

A7



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: February 27, 2007
Author: Kevin Bowers
Phone No.: 604.873.7964
RTS No.: 06598
VanRIMS No.: 04-4200-21
Meeting Date: March 13, 2007

TO: Vancouver City Council

FROM: General Manager of Corporate Services

SUBJECT: Information Technology Infrastructure - Funding for Uninterruptible Power Supply (UPS)

RECOMMENDATION

THAT Council approve the purchase of an Uninterruptible Power Supply (UPS) as described in this report at a cost of \$120,000, with funding provided from the approved 2006 Capital Budget for E-COMM Data Centre upgrades.

COUNCIL POLICY

Budget transfer in excess of \$50,000 requires Council approval.

PURPOSE

This report seeks approval for the purchase of a new UPS for the City Hall Data Centre, with funding provided from the approved 2006 Capital Budget for E-COMM Data Centre upgrades (Reference # W-7). An amended plan for upgrading and expanding the City's data centres will be presented to Council in April 2007 as part of the 2007 Information Technology (IT) Infrastructure Expansion and Replacement Program. The new UPS will mitigate business and technical risk associated with operating the existing UPS at close to its maximum capacity and will ensure that additional servers required for in-progress projects can be safely accommodated within the City Hall Data Centre.

DISCUSSION

In order to meet the upcoming demands on data centre resources, IT has amended the plan for upgrading and expanding the City's data centres which will be presented to Council in April as part of the 2007 IT Infrastructure Expansion and Replacement Program. The original plan was to relocate Corporate Services IT server room within the E-COMM facility for additional floor space to accommodate system expansion and mid-term enterprise system needs. The plan included upgrades to the fire suppression system, heating, ventilating and air conditioning (HVAC) system, and UPS; as well as installation of additional server racking systems and re-configuration of the audio visual (AV) systems that are currently in the room. The cost estimates were \$859,000, of which \$450,000 was provided for in the 2006 Basic Capital Budget. Recent study has indicated that retrofitting and upgrading existing data centers at E-COMM and City Hall will provide a better value to the City and will accomplish the same objectives. The amended plan, which will be presented in April, will also include basic upgrades to the City Hall Data Centre.

However, prior to the April Council Report, there is an urgent need to increase the UPS capacity in the City Hall data centre. A UPS is used to regulate the supply of electricity and to safely bridge equipment from their normal source of power (i.e. from BC Hydro) to an alternate source of power (i.e. a diesel generator) during a power failure. Disruption in the supply of power can result in data corruption or loss - an unacceptable business risk. The existing UPS is operating near the manufacturer's suggested maximum capacity of 90%. This means additional servers required for upcoming projects cannot be added to the existing unit.

Information Technology is therefore seeking approval to purchase a second UPS for the City Hall Data Centre with source of fund to be 2006 Capital Budget approved for E-COMM Data Centre upgrades. This will ensure that the existing UPS continues to operate optimally and will also allow approved IT projects to proceed without delay. The following projects will immediately benefit from the purchase of a new UPS:

- Infrastructure Management Strategy (IMS) implementation
- Citywire applications upgrades
- Database reporting services
- Citywire failover / backup server
- Web publishing support services

FINANCIAL IMPLICATIONS

Funding of \$450,000 was approved by Council as part of the 2006 Capital Budget (Reference # W-7) for E-COMM Data Centre upgrades. Staff recommend using \$120,000 of this capital funding for the purchase of a UPS for the City Hall Data Centre to meet operational needs and to mitigate the risk of data corruption or loss as a result of power disruption.

CONCLUSION

Approval of this recommendation will allow IT to move ahead with approved IT projects and will ensure that the current UPS continues to operate optimally.

* * * * *