PUBLIC STREET LIGHTING

PFI ANNUAL SERVICE REPORT 2013

Working in Partnership With

Contents

1- INTRODUCTION

This Annual Service Report relates to the City of Stoke-on-Trent Council Public Street Lighting and has been prepared by the PFI Service Provider in Partnership with the Authority to provide an overall summary of performance when considered against the Performance Indicators.

The performance indicators are as listed in the Output Specification of the Project Agreement. The report will also consider other requirements of the Output Specification that are listed as forming part of the Annual Service Report. Specifically the report has been prepared in accordance with the requirements of the Output Specification and will provide details of the following:

1. Graphical representation of LPI's showing trend analysis over the previous twelve (12) Months;
2. Environmental Considerations
3. Details of local Crime and community safety statistics
4. Details of local Road Safety statistics
5. Innovation
6. Progress of Asset Replacement Program
7. Health and Safety data
8. Customer Feedback in tabulated and graphical formats
9. Continuous Improvement update

2 – BEST VALUE PERFORMANCE INDICATORS AND LOCAL PERFORMANCE INDICATORS

This section of the Annual Service Report focuses on the Service Providers performance against the relevant and local performance indicators for the Project.

a) LP1 - Percentage of Lighting Points working as planned.

b) LP2 - Percentage of Apparatus more than twenty five (25) years old

c) LP3 - Percentage of streets which conform to the lighting standards referred to in the Output Specification.

d) LP4 - Average time to repair a non-emergency fault from first being reported.

e) LP5 - Average time to attend an emergency repair.

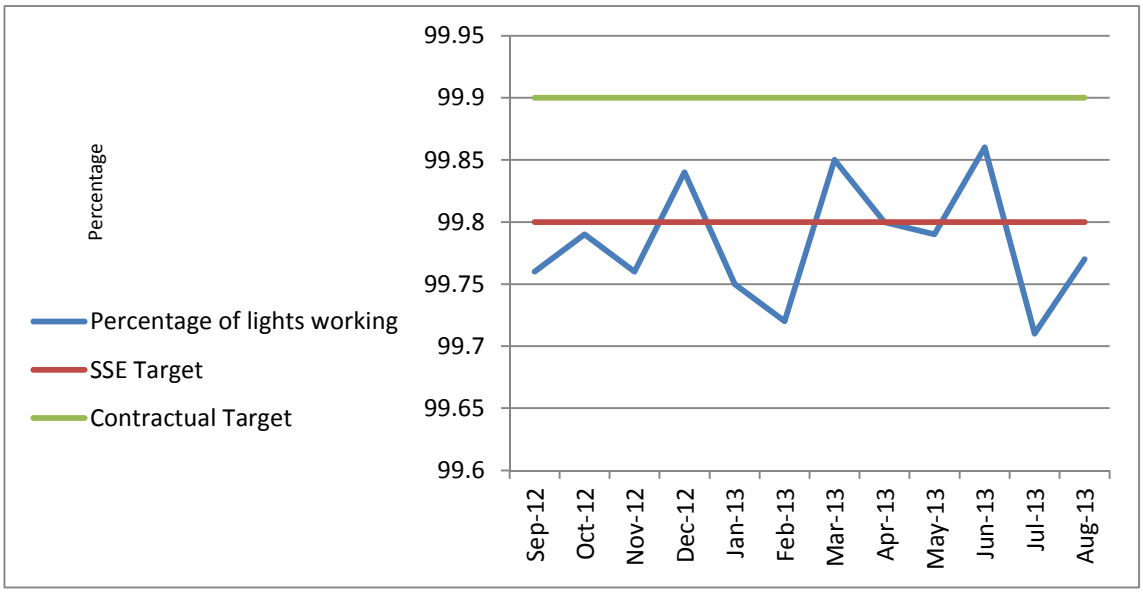
f) LP6 - Percentage of inefficient light sources.

g) LP7 - Percentage number of repeat visits associated with non-Emergency Faults.

h) LPI8 – Number of requests for additional lighting.

The requirement for the Annual Service Report is to provide graphical representation of the above performance indicators. The information contained in the Monthly Monitoring Reports each month has been collated and is detailed on the graphical representations below. This information details the trends of the performance of the Service Provider for the past year of the Project.

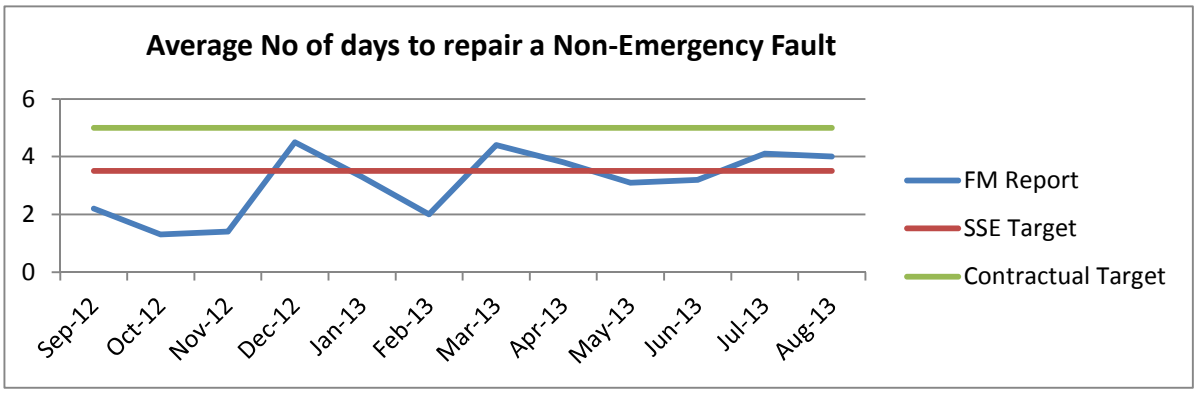
a). LP1 - Percentage of Lighting Points working as planned



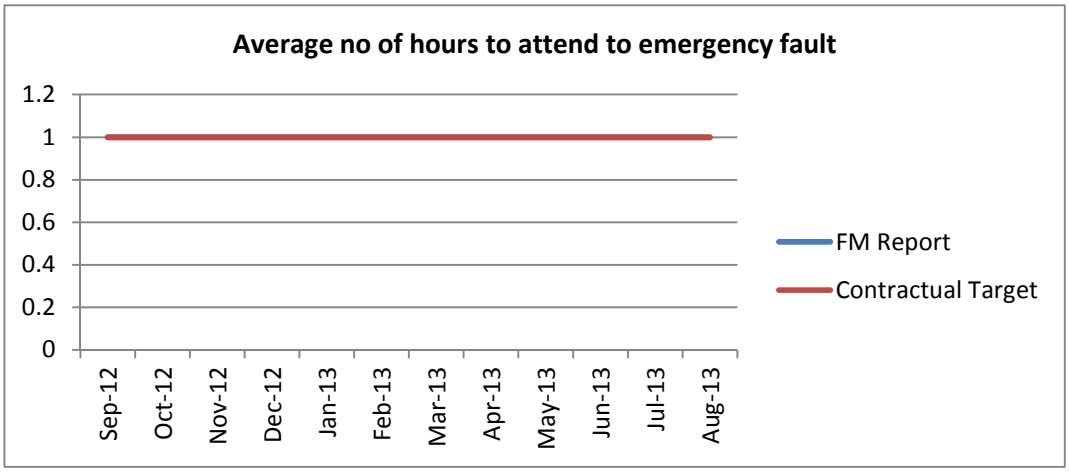
b). LP2 – Percentage of apparatus more than 25 years old, this equates to, at the time of this report to 0.40%. These lighting columns have not been replaced as they fall within development areas and thus have mitigation with the Local Authority.

c). LP3 – At the time of this report the percentage of streets which conform to the lighting standards referred to in the Output Specification is 80%.

d). LP4 - Average time to repair a non-emergency fault from first being reported



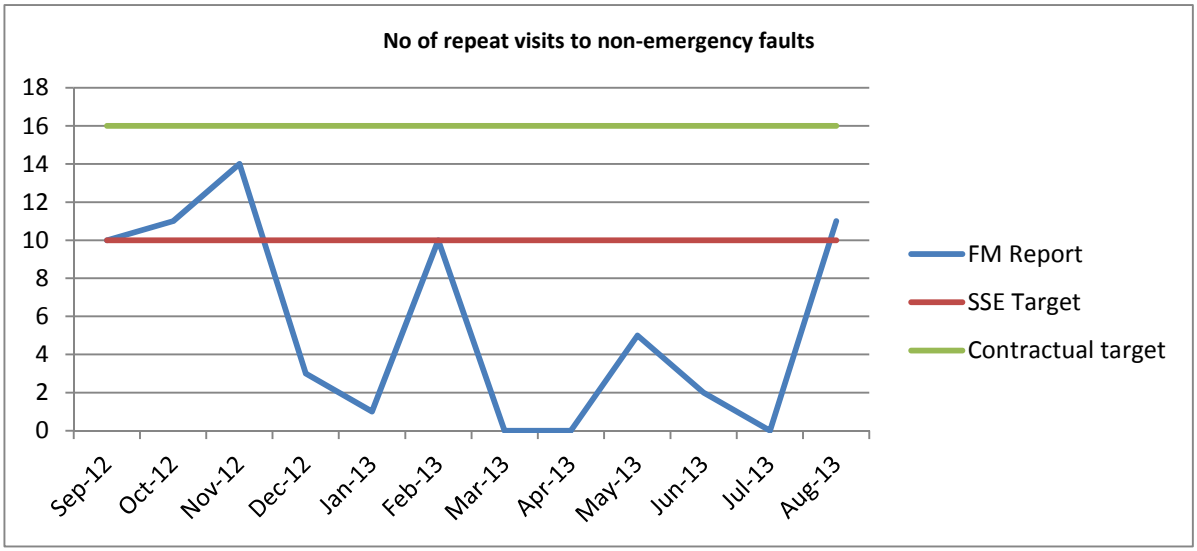
e). LP5 - Average time to attend an emergency repair within



Note: LPI is 1.00 for LP5, indicator line is hidden behind trend line

f). LP6 - Percentage of inefficient light sources
18% of street lights over 25 years old, which will decrease as the contract progresses.

g). LP7 - Number of repeat visits associated with non-emergency faults



SSE are striving to reduce the number of repeat visits by introducing new technology and staff training.

h). LP8 – Since the commencement of the PFi Project there have been 446 no requests for additional lighting (Clause 9.5 requests).

3 – ENVIRONMENTAL CONSIDERATIONS

The service provider supports the need for reducing the carbon footprint in the UK and Stoke-on-Trent. Climate change is a constant threat to our environment and considered a contributory factor in many freak weather conditions. Electricity production is the biggest contributor to the emissions that cause climate change.

The prime gas responsible for global warming is CO2. Burning fossil fuels - coal, oil and natural gas - produces a large amount of this gas and supplies of fossil fuels are rapidly decreasing. There is an ever-increasing need to find alternatives.

One alternative to fossil fuels is nuclear power, however this has met with wide protests from campaigners who believe that a nuclear reactor can produce radioactive waste with a 'lifespan' of thousands of years. There are also by-products that could potentially do harm to the environment.

Renewable energy is the environmentally friendly alternative. It has no by-products that could harm the atmosphere and comes from everlasting sources such as wind and water. There is little to no waste, and consequently more and more people are seeing renewable energy as a legitimate alternative.

The annual energy consumption for street lighting in the City of Stoke-on-Trent for the previous year was 12,937,440kwh. Since the energy purchased for Stoke-on-Trent is from renewable sources, which is 100% exempt from Climate Change levy, means there is zero carbon emissions.

The electricity supplier ensures that for every unit of electricity used, the same amount of green electricity is generated.

4 – CRIME AND COMMUNITY SAFETY

The table below shows the trend for notifiable offences recorded by the Police for the Stoke-on-Trent area. The table shows a comparison from 2010-2011 to 2012-2013. The trend is a reduction of offences, with the exception of motor vehicle related crime. Data has been provided by the Office for National Statistics.

Offence	2010-11	2012-2013
Violence against the person	6598	5554
Wounding or other act endangering life	3108	2537
Robbery	265	167
Theft from the person	200	174
Criminal damage including arson	5183	3692
Burglary in a dwelling	1038	870
Burglary other than a dwelling	1298	1235
Theft of a motor vehicle	422	443
Theft from a motor vehicle	1043	1097

The above table shows, with the exception of motor vehicle related theft, that the trend of a reduction in offences since the beginning of the PFI contract has continued. This is not just due to street light improvements but also local strategies implemented by Stoke on Trent City Council such as their Safer City Partnership which was launched in 2007 to help monitor and improve safety within the City.

5 – ROAD SAFETY

The Government's casualty reduction targets have been achieved in Stoke-on-Trent over the last ten years, though the number of people killed or seriously injured is still unacceptably high. The table below shows an overview comparison between 2010 and 2012. The trend shows that since the introduction of the PFi project there has been a reduction in casualties/injuries with the exception of injuries/fatalities to children.

Road Accident Data	2010	2012
Killed or serious injured (total)	45	36
Slightly injured (total)	903	613
Child Killed or seriously injured*	6	8
Motorcycle casualties**	59	51
Pedal cycle casualties**	56	34

The above data for Stoke-on-Trent has been provided by Staffordshire Safer Roads Partnership/Staffordshire Police.

6 - INNOVATION

SSE has strived over the last year to introduce new ideas and thinking with the emphasis on performance, safety and innovation.

Licence to Innovate

A company wide initiative to encourage SSE staff to engage in and submit innovative ideas that are appropriate to SSE's company values and goals.

Innovation is a critical part of our company strategy and these ideas are encouraged and supported throughout the process.

651 staff submitted an innovation idea in 2012, with 168 of these being implemented across the business.
One such innovation is the implementation of a texting service whereby any resident reporting a fault receives a text message to confirm that the fault has been attended to and it's current status.

'Stop-Start' technology

The majority of SSE's company vehicles now have 'stop-start' technology. This system automatically shuts off the engine when the vehicle comes to a stop to prevent unnecessary fuel consumption in a motionless vehicle and is a simple but very effective way to boost fuel economy.

Non-illuminated Light Sources

In keeping with SSE's fourth core value of 'Sustainability' SSE are working in close partnership with Stoke on Trent City Council to reduce energy consumption and reduce the city's carbon emissions.

Over the past 24 months non-illuminated bollards have been installed on trial within the city, where legislation allows. The bollards are 're-boundable' and therefore less likely to be damaged in the event of a road traffic accident or act of vandalism, thus reducing the need for frequent repair and/or replacement on traffic sensitive roads. Currently two such bollards are on trial on Sir Stanley Matthews Way.

Additionally the bollard is non-illuminated and will provide a saving of 32w per bollard (based on 2 x 11w PL Lamp Bollard). Using this equipment throughout the city has the potential to reduce energy consumption and carbon emissions.

Refer to the innovation report in Appendix 1

Non-illuminated bollard, Sir Stanley Matthews Way.

7 - Projects

The City Centre Public Realm project is a key City Council transformational project. It aims to promote City Centre life by:

- Providing an inspirational series of linked public spaces and streetscapes that can accommodate events and festivals.
- Providing a high level of good quality amenity space that visitors and local residents can use and enjoy in a safe, accessible and attractive City Centre environment.

SSE have worked in partnership with the City Council to design and deliver architectural lighting to enhance and improve the city centre night time environment to:

- Significantly improve the image of the City Centre
- Promote and raise the profile of Cultural venues
- Promote the City Centre's twilight and evening economy.

Granite seating bench fitted with LED lighting – installed by SSE.

Phases 1 & 2 are now complete with a further phase 3 & 4 in the planning stage for the future.

Curved lighting columns with plant like lanterns designed to create soft pools of light.

Bespoke lighting in Swan Square. Colour changing LED uplighters.

8 – ASSET REPLACEMENT

With the Initial Asset Replacement Programme complete (IARP), the Asset Replacement Programme (ARP) continues to progress as lighting columns become life expired.

47 No units were replaced last year in the following streets:

Barratt Gardens, Milton
Matthews Walk, Hanley
Old Hall Street, Hanley
Glandore Road, Parkhall
Fleming Road, Stoke
Cherrywood Grove, Longton
Bucknall New Road, Hanley
Trentham Road, Trentham
Stone Road, Trentham
Gordon Banks Drive, Trentham
High Street, Tunstall
Snow Hill, Shelton
Iris Close, Weston Heights
Cross Street, Weston Heights

Asset Replacement Programme (ARP) to commence in the future:

April 2014
Festival Way, Etruria
Marina Way, Etruria
Ridgehouse Drive, Etruria
May 2014
Ridley Walk, Fenton
Ridley Street, Fenton
Brookside, Tunstall
June 2014
Brockley Square, Hanley
Cannon Place, Hanley
September 2014
Lakewood Grove, Cobridge
Pebble Mill Street, Cobridge
Victoria Street, Basford (Signs)
October 2014
Andover Close, Sandford Hill
Cobridge Road, Hanley (Signs)
January 2015
Eldon Street, Sneyd Green
Abbey Road, Abbey Hulton

March 2015
Ashman Street, Burslem
Shipley Place, Burslem
April 2015
Boothen Road, Stoke
Boscombe Grove, Trentham
June 2015
Chapel Lane, Burslem
Ashfield Square, Burslem
September 2015
Portland Street, Hanley
The Close, Weston Coyney
October 2015
Park Terrace, Tunstall
November 2015
Empire Passage, Oakhill
December 2015
Lanehead Road, Cobridge

9 – HEALTH AND SAFETY DATA

The first core value of SSE is 'Safety'. SSE is proactive in promoting health and safety amongst its staff. This is achieved using the following tools:

- Site Safety Inspections – SSE Contracting Operational Managers at Stoke-on-Trent carried out over 82 inspections at work sites across the City of Stoke-on-Trent during the project year 2012-13.
- Near-miss/hazard reports (report of a situation which has been identified that has the potential to cause damage or injury.) – SSE Contracting staff at Stoke-on-Trent completed over 201 reports during the project year 2012-13.
- Brother's Keeper – Staff are encouraged to treat each other as family and promote a 'Don't walk on by' attitude.
- Mission Zero – Each and every working day all staff receive a safety brief. This will consist of relevant topics for that day, which could include a safety bulletin, weather conditions or local issues.
- Toolbox talks – Any change in procedures; learning from incidents elsewhere in SSE and externally; training sessions enable staff to be briefed on the latest topics.
- Competency Portfolios – Through the Association of Signals, Lighting and other Highway Electrical contractors (ASLEC), a portfolio system is used to track and log the competency of each operative who SSE Contracting sets to work within Stoke-on-Trent. This process involves timetabled on-site audits which are carried out on operatives to prove their competence and to ensure the required standard is maintained. Training records are also managed through the portfolio system to sure all operatives' training is up to date.
- Road Safety – SSE Contracting depot have recently been awarded for their driving safety with an internal award of £2500 which was donated to a local disabled sports charity in Stoke-on-Trent

All the above have contributed towards SSE Contracting staff's safety culture in Stoke-on-Trent, having gone 115 months free from HSE Major Reportable Incidents; 120 months free from a Lost Time Injury; and 129 months free from a Class 1 Road Traffic Collision.

10 – CUSTOMER FEEDBACK

As part of our commitment to Customer Service, this year we conducted our annual survey to gauge how satisfied the public are with the service provided by our company.

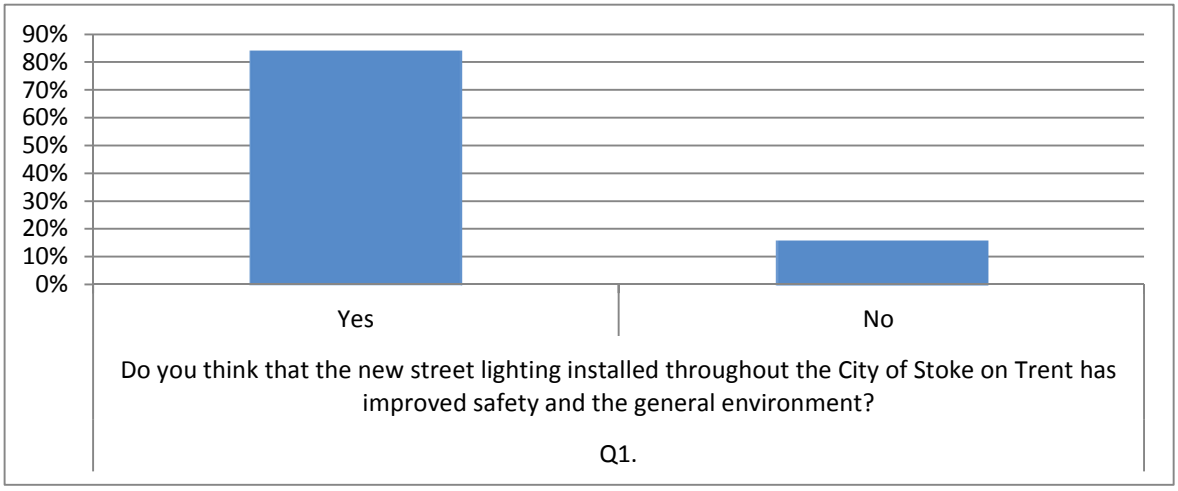
In order to obtain residents perception of the public street lighting in Stoke-on-Trent a traditional survey was carried out within the city to obtain the views of residents. A copy of the questionnaire can be found in Appendix 2.

Further to this we have included Appendix 3 NHT Public Satisfaction survey for Stoke-on-Trent which compares Public Street Lighting against other factors including Highway Services and thus establishes the public view across a wider consideration.

Customer Survey

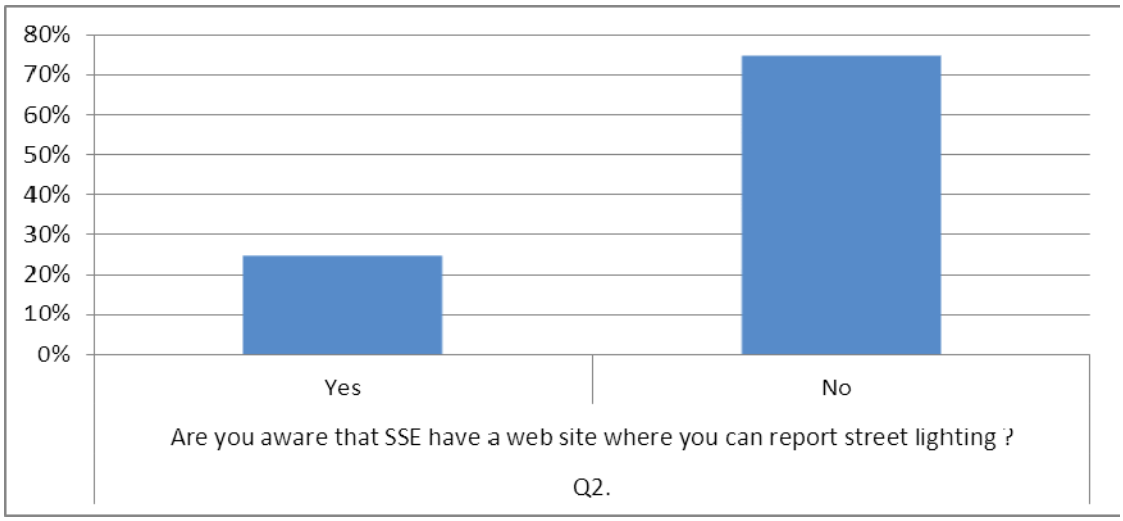
160 Questionnaires were sent out and 100 completed Questionnaires were returned.

Do you think that the new street lighting installed throughout the city of Stoke on Trent has improved safety and the general environment?	% of respondents
Yes	**84%**
No	**16%**

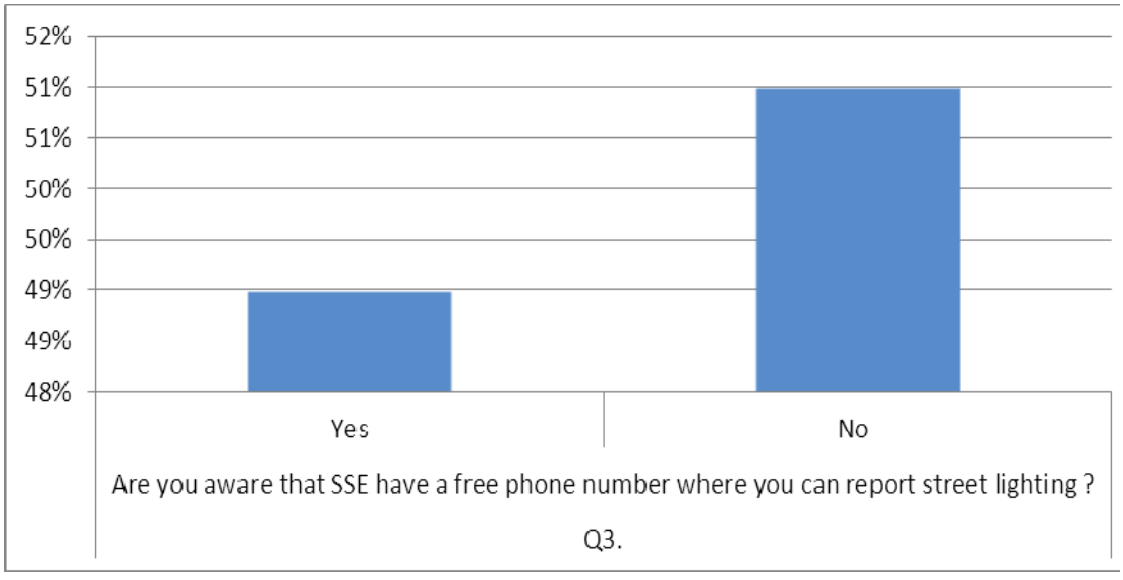


SSE are proposing to raise awareness of the website by adding the website address to the labelling on the street lighting columns and signs.

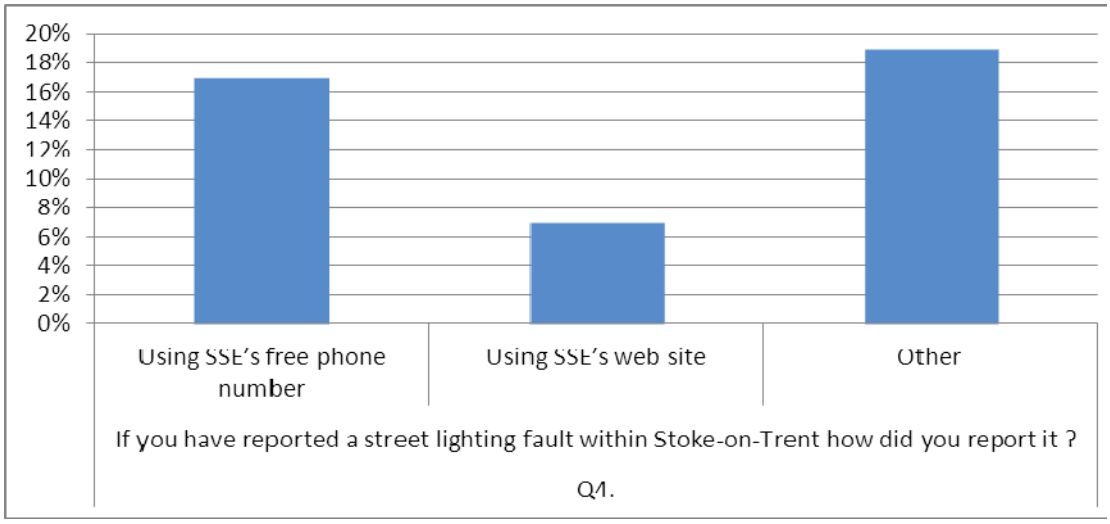
Are you aware that SSE has a website where you can report street lighting?	% of respondents
Yes	25%
No	75%



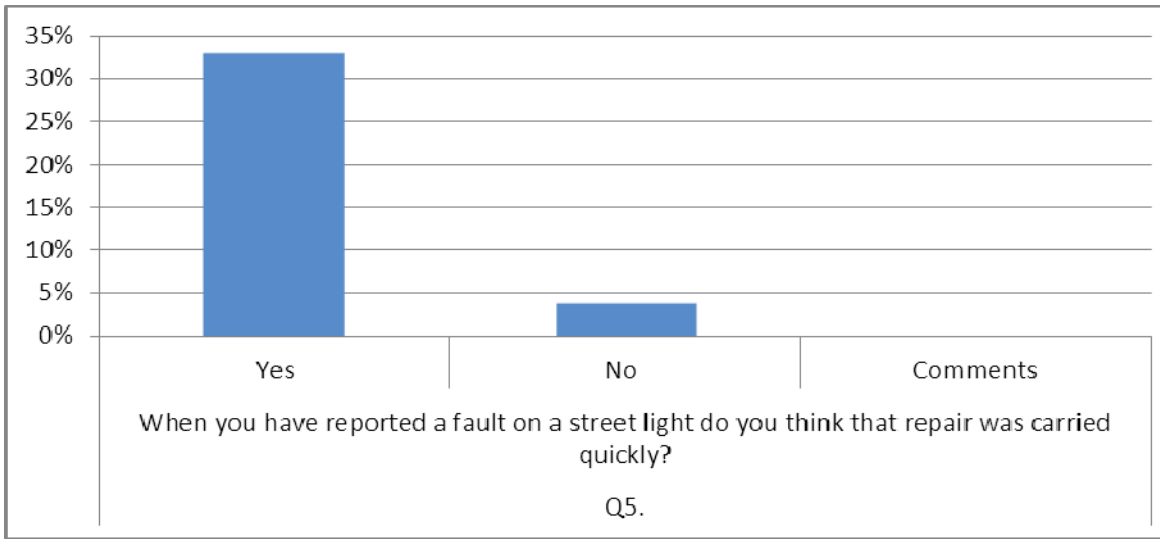
Are you aware that SSE has a Freephone number where you can report street lighting?	% of respondents
Yes	49%
No	51%



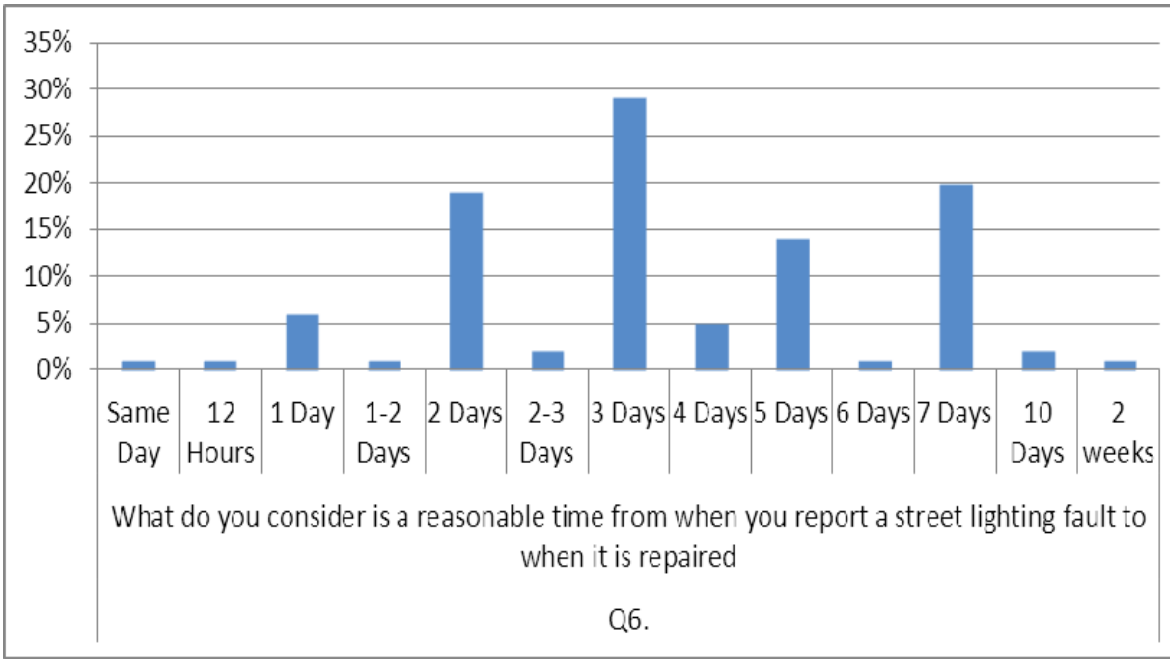
If you have reported a street lighting fault within Stoke on Trent how did you report it?	% of respondents
Using SSE's Freephone number	17%
Using SSE's website	7%
Other	19%



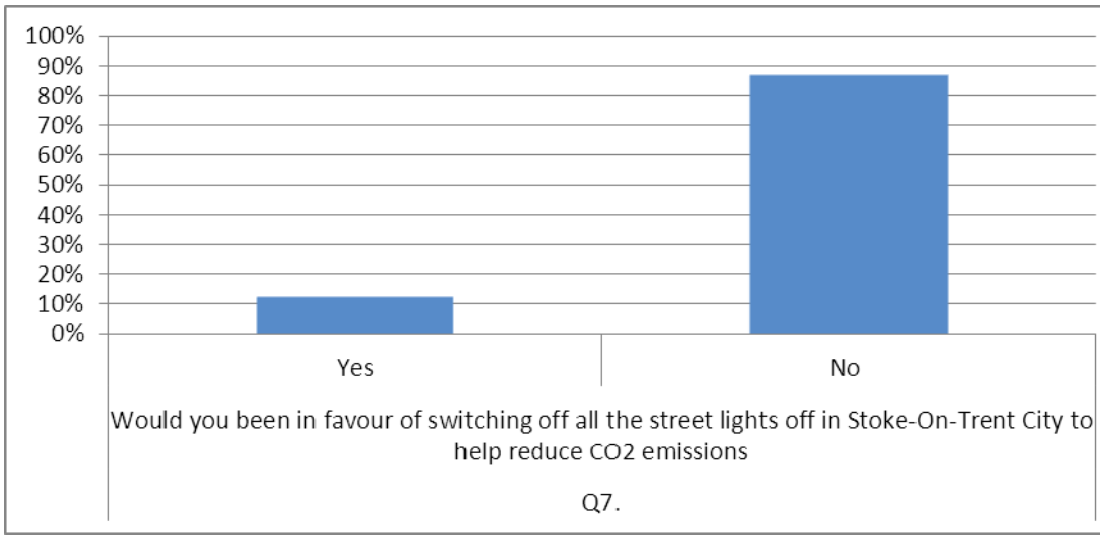
When you have reported a fault on a street light do you think the repair was carried out quickly?	% of respondents
Yes	33%
No	4%
Never reported	63%



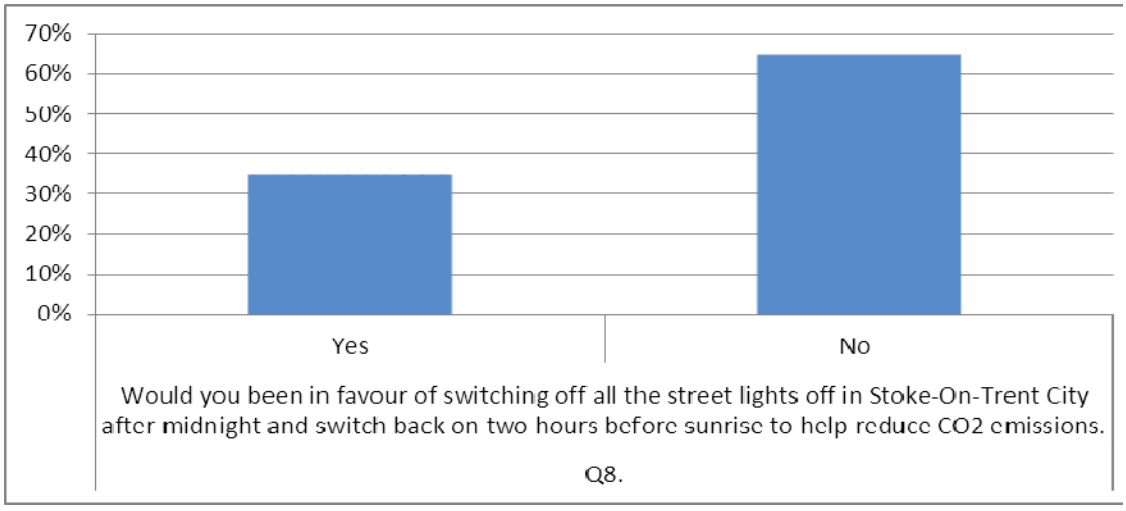
What do you consider is a reasonable time from when you report a street lighting fault to when it is repaired?	% of respondents
Same day	1%
12 hours	1%
1 day	6%
1-2 days	1%
2 days	19%
2-3 days	2%
3 days	29%
4 days	5%
5 days	14%
6 days	1%
7 days	20%
10 days	2%
2 weeks	1%



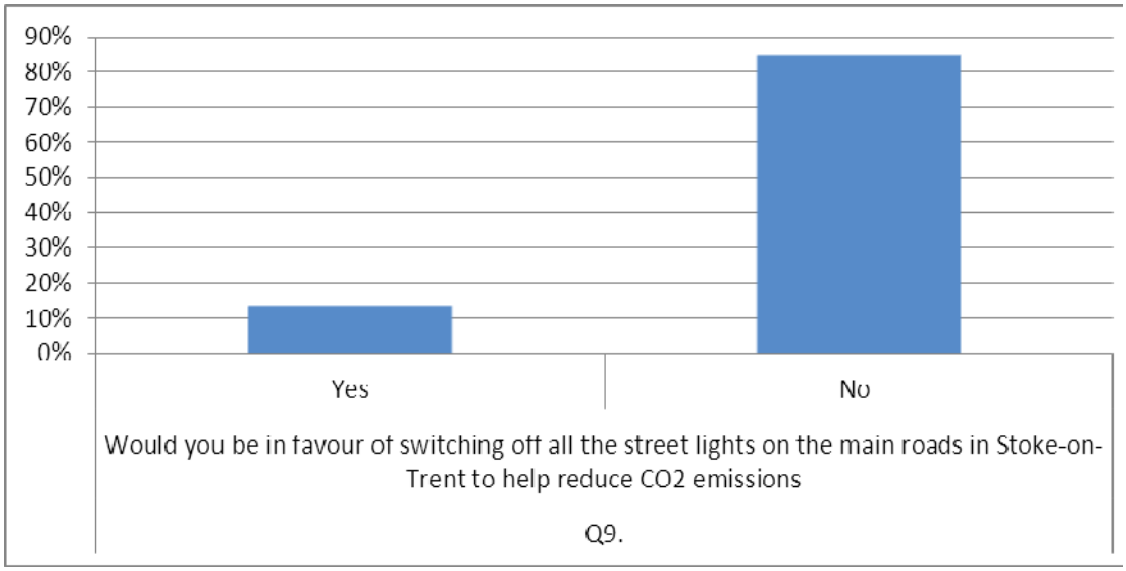
Would you be in favour of switching off all the street lights in Stoke on Trent to help reduce CO2 emissions?	% of respondents
Yes	13%
No	87%



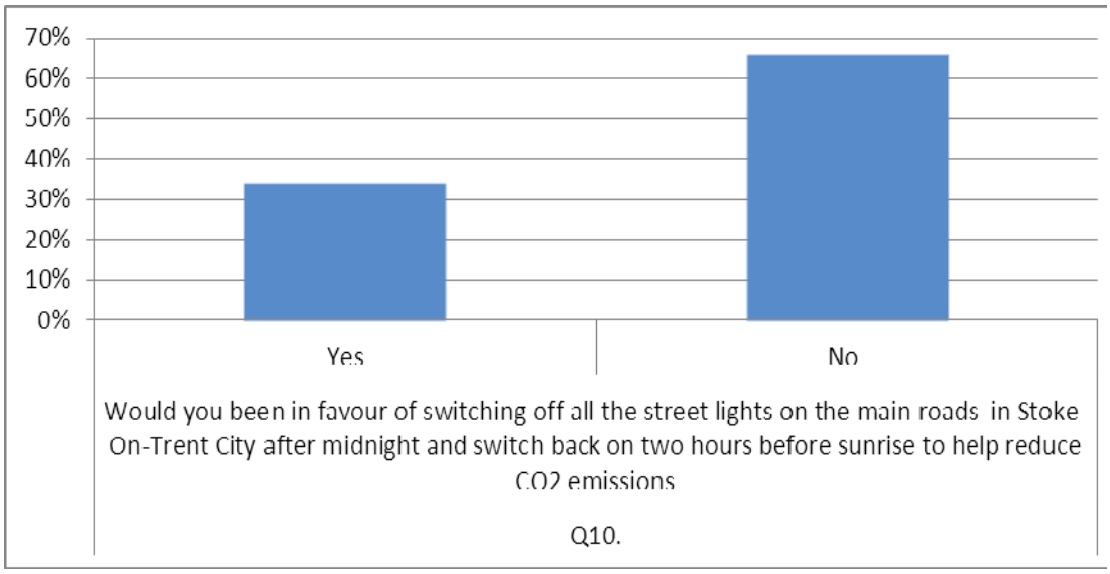
Would you be in favour of switching off all the street lights in Stoke on Trent after midnight and switch back on two hours before sunrise?	% of respondents
Yes	35%
No	65%



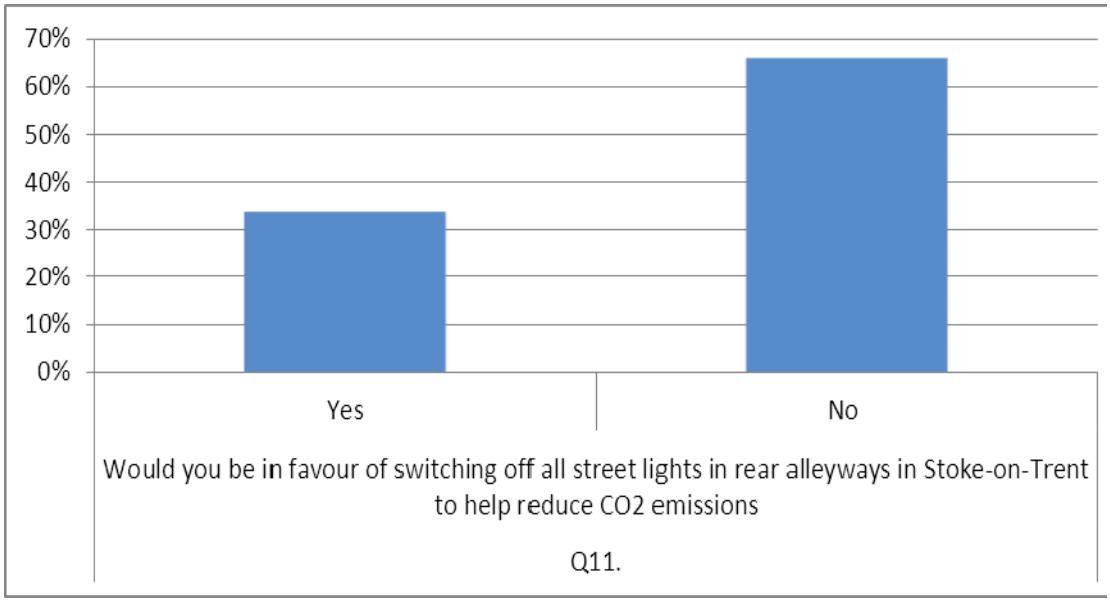
Would you be in favour of switching off all the lights on the main roads in Stoke on Trent?	% of respondents
Yes	15%
No	85%



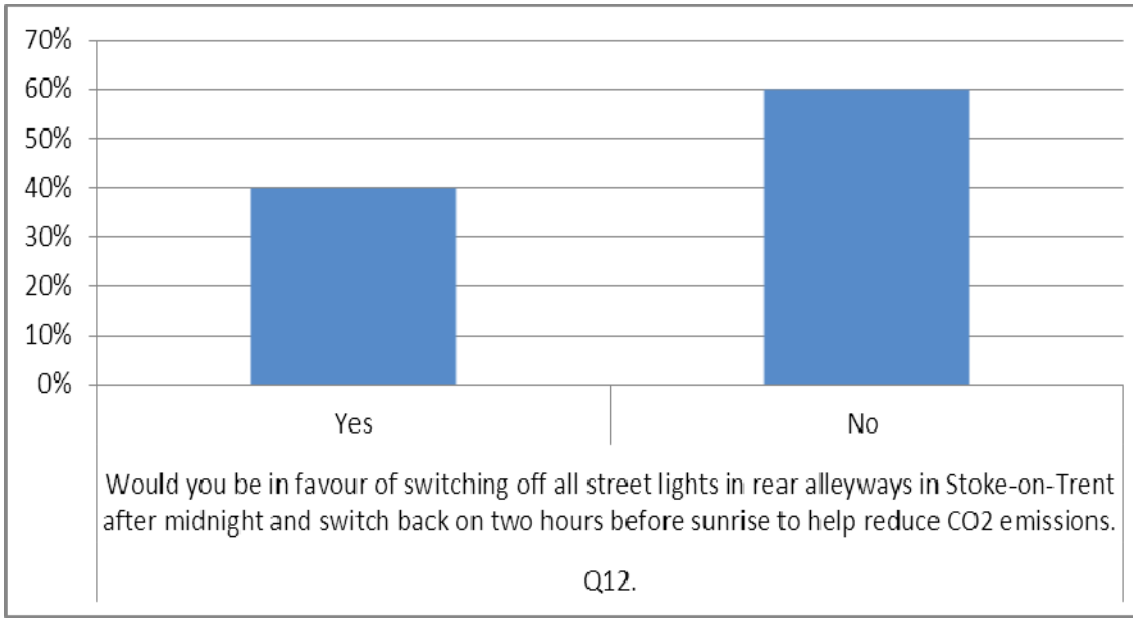
Would you be in favour of switching off all the lights on the main roads in Stoke on Trent after midnight and back on two hours before sunrise?	% of respondents
Yes	34%
No	66%



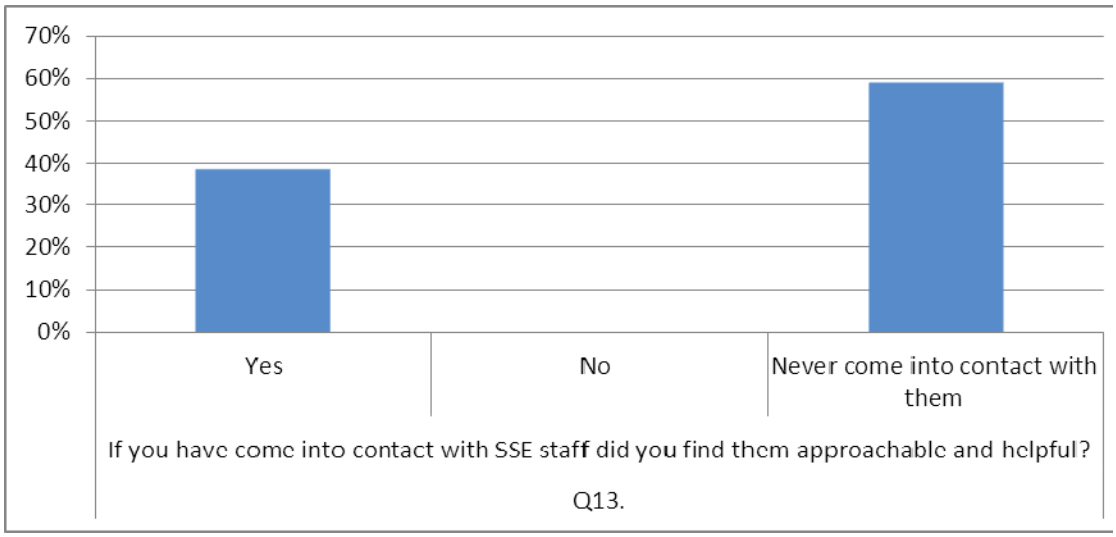
Would you be in favour of switching off all street lights in rear alleyways in Stoke on Trent?	% of respondents
Yes	34%
No	66%



Would you be in favour of switching off all street lights in rear alleyways after midnight and back on two hours before sunrise?	% of respondents
Yes	40%
No	60%



If you have come into contact with SSE staff did you find them approachable?	% of respondents
Yes	39%
No	0%
Never come into contact	61%



11 – CONTINUOUS IMPROVEMENT

Website

SSE's website www.lightsoninstoke is now linked directly to our Facilities Management system to enable easier and more accurate reporting.

The website is regularly visited by the public to report faults, find information and to leave comments.

Night scouting

As part of our service improvement SSE has a full time night scout dedicated to patrolling the city after dark. All ten areas of Stoke on Trent are covered on a rota, each area being patrolled once every fortnight in Winter and once every four weeks in Summer as required by our contractual agreement. SSE have enhanced this service by scouting every two weeks during the Summer instead of every four. This ensures that any illuminated items of street furniture that are out of lighting and not reported by the general public are logged at the time of inspection and repaired within five working days.

The scouting vehicle is equipped with a portable fault logging system which is directly linked to our FM reporting database.

APPENDIX 1

Street Lighting Carbon Emissions & Energy Efficiency Response Paper for Stoke On Trent City Council

Prepared by

Executive Summary

▪ The Council and SSE Contracting have held discussions regarding the need and desire of both parties to reduce energy consumption relating to street lighting in Stoke on Trent.

▪ A number of specific technical proposals have previously been discussed with the Council including the contractual mechanisms to make a change in the Project.

▪ SSE Contracting would self fund, at no additional cost to the Council, the capital cost of two of these options as detailed in Annex 1. Further discussions with the Council will be required to determine any change or approach to adopt.

Current Project Proposals for Residential Areas.

▪ SSE Contracting has been in discussions with manufacturers and our PFI lighting designers at Stoke and have developed a number of options including LED technologies and/or retrofitting electronic dimmable control gear and white light.

▪ SSE Contracting and the Council have agreed a trial site area for these different light sources. These then can be monitored and assessed by the Council such that, jointly, the most appropriate solution for specific areas of the city can be identified.

▪ Following the identification of the Council's preferred solution, SSE Contracting would further investigate the impact of the solution for inventory-wide implementation across residential areas. This would include modelling the necessary forecast energy savings, capital funding requirements and implementation timescales.

▪ **The Trial Site**

▪ In association with the Council an agreed trial site area has been established. This area includes Penkville Street Back Lane, Shelburne Street, Boothenwood Terrace, Munro Street and James Street.

▪ These will result in changing the existing units to a white light source and using BS5489 – 2013. To assist the evaluation and differentiate between high and low crime areas we propose that different adjacent streets will have different LED solutions.

▪ It is proposed to install the trial area lanterns with Mayflower CMS controls such that, in addition to the trial of the lighting units themselves, detailed trials of potential residential dimming regimes can be flexibly and cost effectively undertaken to assess residents reactions before adopting any proposals city-wide.

▪ **Traffic Routes**

SSE Contracting is also prepared to investigate options for traffic routes.

Introduction

SSE Contracting has researched and investigated the following carbon emission & energy saving options for the Council:-:

- Replacing residential lanterns with Energy efficient LED lighting
- Retro-fitting electronic control gear and white light – Options utilising Philips and Osram equipment
- Traffic Route Lantern retrofitting control gear and lamp options

Indicative Energy Savings

The calculation tables contained within each option demonstrates the energy savings across all residential areas currently fitted with SON lamps. Each of the figures is annual and based on implementation of the full quantity of replacements referred.

Energy price is based on 9.893p/KWh, the current buying price. CO_2 savings to the Council are also shown.

Savings are calculated on the basis total savings and do not take account of any sharing mechanisms which may exist in the contract.

Capital costs do not include any funding/borrowing costs, should this be required.

The payback period is calculated on the basis that all apparatus has been installed and full savings are achieved, however there will of course be a gradual increase in savings during the replacement period, which is not factored into these calculations.

Residential Technical Options

Option 1 – Retro-fitting existing Residential Luminaire with LED light source

Philips has developed a retro-fit LED module for the Iridium luminaire. Design work utilising BS5489 – 2013 has been carried out for both high and low crime areas using an ECO 24LED and GRN 16LED option respectfully. The trial should demonstrate whether an LED solution can be applied to both high and low crime areas.

A cost analysis and energy saving indication for the trial area is detailed below;

	Cost/Benefit
Capital Replacement Quantity	21,000
Capital Replacement Unit Cost	£186.96
Total Capital Cost	£3,926,000
Energy Saving Per Year (Kwh)	5,164,184 Kwh

Annual CO_2 Saving	2,773 Tonnes
Energy Saving Per Year (£)	£510,892
Payback Period	7.7 yrs

The calculation above is based on the number of existing luminaire conversions detailed in table 3 below:

Table 3: LED conversions

Luminaire Conversions	
Lamp Source	**Quantity**
70w SON	17,000
50w SON	4,000
Total	**21,000**

Option 2 – Alternative to LED, replacing Existing Control Gear and Lamp Source

We propose two different options for consideration;

Option 2a

Philips has now introduced an 'Edison Screw' version of their Cosmopolis lamp. This will retro-fit into the existing 50 watt and 70 watt SON lanterns. Photometric performance is currently being assessed. This option will include replacing the existing magnetic control gear with electronic 45 watt and 60 watt dimmable gear and lamps. Anticipated costs and energy savings are indicated below;

	Cost/Benefit
▪ Capital Replacement Quantity	▪ 21,000
▪ Capital Replacement Unit Cost	▪ £91.52
▪ Total Capital Cost	▪ £1,922,000
▪ Energy Saving Per Year (Kwh)	▪ 2,000,372 Kwh
▪ Annual CO_2 Saving	▪ 1,074 Tonnes
▪ Energy Saving Per Year (£)	▪ £197,896
▪ Payback Period	▪ 9.7yrs

The calculation above is based on the number of luminaire conversions detailed in table 3 below:

Table 3: Control Gear Lamp conversions

Luminaire Conversions	
Lamp Source	**Quantity**
70w SON	17,000
50w SON	4,000
Total	**21,000**

Option 2 b

The second option is to trial the Osram 'Powerball HCI-TT' 50 watt and 70 watt lamp and Powertronic Ballast. As above, photometric performance is currently being assessed. Anticipated costs and energy savings are indicated below;

▪	▪ Cost/Benefit
▪ Capital Replacement Quantity	▪ 21,000
▪ Capital Replacement Unit Cost	▪ £71.74
▪ Total Capital Cost	▪ £1,506,500
▪ Energy Saving Per Year (Kwh)	▪ 1,625,500 Kwh
▪ Annual CO_2 Saving	▪ 873 Tonnes
▪ Energy Saving Per Year (£)	▪ £160,811
▪ Payback Period	▪ 9.4 yrs

▪ The calculations above are based on the number of luminaire conversions detailed in table 2 below:

Table 2: Lamp/control gear conversions

Luminaire Conversions	
Lamp Source	**Quantity**
70w SON	17,000
50w SON	4,000
Total	**21,000**

Traffic Route Lantern Retrofit Technical Options

An evaluation was previously carried out for Leek New Road. This involved looking into retro-fitting of Cosmopolis and fitting of electronic control gear.

The Cosmopolis option was not viable due to fitting of the lamp and suitability into existing optic. The Philips Edison Screw Cosmopolis lamp may now be a realistic option for traffic routes. We are already actively pursuing this possibility with Philips. Currently there is very limited information and photometric data available. Upon receipt of required information to carry out an evaluation we will explore this option in more detail with the Council.

Retro-fitting of electronic control gear to existing lanterns and lamp source may now be more viable with increased performance and reduced costs of electronic control gear and lamp. For this option to be truly viable, dimming should be considered. This option needs further discussion with the Council to agree a proposal with regard to an acceptable dimming level/regime.

Next Steps

SSE Contracting invites the Council to approve the proposals for the trial area and to agree the timescales for both installation and the necessary monitoring and resident consultation and feedback sessions to identify the most appropriate solutions to adopt city wide. This to include and consider dimming options which may be appropriate for city wide implementation.

SSE Contracting is prepared fully to fund the residential trials, including the Mayflower installations within the existing PFI contractual frameworks. Contractual and funding options for a city-wide implementation of the solutions identified will be considered when the balance of capital cost and energy and carbon savings are fully established following assessment of the results of the trial. These assessments will need to include dimming options.

In addition, further discussions are proposed for achieving energy and carbon savings in relation to the traffic routes.

The Council is further invited to consider whether it wishes to pursue any bollard retro-fit or part night lighting options

Annex 1

Previous Technical Options Considered

The previous proposal's referred to are:

1 – Installing Photo-Electric Cells in Bollards

2 – Part-Night Lighting on Back Lanes

3 - De-illuminating Traffic Bollards

1. Installing Photo-Electric Cells (PEC's) in Bollards

Currently Illuminated Bollards are illuminated continuously. The table below indicates energy savings if fitting Infra Red (IR) PEC's to illuminated bollards so that they are off during daylight hours. This option will incur an additional annual maintenance rate to cover possible PEC failure.

	Cost/Benefit IR PEC
Capital Replacement Quantity	*1,230*
Average Capital Replacement Unit Cost	*£26.23*
Total Capital Cost	*£32,263*
Energy Saving Per Year (Kwh)	*127,449 Kwh*
Annual CO_2 Saving	*68.44 Tonnes*
Energy Saving Per Year (£)	*£12,608*
Additional Annual Maintenance	*+£1,181*
Payback Period	*2.82yrs*

2. Part-night lighting on back lanes

All back lane lanterns in Stoke-on-Trent are switched on/off using a 75/35 Lux Switching regime. Replacing the existing photocell with one which switches lights on during the early evening, but then off during the middle of the night, and switches lights back on in the morning has energy saving benefits. The new Part Night switching regime significantly reduces the number of hours the street light is in-light during the year and therefore saves money. This may not be publically acceptable and following the previous report is still subject to further discussion with the Council.

The Part Night switching regime used for this calculation is – Regime 762 Dusk to 24.00 / 05.30 to Dawn 35 Lux. This has been applied to all back lane lanterns with a

PL light source. This would achieve a benefit in energy saving of 157,814Kwh or £15,513 respectively per year in comparison to the PECU Array consumption. It is proposed that the PEC replacement would take place at planned maintenance visits i.e. bulk lamps change/clean. To assist evaluation and feedback it is proposed to include a trial site in the trial site area.

	Cost/Benefit
Capital Replacement Quantity	2,380
Capital Replacement Unit Cost	£15.68
Total Capital Cost	£37,301
Energy Saving Per Year (Kwh)	157,814 Kwh's
Annual CO_2 Saving	84.75 Tonnes
Energy Saving Per Year (£)	£15,513
Payback Period	2.4 years

The calculation above is based on the number of lanterns installed as shown in table 1:

Table 1: Luminaires installed

Luminaires Installed		
Lamp Source	**Manufacturer**	**Quantity**
36w PLL	Philips	279
24w PLL	Philips	2,101
	Total	**2,380**

3. De-Illuminating Traffic Bollards and Alternative Light Sources

With most bollards already having been replaced during the CIP, the proposal to replace Illuminated Traffic Bollards with Single Aspect Non-Illuminated Traffic Bollards where the revised Traffic Regulations permit, globally across the project area did not prove cost effective.

Further discussion is required with the Council on a site by site basis should the Council still wish this option to be considered.

With regard to on-going bollard replacements as and when illuminated bollards become life expired, full de-illumination, de-illumination during day light hours and alternative light source compared to standard project apparatus will be considered. Should LED be the preferred option then further discussion will be required on how to adopt into the project. The light unit will be more expensive and annual maintenance costs will be different. An agreed process with be required to cover any additional capital costs to SSE Contracting.

APPENDIX 2

SSE Contracting PFI Street Lighting Questionnaire

City of Stoke-on-Trent

1) Do you think that the new street lighting installed throughout the City of Stoke on Trent has improved safety and the general environment?

    a. Yes
    b. No
    c. If no, why?

2) Are you aware that SSE have a web site where you can report street lighting?

    a. Yes
    b. No

3) Are you aware that SSE has a free phone number where you can report street lighting?

    a. Yes
    b. No

4) If you have reported a street lighting fault within Stoke-on-Trent how did you report it?

    a. Using SSE's free phone number
    b. Using SSE's web site
    c. Other, please state

5) When you have reported a fault on a street light do you think that repair was carried quickly?

    a. Yes
    b. No
    c. If not, why not.

6) What do you consider is a reasonable time from when you report a street lighting fault to when it is repaired?

7) Would you been in favour of switching off all the street lights off in Stoke-On-Trent City to help reduce CO2 emissions.

   a. Yes
   b. No

8) Would you been in favour of switching off all the street lights off in Stoke-On-Trent City after midnight and switch back on two hours before sunrise to help reduce CO2 emissions.

   a. Yes
   b. No

9) Would you be in favour of switching off all the street lights on the main roads in Stoke-on-Trent to help reduce CO2 emissions?

   a. Yes
   b. No

10) Would you been in favour of switching off all the street lights on the main roads in Stoke-On-Trent City after midnight and switch back on two hours before sunrise to help reduce CO2 emissions?

   a. Yes
   b. No

11) Would you be in favour of switching off all street lights in rear alleyways in Stoke-on-Trent to help reduce CO2 emissions?

   a. Yes
   b. No

12) Would you be in favour of switching off all street lights in rear alleyways in Stoke-on-Trent after midnight and switch back on two hours before sunrise to help reduce CO2 emissions?

   a. Yes
   b. No

13) If you have come into contact with SSE staff did you find them approachable and helpful?

a. Yes
b. No
c. Never come into contact with them

14) Do you have any comments regarding street lighting?

APPENDIX 3

Highway Maintenance

How satisfied or dissatisfied are you with Highway Maintenance in your local area...?

Comparison with NHT Average

This graph shows Stoke on Trent satisfaction scores for Highway Maintenance compared with the NHT Surrey County Council Average scores. This report uses the weighted Benchmarking Indicators.

Net Satisfaction

This graph shows the % of Stoke on Trent respondents that were very or fairly satisfied with Highway Maintenance generally against those that were fairly or very dissatisfied (uses unweighted data)

Response Analysis

This graph shows a breakdown of the Stoke on Trent resident responses to questions about Highway Maintenance in general.