Report to the Cabinet

Report reference: C-013-2008/09.
Date of meeting: 14 July 2008.

Epping Forest District Council

Portfolio: **Corporate Support and ICT Services.**

Subject: **Civic Offices – Business Continuity and Resilience.**

Responsible Officer: **Mike Tipping** **(01992 - 564280).**

Democratic Services Officer: **Gary Woodhall** **(01992 - 564470).**

Recommendations:

(1) That an allocation from the Capital Contingency Fund in the sum of £20,000 be approved for 2008/09 to enable a secondary 11Kv power supply to be installed to the Civic Offices complex;

(2) That Contract Standing Orders in relation to obtaining competitive quotations for the work be waived and an order for the work placed with EDF Energy in view of their status as a statutory supply authority and the proposed work is to be carried out on their network; and

(3) That a further report be submitted to a future meeting, following a review of critical services, on measures to re-distribute essential supplies and increase the capacity of the on-site back up generator supply with a view to making financial provision in the 2009/10 budget.

Executive Summary:

This report describes disruption that occurred to Council Services in March and April 2008 as a result of interruptions to the main power supply to the Civic Offices complex and makes recommendations to improve the Council's resilience to future similar occurrences.

Reasons for Proposed Decision:

To improve the resilience of the Civic Offices from disruption to service provision as a result of disruptions to the main power supply to the complex.

Other Options for Action:

To do nothing and accept the risk associated with the current level of resilience.

To make a bid for budget provision in the 5-year maintenance plan for 2009/10 and accept the risk associated with the current level of resilience during the intervening period until a budget is approved and the work can be carried out.

Report:

1. During March and April 2008 two unforeseen incidents occurred that disrupted the EDF Energy power supply to the Civic Offices site.

2. The first incident occurred on Wednesday 5 March at approximately 1.45p.m. The power supply to many premises along the High Street, including the Civic Offices was interrupted because a third party contractor damaged a high voltage 11Kv cable during an excavation in Epping High Street.

3. Most premises had power restored the same day but the Civic Offices remained without power until approximately 5.00a.m on Friday 7 March 2008, a period of approximately 39 hours.

4. During this period the Council's back up generator started automatically and provided emergency power to keep a number of critical systems operating such as emergency lighting, fire alarms, security, telephones and computer suite No. 2.

5. Despite these limitations the Civic Offices remained open. Reception and telephone services at the site were unaffected, although telephone services to some satellite locations were affected where these were linked by data networks to the Civic Offices.

6. The major disruption was the loss of the data network and computer services at both the Civic Offices and satellite locations. Once power had been restored there was a further period of delay before computer services were fully operational whilst the back up batteries for the computer network servers in computer suite No. 1 recovered.

7. The second incident occurred on 2 April 2008. This time there were two appreciable power fluctuations in quick succession over the EDF Energy network which played havoc with a number of council systems and led to a further loss of computer services for a period of approximately 24 hours. EDF Energy could not fully explain why this occurred other than possible interference to their over ground network. EDF Energy explained that these type of events are not uncommon in rural settings and there is little they can do to prevent them.

8. Arising from these incidents there are two issues that need to be reviewed as part of the Council's business continuity and risk management plans - Firstly the EDF network electricity supply and ways in which resilience might be improved and secondly a comprehensive review of the deemed critical services that should have priority for back up generator supply and to consider the capacity and load factor of the existing generator to meet that demand.

9. This report covers the first of those two issues.

10. Since these incidents a meeting has taken place with EDF Energy, the network supplier to examine why it took so long to restore power following the first incident in March and to explore ways in which resilience to the supply might be improved.

11. The reason it took so long to restore power to the Civic Offices site was because of the type of connection the site has from the EDF network. The connection is known as a "T" connection, which means there is one cable coming into the site with no facility for EDF Energy to re-route the power to the site from another direction.

12. This type of connection is likely to have been specified, probably by the consultant engineers, at the time when the Civic Offices was designed and built.

13. A proposed solution to improve resilience is to change the type of connection from a "T" connection to a "ring" connection, providing a twin radial 11kV service to the Civic Offices. This would mean installing a second 11Kv cable from the High Street to the EDF Sub Station located in the “Pyramid Building" in the public car park adjacent to Homefield House.

14. The new cable would be laid in an existing underground duct from the High Street to the sub station building. EDF records show that there is capacity within the duct but this cannot be confirmed until an excavation is made at the access point in the High Street.

15. Should the EDF records prove to be incorrect or another problem be found with the duct such as obstruction or collapse this would mean additional cost to the Council which unfortunately cannot be quantified at this time.

16. The high voltage switch equipment associated with the EDF transformer within the sub station would also need to be upgraded to accept this revised type of connection. The end result would be that, in a similar situation to that which occurred in March, EDF Energy would have the ability to re-route the supply into the site via the alternate feeder and power would be restored much sooner, in all probability within an hour or so, using remote automatic switching from their Control Centre at Ipswich.

17. Because EDF Energy are complying with their statutory obligations in terms of the supply they provide to the Council, an upgrade such as that described would be at the Council's cost. The Council would have to pay for the supply and installation of a new cable and new switch equipment in the Sub Station.

18. However, because EDF Energy have plans to upgrade the switch equipment in their sub Station, although not for some years, they are prepared to bring that upgrade forward and meet that element of the cost which means the Council would only have to pay for the supply and installation of the new cable, cable joints, and any problems found with the underground duct etc.

19. An upgrade as described would improve the resilience of the power supply in incidents similar to that which occurred in March, a re-occurrence of which is a distinct possibility given the number of times the utility companies excavate trenches for access to their underground infrastructure.

20. An upgrade as described will not increase resilience to any faults that may occur to the EDF low voltage service cable and the transformer equipment within the sub station. However these type of faults and problems are less likely to happen because access to this equipment is strictly limited to technically competent personnel.

21. An upgrade as described will not increase resilience during incidents of significant power fluctuations. These matters can be addressed as a second stage to this study and will be reported in a later submission to Cabinet.

22. Normally, with works of this nature and value, Contract Standing Orders requires that 3 quotations be sought. However as the work to be carried out is on the EDF Energy network and they are a statutory supply authority there is no option other than for EDF Energy to carry out the work on behalf of the Council.

23. Therefore should the Cabinet decide to proceed with this improvement it is requested to waive contract standing orders in relation to obtaining competitive quotations and approve the work being carried out by EDF Energy.

24. The recommendations are consistent with the Council's risk management strategy in

that a forseeable risk has been identified that could significantly disrupt the delivery of services to the public and action is proposed to mitigate that risk.

25. In relation to the second issue, that of reviewing those services that should have a back up power supply from the on site generator, the priority order and the capacity of that generator, this review has commenced but will take some time to complete, so it is intended to submit a further report on these aspects with a view to any financial implications being included in the 5 year maintenance plan for 2009/2010.

Resource Implications:

Finance: Allocation from Capital Contingency Budget of £20,000 in 2008/09
Land and Personnel: Nil.

Legal and Governance Implications:

None.

Safer, Cleaner and Greener Implications:

None.

Consultation Undertaken:

EDF Energy.
Internal Risk Management Group.

Background Papers:

None.

Impact Assessments:

Responding to and mitigating a risk to the disruption of Council services in accordance with the Council's Risk Management Strategy.