



## Case Study: Optimizing Database Application Disaster Recovery for Cost Efficiency and Sustainability

In this case study, we explore how TD SYNnex helps a public power utility optimize their disaster recovery strategy to reduce compute costs while aligning with sustainability goals. This utility manages critical customer data on their Application and SQL Server database hosted in multiple AWS regions.

### The Problem:

The utility faced two key challenges:

1. High compute and ongoing management costs: The existing disaster recovery solution was resource-intensive, resulting in high operational expenses. The high cost was a result of a short recovery time objective.
2. Environmental Impact: In addition to cost optimization, the utility wanted to align their cloud infrastructure designs with their initiatives to attain operating efficiencies in energy risk management.

### The Solution:

As part of a new Managed Services effort, TD SYNnex Public Sector supported the power company's team in creating an infrastructure-as-code solution across AWS regions to ensure timely availability in a disaster scenario. By using AWS Backup Cross Region Replication, and dynamic runbooks to launch a recovered environment in the event of a disaster, TD SYNnex is able to meet this utility's requirements for both cost and sustainability. TD SYNnex was responsible for configuring the backup solution, replication, compute resources, and templates, while managing the AWS components before, during, and after launching the updated solution.

### How AWS Solutions Were Leveraged:

AWS Backup, AWS EC2, and AWS S3 were utilized with Cross Region Replication to make the current data and backups available in multiple regions.

AWS CloudTrail, CloudWatch, Trusted Advisor, Security Hub, and Guard Duty were used to secure and monitor the cloud infrastructure.

### Third Party Tools Used:

CloudCheckr, Automox, Trend Micro, AppDynamics, Ansible Tower, and Zendesk Support.

**FOR MORE  
INFORMATION**

Visit our website: [tdsynnex.com/na/us/td-synnex-public-sector/](https://tdsynnex.com/na/us/td-synnex-public-sector/)

For questions, email: [publicsector@tdsynnex.com](mailto:publicsector@tdsynnex.com)

Initial Period of Performance: Jan 2024 - Dec 2024



## The Outcome:

- With the new solution architecture, compute resources are only deployed as-needed, reducing energy consumption and compute infrastructure costs by 75% for the disaster recovery solution. AWS regions selected for this solution use 100% renewable energy.

## Conclusion or Lessons Learned:

By combining cost-effective backup and deployment strategies, cross-region replication, and sustainability practices, TD SYNEX achieved a resilient and eco-friendly disaster recovery solution. This case study demonstrates that disaster recovery can be both efficient and sustainable.

## About TD SYNEX Public Sector

TD SYNEX Public Sector is the premier government solutions aggregator that specializes in understanding the IT needs and solving the challenges of the federal, state, local and education markets.

**FOR MORE  
INFORMATION**

Visit our website: [tdsynnex.com/na/us/td-synnex-public-sector/](https://tdsynnex.com/na/us/td-synnex-public-sector/)

For questions, email: [publicsector@tdsynnex.com](mailto:publicsector@tdsynnex.com)

Initial Period of Performance: Jan 2024 - Dec 2024

