



Joint Street Lighting Committee

18 September 2017

Street Lighting PFI Performance Report for 1 July 2016 to 30 June 2017

Report by: Paul Nelson, Environmental Sustainability and Street Lighting Manager, North Tyneside Council

Ward Implications: All

For Information

1. Summary

- 1.1 At its meeting in August 2016, Joint Street Lighting Committee agreed that officers should review the performance information presented in this report to ensure it is meaningful and prioritises the most useful information. For example, committee agreed that the report should include a section on electricity consumption, something that had previously not been included.

This report therefore details the performance of the service provider between July 2016 and June 2017 and includes additional details on electricity consumption, spend and reduction programmes.

2. Recommendation

- 2.1 Committee is recommended to receive this report for information and note the comments on performance.

3. Introduction/Background

- 3.1 This report covers the period between the 1 July 2016 until the 30 June 2017 and outlines performance against a number of contract performance standards and local indicators.

4. Key Issues and Progress

4.1 Contract Monitoring General Comments

- 4.1.1 There are a small number of instances when the time taken to repair a fault by the District Network Operator (Northern Powergrid) exceeded the 30 day target. There are no instances when the time taken to repair a fault by SSE exceeded the 5 day target.

There are no other performance concerns to highlight. The performance standards are detailed in Appendix 1.

4.2 **Performance Standard 1** – Monitors the Initial Asset Renewal Programme (IARP);

As we are now beyond the IARP period, PS1 now shows the total number of street lighting apparatus in each Local Authority area.

4.3 **Performance Standard 2** – Monitors the percentage of lighting apparatus in lighting across the month. Example values are given. Contract targets are being met.

4.4 **Performance Standard 3** – Monitors responsiveness to repairing faults;

- Criteria A – Emergency response currently achieving 100% attendance within one hour.
- Criteria B – Performance in this area is satisfactory.

4.5 **Electricity consumption and spend;**

Both Authorities are consuming less electricity than the contractual forecast. Commentary is given on progress towards making further efficiencies through the introduction of LED lighting.

4.6 **Financial**

4.6.1 Contract payment is by means of a unitary charge which would be subject to deductions and penalties for poor performance. Details of the payments and penalties are detailed in the confidential Finance Report.

5. **What Happens Next**

5.1 Six monthly performance reports will be presented at future Joint Street Lighting Committee meetings. The 2018 timetable is to be confirmed.

6. **Further Information**

6.1 Background papers are held by;

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North Tyneside Council



JOINT STREET LIGHTING COMMITTEE

**PFI Progress Report for 1st July 2016
to 30th June 2017**

Performance Standard 1 - Total Number of Street Lighting Apparatus

| Month | Newcastle | North Tyneside |
|----------------|----------------------------------|----------------------------------|
| | No. of street lighting apparatus | No. of street lighting apparatus |
| July 2016 | 39,955 | 30,773 |
| August 2016 | 39,969 | 30,756 |
| September 2016 | 39,977 | 30,782 |
| October 2016 | 40,000 | 30,775 |
| November 2016 | 40,029 | 30,783 |
| December 2016 | 40,046 | 30,786 |
| January 2017 | 40,056 | 30,798 |
| February 2017 | 40,073 | 30,822 |
| March 2017 | 40,314 | 31,111 |
| April 2017 | 40,323 | 31,141 |
| May 2017 | 40,334 | 31,147 |
| June 2017 | 40,327 | 31,150 |

Performance Standard 2

| Month | Newcastle | | North Tyneside | |
|----------------|-------------------------------------|---------------------------------------|-------------------------------------|---------------------------------------|
| | % of Apparatus in Lighting (Target) | % of Apparatus in Lighting (Achieved) | % of Apparatus in Lighting (Target) | % of Apparatus in Lighting (Achieved) |
| | July 2016 | 98.50% | 99.80% | 98.50% |
| August 2016 | 98.50% | 99.76% | 98.50% | 99.78% |
| September 2016 | 98.50% | 99.60% | 98.50% | 99.64% |
| October 2016 | 98.50% | 99.52% | 98.50% | 99.53% |
| November 2016 | 98.50% | 99.67% | 98.50% | 99.48% |
| December 2016 | 98.50% | 99.62% | 98.50% | 99.68% |
| January 2017 | 98.50% | 99.69% | 98.50% | 99.66% |
| February 2017 | 98.50% | 99.78% | 98.50% | 99.62% |
| March 2017 | 98.50% | 99.68% | 98.50% | 99.49% |
| April 2017 | 98.50% | 99.82% | 98.50% | 99.64% |
| May 2017 | 98.50% | 99.78% | 98.50% | 99.64% |
| June 2017 | 98.50% | 99.77% | 98.50% | 99.60% |

The performance is calculated in the following way, using July 16 as an example;

| | Newcastle | North Tyneside |
|--|-----------|----------------|
| The total number of units in the area | 39955 | 30773 |
| The total number of days in the month | 31 | 31 |
| The total number of units that failed | 302 | 418 |
| The number of days in the scouting period | 31 | 31 |
| The average number of days to repair a fault | 1.62 | 1.52 |

The above values are input into a deduction formula and an output value is obtained. If the value is equal to or exceeds 98.5% there is no deduction.

Performance Standard 3 Emergency Faults Criteria A

| Month | Newcastle | | North Tyneside | |
|---|-------------------------------------|--|-------------------------------------|--|
| | Number of Emergency responses | Number of Emergency responses attended within 1 hour | Number of Emergency responses | Number of Emergency responses attended within 1 hour |
| July 2016 | 10 | 10 | 11 | 11 |
| August 2016 | 14 | 14 | 6 | 6 |
| September 2016 | 17 | 17 | 5 | 5 |
| October 2016 | 12 | 12 | 8 | 8 |
| November 2016 | 20 | 20 | 11 | 11 |
| December 2016 | 11 | 11 | 4 | 4 |
| January 2017 | 15 | 15 | 6 | 6 |
| February 2017 | 14 | 14 | 10 | 10 |
| March 2017 | 16 | 16 | 10 | 10 |
| April 2017 | 8 | 8 | 7 | 7 |
| May 2017 | 11 | 11 | 9 | 9 |
| June 2017 | 6 | 6 | 9 | 9 |
| Number of Hours in excess of the 1 hour response time | 0 | | 0 | |

PERFORMANCE STANDARD 3 Criteria B

Newcastle repairs performance

| | SSE repairs - Target 5 working days | | | | | | Northern Powergrid repairs - Target 30 working days | | | | |
|--------|-------------------------------------|-------------------------------|-----------------|---------|----------|--|---|-------------------------------|-----------------|---------|----------|
| | Number of faults / instances | Number repaired within target | % within target | Av time | Max time | | Number of faults / instances | Number repaired within target | % within target | Av time | Max time |
| Jul-16 | 302 | 302 | 100% | 1.62 | 5 | | 5 | 5 | 100% | 17.40 | 19 |
| Aug-16 | 337 | 337 | 100% | 1.70 | 5 | | 8 | 7 | 88% | 35.13 | 112 |
| Sep-16 | 448 | 448 | 100% | 2.13 | 5 | | 9 | 9 | 100% | 19.44 | 26 |
| Oct-16 | 517 | 517 | 100% | 2.24 | 5 | | 13 | 13 | 100% | 18.08 | 29 |
| Nov-16 | 392 | 392 | 100% | 2.04 | 5 | | 10 | 10 | 100% | 16.00 | 20 |
| Dec-16 | 418 | 418 | 100% | 2.16 | 5 | | 6 | 6 | 100% | 11.17 | 13 |
| Jan-17 | 429 | 429 | 100% | 1.73 | 5 | | 7 | 4 | 57% | 28.33 | 49 |
| Feb-17 | 305 | 305 | 100% | 1.70 | 5 | | 14 | 13 | 93% | 20.29 | 143 |
| Mar-17 | 422 | 422 | 100% | 1.83 | 5 | | 15 | 14 | 93% | 18.23 | 149 |
| Apr-17 | 274 | 274 | 100% | 1.57 | 4 | | 5 | 4 | 80% | 17.80 | 53 |
| May-17 | 305 | 305 | 100% | 1.72 | 4 | | 5 | 5 | 100% | 19.40 | 29 |
| Jun-17 | 359 | 359 | 100% | 1.53 | 4 | | 7 | 7 | 100% | 22.57 | 26 |

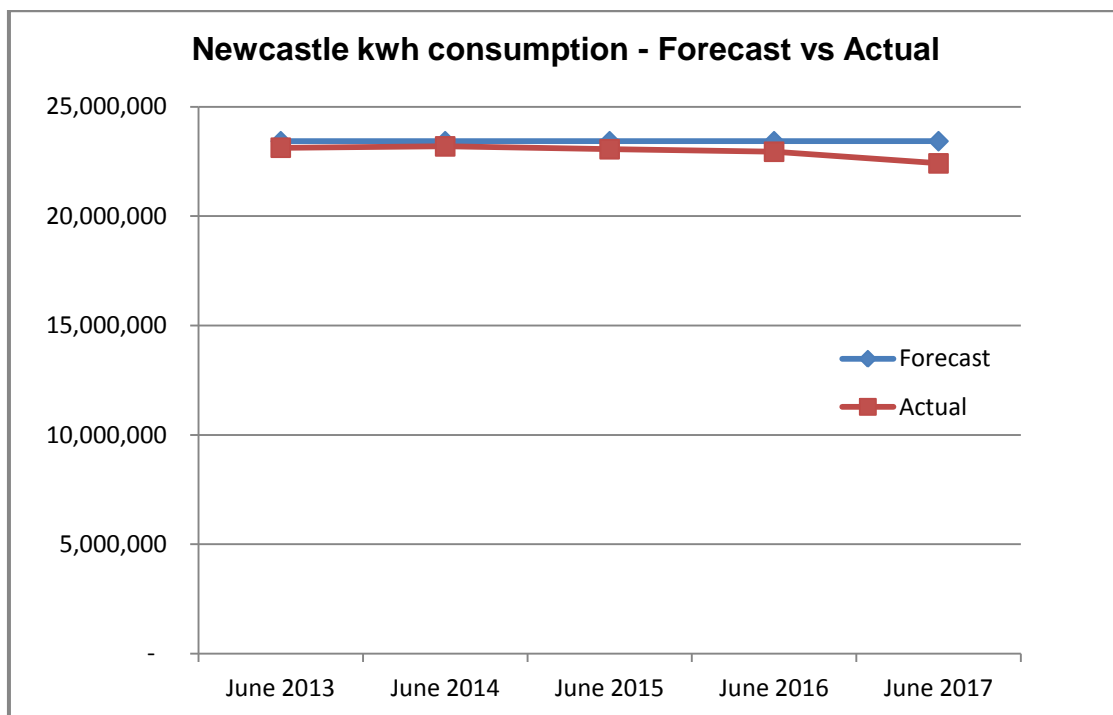
PERFORMANCE STANDARD 3 Criteria B

North Tyneside repairs performance

| | SSE repairs - Target 5 working days | | | | | | Northern Powergrid repairs - Target 30 working days | | | | |
|--------|-------------------------------------|-------------------------------|-----------------|---------|----------|--|---|-------------------------------|-----------------|---------|----------|
| | Number of faults / instances | Number repaired within target | % within target | Av time | Max time | | Number of faults / instances | Number repaired within target | % within target | Av time | Max time |
| Jul-16 | 418 | 418 | 100% | 1.52 | 4 | | 5 | 5 | 100% | 18.60 | 24 |
| Aug-16 | 192 | 192 | 100% | 2.15 | 5 | | 9 | 9 | 100% | 23.57 | 27 |
| Sep-16 | 324 | 324 | 100% | 2.06 | 5 | | 6 | 6 | 100% | 22.83 | 25 |
| Oct-16 | 483 | 483 | 100% | 1.81 | 5 | | 8 | 8 | 100% | 19.00 | 25 |
| Nov-16 | 309 | 309 | 100% | 3.11 | 5 | | 9 | 9 | 100% | 16.00 | 18 |
| Dec-16 | 323 | 323 | 100% | 1.84 | 5 | | 6 | 6 | 100% | 16.83 | 25 |
| Jan-17 | 275 | 275 | 100% | 2.31 | 5 | | 7 | 7 | 100% | 17.86 | 22 |
| Feb-17 | 319 | 319 | 100% | 2.18 | 5 | | 8 | 8 | 100% | 18.63 | 25 |
| Mar-17 | 402 | 402 | 100% | 2.39 | 5 | | 7 | 7 | 100% | 13.57 | 26 |
| Apr-17 | 320 | 320 | 100% | 2.12 | 4 | | 5 | 4 | 80% | 41.40 | 185 |
| May-17 | 415 | 415 | 100% | 1.61 | 4 | | 4 | 4 | 100% | 14.25 | 20 |
| Jun-17 | 418 | 418 | 100% | 1.81 | 5 | | 7 | 6 | 86% | 82.57 | 460 |

Newcastle Electricity Consumption

| 12 months to; | Jun-13 | Jun-14 | Jun-15 | Jun-16 | Jun-17 |
|---|------------|------------|------------|------------|-------------------|
| Forecast consumption kwh | 23,427,356 | 23,427,356 | 23,427,356 | 23,427,356 | 23,427,356 |
| Actual consumption kwh | 23,129,187 | 23,190,208 | 23,059,262 | 22,945,520 | 22,413,025 |
| Difference kwh | - | - | - | - | - |
| | 298,169 | 237,148 | 368,094 | 481,836 | 1,014,331 |
| Actual Energy Cost | £2,207,579 | £2,307,249 | £2,346,898 | £2,440,455 | £2,476,578 |
| Forecast cost at current unit rate | | | | | £2,623,161 |
| Avoided costs | | | | | £146,583 |



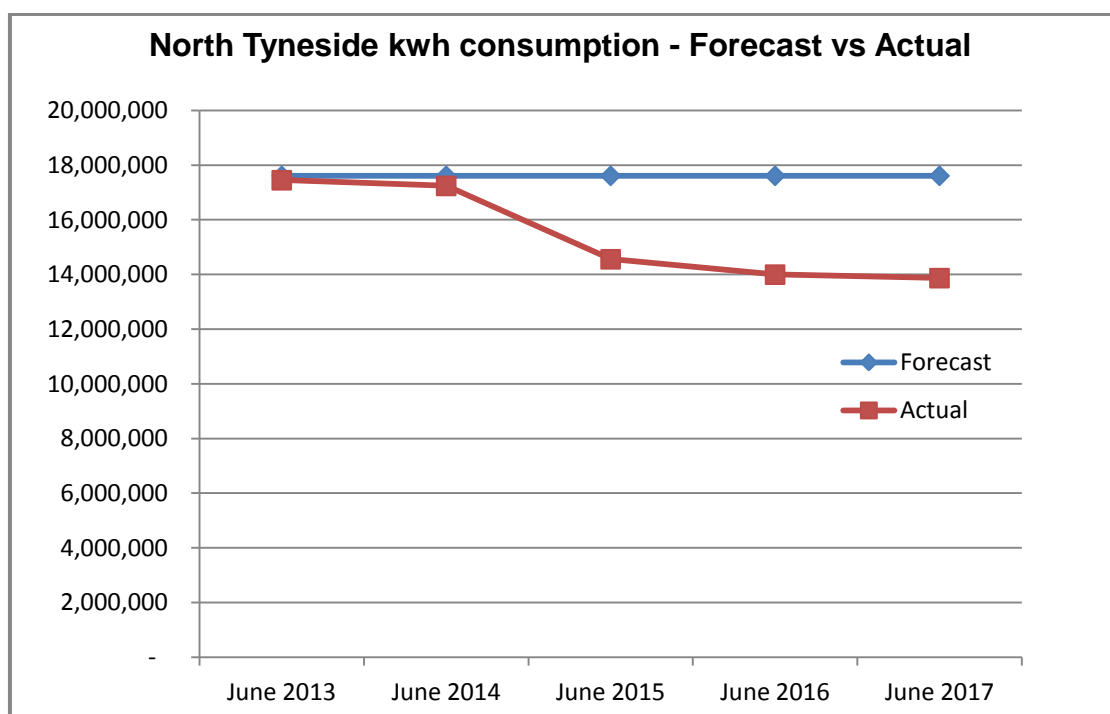
The table and graph above show the electricity consumption forecast included in the contract with SSE and the actual billed electricity consumption to the Council. Following the scheme that introduced some dimmed lighting to housing estates in the City and brought consumption down to the contractual cap, Newcastle's electricity consumption has been fairly stable.

Had the Council been consuming the forecast electricity of 23,427,356 kwh's at the current unit rate, it would be paying £147k extra in electricity charges.

Furthermore, officers are currently developing the business case to replace all street lamps across the City which will deliver significant kwh and financial savings.

North Tyneside Electricity Consumption

| 12 months to; | Jun-13 | Jun-14 | Jun-15 | Jun-16 | Jun-17 |
|---|------------|------------|------------|------------|-------------------|
| Forecast consumption kwh | 17,611,959 | 17,611,959 | 17,611,959 | 17,611,959 | 17,611,959 |
| Actual consumption kwh | 17,450,782 | 17,242,766 | 14,559,967 | 13,997,515 | 13,870,521 |
| Difference kwh | 161,177 | 369,193 | 3,051,992 | 3,614,444 | 3,741,438 |
| Actual Energy Cost | £1,667,454 | £1,720,218 | £1,477,701 | £1,481,497 | £1,556,902 |
| Forecast cost at current unit rate | | | | | £2,005,122 |
| Avoided costs | | | | | £448,220 |



The table and graph above show the electricity consumption forecast included in the contract with SSE and the actual billed electricity consumption to the Council. North Tyneside Council has enjoyed significant kwh consumption savings through its dimming, trimming and part night switch off programmes, as witnessed from June 2014 to June 2015.

Had the Council been consuming the forecast electricity of 17,611,959 kwh's at the current unit rate, it would be paying £448k extra in electricity charges.

Furthermore, starting in June 2017, the Council is installing LED lighting to 7300 columns and this will further reduce consumption and produce almost £500k in energy, maintenance and carbon charges.