

Street Lighting Select Committee

Final Report Structure

Background - Reasons for the Review

- Scope etc

Summary of Evidence

- Scene setting report
- Procurement process
- Accident and crime implications of part night lighting
- Part night lighting
- Institution of Lighting Engineers

Issues Arising from the Evidence

Recommendations

Background

On 26 March 2007, the Overview and Scrutiny Committee commissioned a Select Committee to examine the issues of street lighting repair performance by E-ON (Central Networks). This review concluded on 11 June 2007. Further to the review the Overview and Scrutiny Committee at its meeting on 21 May 2007, commissioned a wider review – **To identify and feed into emerging areas of street lighting policy development as well as examine existing policies.** The review links to priorities around carbon management, road safety and crime reduction issues.

The final meeting of the Select Committee is scheduled for the 21 January 2008, when a final report will be agreed.

Summary of Evidence:

Select Committee Meetings

The Select Committee commenced its review on the 17 September 2007 with a scene setting presentation from Gary Wood, Service Manager, Policy and Standards, which outlined the County Council's goals, objectives and policies for street lighting. The overall purpose for the street lighting asset as described in the County Councils Street Lighting Code of Practice is:

to ensure the safety of all road users and pedestrians, reduce fear of crime and give a feeling of security to the public in the hours of darkness.

In order to achieve the above strategic goals a number of specific objectives are identified:

- reduce the percentage of street lamps not working as planned
- improve the speed of response to repair street lighting faults
- replace dangerous/poor condition street lighting columns
- upgrade street lighting to improve pedestrian and road user safety

- develop a long term funding strategy for street lighting
- reduce CO² emissions through energy conservation, use of green energy where appropriate and use of suitable new technologies.

The Select Committee were informed that there is no statutory requirement to provide street lighting; however, there is a duty to improve road safety and to combat crime. Measures to address both these issues include the provision of street lighting for road users, pedestrians and local residents.

Currently there are 88,807 street lighting columns in Nottinghamshire the majority of which are steel or concrete with a very small proportion being some other type of column or fixing. These have three lighting sources, SOX (low pressure sodium – orange light) which are less efficient in their colour rendering properties compared to SOX (high pressure sodium – peach coloured) and white light. An inventory of columns and assets is stored electronically on a computer database.

The current demands and conflicts on the Highways Lighting Asset are:

- a safely lit highway
- reduction in fear of crime
- avoidance of light pollution
- cost effective lighting systems
- sustainable lighting systems and energy
- environmental surroundings, e.g. conservation areas.

Future demands include:

- growing highway lighting stock
- increasing energy costs
- the need to reduce carbon dioxide emissions
- consideration of the Institute of Lighting Engineers “Invest to Save “ document
- requirement to move to a risk based inventory and a new national performance indicator based on this

- revision of the NCC Code of Practice for street lighting in light of the new ILE Code of Practice
- moving the inventory from the SLIMS database over to 'CONFIRM' (The County's Highways Asset Management System)

At the second meeting on 22 October 2007 Allan Allsop, Principal Officer, Energy Management, introduced a report on the authority's procurement of electricity and carbon management in relation to street lighting. He discussed the importance of purchasing electricity at the right time to obtain the best possible price for the County Council. These procedures used are in line with 'best practice' recommendations from the Office of Government and Commerce and are fully compliant with EU procurement regulations. Street lighting contributed 16% (19,000 tonnes) of the council's carbon dioxide emissions, with the purchase of green and Combined Heat and Power (CHP) generated electricity this reduced to 12,000 tonnes. Green electricity is generated from renewable sources.

Options that could possibly be explored when considering recommendations include:

- **consider the amalgamation of buildings and street lighting electricity contracts which would achieve a more balanced load profile. This could yield savings, however it would be dependant upon the type of profile suppliers are looking for at the time of the tender.**
- **a 3 Counties (Notts/Derbys/Leics) purchasing alliance for street lighting electricity supply**
- **consider a benchmarking exercise with the Centre of Excellence.**

The County Council's Carbon Management Plan identifies proposals for reducing emissions and identifies the priorities of:

- reducing the need for energy
- using electricity efficiently
- moving to using renewable energy.

To achieve further reductions beyond those identified by the plan would require additional expenditure.

If the Committee were to consider a recommendation to reduce carbon emissions by purchasing green electricity it would have to consider undertaking additional revenue expenditure.

Suzanne Heydon, Team Manager, Accident Investigation introduced a report on the implications of part night street lighting on road accidents and outlined the County Council's obligations and responsibilities. She explained that the County Council has a statutory responsibility to provide a safe and efficient highways network for the benefit and safety of all road users. Part night lighting has been considered by several highways authorities across the country in an attempt to reduce CO2 emissions, be more energy efficient and generate savings in energy costs. However the potential increase in road accidents has been highlighted, around 33% of accidents occur during the hours of darkness and the introduction of street lighting and improvement to existing lighting has been an effective countermeasure.

Any increase in night time lighting accidents resulting from a reduction in lighting provision will affect the County Council's performance against national performance indicators.

It was noted that the criteria for lighting signs and bollards has changed over time and there may be some scope through changes to legislation to consider reductions.

Inspector Dean Brown, Nottinghamshire Police, gave evidence about how lighting can be used to prevent crime; he also indicated that by reducing levels of lighting people perceptions of crime could increase as well as actual levels of crime.

At the meeting on the 26 November 2007 the Chair welcomed Lawrence McKeogh County Roads Manager, Highways and Transport and Keith Tovee Principal Engineer, Street Lighting from Essex County Council. Mr McKeogh gave a presentation about Essex's pilot project for part-night lighting, which had started in two of the county's districts. A

number of energy saving options had been considered before deciding that, for a small capital investment, part-night lighting gave the best value for money and reduction in CO² emissions. Part-night photocells were predicted to give energy cost savings of 29% with a return on investment over 3 to 4 years. Two districts with a mix of urban and rural areas were chosen for the pilot, and extensive consultation was carried out. Initial press coverage was negative, though an on-line opinion poll by a local paper had showed 80% in favour of the project.

The pilot project started in April 2006. Mr McKeogh explained that before implementation, a list of exception criteria (for locations where lighting would continue all night) was drawn up, and a wide-ranging risk assessment carried out. New photocells were installed on a phased basis, which would turn off the street lights from approximately 12 midnight to 5.00 am GMT. A joint monitoring group has been reviewing the project's success. Accident statistics have showed no increase in recorded accidents during the hours without lighting, and crime figures were inconclusive.

The Select Committee also received an update on the lighting of signs and bollards from the Communities Department. To remove lighting from some units it would be necessary to determine how many units would be affected and assess the potential costs and benefits but it was indicated that the annual saving per unit would be in the region of £4.00

Evidence received from the Institution of Lighting Engineers

To be completed

Issues Arising from the Evidence

Recommendations

- 1. The Select Committee after taking evidence recommends that the County Council considers:**

- the amalgamation of buildings and street lighting electricity contracts which would achieve a more balanced load profile. This could yield savings, however it would be dependant upon the type of profile suppliers are looking for at the time of the tender.
- forming a 3 Counties (Notts/Derbys/Lincs) purchasing alliance for street lighting electricity supply
- undertakes a benchmarking exercise with the Centre of Excellence
- reduces carbon emissions by purchasing green electricity. This would require that the Council would need to consider the possibility of a new funding resource to make this happen.

2. The Select Committee considers the above and/or recommends that the County Council explores the possibility of introducing a part night lighting pilot scheme in an area of Nottinghamshire.