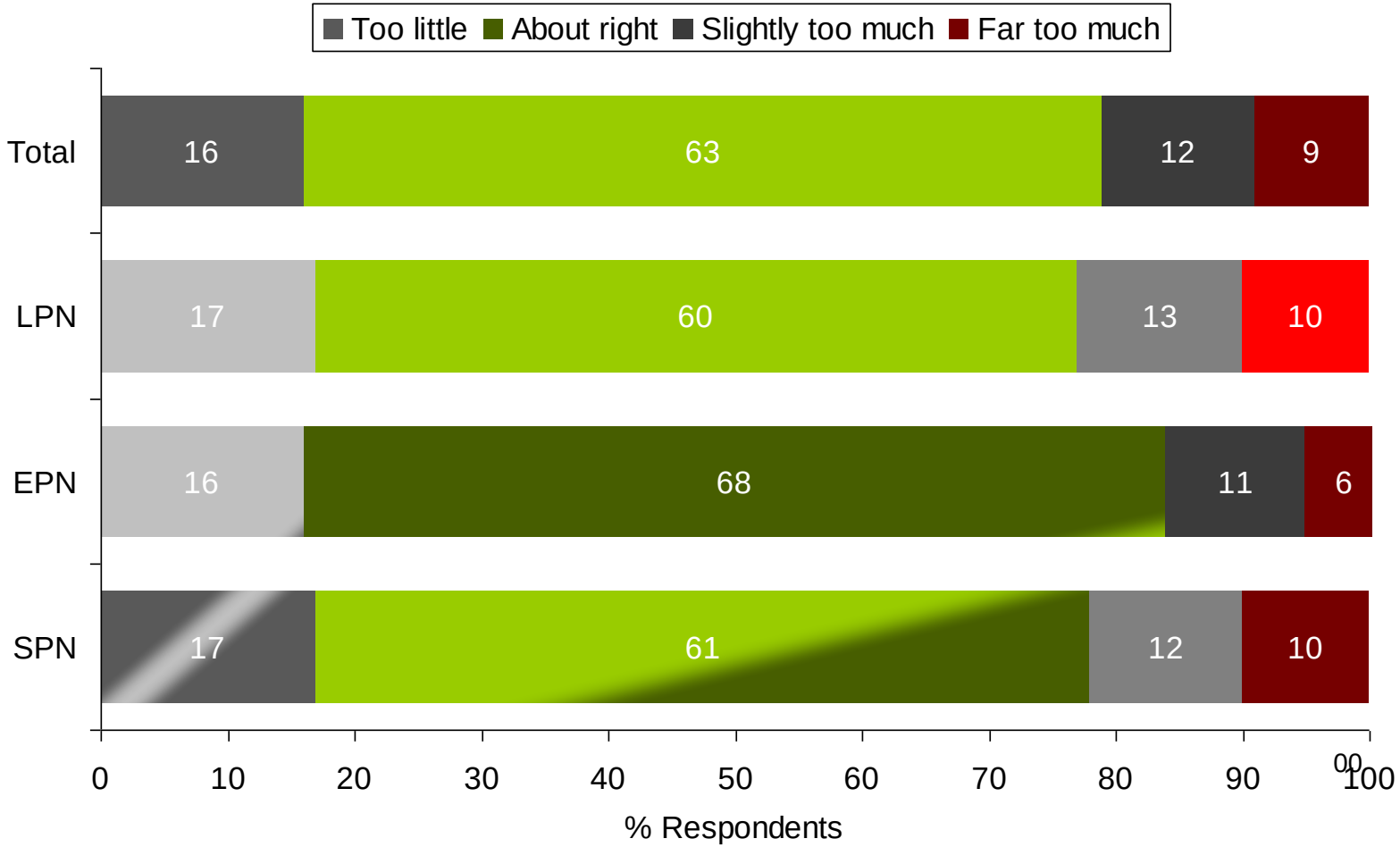
LPN and EPN customers were significantly more likely to have a bill up to £450 than SPN



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q7. Annual electricity bill

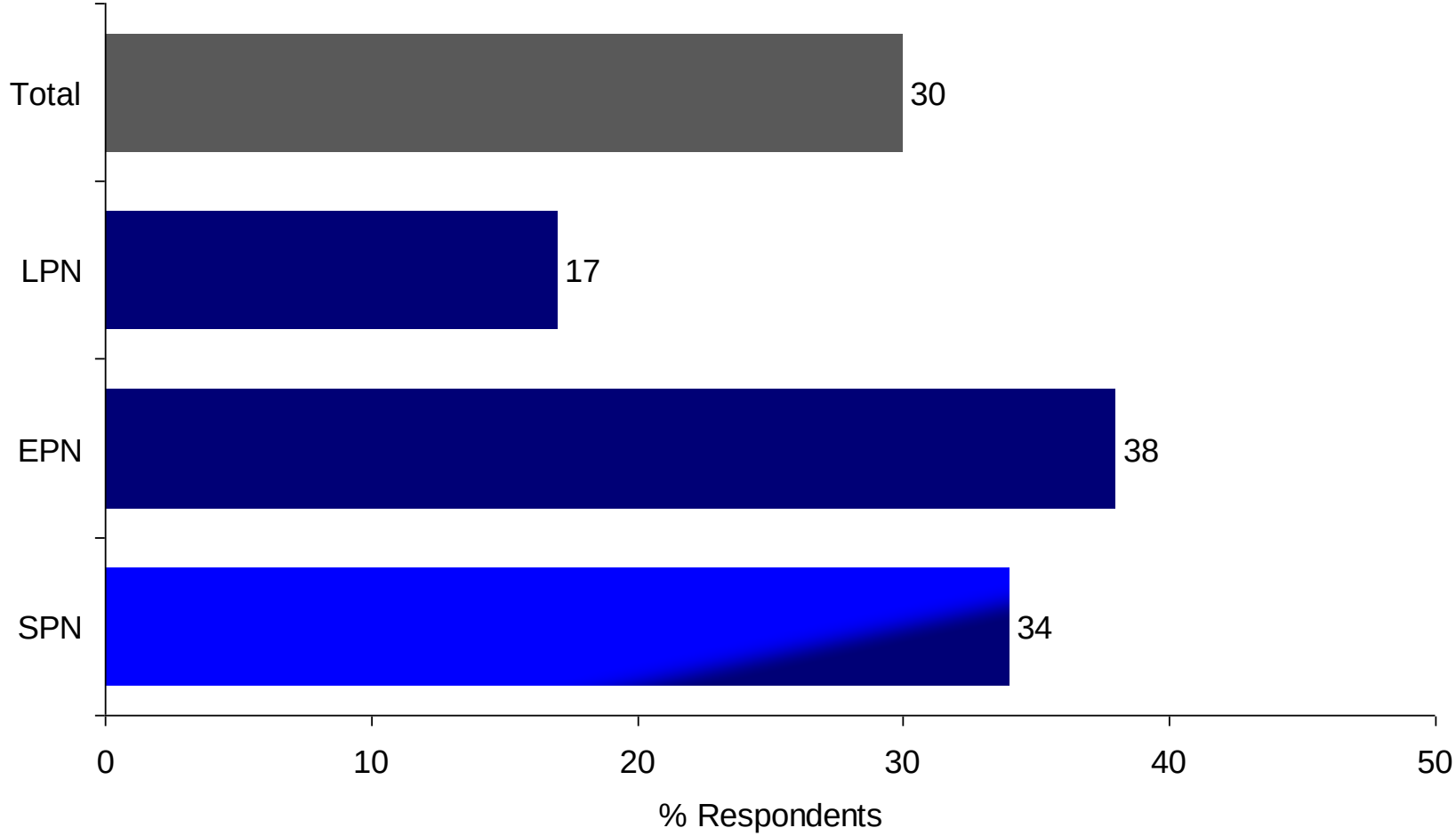
Most felt that the proportion of their bill allocated to the distributor was “about right”



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q9. Given what we have told you about the role of the distributor, how do you feel about the amount that goes towards your distributor? Is it..

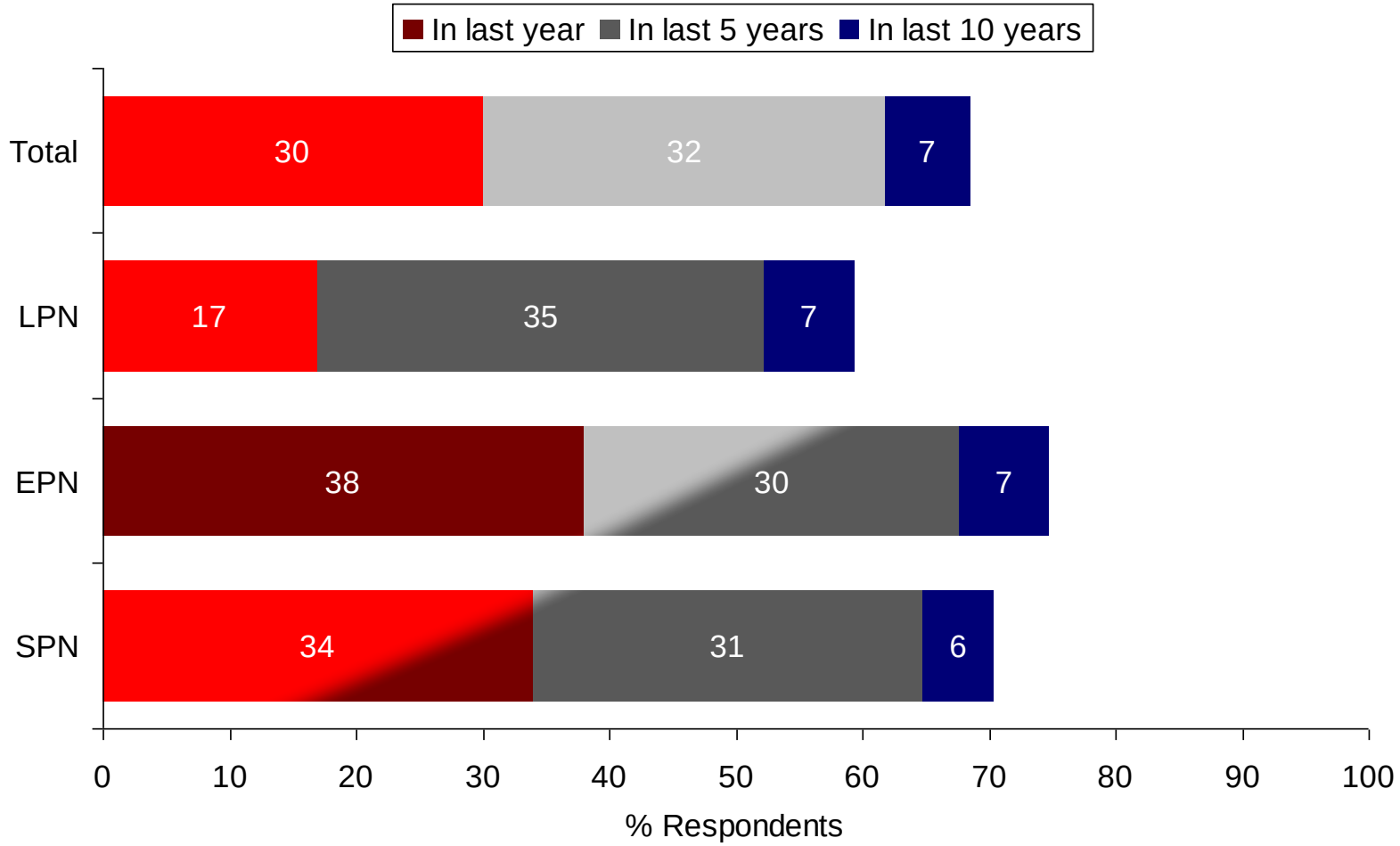
EPN and SPN customers were significantly more likely to have had an unplanned cut in the last year



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q10. Have you experienced any unplanned power cuts lasting more than 3 minutes (that is, any that you were not warned about) in the last year?

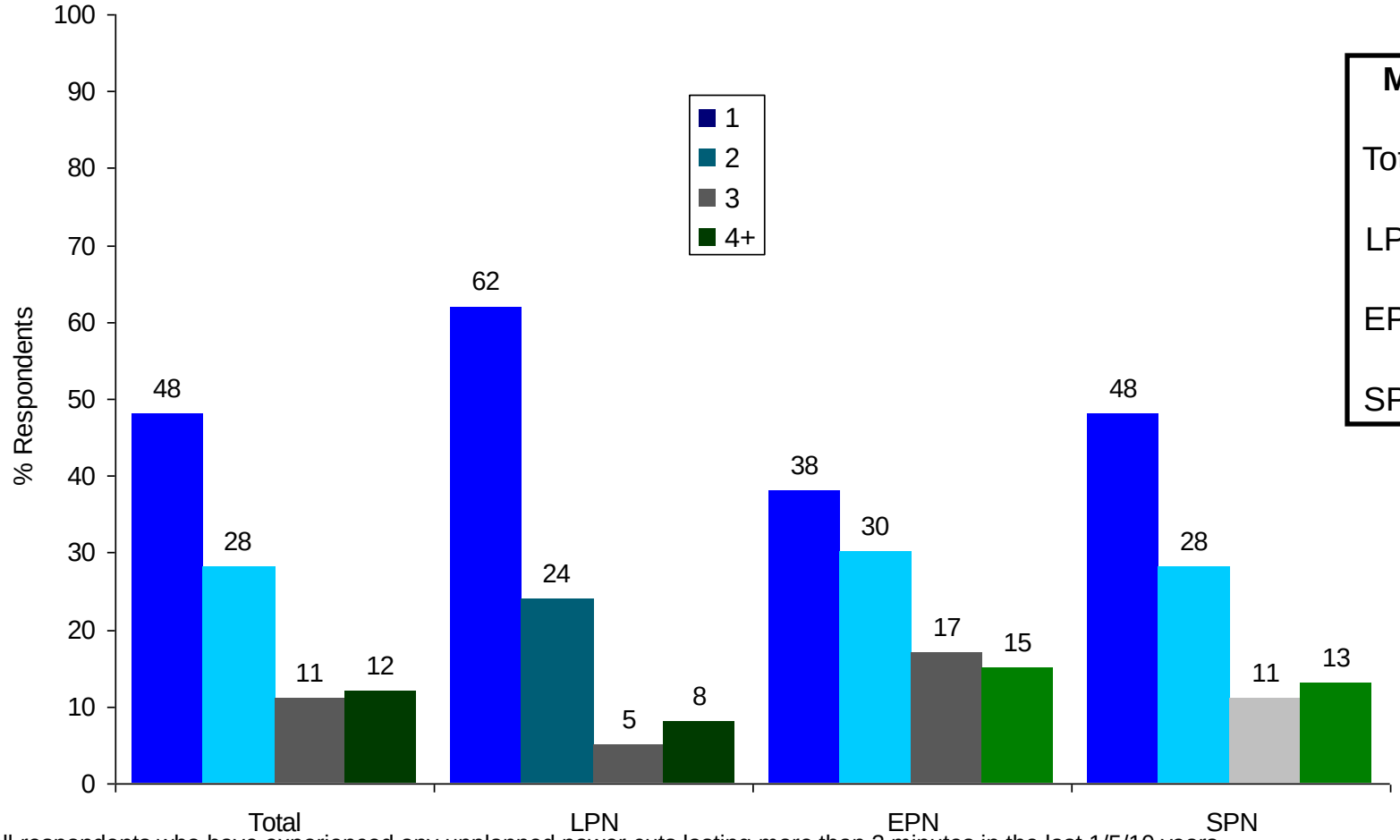
6 in 10 had experienced an unplanned cut in the last 5 years



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q11/12/13. Has you experienced any unplanned power cuts lasting more than 3 minutes (that is, any that you were not warned about) in the last year/in the last 5 years/in the last 10 years?

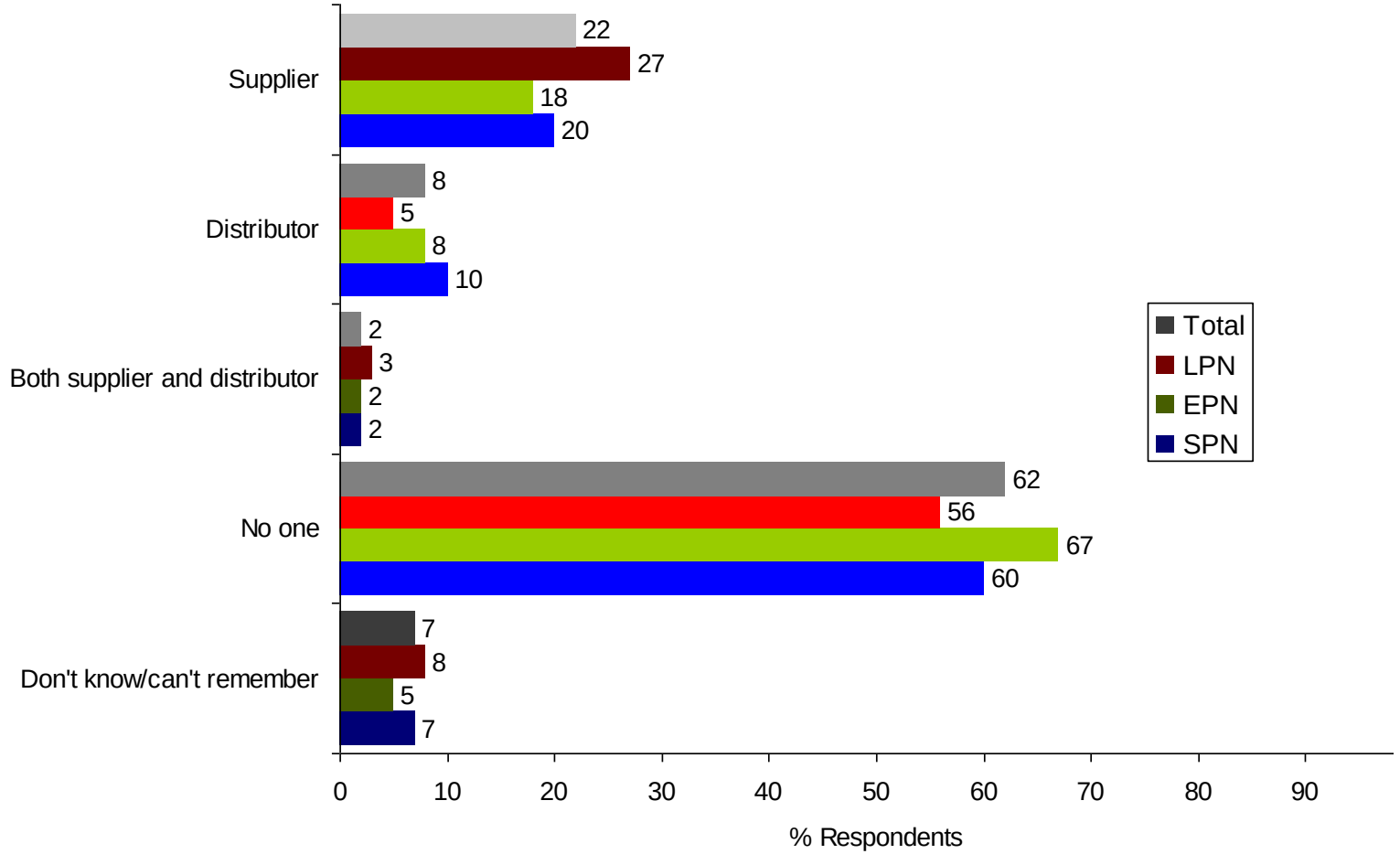
Nearly one quarter of those who had experienced an unplanned cut had had 3 or more



Base: all respondents who have experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – domestic: 826, LPN (234), EPN (298), SPN (294)

Q13. How many of these unplanned cuts have you had in the last (1/5/10 year(s))?

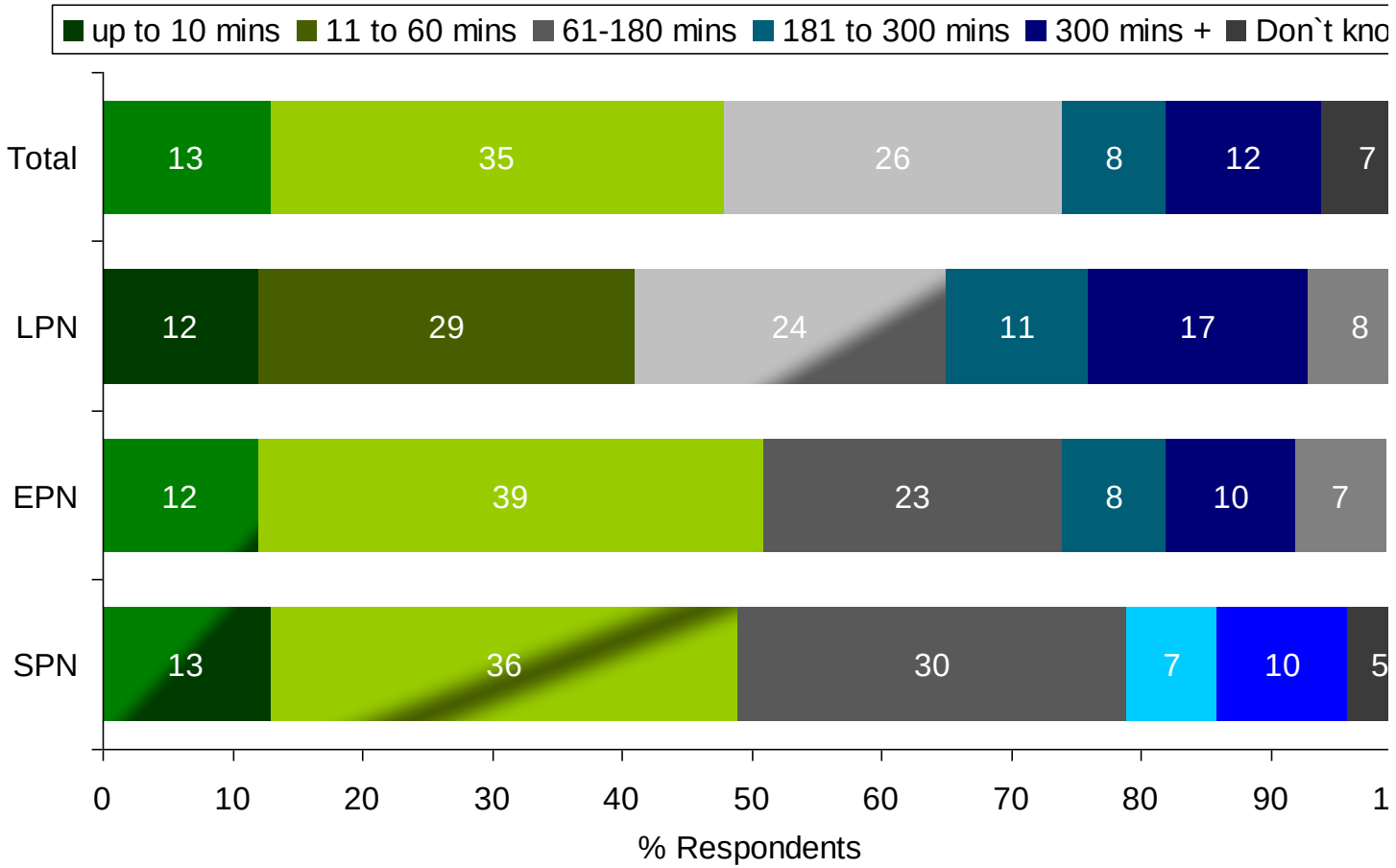
Two thirds did not contact their supplier or distributor at their last unplanned cut



Base: all respondents who have experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – domestic: 826, LPN (234), EPN (298), SPN (294)

Q15. Who, if anybody, did you contact on the last occasion you experienced a power cut?

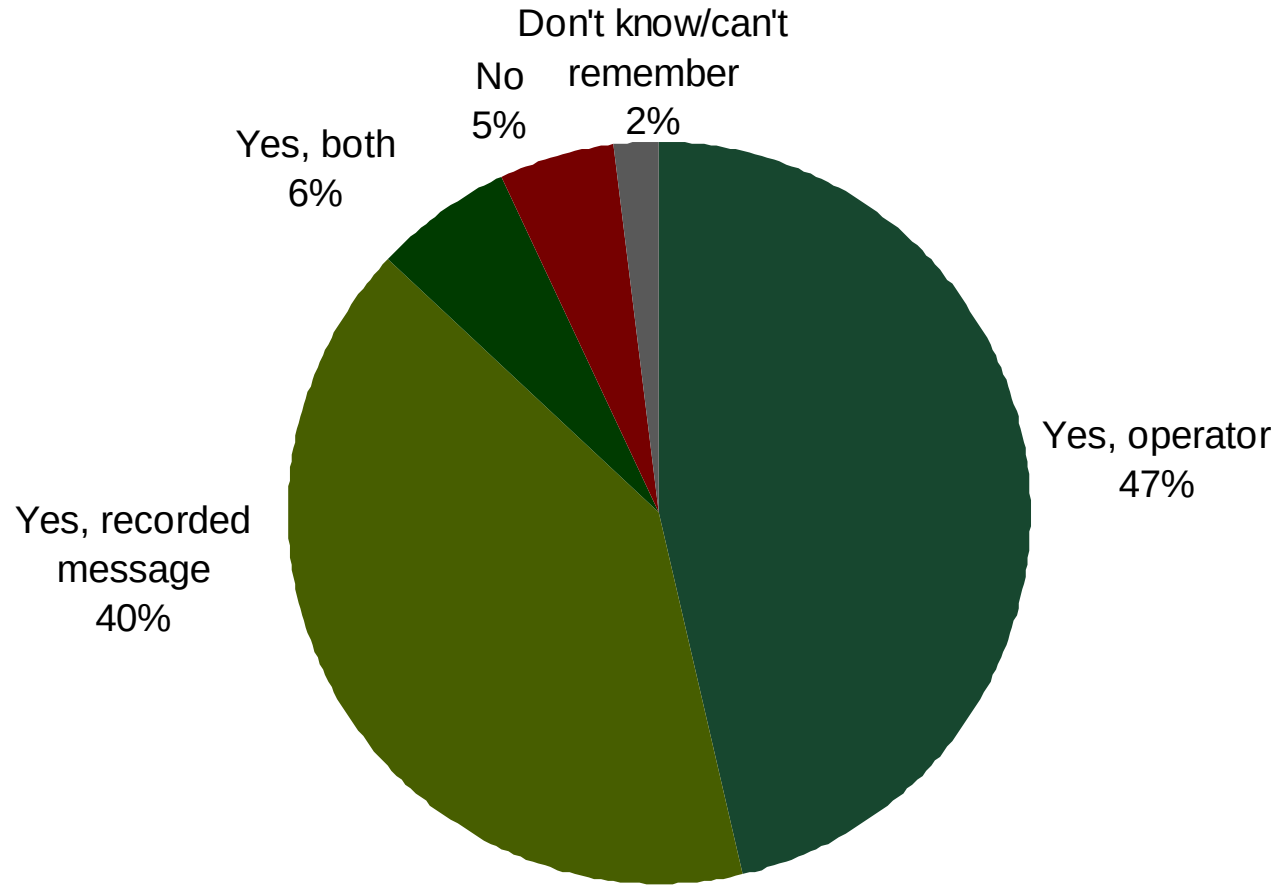
Of those who had had an unplanned cut, nearly half said their last cut lasted for one hour or less



Base: all respondents who have experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – domestic: 826, LPN (234), EPN (298), SPN (294)

Q14. On the last occasion that you had an unplanned power cut in excess of 3 minutes, how long did it last?

Nearly all respondents got through to an operator or recorded message when they called their distributor about a cut

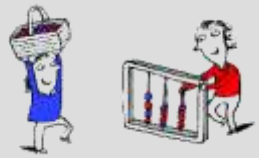


Base: all respondents who contacted their distributor on the last occasion they experienced a power cut – domestic: 82

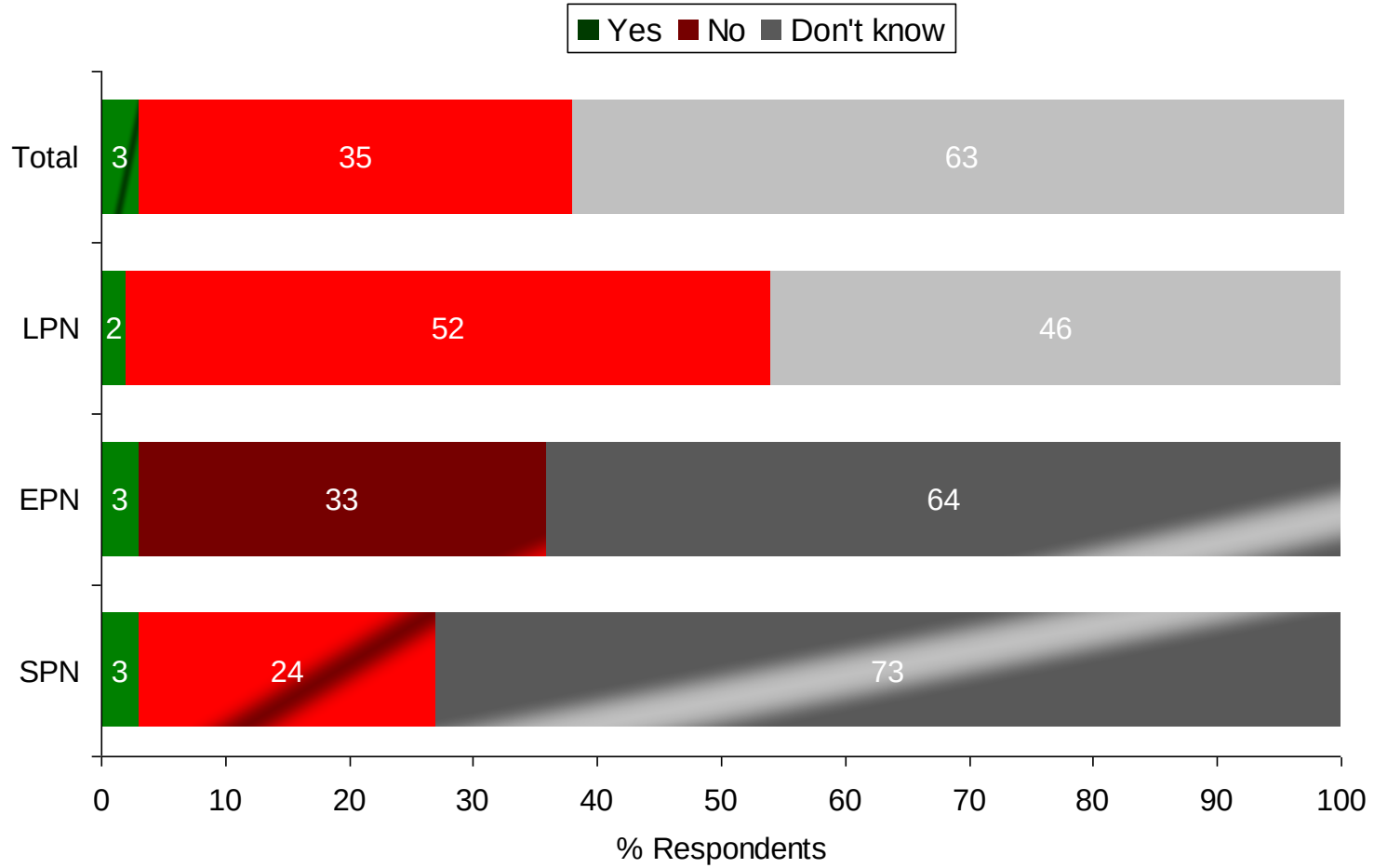
Q16. Did you manage to get through to either an operator or a recorded message at your distributor?

Views were positive about the operator/ recorded message

- Three quarters of those who got through to an operator or recorded message got all the information they needed
- 70% of those who got through to an operator or recorded message rated the information they received as “very” or “quite” accurate.



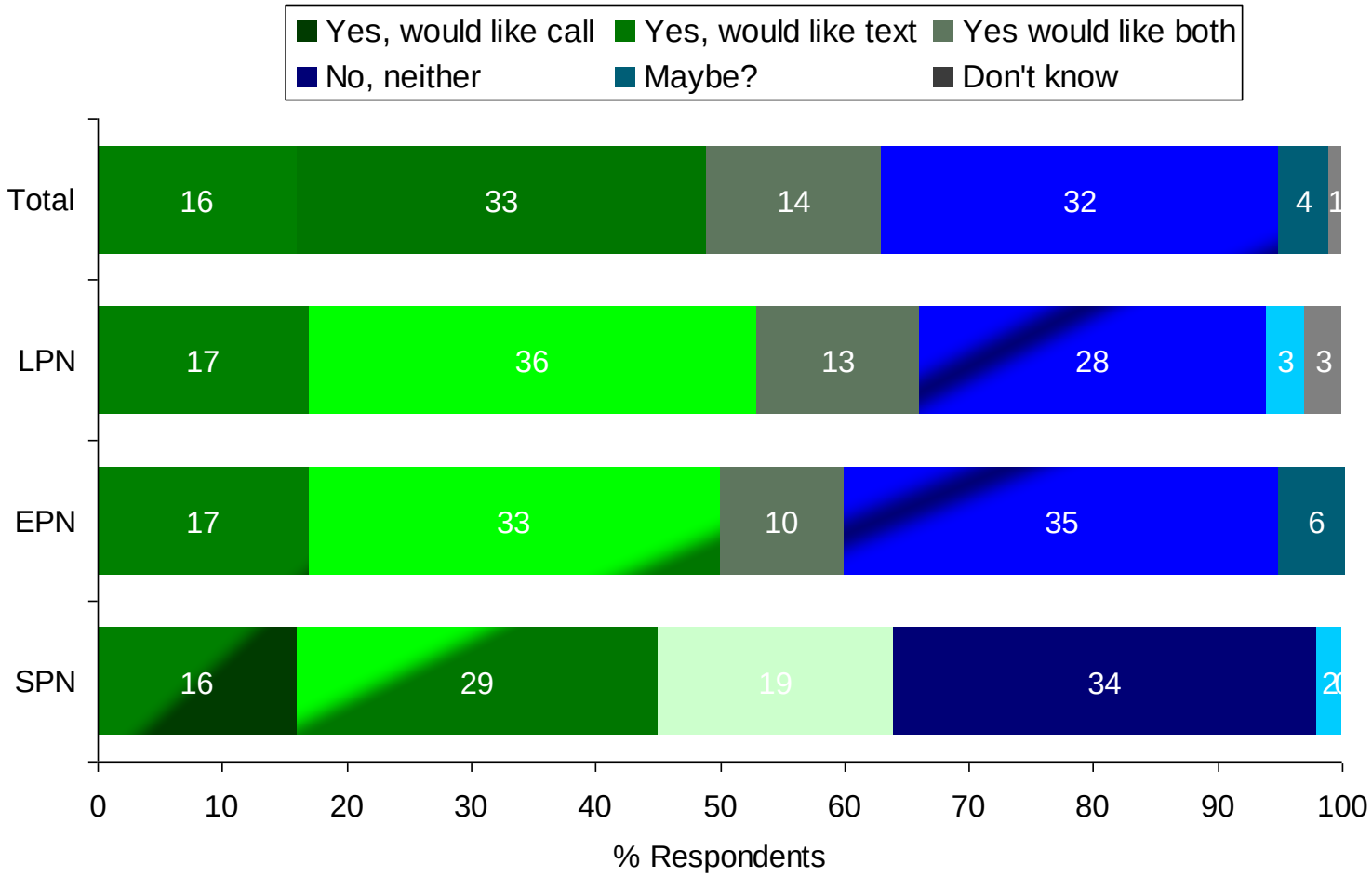
One third said their distributor had not contacted them during an unplanned cut; the remainder did not know



Base: all respondents who have experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – domestic: 742, LPN (199), EPN (273), SPN (270)

Q19. Has your distributor ever contacted you or called you back during an unplanned power cut?

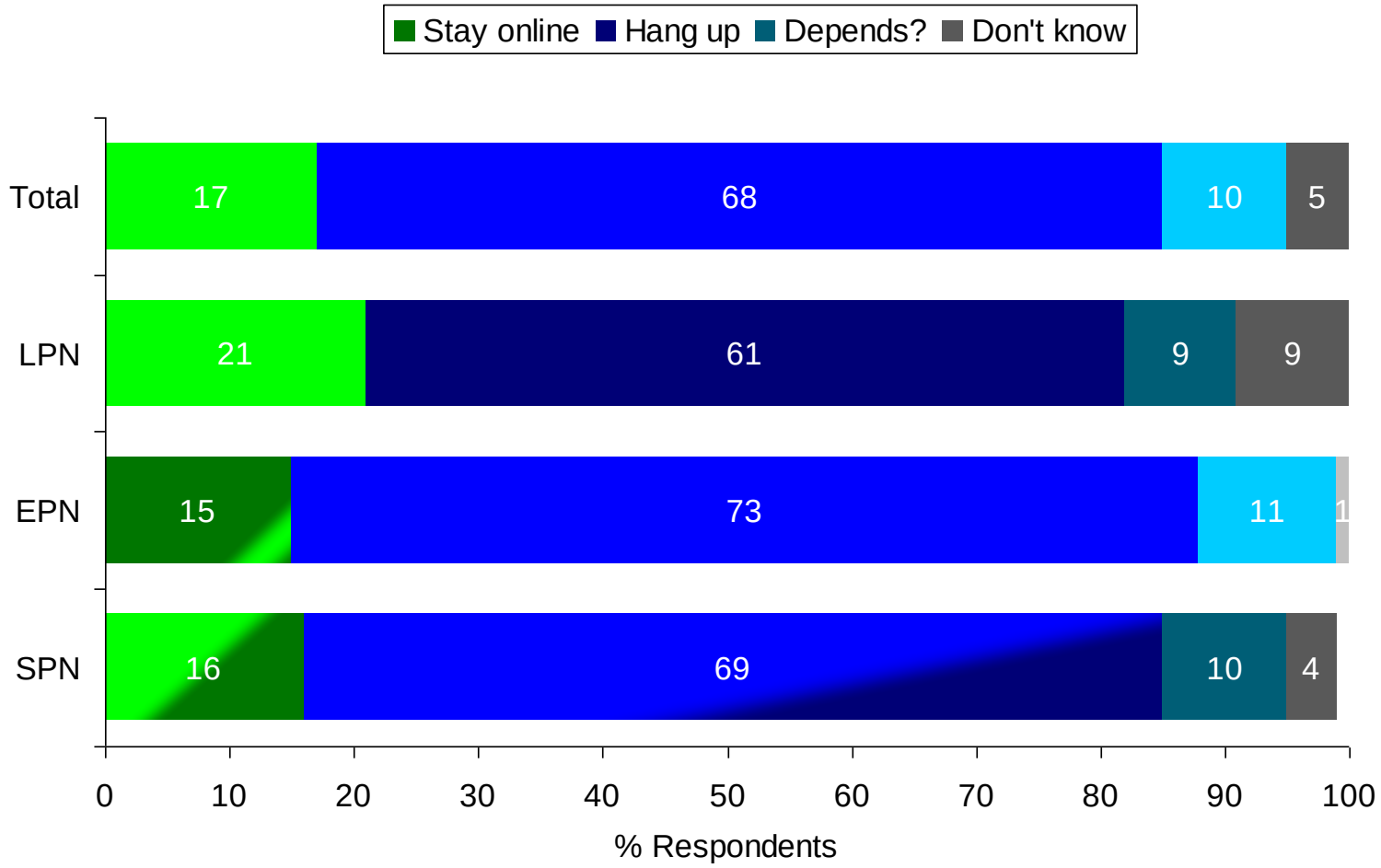
Nearly two thirds would like a call or text (or both) re. an unplanned cut



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q20. Where your distributor is aware of a power cut affecting an area, would you like to receive information about the cut via an automatic contact via text or phone call, or are you content simply to call the call centre if you need information?

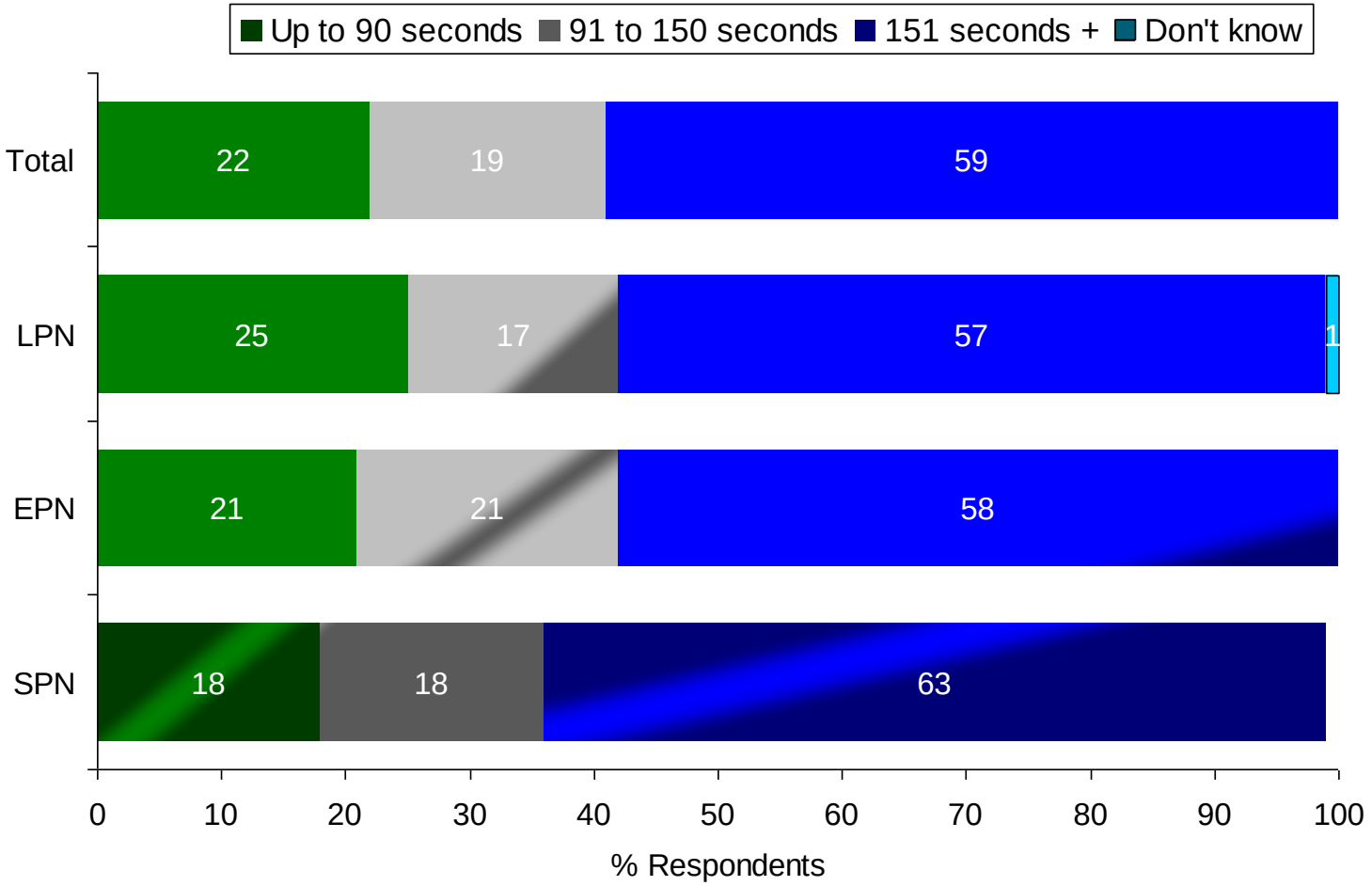
Nearly 7 in 10 would hang up having heard recorded information about an unplanned cut



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q21. Where your distributor has information about a power cut they will usually prepare a recorded message for callers to listen to when they make contact about the cut. Is your preference to stay on the line to speak with an advisor after hearing the recorded message, or would you hang up after hearing it?

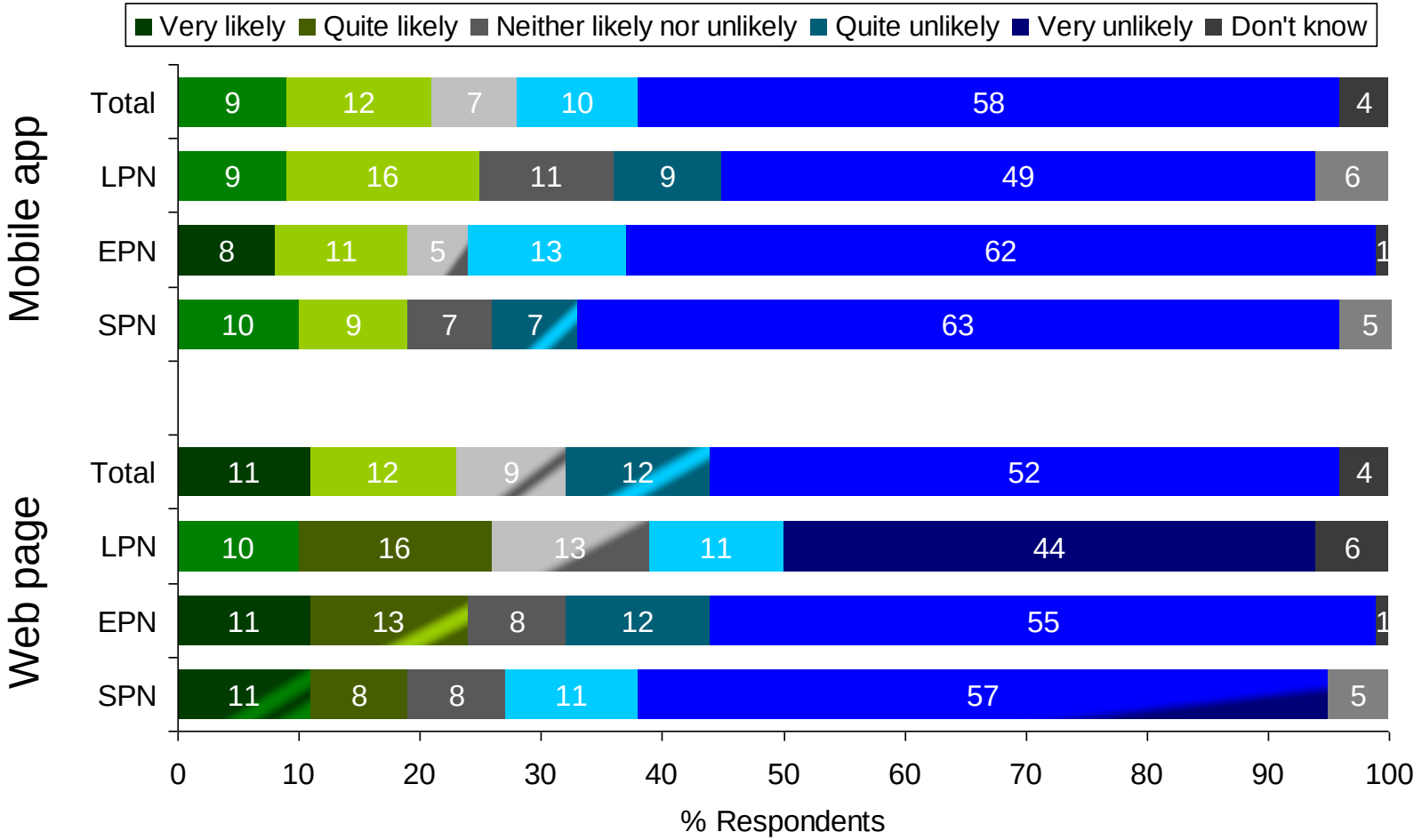
4 in 10 respondents who would stay on the line after listening to a recorded message would be happy to wait up to 2½ minutes



Base: all respondents who prefer to stay on the line after listening to a recorded message – domestic: 329, LPN (116), EPN (104), SPN (109)

Q22. What is an acceptable time to wait to speak to an advisor after hearing a recorded message?

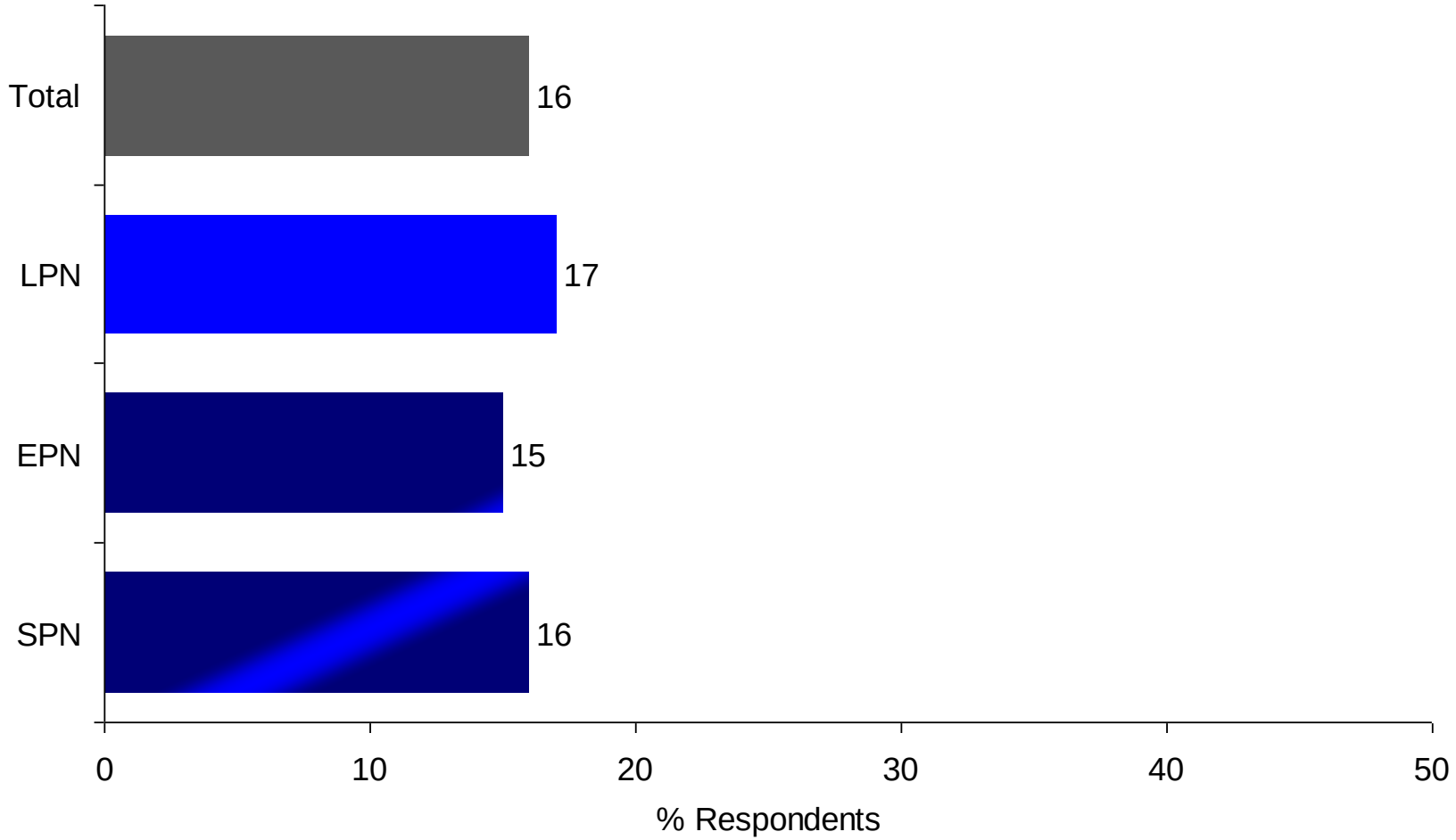
One in five would visit a web page or mobile app during an unplanned cut, higher among LPN



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q23. In the event of a power cut, how likely would you be to visit a UK Power Networks (ie your distributor's): Webpage/mobile app

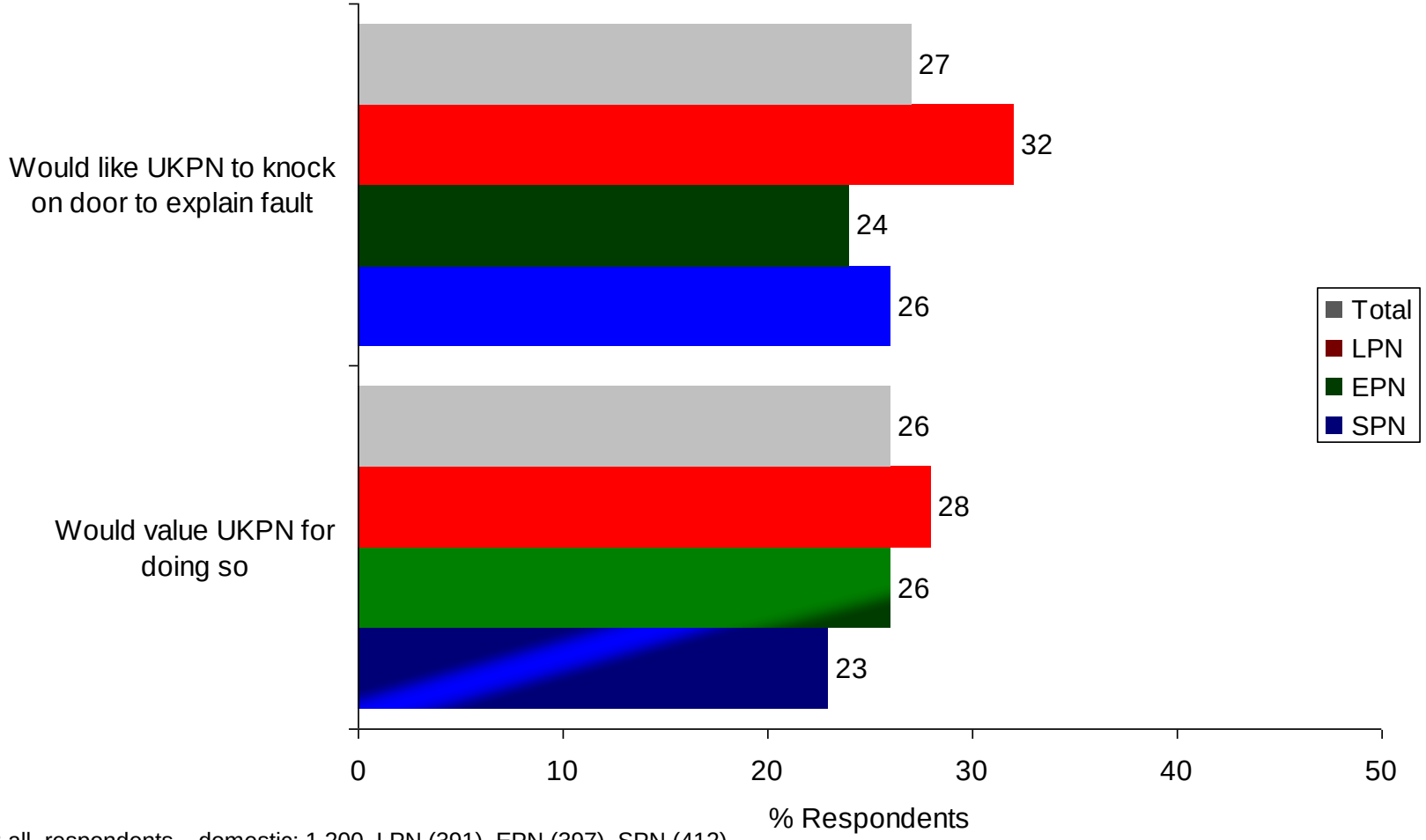
One in six would be interested in updates on unplanned cuts via social media



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q24. Would you be interested in receiving reports on, and updates about, power cuts via social media such as Twitter or Facebook?

One quarter would like UKPN to visit to explain the fault and a similar proportion would value this

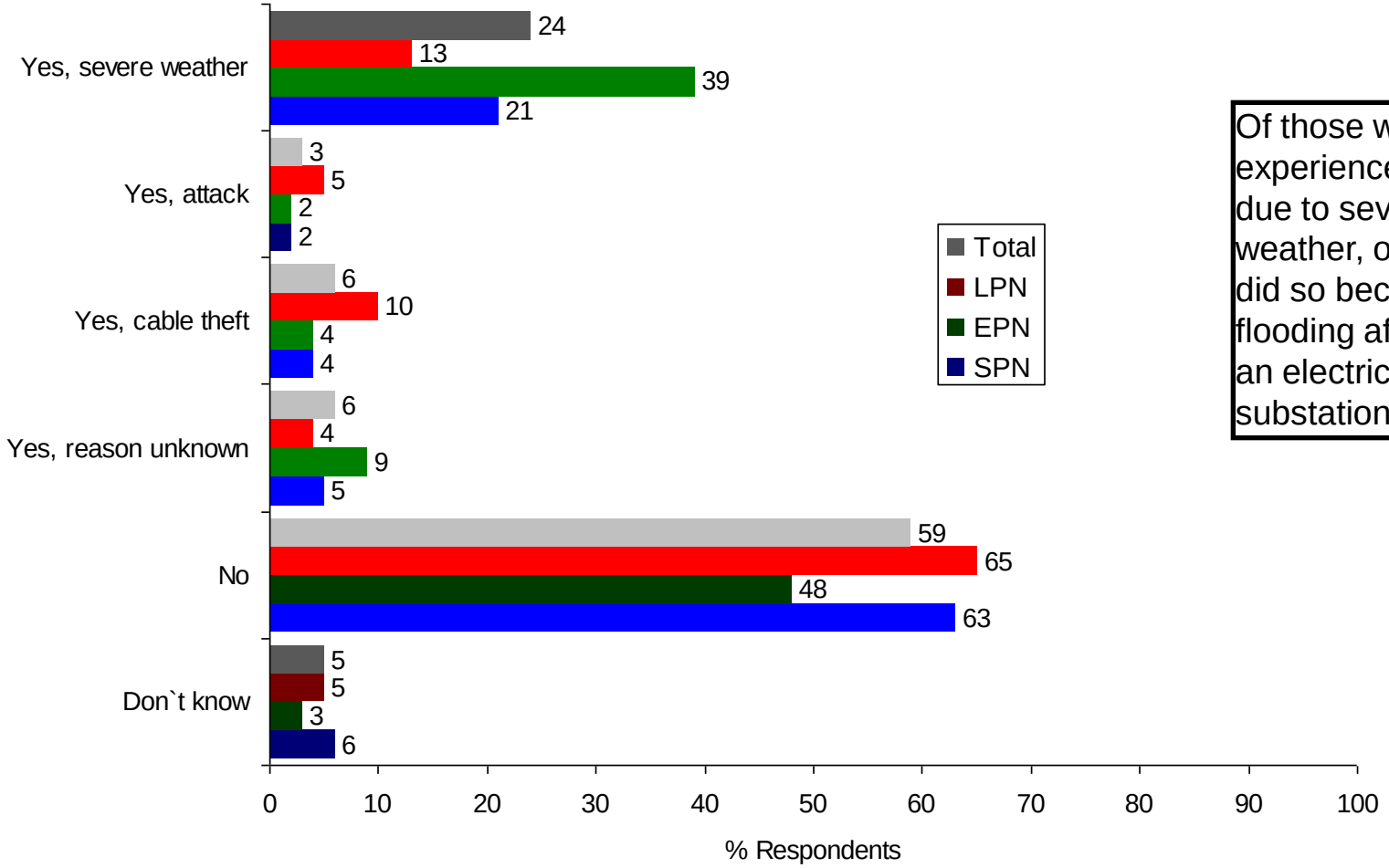


Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q25. Again, thinking about the event of a power cut, when a cut occurred would you like staff, or an engineer, from UK Power Networks to knock on your door and explain the reason for the fault?

Q26. Would you value them doing so once the power was restored?

EPN customers were significantly more likely to have experienced a cut due to severe weather



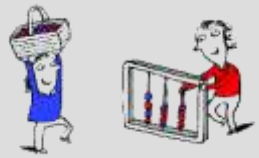
Of those who had experienced a cut due to severe weather, only 4% did so because of flooding affecting an electricity substation.

Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

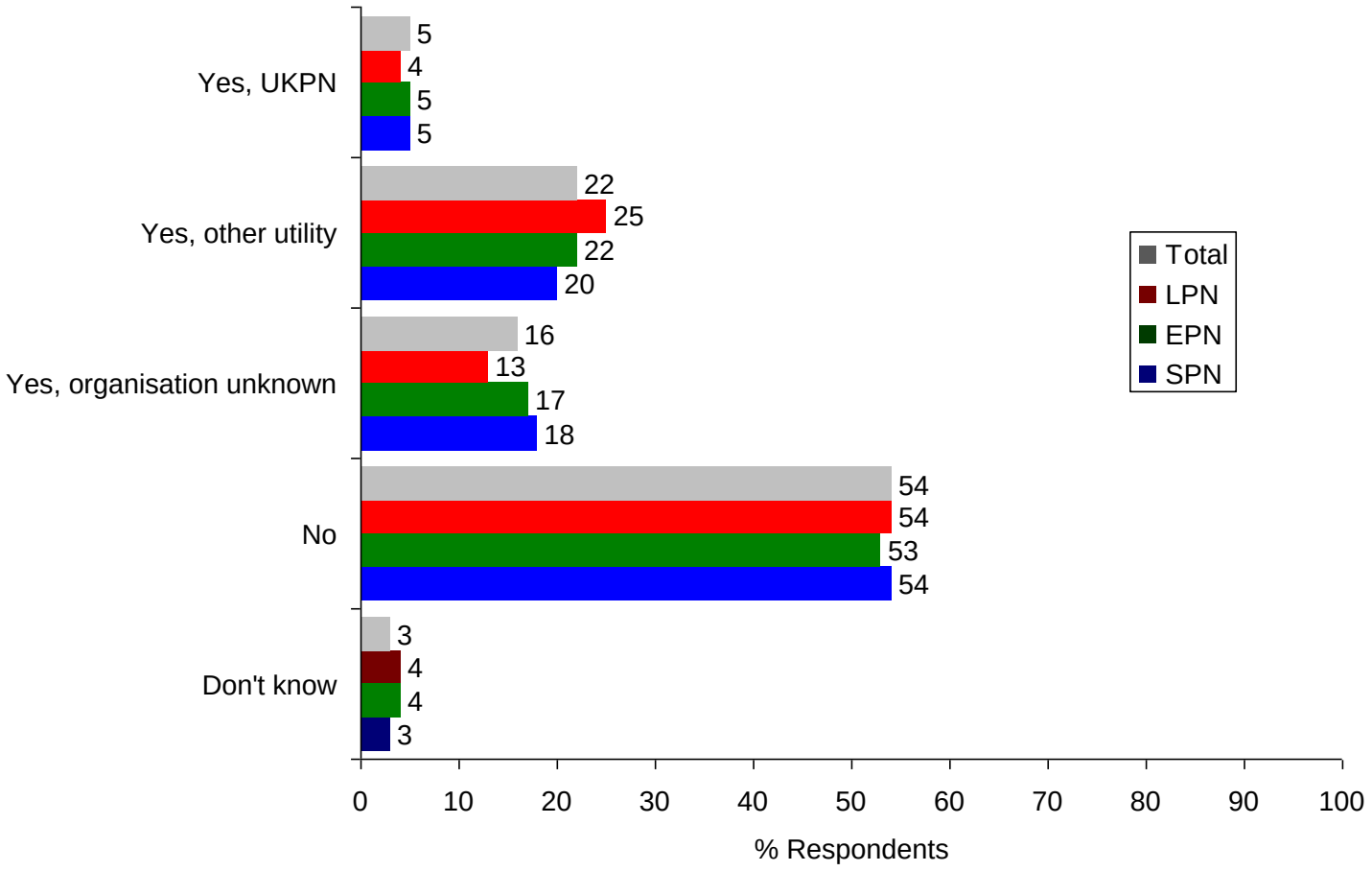
Q27. Have you – or have any of your family or friends that live in your area - ever experienced a power cut due to severe weather (eg a major storm or flooding) or due to any other emergency or unforeseen event (for example, an unforeseen attack on the network or theft of cables)?

One quarter contacted their distributor when severe weather or an unforeseen event caused a cut

- 6 in 10 of those who contacted their distributor for this reason felt that they dealt with the fault “very well” or “quite well”
  - One in six rated “quite poorly” or “very poorly”



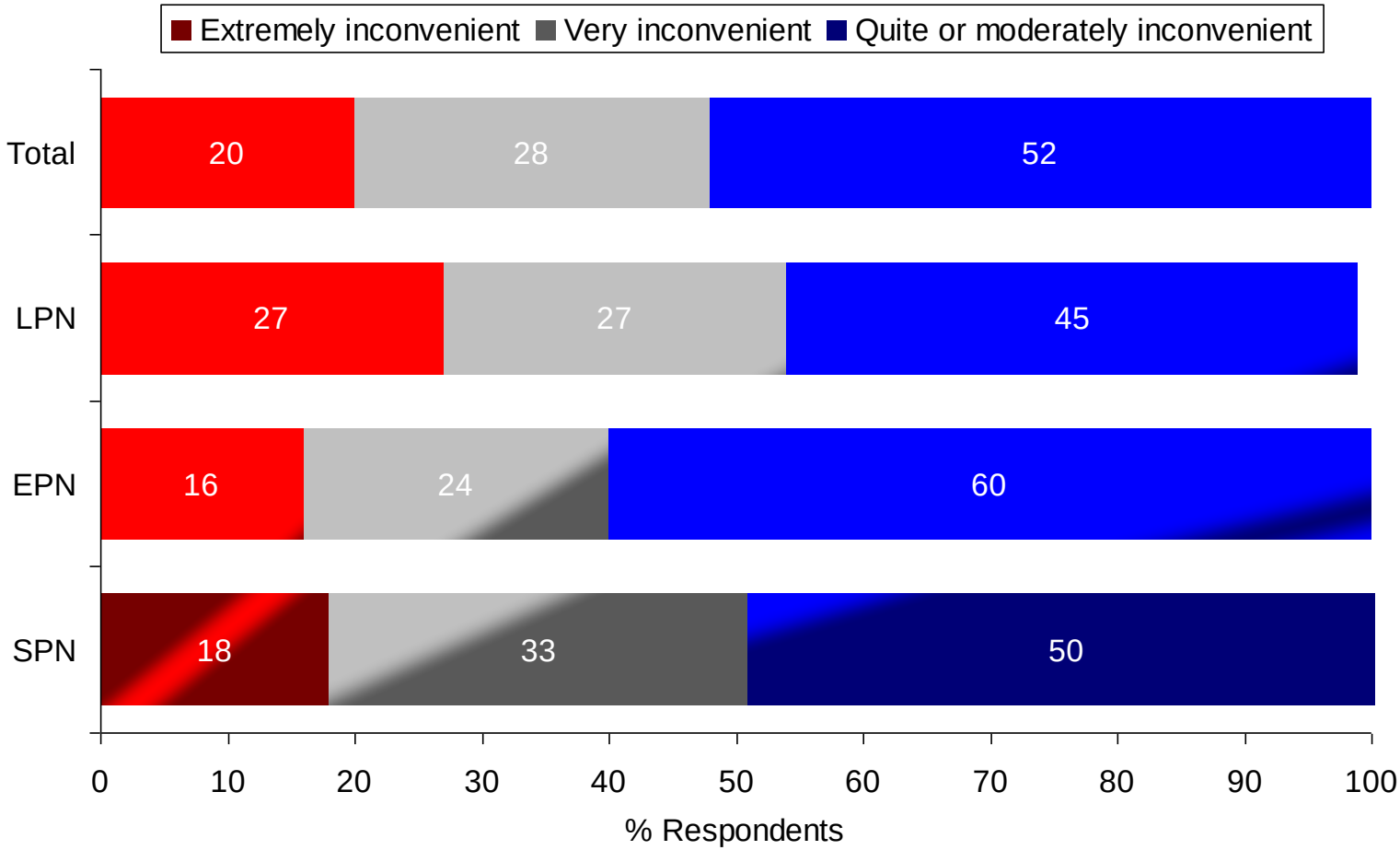
Just under half had experienced inconvenience due to roadworks



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q31. Have you ever suffered inconvenience as a result of roadworks caused by UK Power Networks or another utility (ie your water company)?

LPN were significantly more likely to have been “extremely inconvenienced” by the roadworks

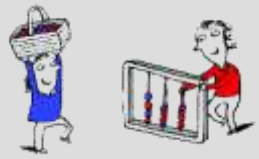


Base: all respondents who suffered inconvenience as a result of roadworks caused by UKPN or another utility – domestic: 516, LPN (165), EPN (174), SPN (177)

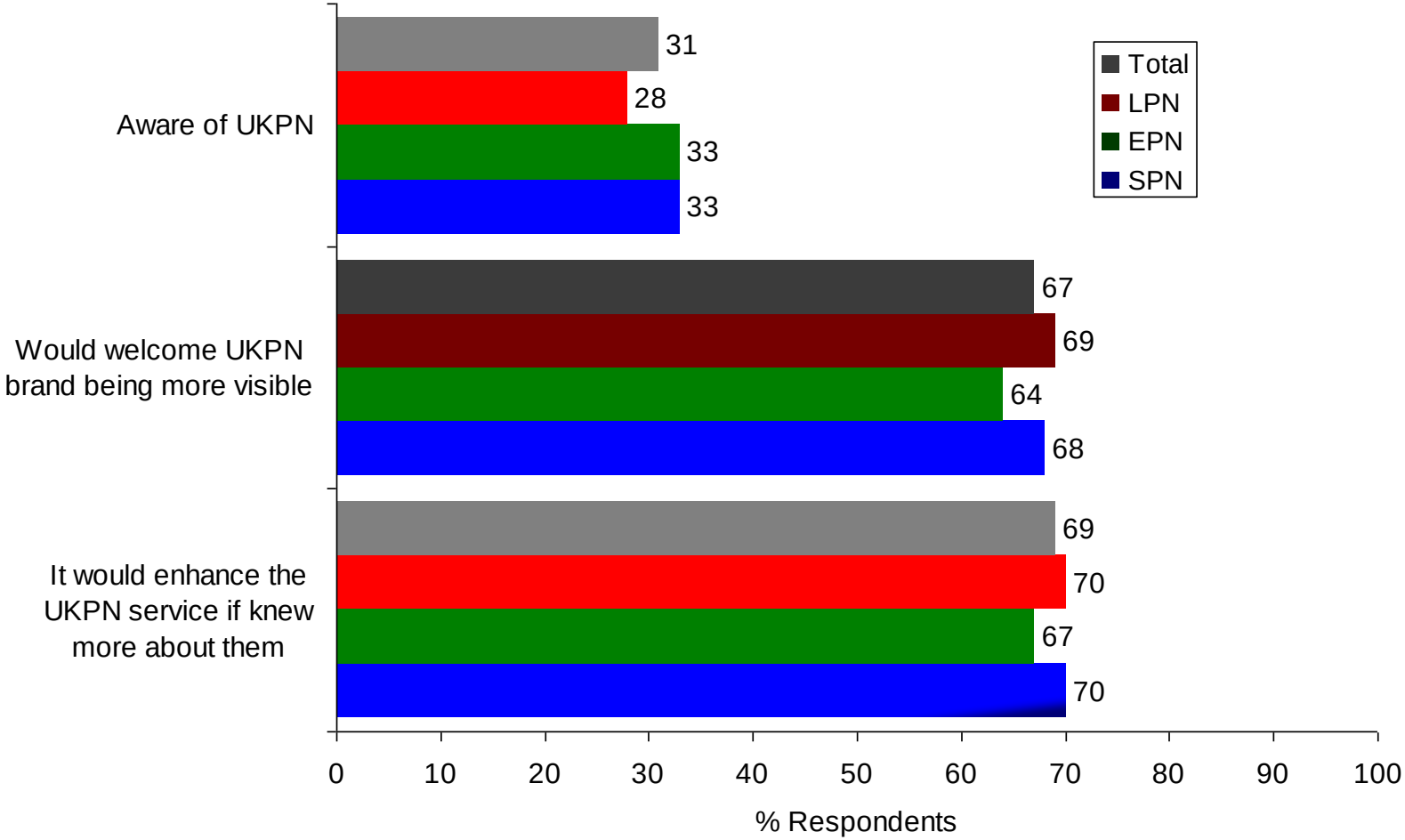
Q32. How inconvenient was the work to you? Please use a scale of 1 to 3, where 3 is extremely inconvenient and 1 is quite, or moderately, inconvenient

Incidence of obtaining new connections quotes was very low

- Only 6% had ever had to contact their distributor to get a quote for a new electricity connection.
- In three quarters of these cases the distributor completed the new connections work.



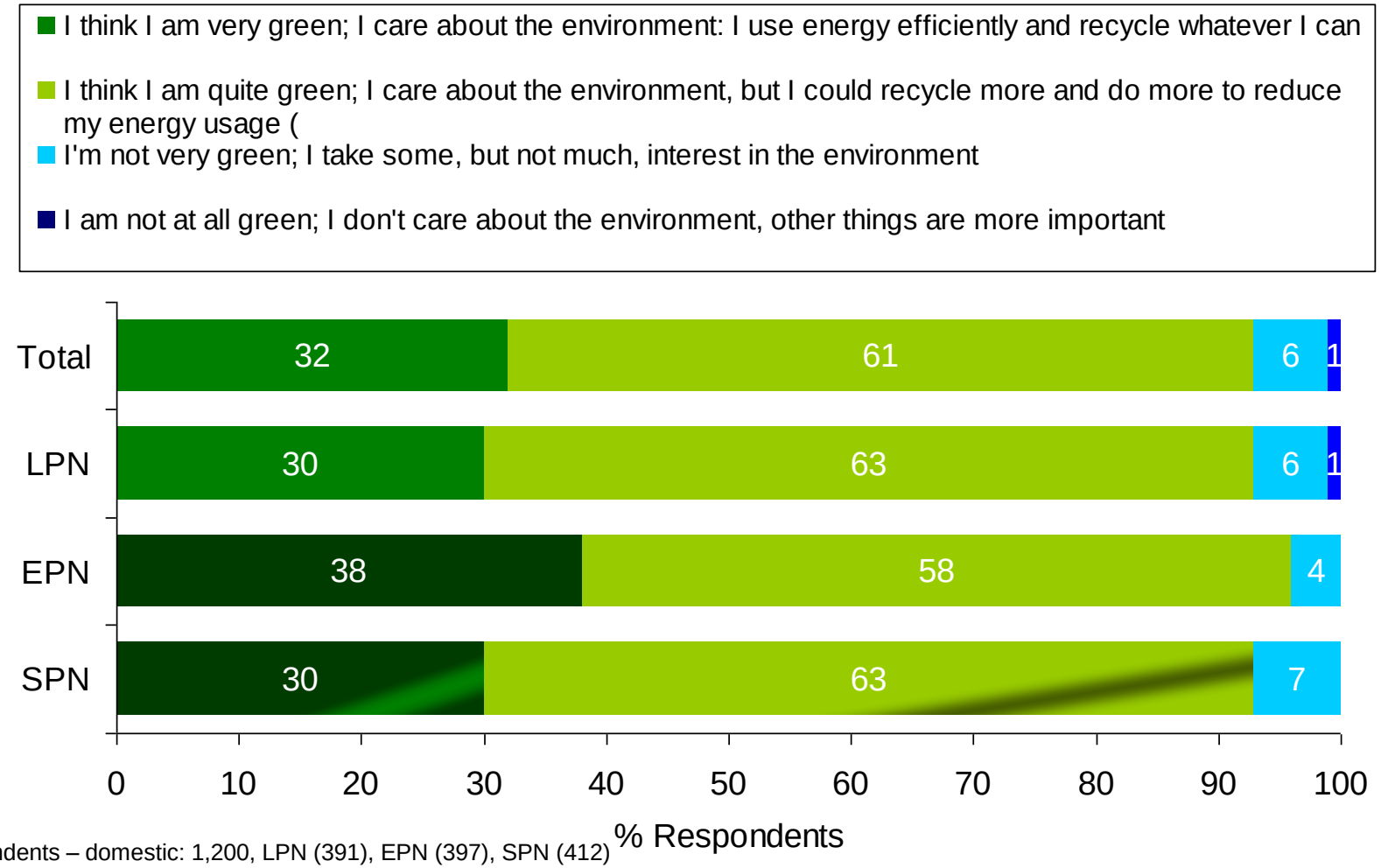
3 in 10 are aware of UKPN and customers would welcome a more visible brand



Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q35. Prior to this interview had you heard of UK Power Networks?
Q36. Would you welcome their brand being more visible?
Q37. Would it enhance the service they provide if you knew more about them, how to find them etc?

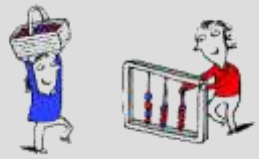
One third rate themselves as “very green”



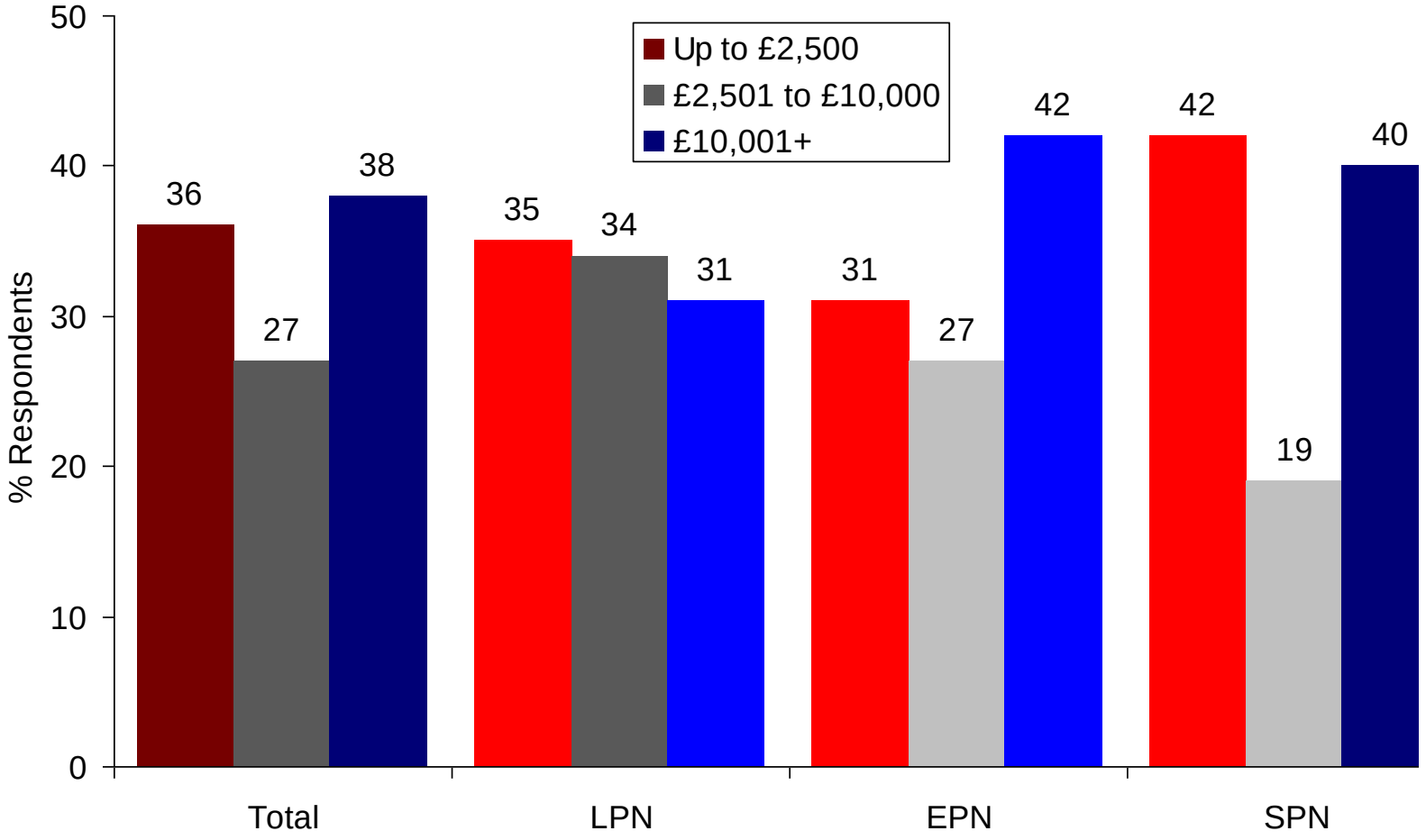
Base: all respondents – domestic: 1,200, LPN (391), EPN (397), SPN (412)

Q38. Which of the following best describes you attitude towards the environment, or how "green" you consider yourself to be?

BUSINESS



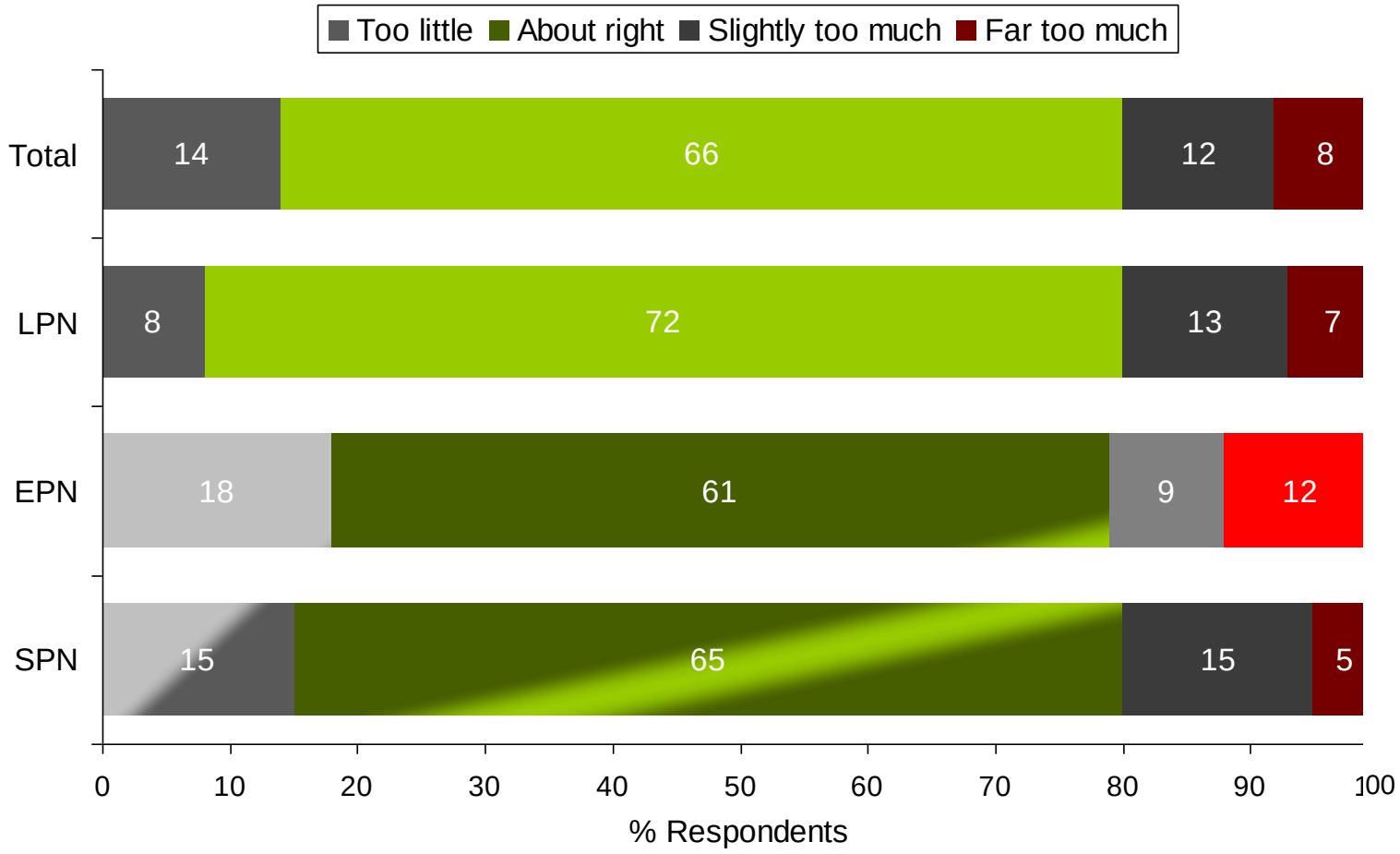
Around one third fall into each bill size band



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q7. Annual bill size

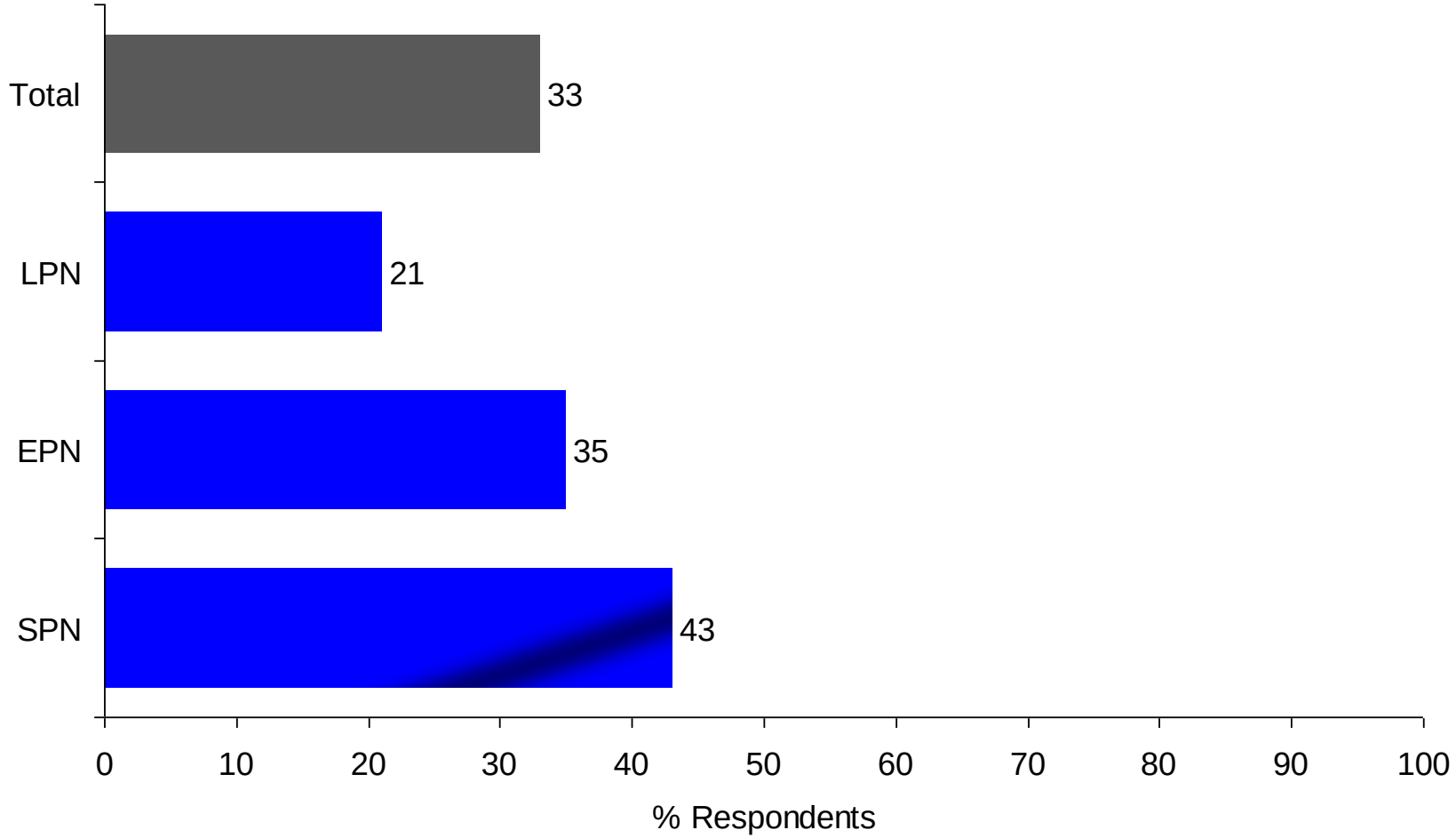
Two thirds of businesses feel the amount paid to the distributor is “about right”



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q11. Given what we have told you about the role of the distributor, how do you feel about the amount that goes towards your distributor? Is it..

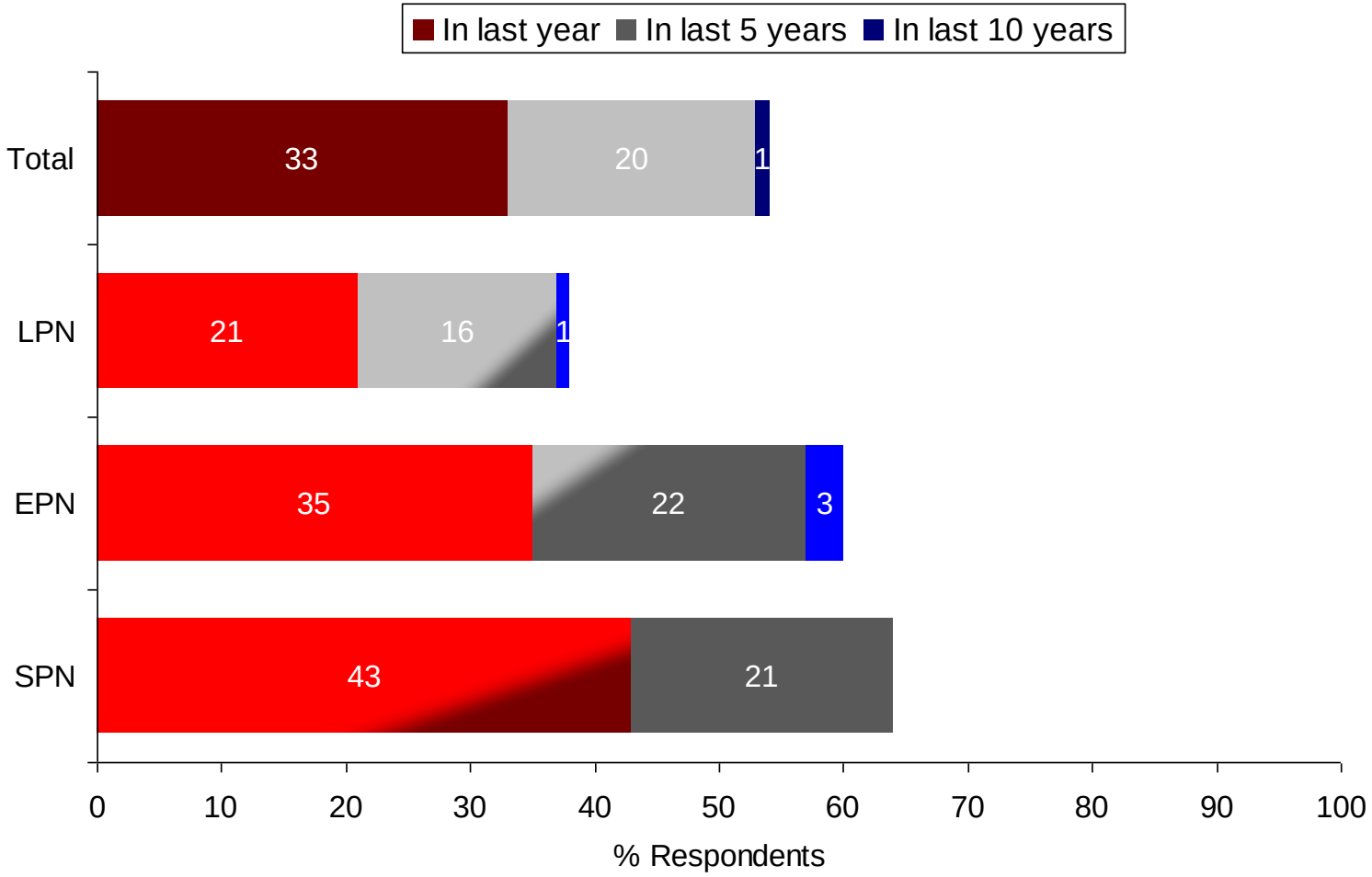
SPN customers were twice as likely as LPN to have experienced an unplanned power cut



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q12. Has your business experienced any unplanned power cuts lasting more than 3 minutes (that is, any that you were not warned about) at this site in the last year?

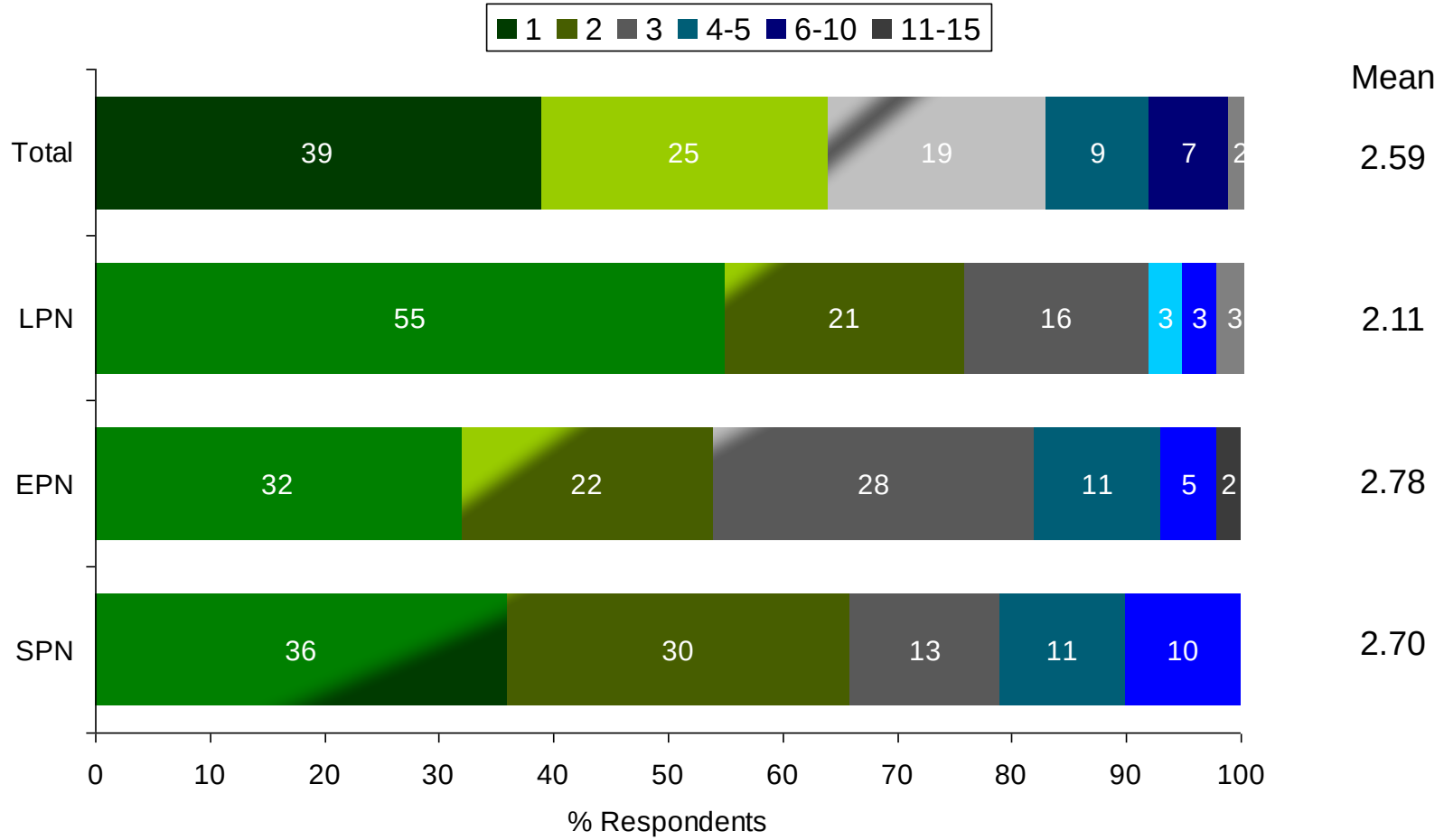
Over half have experienced an unplanned cut in the last 5 years



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q12/13/14. Has your business experienced any unplanned power cuts lasting more than 3 minutes (that is, any that you were not warned about) at this site in the last year/in the last 5 years/in the last 10 years?

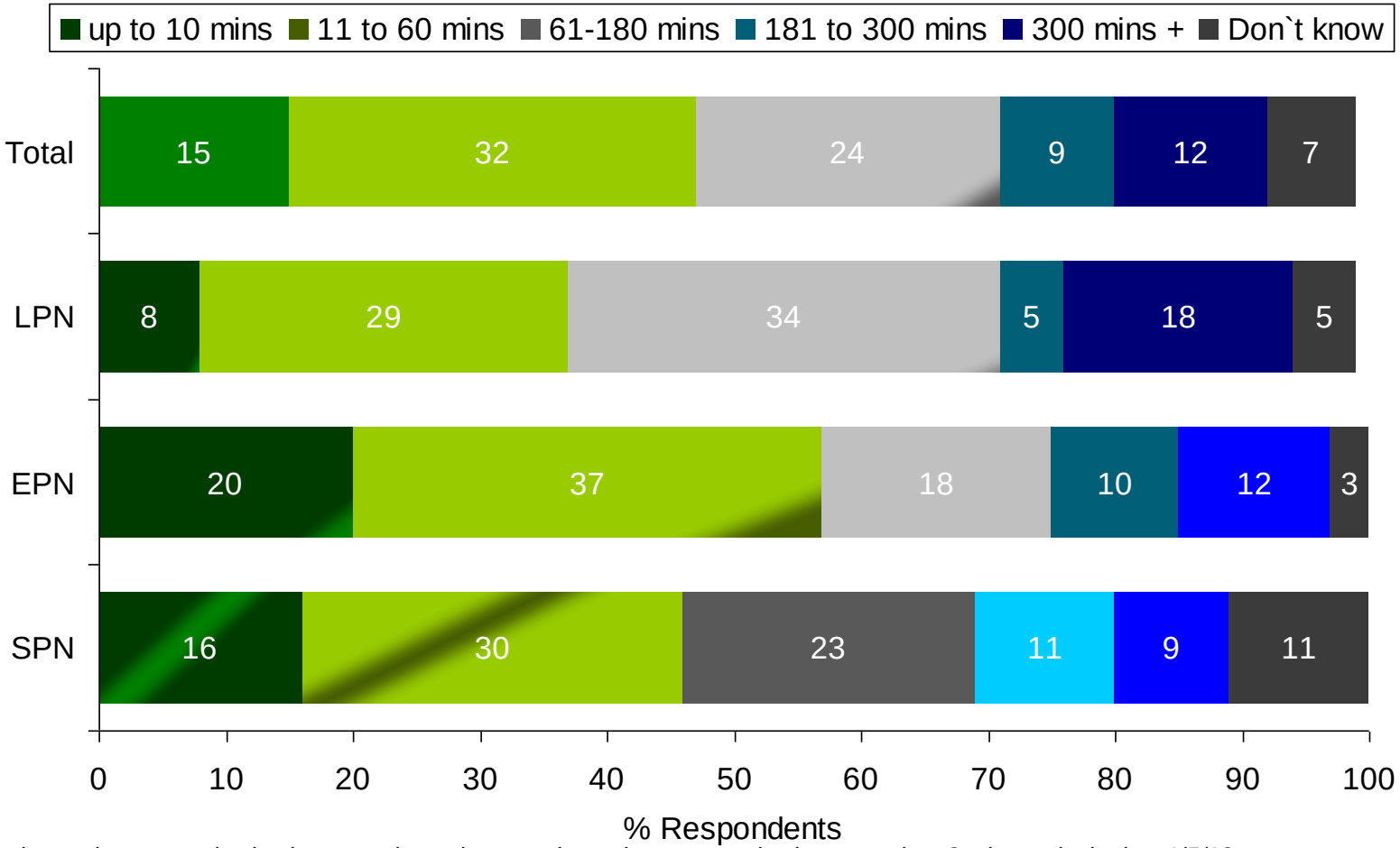
Most who had encountered an unplanned cut had experienced one or two



Base: all respondents whose organisation has experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – business: 162, LPN (38), EPN (60), SPN (64)

Q15. How many of these unplanned cuts have you had in the last (1/5/10 year(s)) at this site?

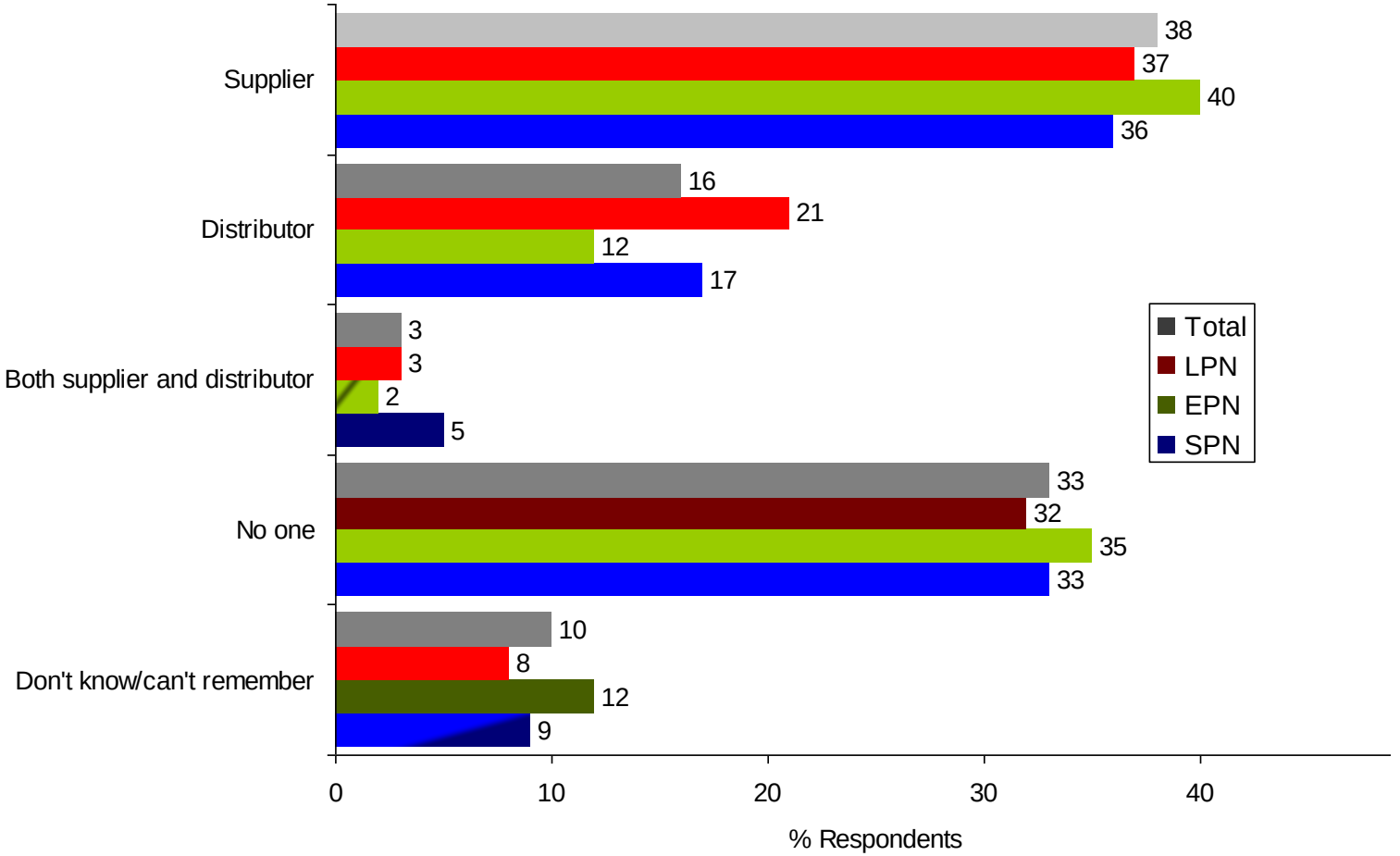
Nearly half of respondents' last unplanned cuts lasted an hour or less, with longer cuts for LPN customers



Base: all respondents whose organisation has experienced any unplanned power cuts lasting more than 3 minutes in the last 1/5/10 years – business: 162, LPN (38), EPN (60), SPN (64)

Q16. On the last occasion that you had an unplanned power cut in excess of 3 minutes at this site, how long did it last?

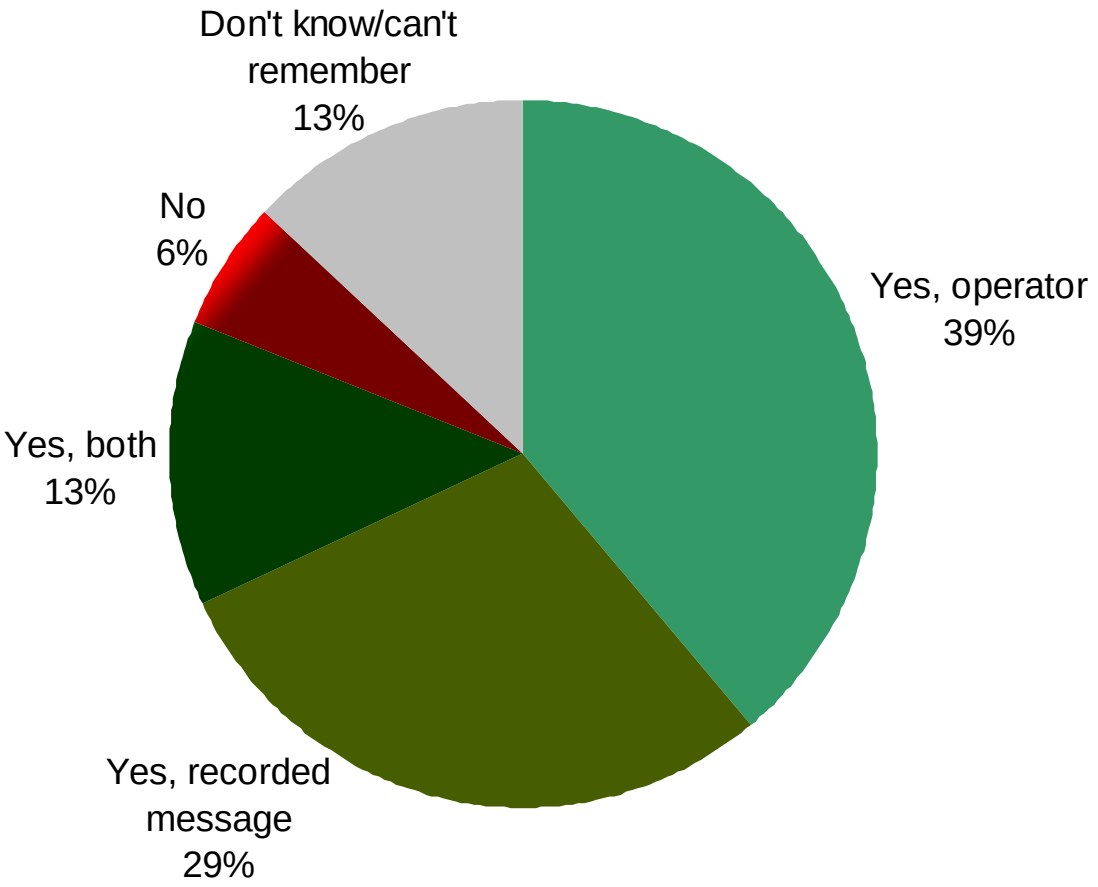
Around 4 in 10 contacted their supplier when they experienced a power cut, but one third did not contact anyone



Base: all whose business experienced any unplanned power cuts lasting more than 3 minutes at this site in the last 1/5/10 year(s)– business: 162, LPN (38), EPN (60), SPN (64)

Q17. Who, if anybody, did you contact on the last occasion your business experienced a power cut?

The vast majority got through to their distributor when they contacted them about the power cut



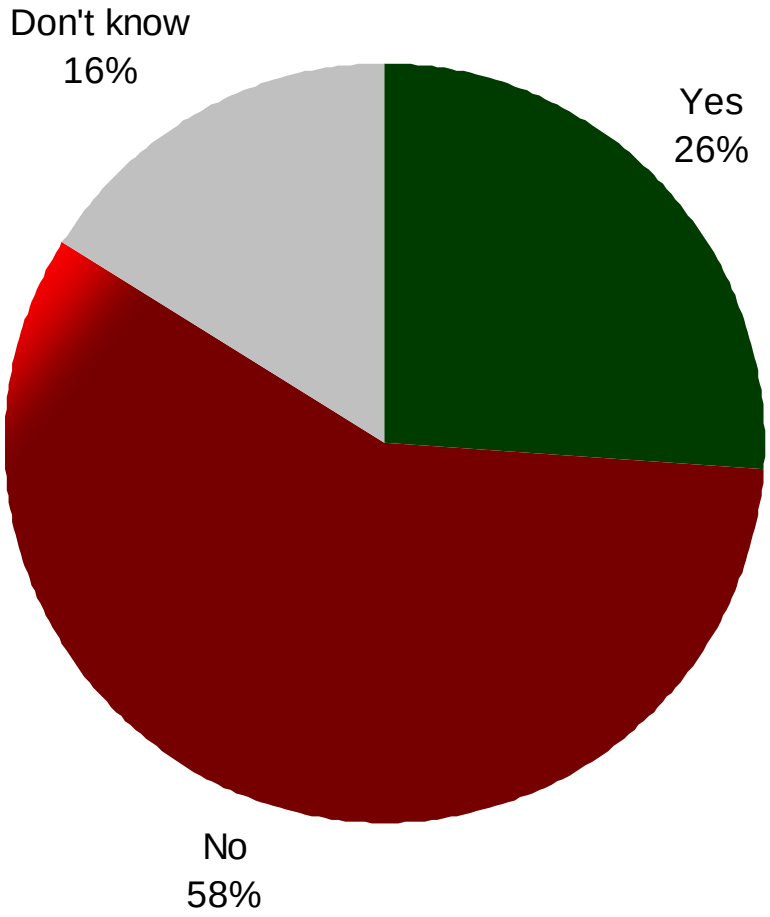
- Of the 25 respondents who got through to their distributor, three quarters got all the information they wanted.

- Half described the information they received as “very” or “quite” accurate.

Base: all who contacted their distributor on the last occasion their business experienced a power cut – business: 31

Q18. Did you manage to get through to either an operator or a recorded message at your distributor?

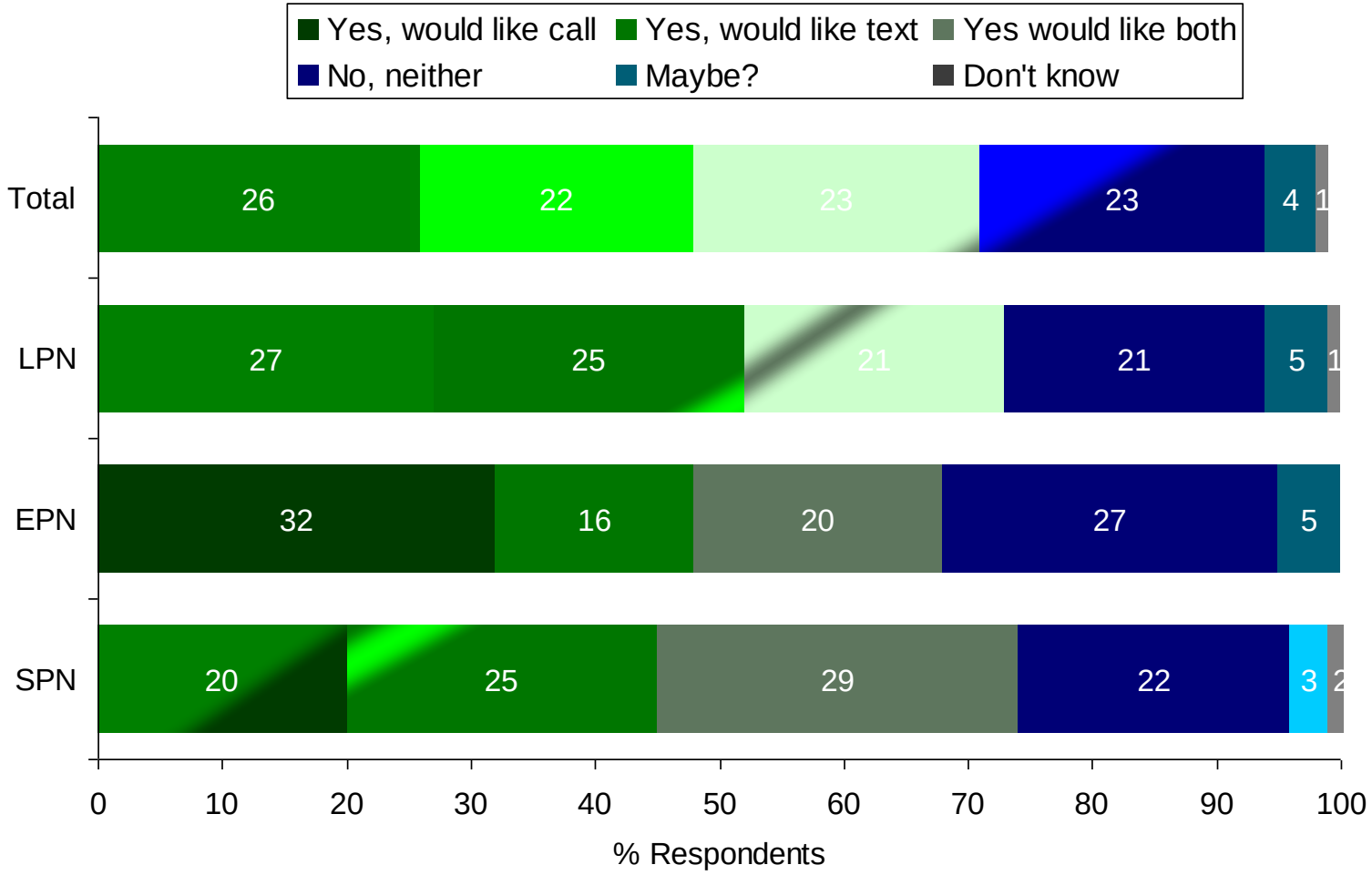
Only one quarter said their distributor had ever contacted them during an unplanned power cut



Base: all who contacted their distributor on the last occasion their business experienced a power cut – business: 31

Q21. Has your distributor ever contacted you or called you back during an unplanned power cut?

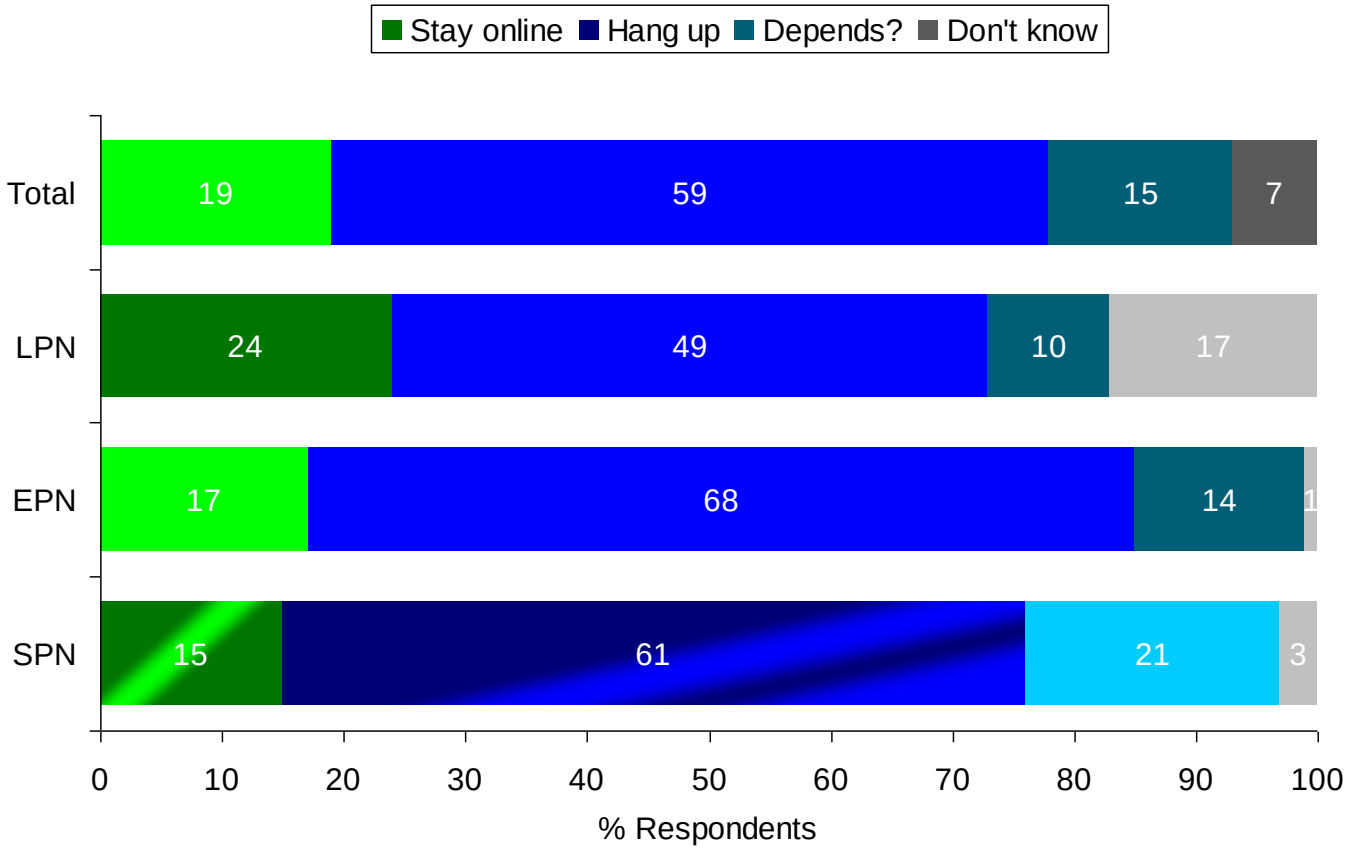
Interest in contact from the distributor during an unplanned cut is quite high



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q22. Where your distributor is aware of a power cut affecting an area, would you like to receive information about the cut via an automatic contact via text or phone call, or are you content simply to call the call centre if you need information?

Only one in five would stay on the line after hearing a recorded message about a cut

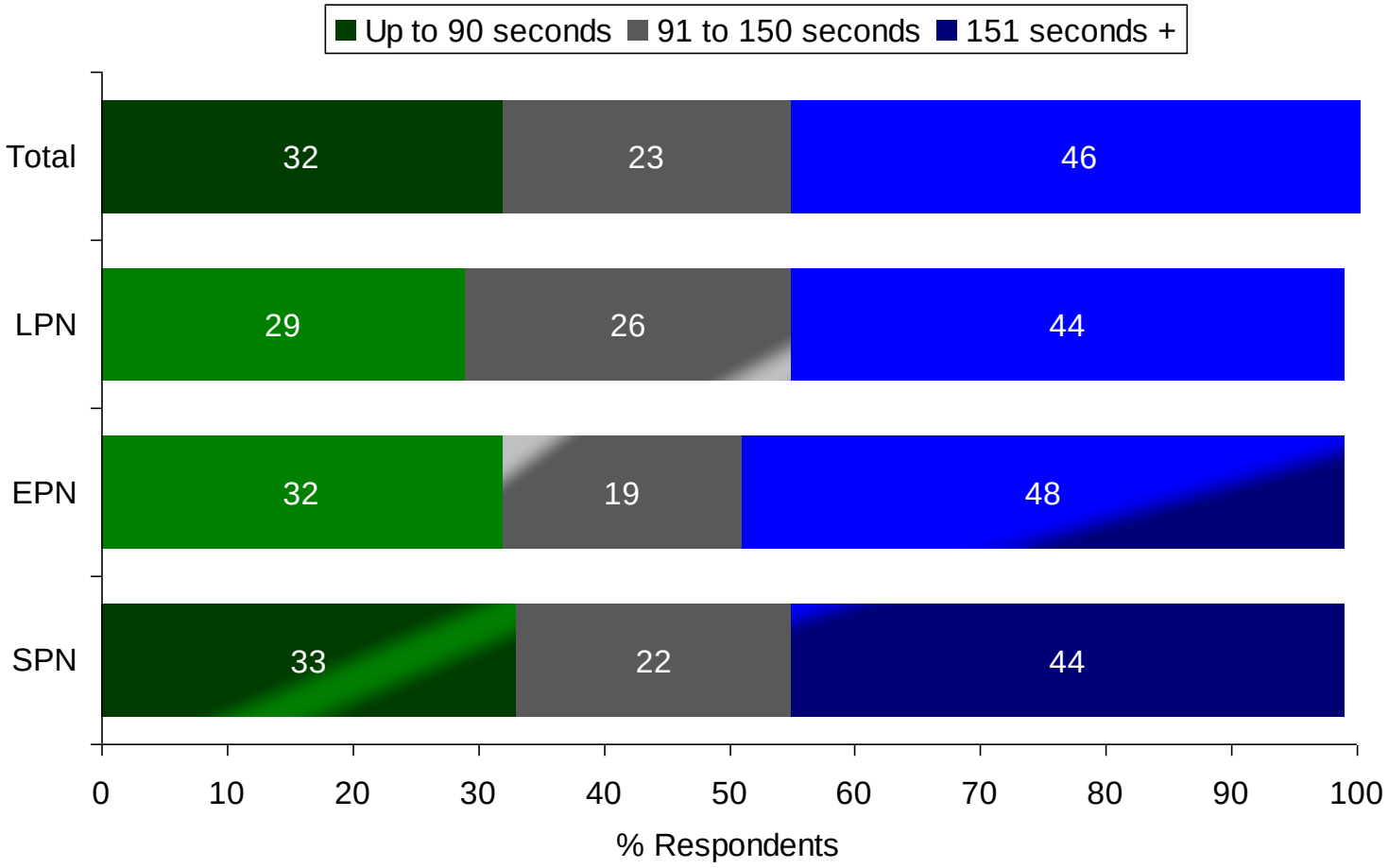


7 in 10 of those who said “it depends” said it depends on the information in the message

Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q23. Where your distributor has information about a power cut they will usually prepare a recorded message for callers to listen to when they make contact about the cut. Is your preference to stay on the line to speak with an advisor after hearing the recorded message, or would you hang up after hearing it?

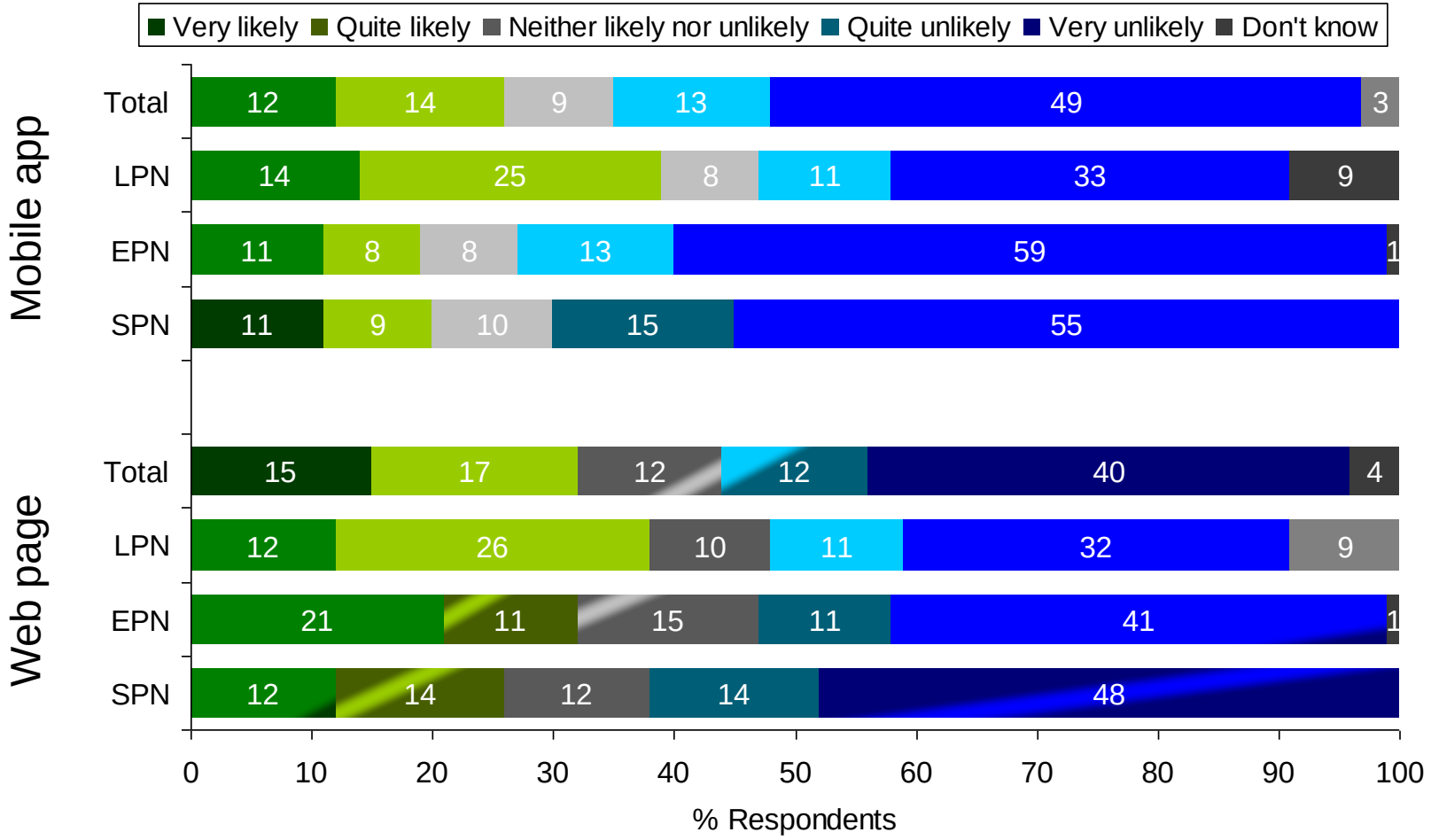
One third are happy to wait up to 90 seconds after the recorded message to speak to an operator



Base: all respondents who prefer to stay on the line after listening to a recorded message – business: 101, LPN (34), EPN (31), SPN (36)

Q24. What is an acceptable time to wait to speak to an advisor after hearing a recorded message?

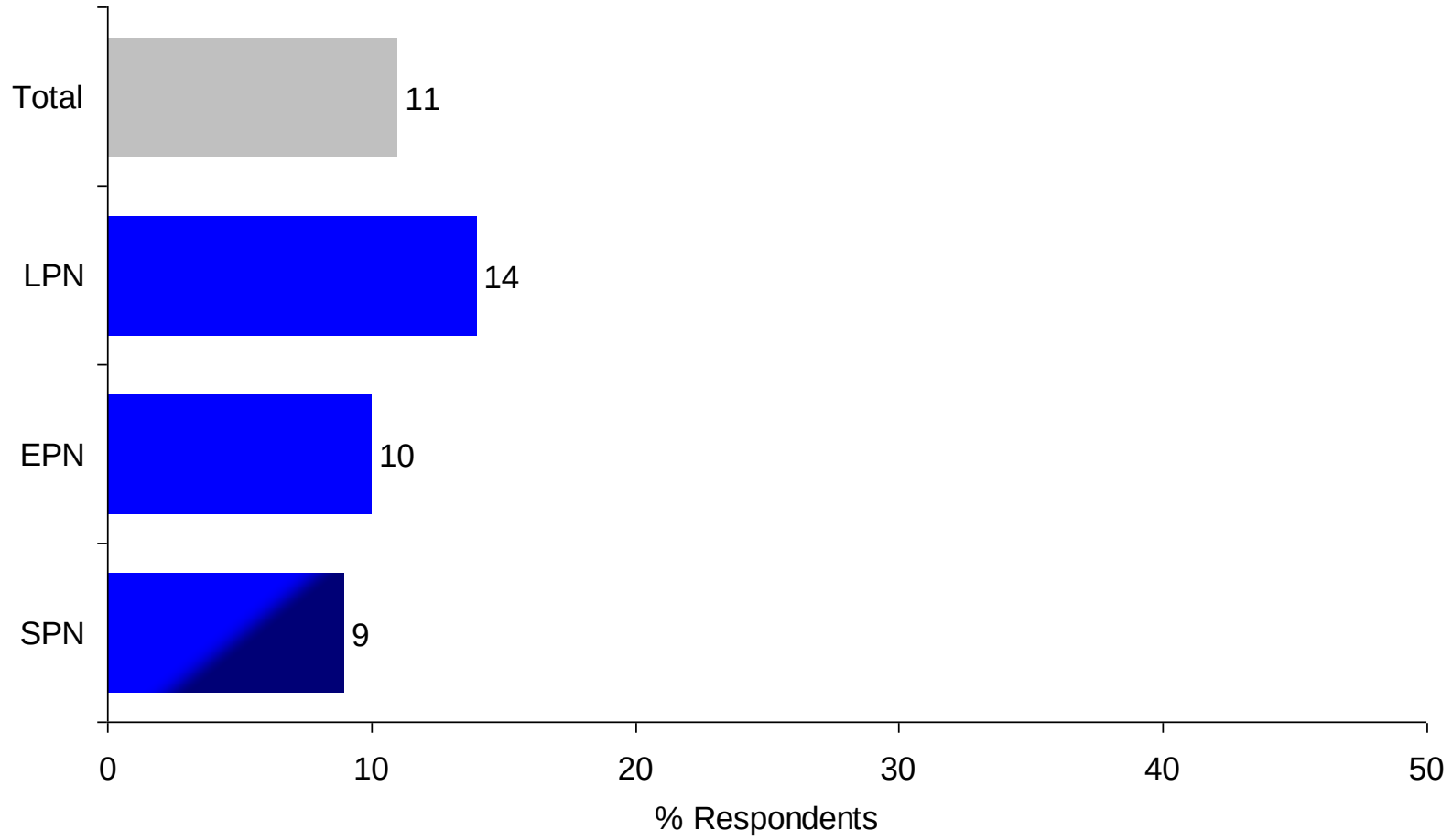
Mixed views on likelihood of visiting a web page or mobile app, but LPN most likely to do so



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q25. In the event of a power cut, how likely would you be, as a business, to visit a UK Power Networks?: Webpage/mobile app

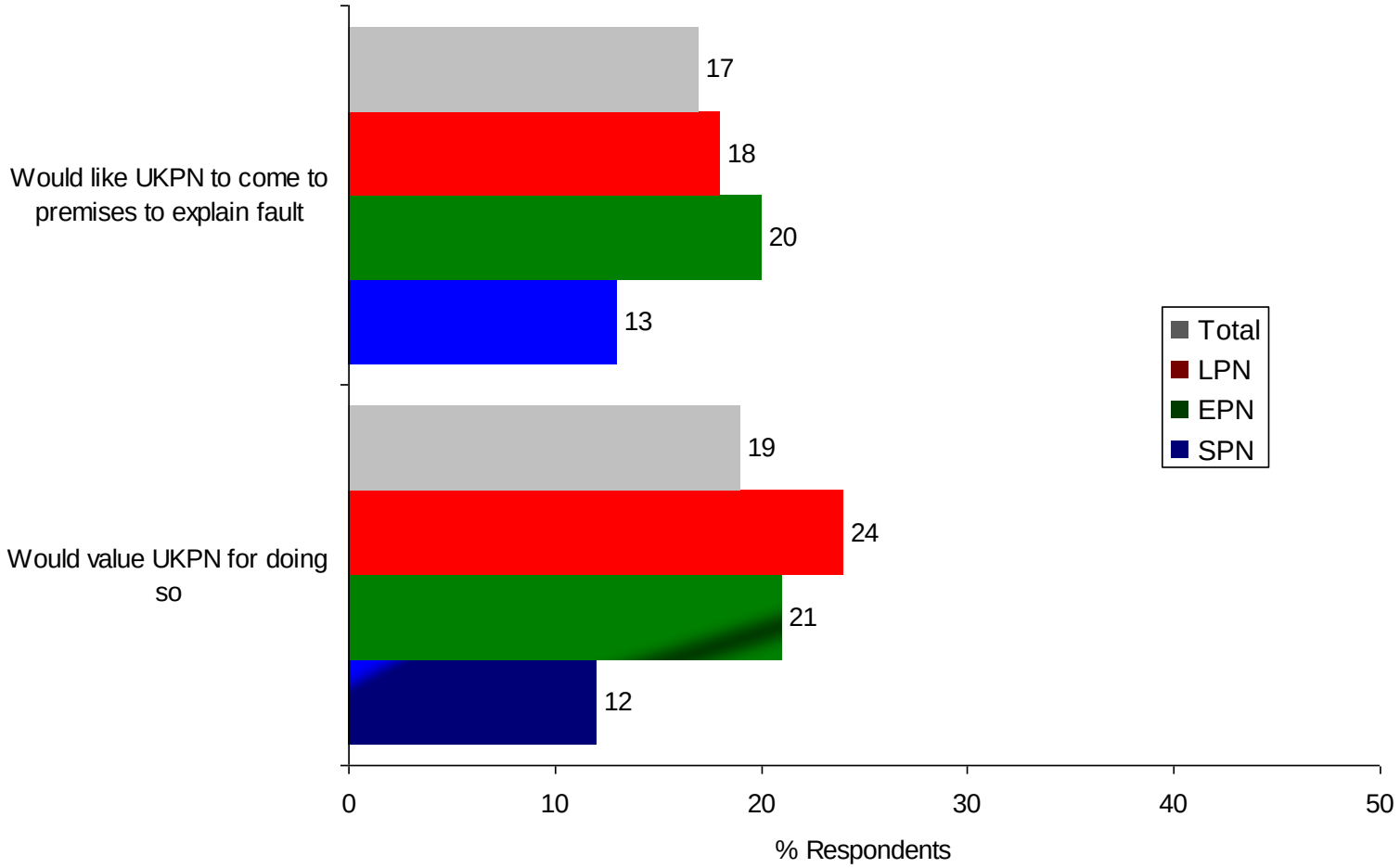
Little interest in receiving updates about cuts via social media



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q26. Would you be interested, as a business, in receiving reports on, and updates about, power cuts via social media such as Twitter or Facebook?

Low interest in UKPN visiting premises during a cut, and UKPN would gain little value for doing so

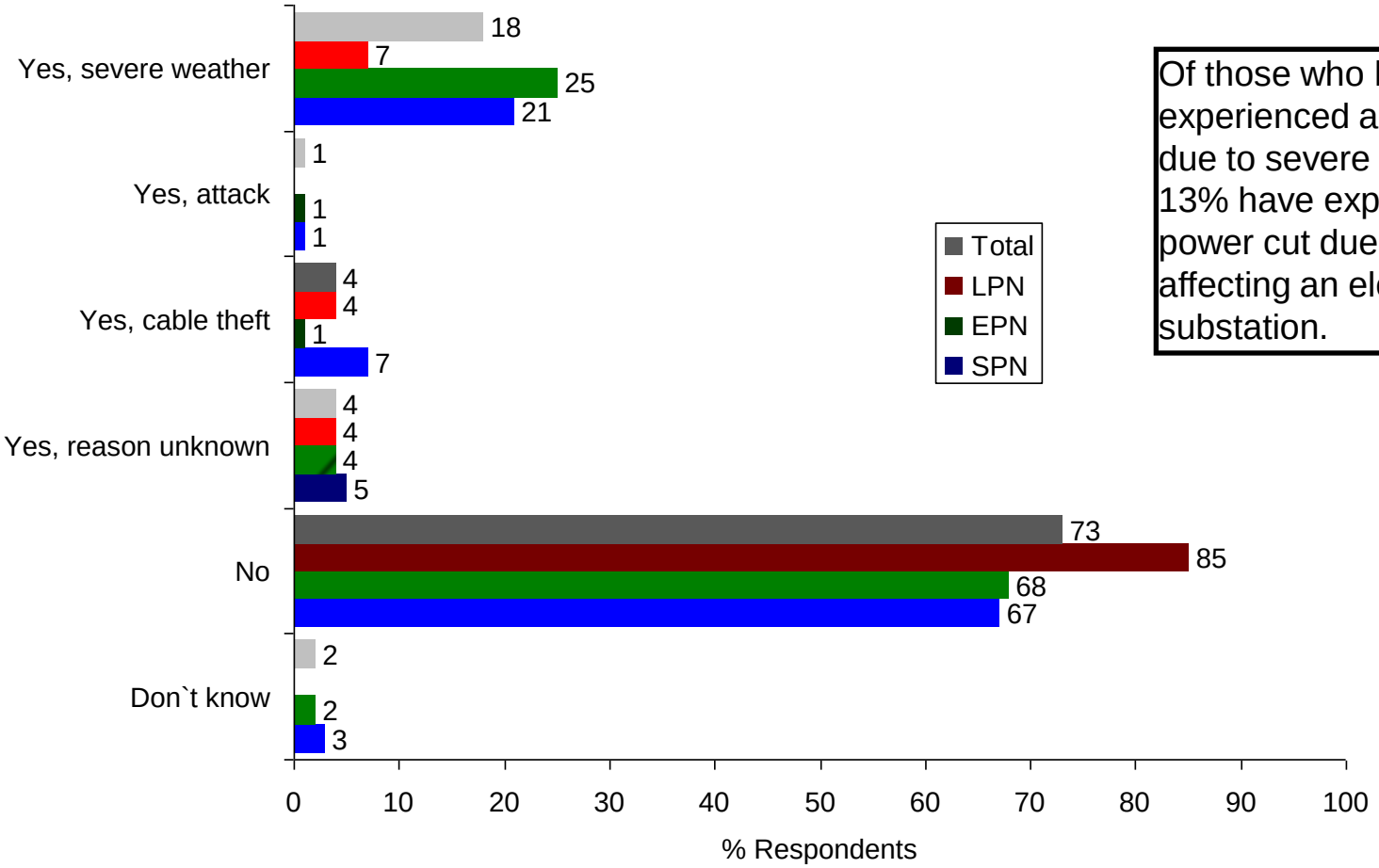


Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q27. Again, thinking about the event of a power cut, when a cut occurred would you like staff, or an engineer, from UK Power Networks to come to your premises and explain the reason for the fault?

Q28. Would you value them doing so once the power was restored?

Three quarters have never experienced a power cut due to severe weather, emergency or unforeseen event



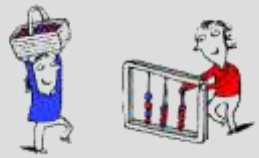
Of those who had ever experienced a power cut due to severe weather, 13% have experienced a power cut due to flooding affecting an electricity substation.

Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

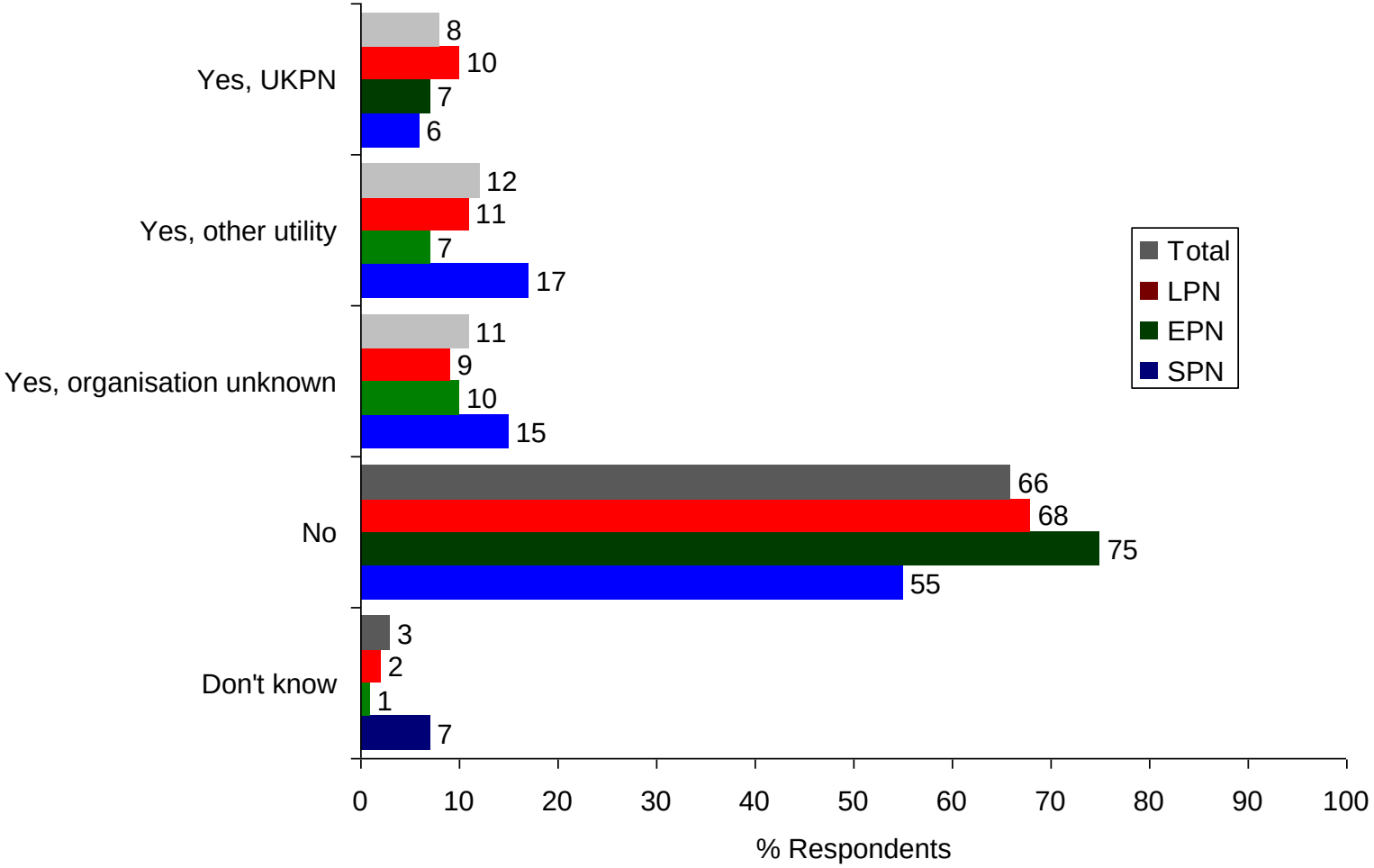
Q29. Have you ever experienced a power cut due to severe weather (eg a major storm or flooding) or due to any other emergency or unforeseen event (for example, an unforeseen attack on the network or theft of cables) at this site?

Most did not contact their distributor as a result of this event

- Of those who had experienced a power cut due to severe weather, attack or cable theft, one third (36%) contacted their distributor.
- 16 of the 27 who contacted their distributor claimed their distributor dealt with the fault “very well” or “quite well”.



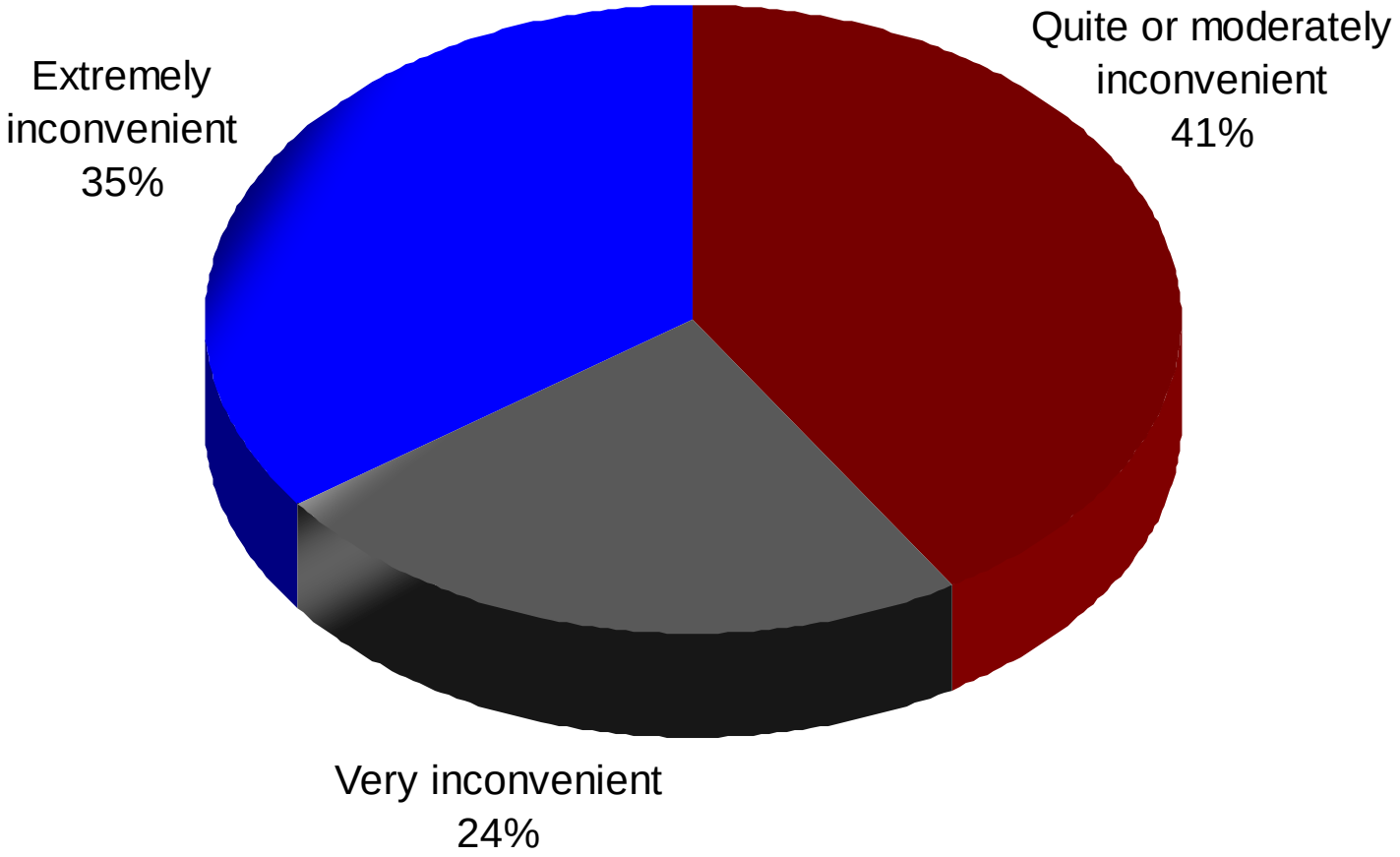
One third had been inconvenienced by roadworks caused by UKPN/another utility



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q33. Has your business ever suffered inconvenience as a result of roadworks caused by UK Power Networks or another utility (ie your water company)?

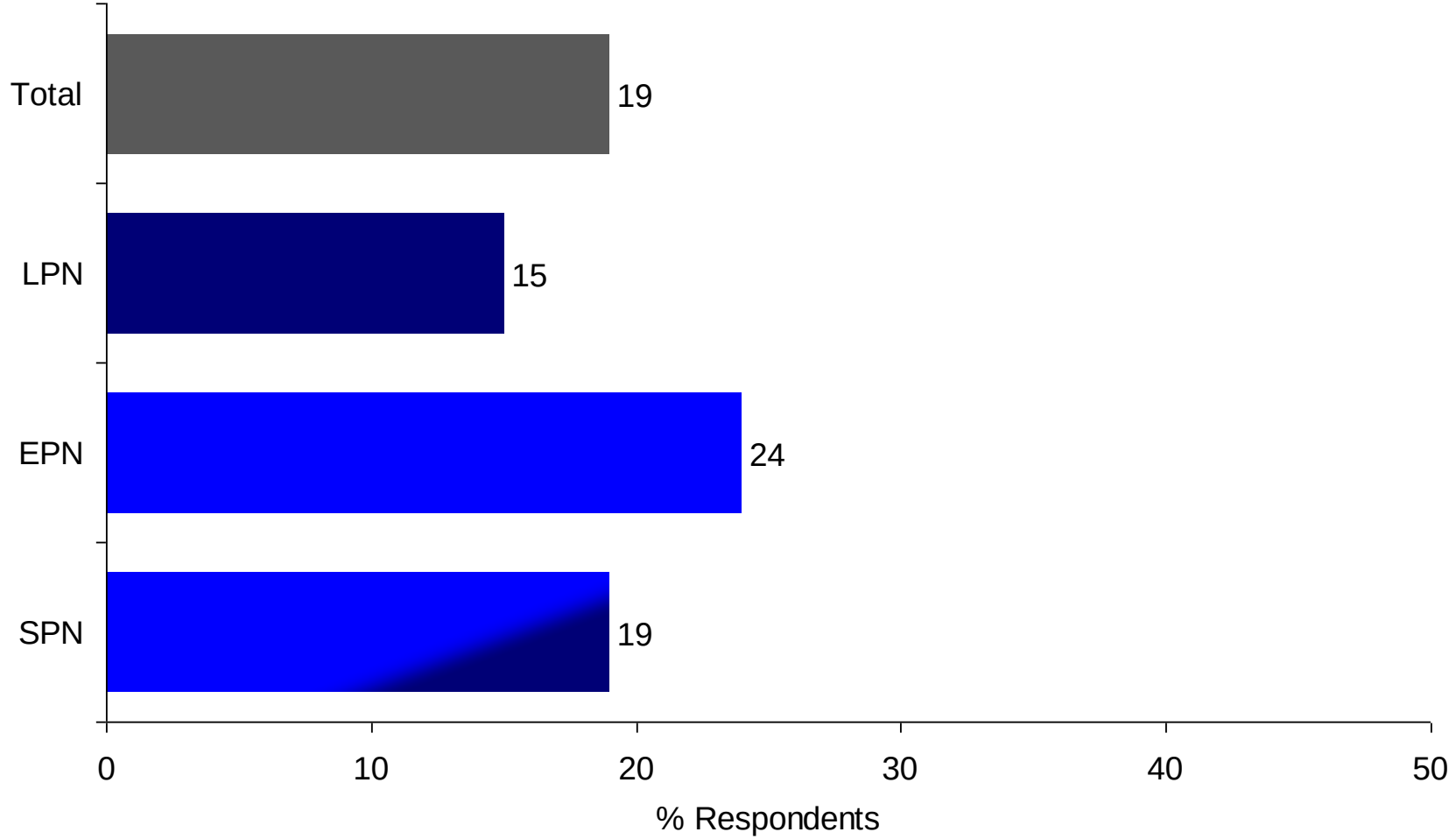
One third of those who were inconvenienced were severely impacted



Base: all respondents whose business suffered inconvenience as a result of roadworks caused by UKPN or another utility – business: 92

Q34. How inconvenient was the work to your business? Please use a scale of 1 to 3, where 3 is extremely inconvenient and 1 is quite, or moderately, inconvenient

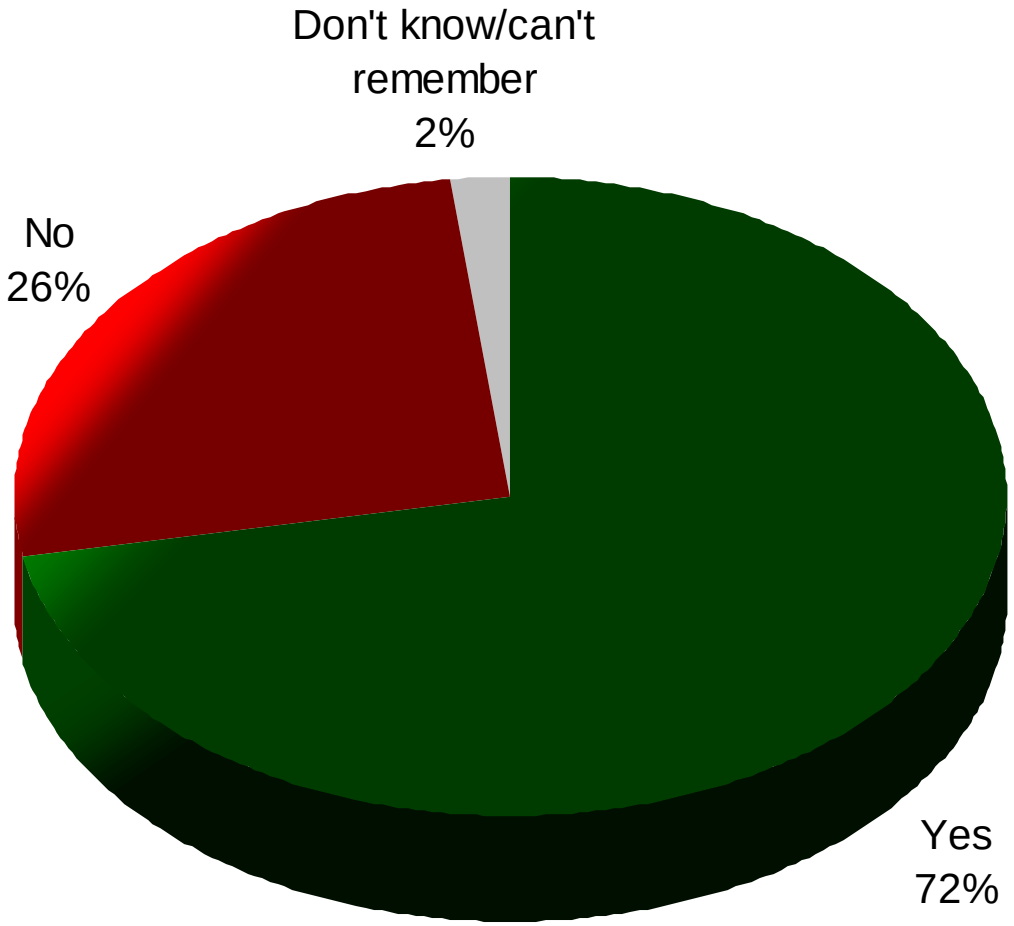
One in five have contacted their distributor for a quote for a new connection



Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q35. And has your organisation ever had to contact your distributor to get a quote for a new electricity connection?

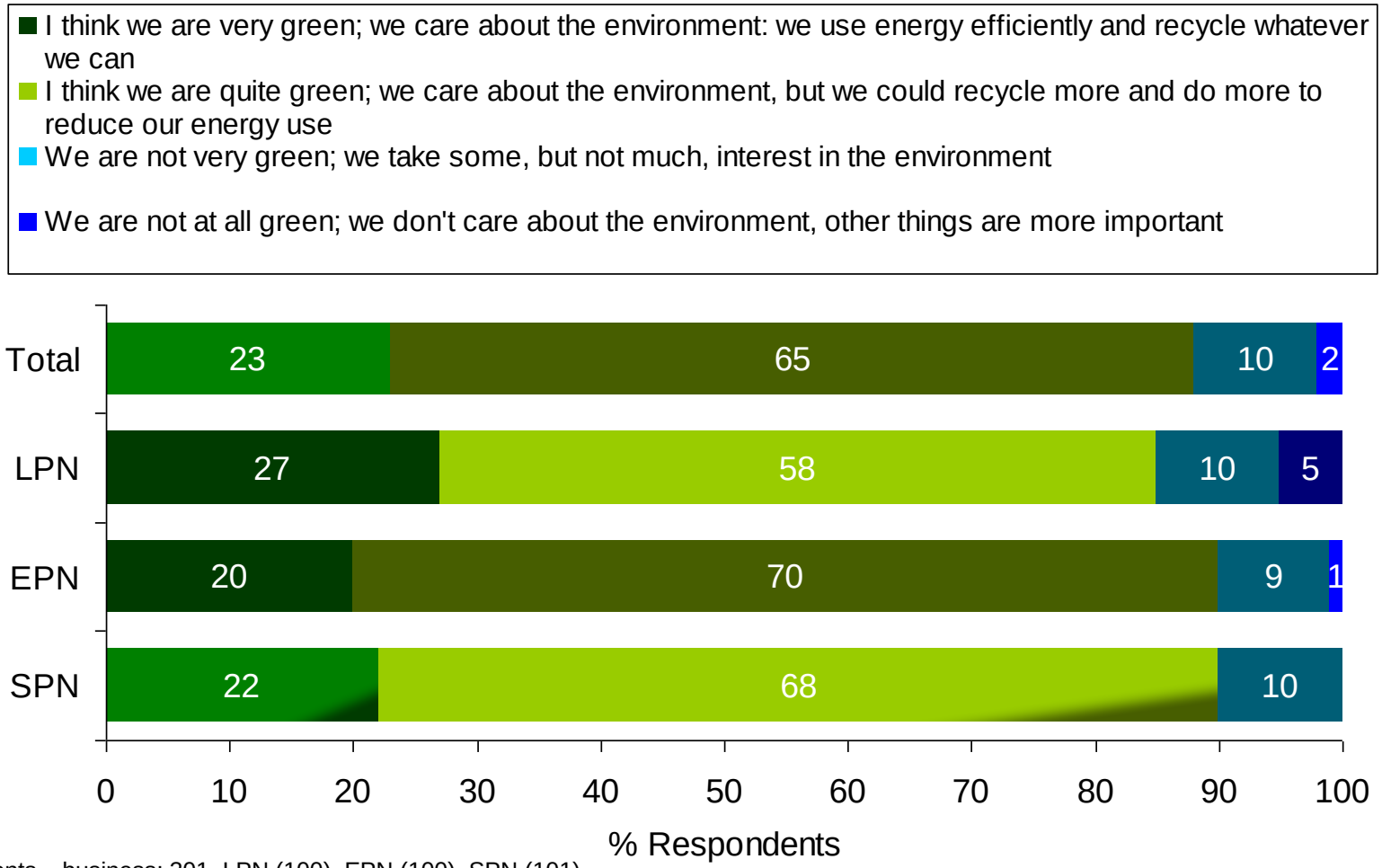
The distributor did the new connection work for three quarters of businesses



Base: all whose organisation had to contact their distributor to get a quote for a new electricity connection – business: 58

Q36. And did they undertake the new connection for you? ie was the work completed?

Most categorise their organisation as "quite green"

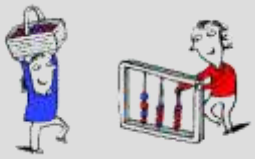


Base: all respondents – business: 301, LPN (100), EPN (100), SPN (101)

Q37. Which of the following best describes your organisation`s attitude towards the environment, or how "green" you consider your organisation to be?

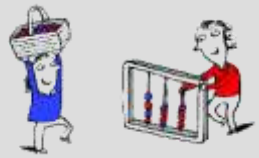
Appendix B – Segmented SP Findings

DOMESTIC



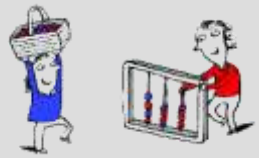
Domestic LPN segment 1 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0470	3.34
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0423	3.01
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0417	2.96
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0346	2.46
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0249	1.77
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0213	1.52
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.0190	1.35
Contingency Services: Provision of generator hire e.g. for an event	0.0179	1.27
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0169	1.20
Contingency Services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0162	1.15
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0158	1.12
Investment in infrastructure required to support take up of electric vehicles	0.0146	1.04
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0141	1.00
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0143	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0441	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0536	



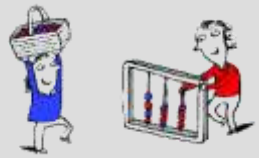
Domestic LPN segment 1 Customer WTP

Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.35
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.12
Investment in infrastructure required to support take up of low carbon electric heating technologies	2.08
Investment to enable uptake of micro-generation e.g, solar panels etc	1.73
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.25
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	1.07
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.95
Contingency Services: Provision of generator hire e.g. for an event	0.89
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.84
Contingency Services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.81
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.79
Investment in infrastructure required to support take up of electric vehicles	0.73
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.70
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.72
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-2.21
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.68



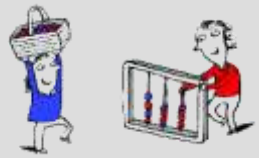
Domestic EPN segment 1 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0524	4.01
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0458	3.51
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0309	2.36
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0261	2.00
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0252	1.93
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0249	1.91
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0241	1.84
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0210	1.61
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0202	1.54
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0200	1.53
Frequency of power cuts over 3 mins - average number: 1 every 18 months	0.0153	1.17
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0142	1.09
Investment in infrastructure required to support take up of electric vehicles	0.0141	1.08
Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0131	1.00
Contact for any new connections work: All contact through an on-line web portal	-0.0130	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0227	
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0255	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0316	



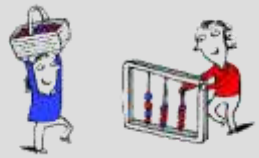
Domestic EPN segment 1 Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	3.36
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.94
Timing of any new connections work: Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	1.98
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.67
Investment to enable uptake of micro-generation e.g, solar panels etc	1.62
Frequency of power cuts over 3 mins - average number: 1 every 24 months	1.60
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.54
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.35
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.29
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.29
Frequency of power cuts over 3 mins - average number: 1 every 18 months	0.98
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.91
Investment in infrastructure required to support take up of electric vehicles	0.91
Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.84
Contact for any new connections work: All contact through an on-line web portal	-0.83
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.46
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-1.63
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.02



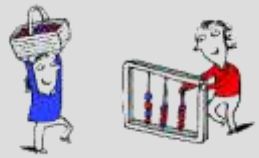
Domestic SPN segment 1 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0616	5.67
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0536	4.94
Investment in infrastructure required to support take up of electric vehicles	0.0380	3.50
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0358	3.29
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0270	2.49
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0236	2.18
Time to complete simple, low voltage new connections work: 30 days quicker than now, ie within 60 days	0.0224	2.06
Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0223	2.05
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	0.0210	1.93
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0197	1.82
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0191	1.76
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0143	1.32
Information during a power cut: Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.0138	1.27
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0130	1.19
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0124	1.14
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0109	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0168	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0287	



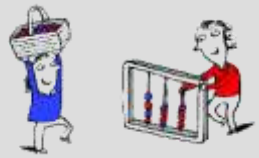
Domestic SPN segment 1 Customer WTP

Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	3.21
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.79
Investment in infrastructure required to support take up of electric vehicles	1.98
Investment to enable uptake of micro-generation e.g, solar panels etc	1.86
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.41
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.23
Time to complete simple, low voltage new connections work: 30 days quicker than now, ie within 60 days	1.17
Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	1.16
Time to complete simple, low voltage new connections work:75 days quicker than now, ie within 15 days	1.09
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.03
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.99
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.75
Information during a power cut: Information available on contacting call centre plus provision of automatic update calls to customer from call centre and follow-up call when power cut over	0.72
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.67
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.65
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.57
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.88
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-1.49



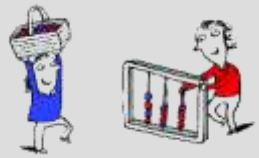
Domestic LPN segment 2 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0587	4.21
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0512	3.67
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0484	3.47
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0346	2.48
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0327	2.34
Contact for any new connections work: Phone or email contact via a named co-ordinator	0.0257	1.84
Contingency Services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0232	1.66
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.0225	1.61
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0209	1.49
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0171	1.23
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0148	1.06
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0140	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0406	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0525	



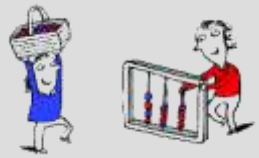
Domestic LPN segment 2 Customer WTP

Levels	WTP in % in 2023
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.49
Investment to enable uptake of micro-generation e.g, solar panels etc	2.17
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.05
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.46
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.38
Contact for any new connections work: Phone or email contact via a named co-ordinator	1.09
Contingency Services: Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.98
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.95
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.88
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.73
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.63
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.59
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.72
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.22



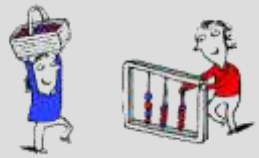
Domestic EPN segment 2 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0213	2.69
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0212	2.67
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0189	2.38
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0155	1.96
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0124	1.56
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0123	1.55
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0113	1.43
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0110	1.38
Investment in infrastructure required to support take up of electric vehicles	0.0093	1.18
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0079	1.00
Contact for any new connections work: All contact through an on-line web portal	-0.0095	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0159	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0310	



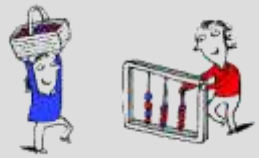
Domestic EPN segment 2 Customer WTP

Levels	WTP in % in 2023
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	2.66
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.64
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.36
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.94
Type of new connections service offered: All elements of the work completed by UK Power Networks	1.54
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.54
Investment to enable uptake of micro-generation e.g, solar panels etc	1.41
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.37
Investment in infrastructure required to support take up of electric vehicles	1.16
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.99
Contact for any new connections work: All contact through an on-line web portal	-1.19
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.99
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-3.87



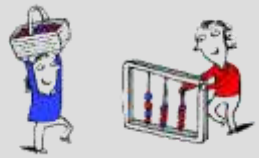
Domestic SPN segment 2 Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0608	3.98
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0528	3.46
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0423	2.78
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0375	2.57
75 days quicker than now, ie within 15 days	0.0366	2.46
Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0363	2.40
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0339	2.38
Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	0.0287	1.80
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0275	1.37
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0253	1.28
Investment in infrastructure required to support take up of electric vehicles	0.0210	1.24
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0170	1.00
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff ‘knocking on doors’ etc	0.0163	
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0132	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0345	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0414	

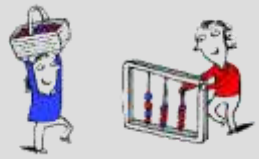


Domestic SPN segment 2 Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.84
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.47
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.98
Investment to enable uptake of micro-generation e.g, solar panels etc	1.75
75 days quicker than now, ie within 15 days	1.71
Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.70
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	1.58
Information available on contacting call centre plus provision of automatic text messages to registered customers with details of power cut and updates	1.34
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	1.28
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	1.18
Investment in infrastructure required to support take up of electric vehicles	0.98
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.79
Information during a power cut: Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.76
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.62
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.61
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-1.93

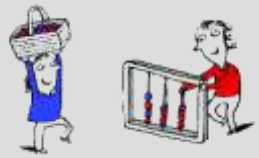


BUSINESS



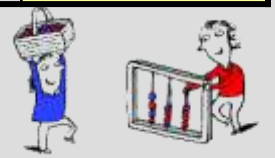
Small size businesses LPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.2176	9.99
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0729	3.35
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0592	2.72
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0523	2.40
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0423	1.94
Investment in infrastructure required to support take up of electric vehicles	0.0372	1.71
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0231	1.06
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.0218	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0380	-1.74
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0836	-3.84
Contact for any new connection work: All contact through an on-line web portal	-0.1242	-5.70



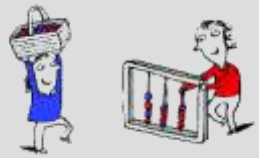
Small size businesses LPN Customer WTP

Levels	WTP in % in 2023
Timing of any new connections work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	7.72
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.59
Investment to enable uptake of micro-generation e.g, solar panels etc	2.10
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	1.86
Investment in infrastructure required to support take up of low carbon electric heating technologies	1.50
Investment in infrastructure required to support take up of electric vehicles	1.32
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.82
Frequency of power cuts over 3 mins - average number: 1 every 48 months	0.77
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.35
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.97
Contact for any new connection work: All contact through an on-line web portal	-4.40



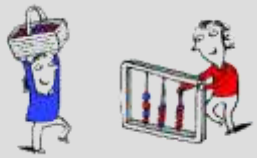
Small size businesses EPNSPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment to enable uptake of micro-generation e.g, solar panels etc	0.0730	5.09
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0662	4.61
Investment in infrastructure required to support take up of low carbon electric heating technologies	0.0595	4.14
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.0562	3.91
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0521	3.63
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0368	2.56
Investment in infrastructure required to support take up of electric vehicles	0.0346	2.41
Frequency of power cuts over 3 mins - average number : 1 ever 24 months	0.0343	2.39
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0343	2.39
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0282	1.96
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0183	1.27
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.0181	1.26
Timing of any new connection work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0144	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0643	
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0791	



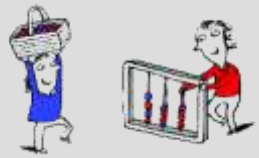
Small size businesses EPNSPN Customer WTP

Levels	WTP in % in 2023
Investment to enable uptake of micro-generation e.g, solar panels etc	2.80
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	2.54
Investment in infrastructure required to support take up of low carbon electric heating technologies	2.28
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	2.15
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	2.00
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	1.41
Investment in infrastructure required to support take up of electric vehicles	1.33
Frequency of power cuts over 3 mins - average number : 1 ever 24 months	1.31
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.31
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	1.08
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.70
Type of new connections service offered: All elements of the work completed by UK Power Networks	0.69
Timing of any new connection work: Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.55
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.46
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-3.03



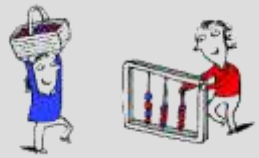
Medium/Large size businesses LPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.1344	5.00
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0448	1.67
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	0.0402	1.50
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	0.0269	1.00
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.1394	-5.18



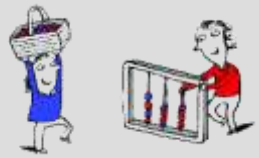
Medium/Large size businesses LPN Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	7.64
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	2.55
Timescale for provision of quotations for simple, low voltage new connections work: Within 7 working days	2.29
Time to complete simple, low voltage new connections work: 75 days quicker than now, ie within 15 days	1.53
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-7.92



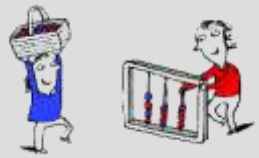
Medium/Large size business EPNSPN Customer Priorities: Combined & Ranked

Levels	Factored coefficient	Indexed coefficient
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	0.1270	7.35
Timing of any new connections work : Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	0.0853	4.93
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	0.0731	4.23
Timing of any new connections work : Work undertaken in normal business hours (08.00-17.00) and in the evenings	0.0692	4.00
Investment in infrastructure required to support take up of electric vehicles	0.0355	2.05
Timing of any new connections work : Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	0.0330	1.91
Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	0.0266	1.54
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	0.0252	1.46
75 days quicker than now, ie within 15 days	0.0216	1.25
All elements of the work completed by UK Power Networks	0.0210	1.22
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.0193	1.12
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.0188	1.09
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.0173	1.00
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-0.0264	-1.53
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-0.0272	-1.57
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-0.0472	-2.73



Medium/Large size Businesses EPNSPN Customer WTP

Levels	WTP in % in 2023
Investment in infrastructure required to enable UKPN to detect loss of supply from individual or small groups of premises	5.91
Timing of any new connections work : Work undertaken in normal business hours (08.00-17.00), in the evenings and at weekends	3.97
Investment in network technologies to allow cheaper and quicker connection of new low carbon generators of electricity	3.40
Timing of any new connections work : Work undertaken in normal business hours (08.00-17.00) and in the evenings	3.22
Investment in infrastructure required to support take up of electric vehicles	1.65
Timing of any new connections work : Work is undertaken within a banded time ie morning, afternoon or evening in normal business hours, evenings or at weekends	1.53
Information available on contacting call centre plus provision of additional information services such as real-time information on internet, use of social media, customer service staff 'knocking on doors' etc	1.24
Provision of back-up services to customers e.g. regular testing of customer-owned generators and systems	1.17
75 days quicker than now, ie within 15 days	1.01
All elements of the work completed by UK Power Networks	0.98
Timescale for provision of quotations for simple, low voltage new connections work: By date agreed with customer	0.90
Frequency of power cuts over 3 mins - average number: 1 every 24 months	0.88
Rural customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers within 60minutes	0.80
Timescale for provision of quotations for simple, low voltage new connections work: Within 10 working days	-1.23
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 60 minutes	-1.27
Urban customers: For power cuts longer than 3 minutes, time to restore 80% of affected customers: Within 180 minutes	-2.19



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