



● **Board of Directors**
Engineering, Operations, and Technology Committee

8/15/2023 Board Meeting

7-2

Subject

Authorize an agreement with Nth Generation Computing, Inc. in an amount not to exceed \$367,448 for the Datacenter Backup Infrastructure Upgrade; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan's Information Technology Group will need to deploy a faster and cloud-compatible backup infrastructure to support and safeguard the backup of all applications. Backup is a critical service that provides the ability to restore enterprise business and water systems in case of a disaster or a major outage. The new backup infrastructure will provide a robust solution to reduce both the risk of backup failure and to improve the restoration of critical IT systems in case of a major outage and business data loss.

Timing and Urgency

The current solution is at end-of-life and very slow. Due to the ever increasing volume of business data, it is getting slower with each passing week and taking a considerable time to complete each backup job. The long execution time to complete the backup increases the risk of job failures. All job failures require the restart of the backup, further aggravating the risk to all business-critical applications.

Details

Background

The current backup infrastructure at Metropolitan relies on outdated and obsolete magnetic tape technology. Metropolitan is gradually moving applications from its on-premises data centers to Microsoft, Oracle, and other cloud infrastructure providers. The existing backup solution is unable to support the backup function for cloud technologies.

The benefits of replacing the existing backup infrastructure are:

- Eliminating risk due to dependence on an outdated magnetic tape medium
- Reducing data security risk by adapting new data protection methods
- Reducing backup duration which will provide savings from reduction in infrastructure utilization, restoration time, cybersecurity breach risks, and human effort
- Enabling Metropolitan in the handling of both the current data volume and future growth of Metropolitan data
- The new solution will cater to the backup of cloud-hosted applications

Award a Contract (\$367,448)

A Request for Proposals (RFP), RFP-RB-408231, for Datacenter Backup Infrastructure Upgrade was issued on August 4, 2022. There were six respondents in the competitive procurement process. The small and/or disabled veteran business enterprise goal designated for this solicitation was twenty-five percent. Proposals were reviewed

and short listed. The short-listed firms were evaluated, and Nth Generation Computing Inc. is recommended to be awarded a contract in the total amount not to exceed \$367,448.

Summary

This action authorizes \$772,605 for the Datacenter Backup Infrastructure Upgrade project. The total project budget is \$772,605 and includes funds for awarding a new contract with Nth Generation Computing Inc. for \$367,448 for professional and technical services. Other costs included are \$334,920 for labor costs by Metropolitan staff, including project management, and \$70,237 for remaining budget.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2022/23 capital expenditure plan. See **Attachment 1** for the Financial Statement.

Project Milestones

Project kickoff and planning – Sep 2023

Complete build and test backup solution for Secondary Data Center (DC) – Nov 2023

Complete deployment of backup solution for Secondary DC – End of Jan 2024

Complete build and test backup solution for Primary DC, US HQ, communication hub and small sites – Feb 2024

Complete deployment of backup solution for Primary DC and all remaining sites – April 2024

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52778, dated April 12, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA (Section 15061(b)(3) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an agreement with Nth Generation Computing Inc. in an amount not to exceed \$367,448 for the Datacenter Backup Infrastructure Upgrade.

Fiscal Impact: Expenditure of \$772,605 in capital funds

Business Analysis: This option will replace an outdated data center backup solution with newer and faster backup and storage technology. The upgrade will reduce the risk of backup failure and support the future growth of Metropolitan data volumes.

Option #2

Do not proceed with this project at this time

Fiscal Impact: No additional expenditure of capital funds

Business Analysis: Dependence on outdated system that increases data security and data recovery risks.

Delays in data recovery and restore time for business-critical applications like SCADA and Oracle Financials in case of loss of data due to data center interruptions or a disaster.

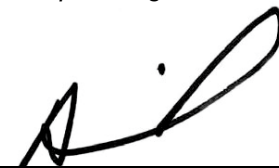
Staff Recommendation

Option #1



Charlie Eckstrom
Group Manager, Information Technology

7/25/2023
Date



Adel Hagekhalil
General Manager

7/30/2023
Date

Attachment 1 – Financial Statement

Ref# it126859735973

Allocated Funds for Datacenter Backup Infrastructure Upgrade

	Current Board Action (Aug. 2023)
Labor	
Studies & Investigations	\$ -
Final Design	334,920
Owner Costs (Program mgmt.)	-
Submittals Review & Record Drwgs	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	367,448
Equipment Use	-
Contracts	-
Remaining Budget	<u>70,237</u>
Total	<u><u>\$ 772,605</u></u>

The total amount expended to date for the Datacenter Backup Infrastructure upgrade is approximately \$0.