

The South Texas Project Nuclear Operating Company is one of the newest and largest nuclear power facilities in the nation. STP's two units produce 2,700 megawatts of carbon-free electricity, providing clean energy to two million Texas homes. 1,200 employees maintain an ongoing commitment to the safe and reliable operation of the facility. The company's culture and core values focus on safety, integrity, teamwork, and excellence.

Business Challenges

- No central reporting or analytic framework for key operational metrics.
- Lack of a unified approach or best practices regarding dashboards.
- Limited reporting capabilities and functionality.
- Extensive effort required to collect data and manually build out reports.
- Data quality and integrity issues, multiple data source systems, and many report versions.
- Software no longer supported or patched by vendor.

Solution

- Delivered Oracle Analytics Cloud (OAC) as the front-end data analysis and visualization tool.
- Provided a secured encrypted pipeline to on-premise source database.
- Set up Single Sign-On (SSO) between Azure AD and Oracle Identity Cloud (OCI).
- Introduced data stewardship into the organization, providing consistency and accuracy of data.
- Developed a framework taxonomy to ensure a roll-out strategy for long-term adoption.
- Constructed interactive OAC dashboards that securely display the latest data based on roles.

Impact

- Robust analytical infrastructure and architecture to build upon.
- Embedded machine learning and natural language processing technologies to support growth.
- Ability to leverage self-service model to extend datasets.
- Simplified report management by maintaining a centralized repository.
- Improved collaboration, including easier access and data share.

STP
Nuclear Operating Company

Energy
Oracle Analytics Cloud