Western Power Distribution RIIO-ED1 Business Plan Commitments Report Year Two - 2016/17

31 October 2017

Safety



Safety Contents

3	Safety	33
	Overview of safety outputs	34
	Meeting health and safety law Output (1) No improvement notices, prohibition notices and prosecutions from the Health and Safety Executive. Output (2) Complete work programmes to meet the Electricity, Safety, Quality and	35 35
	Continuity Regulations (ESQCR) 2002. ESQCR requires that overhead lines are a safe distance from either structures or the ground. Output (3) Complete inspection and maintenance programmes every year.	35 36
	Reducing accidents	38
	 Output (4) Reduce our overall accident frequency rate by 10%. Output (5) Continue to play an active part in the ENA's 'Powering Improvement' initiative, which aims to lead to improved safety performance. Output (6) Work with our trade unions to improve safety performance, including the use of more 'Behavioural Safety' initiatives. Output (7) Investigate all accidents involving members of the public, contractors or our own staff to make sure that learning points are quickly understood and communicated. 	38 39 41 43
	Substation security Output (8) Improve security measures at 50 substation sites to reduce the number of repeat break-ins.	44 44
	 Educating the public. Output (9) Organise and run over 1,000 educational sessions to provide safety information to over 400,000 school children. Output (10) Continue to publish literature on maintaining safety around electrical apparatus and send more than 500,000 copies of this literature to targeted landowners, businesses or leisure operators. 	46 46 47

3 Safety

- 3.1 Safety is fundamental to everything we do.
- **3.2** WPD has committed to a range of outputs to improve overall safety performance. These aim to minimise the safety risks to staff, contractors and members of the public.
- 3.3 The safety outputs are in four themes.
 - Compliance with health and safety law.
 - Reducing accidents.
 - Substation security and theft of equipment.
 - Educating the public.

Regulatory framework:

3.4 There are no Ofgem incentives for safety because the primary requirement from Ofgem is compliance with the requirements set out in legislation and enforced by the Health and Safety Executive (HSE).

Overview of safety outputs

Meet	Meeting health and safety law			
1	No improvement notices, prohibition notices and prosecutions from the Health and Safety Executive.*	No improvement notices were issued or prosecutions made relating to the current price control period during 2016/17. We have appealed an HSE prohibition notice and will provide details of the outcome at the end of the appeals process. We continue to work with the HSE in relation to the investigation of the death of a member of staff as a result of an accident at work in January 2017.		
2	Complete work programmes to meet the Electricity, Safety, Quality and Continuity Regulations (ESQCR) 2002. ESQCR requires that overhead lines are a safe distance from either structures or the ground.	We have completed the programme for clearance distances to structures for West Midlands, East Midlands and South Wales. We have completed 83% of the South West programme, and have agreed to carry out the remaining work by March 2018. We have completed 100% of the work scheduled for 2016/17 relating to the required ground clearance distances.		
<u>3</u>	Complete inspection and maintenance programmes every year.	We completed the majority of work scheduled for completion during the year. A small number of tasks could not be carried out due to access issues and we put in place appropriate plans to manage these safely.		

Red	Reducing accidents		
<u>4</u>	Reduce our overall rate for the frequency of accidents by 10%.*	Our accident rate in 2016/17 is better than the 10% improvement target set for the whole of RIIO-ED1.	
<u>5</u>	Continue to play an active part in the ENA's 'Powering Improvement' initiative, which aims to lead to improved safety performance.	Events designed around the ENA 'Powering Improvement' themes took place in 2016/17, including 'Managing Occupational III Health Risks' and 'Asset Management'.	
<u>6</u>	Work with our trade unions to improve safety performance, including the use of more 'Behavioural Safety' initiatives.	We carried out further work to reinforce the principles of behavioural safety following training delivered in 2015/16. New initiatives were raised by staff and trade union representatives.	
<u>7</u>	Investigate all accidents involving members of the public, contractors or our own staff to make sure that learning points are quickly understood and communicated.**	We investigated all 133 incidents that happened during the year (62 staff accidents, 56 contractor accidents and 15 significant incidents involving the public).	
Substation acquity			
Subs	Substation security		

Suba			
8	Improve security measures at 50 substation	We upgraded security measures at 11 sites that have	
	sites to reduce the number of repeat	had repeat break-ins. We introduced temporary extra	
	break-ins.*	security at four sites where projects are being carried	
		out.	

Edu	Educating the public		
<u>9</u>	Organise and run over 1,000 educational sessions to provide safety information to over 400,000 school children.*	So far in RIIO-ED1 we have delivered a total of 5,748 educational sessions to 139,586 schoolchildren.	
<u>10</u>	Continue to publish literature on maintaining safety around electrical apparatus and send more than 500,000 copies of this literature to targeted landowners, businesses or leisure operators.*	To date in RIIO-ED1, we have issued 886,311 safety leaflets, or made these available through social media, to targeted groups.	

* Targets are for the full eight year RIIO-ED1 period, not for a discrete year ** Target to be achieved each year of RIIO-ED1

Glossary

Meeting health and safety law

Output (1) No improvement notices, prohibition notices and prosecutions from the Health and Safety Executive.

- **3.5** WPD works cooperatively with the HSE to ensure that practices and policies continue to be compliant with legislation and to identify and apply best practice.
- 3.6 The HSE can impose the following sanctions where compliance is breached.
 - Where there is a significant breach of law the HSE has the power to issue a formal Improvement Notice.
 - If the HSE believes that there is a serious risk of harm it has the option to stop activities immediately using a Prohibition Notice.
 - Where HSE inspectors observe a 'material breach' of health and safety legislation during an inspection, they may levy a 'fee for intervention' to cover the cost of inspection visits. Whilst these fees are not fines the HSE do expect that remedial actions will be carried out.
- **3.7** During 2016/17 there have been no improvement notices issued or prosecutions made from the HSE relating to the current price control period.
- **3.8** A notice of contravention (an observation) was identified by the HSE during 2016/17 as follows.
 - An observation was made in March 2017 in relation to the management of a low exposed overhead conductor at a site in South Wales. This observation has been investigated and resolved by replacing the low conductors and reviewing inspection procedures. Company-wide briefings were issued to ensure that the learning from this incident was circulated across the business.
- **3.9** We have appealed an HSE Prohibition Notice during 2016/17 and will provide details on the outcome once the appeals process has concluded.
- **3.10** We are continuing to work with the HSE in relation to the fatality of a member of staff that occurred in January 2017. We are fully committed to supporting these ongoing investigations.

Output (2) Complete work programmes to meet the Electricity, Safety, Quality and Continuity Regulations (ESQCR) 2002. ESQCR requires that overhead lines are a safe distance from either structures or the ground.

- **3.11** The Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR) specify requirements for clearance to objects and ground as detailed below.
 - Regulation 17 deals with the height of overhead lines and specifies the clearances to ground for roads and other situations. This allows safe operation of activities under the lines.
 - Regulation 18 requires that overhead lines are positioned away from buildings and structures to reduce the risk of inadvertent contact. This was a new obligation introduced in 2002 that required DNOs to identify locations where overhead lines were close to structures and remove the hazard by modifying, diverting or undergrounding the lines.
- **3.12** A range of risks were identified as a result of regulation 18 and a work programme initiated, with most work undertaken within DPCR5 to address these risks. The work programme for West Midlands, East Midlands and South Wales is complete. Agreement was reached with the HSE

Snapshot Executive Summary

Glossary

to extend the timeframe for the South West licence area to 31 March 2018. At the close of 2016/17, 83% of the work programme for South West was complete.

- **3.13** For Regulation 17 (clearance to ground), WPD has established a risk based assessment process that measures the existing clearance height and assesses locational risk. The results determine the timescale for rectification of low clearance defects and therefore provides ongoing deadlines for the forward plan (between 3 and 10 years). The assessment policy required all road crossings to be inspected by December 2016 and this target was achieved in August 2016, leading to a programme of defect rectification. The required timeframes for resolving defects can extend up to ten years and as a result there will be some activity that continues into RIIO-ED2.
- **3.14** The achievement of resolving defects within the required timeframes is monitored through key performance indicators. At the close of 2016/17 there were no regulation 17 defects that had not been rectified within the timeframes indicated by the risk assessment process.



- **3.15** One method of ensuring that the network remains safe is through regular and thorough inspection, defect rectification and maintenance.
- **3.16** Cycles of inspection and maintenance are built into our asset management systems so that maintenance and inspection 'tasks' are generated for assets in line with the frequency specified in policy. Local teams use the tasks to manage inspection and maintenance work and the completion of tasks is monitored through key performance indicators sent to managers. WPD targets the completion of all inspection and maintenance tasks within the required period, so that no arrears exist.
- **3.17** The programme for inspection and maintenance work is managed over a calendar year and all tasks are expected to be completed within the year. Occasionally arrears may arise due to access issues. Where maintenance arrears arise, each instance is managed either through enhanced inspections or application of operational limitations. All arrears and associated mitigation plans are reviewed by the Operations Director.
- **3.18** Condition assessments are carried out during inspection and maintenance work. The results are recorded as either condition statuses or as defects. WPD policy requires defects to be fixed with the clear instruction throughout policy documents of 'DON'T IGNORE DEFECTS FIX THEM'. Risk assessment approaches have been developed that lead to deadlines for defect rectification and the clearance of defects within the deadlines is monitored in key performance indicators.
- **3.19** WPD continues to seek ways of improving efficiency and using technology to enhance inspection and maintenance activities. In 2016/17 work has been ongoing to introduce a new 'dashboard' system for monitoring our progress in carrying our operational tasks; this provides a high level view of progress and an automatic process for extracting reports which allow managers to easily drill down into the underlying data. The dashboard will provide improved visibility of outstanding tasks with data automatically updated on a daily basis, complementing the existing weekly KPIs. The dashboard for inspection and maintenance tasks went live on 3 April 2017.
- **3.20** All field teams are issued with iPads for recording of information in the field. During 2016/17 we have continued to introduce new bespoke applications and develop existing ones. These applications allow better checking of existing records and automatic updates of information from site. We continue to make these applications as user friendly as possible in response to feedback from the staff using them. For example, in October 2016 we introduced an application for Tower Inspections which allowed engineers to upload photos of the asset which can be automatically geo-tagged so that we ensure the correct asset is updated on our asset database.

Updates such as these allow us to streamline our processes to ensure that they are quick and easy for staff to undertake and that our mechanisms for capturing information about the current status of the network are efficient and effective.

Reducing accidents

Output (4) Reduce our overall accident frequency rate by 10%.

- **3.21** Safety is a high priority for WPD and during RIIO-ED1 WPD has committed to reducing the overall accident rate involving our own staff by 10%, in comparison to the average accident rate for the previous regulatory period DPRC5.
- **3.22** A number of methods are used to minimise the risk of accidents. This includes the provision of clear processes and procedures, effective training, encouraging staff to take personal responsibility for safety, a range of audit processes, investigating incidents and sharing the learning from investigations.
- **3.23** Each year, a safety action plan is produced informed by both reactive and proactive factors such as accident reports, near misses, industry incidents and any legal, regulatory or industry wide initiatives.
- **3.24** In 2016/17 a range of initiatives were used to promote safety and employee wellbeing as follows.
 - The continued roll-out of 'Technical Managing Safety' a programme for technical staff designed to enhance safety awareness.
 - The introduction of an iPad system for recording near miss incidents to enable easier sharing of information across the business.
 - Including behavioural safety training within the company's induction process.
 - The design and implementation of an improved programme of training for staff who may have to deal with materials containing asbestos during the course of their activities.
 - The development of a new mental health awareness policy and training programme.
 - The introduction of mandatory craft refresher training on a six yearly cycle (or on the introduction of new techniques, procedures or equipment).
- **3.25** Accident frequency rate is derived from the number of annual accidents and the number of staff, and is expressed as 'accidents per 100 members of staff'. This allows performance to be compared across differently sized teams and organisations. The accident rate includes both accidents which have resulted in staff sickness absence and those where the individual has been able to continue to work despite the accident.
- **3.26** In 2016/17 the accident rate for WPD as a whole was 0.93 accidents per 100 staff. This was an improvement on the 2015/16 accident rate of 1.22 and better than the RIIO-ED1 target. The trend in safety performance is shown in the next chart.



3.27 Whilst we are reporting better than target performance, the statistics include the fatality of a member of staff. This sad incident brings home the importance of striving to eliminate accidents. Following this accident an internal panel of inquiry was immediately established and we continue to support and contribute to the external HSE investigation. To provide greater awareness of the circumstances of the accident all operational staff were required to attend a briefing session to discuss the incident and we will continue to review our systems and processes to do everything that we can to minimise the risk of such an incident occurring again.

Output (5) Continue to play an active part in the ENA's 'Powering Improvement' initiative, which aims to lead to improved safety performance.

- **3.28** WPD continues to actively participate in the industry strategy 'Powering Improvement'. Powering Improvement is a cross-sector strategy to bring about continuous improvement in safety and occupational health in the energy generation and networks sectors. The Powering Improvement initiative started in 2010 and each year has a specific theme as shown below.
 - 2010 Leadership
 - 2011 Occupational health/wellbeing
 - 2012 Asset management/maintenance
 - 2013 Behavioural safety/personal responsibility
 - 2014 Beyond 2015 next steps
 - 2015 Working with contractors
 - 2016 Managing occupational ill health risks
 - 2017 Asset management
 - 2018 Human and organisational factors
 - 2019 Review of progress and developing the next phase of 'Powering Improvement'
- **3.29** Powering Improvement is supported by member companies of the Energy Networks Association (ENA) (the industry body for UK transmission and distribution network operators for gas and electricity), member companies of the Association of Electricity Producers (the trade association for the UK generators), trade unions and the HSE.
- **3.30** The Powering Improvement theme for 2016 was 'Managing Occupational III Health Risks'. WPD chose to prepare for this theme in advance and in 2015 undertook a series of 'Switched on to Health' workshops for all staff, signposting health related services available to staff and encouraging individuals to maintain a healthy lifestyle.

Glossary

Snapshot Executive Summary

- **3.31** To further embed the theme of managing occupational ill health risks, WPD held a safety week during October 2016. The theme of the week was 'Helping WPD Work Well' and expanded on previous 'Switched on to Health' sessions. The week enabled us to support the HSE initiative 'Helping Great Britain Work Well' which was launched with the aim of promoting six key health and safety issues including 'Tackling III Health'. As part of our safety week, staff were encouraged to access corporate gym discounts that were introduced as a result of feedback from 'Switched on to Health'.
- **3.32** We have continued to hold the regional contractor safety forums which were introduced as a result of the Powering Improvement 2015 theme of 'Working with Contractors'. In June 2016 four regional forums were attended by all major contractors and a selection of sub-contractors. As in previous years the agenda covered best practice, WPD expectations for safety, a challenge to improve accident rates and behavioural safety. During 2016



we shared elements of our 'Switched on to Health' workshops whilst two of our major contractors shared details of their approach to Health and Safety. Joint working of this nature allows us to share best practice. We work with our contractors to improve safety performance; this includes undertaking site safety audits. During 2016/17 we undertook 16 audits with contractors.

- **3.33** For 2017 the theme of Asset Management has been championed by WPD's Operations Director. Work will focus on demonstrating the link between effective asset management and health and safety. Powering Improvement encourages collaboration between stakeholders of the ENA so that new and existing asset management issues can be discussed; the use of case studies supports industry wide learning when incidents occur.
- **3.34** For 2017 WPD has led a working group conducting a review of current standards for underground low voltage link boxes. The purpose of the work is to ensure that link boxes are designed and built to an appropriate standard and are adequately maintained throughout their life span. This topic emerged as a result of a number of incidents (across the DNOs) related to disruptive link box failures. Link boxes are generally placed in pavements and consequently a key aim is to mitigate any risk to public safety. The forum has met and agreed a risk assessment process, shared best practice across the DNOs, established a UK wide database of assets and failures and are working towards a revised ENA specification for link boxes and a common risk mitigation measure.

Output (6) Work with our trade unions to improve safety performance, including the use of more 'Behavioural Safety' initiatives.

- 3.35 WPD works with trade union representatives to improve the health and safety of staff and to heild on health and safety of staff and to
- 3.35 WPD works with trade union representatives to improve the health and safety of staff and to build on behavioural safety principles. The company facilitates quarterly safety forums with trade unions, with four meetings per annum in each of the four WPD licence areas and four meetings per annum at a company level.
- **3.36** Company level meetings are timed to occur after local forums are complete so that issues can be escalated and learning from any local discussions can be implemented company wide.
- **3.37** Standard topics for discussion at local forums include:
 - a review of policy changes and any safety bulletins that have been issued;
 - a summary of performance; and
 - the discussion of specific accidents and operational incidents in order to share learning.
- 3.38 Additional topics covered in 2016/17 included:
 - a review of access to standard technique documents and the ease of searching company systems for specific information;
 - a review of iPad applications including those for the recording of risk assessments and site safety visits;
 - a review of training provision including the newly introduced Mental Health Awareness sessions;
 - a review of staff safety conferences; and
 - the provision of feedback on the suitability or availability of particular personal protective equipment.
- **3.39** In addition, an annual safety conference is held in each licence area, attended by all trade union appointed safety representatives. The conferences provide an opportunity for additional representatives to discuss safety performance beyond those who attend the regular forum meetings.
- **3.40** In 2016/17, the four safety conferences took place in March and April 2017 and were attended by the company's Safety and Training Manager and Occupational Health Manager. A standard agenda was agreed for the company as a whole and additional agenda items were added locally dependent on the requirements of each licence area. Topics included:
 - a review of safety performance;
 - an update from Occupational Health;
 - a presentation from an Electricity Networks Association representative highlighting ongoing learning from incidents in the wider industry, particularly in relation to asset management;
 - trade union presentations; and
 - a review of actions as result of previous behavioural safety training.
- **3.41** Trade union representatives are informed of all accidents and have the remit to independently investigate accidents if they wish to do so. Trade union representatives have access to the same training provided for supervisors carrying out Site Safety Visits, enabling them to independently audit operational sites.

Obligations

Social

Page 41

Behavioural safety

- **3.42** Behavioural safety is a key theme in the delivery of the company Safety Action Plan. Behavioural safety goes beyond setting rules and enforcing compliance: it focusses on changing attitudes so that staff assume responsibility for their own safety and the safety of others by acting on training, following instructions and challenging others when they see safety rules about to be broken.
- **3.43** In 2015, WPD launched a behavioural safety initiative 'Switched on to Safety' with every member of staff invited to attend a training session designed to enable them to assess their own safety behaviour and to challenge the unsafe behaviours of others. Sessions were facilitated by an external provider and combined live theatre with interactive discussion.
- **3.44** Business managers attended an extended session to encourage them to lead safety effectively and were provided with a range of tools to use with their teams to identify areas for improvement and to develop team centred safety action plans. These local team plans are gathered and reviewed by the central Safety Team so that best practice can be shared across the business.
- **3.45** In 2015/16 the majority of our staff attended behavioural safety sessions. In 2016, any remaining staff were provided with the opportunity to attend. We are now working to embed the principles of the 'Switched on to Safety' events into day to day activities.

Case Study – South Wales

Teams across the business continue to use the tools and models provided as part of the 2015/16 behavioural safety initiative 'Switched on to Safety'. In February 2017 all Safety representatives in South Wales met in order to discuss new ways to promote and embed behavioural safety. A range of potential initiatives were discussed including:

- creative ways to encourage and support less experienced, or recently trained, members
 of staff to challenge their peers in situations where they feel that best practice is not
 being followed;
- ways to encourage staff to speak up when a 'near miss' occurs, with the aim of preventing potential accidents;
- how to prevent distractions, specifically related to the use of mobile phones in the work place; and
- ways to make safety briefings more interactive and engaging.

Initial ideas have been collated and will be developed into action plans as part of the standard quarterly safety forums.

- **3.46** The impact of staff suggestions from initiatives such as these can be significant. In 2015/16 company policy on the use of protective eyewear was changed in response to an initiative from a local depot where eyewear was worn for a greater range of tasks. Since the change to policy in November 2015 the number of eye injuries has reduced. In 2015/16 there were five accidents resulting in eye injuries, in 2016/17 this had reduced to zero related incidents.
- **3.47** In 2016/17 we reviewed our induction process for new trainees joining the business and agreed a behavioural safety module which will be delivered as part of our standard induction. A key aim is to provide new colleagues with the confidence to challenge others if they feel that their behaviour is unsafe. The new programme will be delivered from 2017/18 onwards.
- 3.48 Other activities used to promote and support behavioural safety during 2016/17 have included:
 - revisions to the iPad application used for recording of risk assessments to make it easier for staff to check policies and procedures whilst completing the online form and provides prompt questions to ensure that all potential hazards are considered; and
 - briefing sessions have been undertaken to ensure that staff completing risk assessments are familiar with the new functionality of the application.



Output (7) Investigate all accidents involving members of the public, contractors or our own staff to make sure that learning points are quickly understood and communicated.



- **3.49** Whilst every effort is made to prevent incidents or accidents, they may still occur. When they do occur, WPD has committed to ensure that they are quickly investigated so that the causes can be understood and that appropriate action is taken without delay. This relates to any accident or incident whether it involves staff, contractors or members of the public.
- **3.50** During 2016/17 there were 62 staff accidents, 56 contractor accidents and 15 significant incidents involving the public. All 133 were investigated.
- **3.51** The information gathered from investigations is used to promote improvements in safety performance. Learning from such events, together with general information on good practice and new company initiatives is proactively shared with staff through a range of mechanisms.
 - Safety articles are regularly featured within the company's staff magazine.
 - When an incident occurs the local Team Manager produces an investigation report identifying learning points, a summary of these reports is emailed on a monthly basis to line managers for cascade and discussion in team brief meetings.
 - Where incidents are particularly serious a Safety Bulletin is issued and cascaded. Within 2016/17 ten Safety Bulletins were issued – each bulletin provides an explanation of the issue, relevant learning points and the actions required by individuals for the future.
- **3.52** Staff are encouraged to reflect on opportunities to improve safety performance and have the facility to submit details of 'near misses' (incidents that could have resulted in an accident). A 'Safety Flash' system allows individuals to submit information anonymously should they wish to do so. During 2016/17 we also introduced an electronic system for recording near misses via the company iPads (in addition to the paper form), ensuring that the process is quick and easy and that staff have a variety of options for providing feedback on potential risks.
- **3.53** In 2016/17, 79 near misses were reported and 14 suggestions were submitted. All reports were collated centrally by the Safety Team and then submitted to local management teams to review and action as appropriate; no actions were outstanding for the regulatory year.

Introduction

Snapshot Executive Summary

Substation security

Output (8) Improve security measures at 50 substation sites to reduce the number of repeat break-ins.

- \checkmark
- **3.54** Historical increases in the value of metals led to high levels of theft from the network. Such theft can lead to electricity supplies being interrupted and sites being left in a hazardous state, potentially exposing WPD employees and members of the public to increased risks.
- **3.55** At the time of developing the RIIO-ED1 Business Plan metal prices were high, leading to theft from the network. Since 2011/12 metal prices have progressively become lower (as shown in the London Metal Exchange charts below). Such fluctuations have the potential to impact on levels of theft and as a result the cost benefit of security related interventions will vary over time, as will the level of priority placed on metal theft by external agencies such as police forces.



Monitoring break-ins to substations

- **3.56** WPD has committed to enhancing substation security measures at locations where thieves regularly attempt to break in. Analysis of repeat break-ins commenced in 2015/16; in 2016/17 there were eight occasions where a specific substation was targeted more than once during the year and was therefore a candidate for potential security enhancements.
- **3.57** Of the eight substations where a repeat break-in occurred, enhanced substation security works have been undertaken at four sites during 2016/17. Measures taken varied from the installation of additional lighting, upgrading the perimeter fencing or in one instance installing a high resolution number plate recognition camera at the site entrance.
- **3.58** Whilst construction work is undertaken at sites there can be increased risk of break-ins as a result of the additional supplies and equipment on site. In order to mitigate this time-bounded risk, temporary solutions have been applied at four sites that were the subject of a repeat break in during 2016/17. Temporary measures included the short term use of security guards and investment in portable CCTV cameras for use at major project sites within the East and West Midlands.
- **3.59** Cumulatively during RIIO-ED1 we have undertaken permanent upgrading works at 11 sites that were the subject of repeat break-ins.

Increasing substation security in the West Midlands and East Midlands

- **3.60** Following the acquisition of the Midlands licence areas in 2011, WPD committed to upgrading security measures at all sites in the West Midlands and East Midlands to bring them up to the level of protection provided in the South West and South Wales. Enhancements would ensure that all grid and primary sites would be provided with an intruder system as a minimum, with higher risk sites also being fitted with CCTV and/or electric fences.
- **3.61** Substations are categorised according to risk including an assessment of the strategic importance of the substation to the network and whether there is a history of intrusion/theft.
- **3.62** In order to determine the works required at each site, local site surveys have been conducted. These surveys have identified that works have already been completed at some sites, consequently we have revised the number of sites requiring enhancements (compared to the volumes within the RIIO-ED1 business plan).
- **3.63** The targets and progress are detailed below; West Midlands have completed 43% of their ED1 programme to date, East Midlands have completed 18%:

Substation security enhancements – Midlands		
	West Midlands	East Midlands
Initial forecast of sites requiring upgraded security during RIIO-ED1	372	553
Sites requiring upgraded security – post site survey and risk assessment	182	330
Security enhancements completed during RIIO-ED1	79	59

3.64 The target number of sites requiring the installation of security enhancements may vary over the course of RIIO-ED1 as old sites are decommissioned and new requirements are identified.

Snapshot Executive Summary

Social Obligations

Educating the public

Output (9) Organise and run over 1,000 educational sessions to provide safety information to over 400,000 school children.



- **3.65** Children and other members of the public may not always be aware of the potential dangers from the electricity distribution network. This lack of awareness can lead to them becoming exposed to more risk during certain play, leisure or work activities.
- **3.66** During RIIO-ED1 WPD committed to providing over 1,000 educational sessions to 400,000 school children about the potential dangers of electricity.
- **3.67** Since the start of RIIO-ED1 we have delivered a total of 5,748 sessions to 139,586 school children across our four licence areas making excellent progress towards our RIIO-ED1 target.
- **3.68** The breakdown of sessions delivered during 2016/17 is as follows:

Education sessions delivered 2016/17		
	Number of sessions	Number of children
West Midlands	985	10,274
East Midlands	1,036	24,844
South Wales	1,276	18,286
South West	1,337	16,448
WPD Total	4,634	69,852

- **3.69** Sessions are delivered in a variety of ways, including the following.
 - Individual school safety talks aligned to the national curriculum.
 - Crucial Crew and Life Skills sessions, co-facilitated with emergency services and delivered in schools to teach young people about safety, including electrical safety.
 - Permanent education safety centres at Milton Keynes, Bristol, Gloucester, Leicester and Birmingham where daily sessions are held throughout the school term to teach children about safety, including electrical safety.
- **3.70** In addition to the provision of formal sessions, WPD makes resources available to schools via the Power Discovery Zone an interactive, curriculum-linked website for schools that relates to electricity and safety.



Output (10) Continue to publish literature on maintaining safety around electrical apparatus and send more than 500,000 copies of this literature to targeted landowners, businesses or leisure operators.



3.71 WPD also recognises that those engaged in work or recreational activities near network assets may be unaware of the potential hazards around them. WPD produces a range of information leaflets describing the dangers of overhead lines, electricity substations and underground cables and distributes these to individuals or groups potentially at risk due to their work or leisure.

- leaflets describing the dangers of overhead lines, electricity substations and underground cable and distributes these to individuals or groups potentially at risk due to their work or leisure activities. WPD holds a database of customer groups likely to fall into this category so that literature can be distributed to individuals who have the potential to be exposed to electrical safety risks.
- **3.72** During RIIO-ED1, WPD committed to distributing 500,000 copies of safety literature to specific landowners, business or leisure activity providers whose activities could be higher risk if undertaken near our equipment.
- **3.73** Safety literature continues to be distributed in traditional paper based formats, but in addition social media is used to promote safety information and direct individuals to electronic copies of our literature on the WPD website. This process can be monitored so that the number of individuals who click on online safety literature as a result of a social media post can be logged.
- **3.74** Safety literature entitled 'Think Safe, Stay Safe' highlights the dangers of electricity and provides examples of the type of activities that could be a risk to health.
- **3.75** In 2016/17 a total of 485,112 Think Safe, Stay Safe 'leaflets' were issued or made visible to customers. Our cumulative total for the RIIO-ED1 period is 886,311 leaflets issued.
- **3.76** During 2016/17 information was distributed in a variety of ways as detailed below.
 - Facebook campaigns promoting electrical safety which appeared in the newsfeed of 246,553
 Facebook users. Posts were actively promoted to those in the agricultural industry and participants in leisure activities such as angling, sailing and hot air ballooning.
 - 89,600 individuals were targeted through promotional articles placed in a variety of publications such as the Royal Cornwall Agricultural Magazine, Modern Farmer magazine and South West Farmer magazine.
 - 177,034 landowners with WPD equipment on their land were sent literature as part of the wayleaves process associated with these assets.
 - 2,861 attendees for the Royal Welsh Agricultural Winter Fair received e-tickets which featured 'Think Safe, Stay Safe' information.
- **3.77** Using a varied range of media helps to get the public safety message to a diverse range of individuals.
- **3.78** We refresh our safety information regularly and respond to current issues. In July 2016 following the introduction of Pokémon Go to the UK, WPD became the first DNO to issue a safety warning to users of the game to remind them of the dangers of electricity infrastructure. We reached 215,000 users as a result of the full campaign.



Think safe.

Stay safe.

Ale M