

DELEGATED ITEM

Purchase of Voltage Optimisation equipment for Oldham Council– Corporate Carbon Reduction Activity

Report to Elaine McLean, Executive Director Economy, Place and Skills

Portfolio Responsibility: Cllr Dave Hibbert, Housing, Transport and Regeneration

November 2011

Officer Contact : Justine Collins
Ext. 3439

Purpose of Report

- To seek approval to purchase voltage optimisation technology (also known as power factor correction equipment) at two schools and an office location.
- To agree to receive a £20k grant that will part fund the installation of the Voltage optimisation equipment.
- To request that the balance of funding (£16,939) to undertake the full three site based project can be allocated from the existing corporate carbon reduction programme within the approved councils capital programme

Executive Summary

Oldham Council has secured a £20k grant from The North West Improvement Efficiency Partnership (NWEIP) to trial voltage optimisation equipment at three sites.

The technology optimizes voltage, dealing with the discrepancy between the actual supply voltage we receive into the building and the optimum voltage our electrical equipment needs inside the building. For the first time sites fitted with the equipment will have the opportunity to micro-manage and improve their own power supply, which in turn will reduce carbon and energy costs.

Recommendations

That the £20k NWEIP grant is accepted and that £16,939 of funding from the Council's Capital Programme be released to pay the remaining purchase costs.

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1 Background

- 1.1 NWEIP has made £20,000 available to each local authority in Greater Manchester to trial voltage optimisation equipment.
- 1.2 The technology works by ensuring the building receives the correct voltage from the electricity grid which in turn means that we use less electricity. This enhancement does not cause any problems with electrical equipment inside the building and is fully compliant with the electrical wiring regulations.
- 1.3 NWEIP are funding these measures across AGMA to help trial the equipment, which if successful will see chosen sites saving, money and carbon.
- 1.4 NWEIP hope that successful trials will see an increased uptake of the technology across the public sector. Our trials and data will be shared with NWEIP to help facilitate this aspiration.
- 1.5 An existing procurement framework agreement is in place to use Power Perfector Ltd as the approved and sole supplier of the technology via an existing AGMA OJEU framework agreement (Wigan Council are the lead authority for the existing AGMA framework agreement).
- 1.6 Following on site surveys undertaken by Unity and Power Perfector Ltd three sites have been identified as suitable locations for the equipment to be installed:

Suitable site for permanent technology installation	One off cost to buy and install	Annual CO2 savings (tonnes)	Annual Cost savings at current electricity prices
1. Bare Trees Primary School	£10,596	9.9	£1,241
2. Richmond Primary School	£12,552	11	£1,588
3. Henshaw House	£13,791	12	£1,698
<i>CRC cost saving at £12 per tonne (from 2013. NB carbon cost will steadily rise over time)</i>	-	-	£ 396
Total savings	-	33	£4,923¹
Total project cost	£36,939		
AGMA grant contribution	£20,000		
Total Oldham Council capital match required	£16,939		

¹ Including anticipated carbon reduction commitment tax savings from 2013 onwards

- 1.7 With the grant contribution from NWEIP, the payback period proposed is in the region of **3.5 years**. The equipment has an expected lifetime of 30-50 years. The reduction in energy consumption will also lead to a reduction in our Carbon Reduction Commitment costs (Carbon tax liabilities).
- 1.8 The equipment requires no maintenance other than being incorporated into the buildings existing five yearly electrical wiring checks.
- 1.9 This work also directly supports the Council's Corporate Plan (2010-14) guiding principles '*managing our environmental impact*' and the council's current Environmental Policy (2010).

2 **Current Position**

- 2.1 Power Perfector Ltd has provided Oldham Council with total costs for the purchase and installation of voltage optimisation equipment at Bare Trees Primary School, Richmond Primary School and Henshaw House. Oldham Council has claimed the £20,000 allocation from NWIEP.

3 **Options/Alternatives**

- 3.1 Option 1 – To agree that £16,939 from the Capital Programme can be invested alongside the £20,000 grant to install the voltage optimisation equipment at Bare Trees Primary School, Richmond Primary School and Henshaw House. This will ensure the equipment can be tried and tested at a range of locations with the results used to inform future energy efficiency investment decisions.

Option 2 – install at only one site eg Henshaw House using the NWEIP grant only (giving back £6,209 worth of grant income). This however will provide an extremely small 'trial' which in turn will make it difficult to determine the viability of the technology across the different building types within the council's portfolio.

Option 3 - Do not install and give the full grant back to AGMA, but in turn make no carbon or cost savings. NB Other LAs in GM have used their £20,000 grant on trialling this equipment.

4 **Preferred Option**

- 4.1 Option 1 is the preferred option. Oldham Council will see a direct and immediate impact on energy consumption and carbon emissions. A small and sustained reduction in our Carbon Reduction Commitment costs will be realised in 2012/13 onwards.

5 **Consultation**

- 5.1 **Unity Property and Unity Energy Management Team** - key lead involved with selecting sites, undertaking site surveys, data monitoring and liaison with the schools caretakers and head teachers. Henshaw House has been selected as a location to ensure that Unity can closely monitor the system should problems occur.
Environmental policy team - liaison with AGMA and the NWEIP for the grant funding terms and conditions.
Schools team and Asset Management

6 **Financial Implications**

	<u>Total Budget</u> £'000	<u>Total Cost</u> £'000
Capital Expenditure	36.9	36.9
Capital Income	(20.0)	(20.0)
TOTAL	16.9	16.9
Revenue Expenditure (Estimate)	0.0	(4.9)
TOTAL	0.0	(4.9)

Capital

- 6.1 The proposed will be capital expenditure and be charged against the Economy, Place and Skills capital programme.
- 6.2 A general provision exists within the current capital programme, project E00234, against which this scheme will be a charge.
- 6.3 The scheme will be phased and financed as follows:

	2010/11
	£'000
Works	36.9
<u>Funded</u>	
NWEIP Grant (secured)	20.0
Call on Council resources	<u>16.9</u>
TOTAL	36.9

- 6.4 The condition of the NWEIP grant is that it can only be utilised against the trials of the Voltage Optimisation equipment, and must be utilised before 31 March 2012. Failure to meet either of these conditions will result in the clawback of the grant. The grant has already been received by the Council and held until formal approval of this report.

(J Kara)

Revenue

- 6.5 The proposed scheme, if successful, will look to save the Council energy running costs, originally estimated to be in the region of £4,900 annually, just

based on the three sites within the trial, this figure includes any reduction in the Carbon Reduction Commitment (CRC) tax. This will only be full confirmed at the end of the trial, when the results are collated and compared against findings from the other AGMA authorities. Not all the savings will be made by the Council, some will offset Dedicated Schools Grant (DSG) grant.

(J Kara)

7 **Legal Services Comments**

7.1 None (A Evans)

8 **Human Resources Comments**

8.1 There are no HR implications. (GLB)

9 **Risk Assessments**

9.1 Given that this is a trial and that all safety issues have been addressed, and that savings will be monitored to ensure that promised targets are met, I have no further comments to make on the proposal. (Barbara Cotton)

10 **IT Implications**

10.1 none

11 **Property Implications**

11.1 none

12 **Procurement Implications**

12.1 Although the total spend exceeds the Council's tender thresholds, the goods and services are to be delivered by a supplier on a compliant AGMA Framework (Tina Tyas)

13 **Environmental and Health & Safety Implications**

13.1 Health & Safety

Based on the information below Health and Safety evaluation is not required in respect of this report.

a) The basis of this report is seek approval for securing the grant to facilitate proposed work going ahead

b) Procurement at Wigan as lead AGMA authority have confirmed that all evaluations have been undertaken by them as part of the collaborative framework

(James Fortune-Clubb)

Environmental – There will be a direct reduction in energy consumption and carbon emissions from the three highlighted sites (Justine Collins).

14 Equality, community cohesion and crime implications

None (Bruce Penhale)

15 Equality Impact Assessment Completed?

No

16 Key Decision

16.1 No

17 Forward Plan Reference

17.1 N/A

18 Background Papers

18.1 The following is a list of background papers on which this report is based in accordance with the requirements of Section 100(1) of the Local Government Act 1972. It does not include documents which would disclose exempt or confidential information as defined by the Act :

File Ref : Voltage Power Optimisation Units
Name of File : Power Perfector
Records held in ACE Department
Officer Name : Justine Collins
Contact No : ext 3439

19 Appendices

19.1 N/A

DELETE IF CABINET DECISION	
Signed _____ Cabinet Member [specify whom]	Dated _____
Signed _____	Dated _____

Executive Director	
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