

HOW AURORA ENERGY TRANSFORMED DRAWING MANAGEMENT WITH REDEYE

Learn how Aurora Energy consolidated 21,000 drawings into a single source of truth, improving version control and operational accuracy across their electricity network.

<u>Aurora Energy</u> is a power distribution company serving the Otago region in New Zealand. Operating across three distinct network areas, the company manages over 96,700 customer connections and 40 zone substations.

With an engineering team of roughly 20 people, Aurora Energy maintains comprehensive electrical drawings for all assets, including transformers, poles, relays and associated infrastructure. For a company of this size, the accuracy and accessibility of these drawings directly impact operational reliability, fault management and the safety of the network they serve.

96.7K+

CUSTOMER CONNECTIONS

40

ZONE SUBSTATIONS **20**

PERSON ENGINEERING TEAM **21K**

TOTAL DRAWINGS



THE CHALLENGE

Before implementing a formal drawing management system, Aurora Energy faced operational inefficiencies. The company, which was formed in 2017, inherited decades of legacy drawings, some dating back 50 to 70 years. These were stored in various formats, from manual sketches to Microstation and AutoCAD files. Many drawings were kept offline and not connected to centralized systems.

"All I wanted was all the drawings in one place...one source of truth, one location, and access for all."

- Sandeep Avirineni, Drawing Management and Drafting Lead at Aurora Energy

The challenge extended beyond format inconsistencies. Drawings were distributed across multiple locations without a standardized numbering system between the Dunedin and Central Otago offices. Naming conventions varied, and version control was minimal. Revisions were often out of sync between on-site copies at substations and office versions.

Without formal processes, storage practices depended on individual preferences, which changed as personnel changed.

As Sandeep Avirineni, Drawing Management and Drafting Lead at Aurora Energy, explains: "We needed to address the issues we inherited. Drawings weren't consistently managed, and version control was lacking. Some substation copies didn't match online versions, and there was no uniform approach."

This led to duplicated effort during project cycles and reduced efficiency.

Aurora Energy committed to implementing a centralized repository designed to:



Consolidate all drawings in one location



Provide access for engineering teams, contractors, and consultants



Ensure version control and accountability



THE SOLUTION

Aurora Energy evaluated RedEye, an Accruent solution designed specifically for drawing management. RedEye offered the centralized repository Aurora Energy was seeking, combined with robust version control capabilities and simplified access for multiple users.

The software selection criteria were clear:

- Consolidate drawings
- Enforce version control

- · Enable ease of access
- Simplify workflows that had become unnecessarily complex

The deployment began with an initial upload of 15,000 to 16,000 drawings pulled from known folders and SharePoint locations. Aurora Energy added additional drawings over time, eventually managing approximately 21,000 total drawings within the system.

The initial implementation proved overly complex and the team worked closely with Accruent Professional Services to reconfigure workflows and simplify the system to align with how Aurora Energy operated. This collaboration focused on ensuring ease of use for engineers, consultants and contractors rather than forcing the team to adapt to unnecessary complexity.

A key improvement involved introducing visualized metadata for all 40 substations, which dramatically improved navigation and accessibility. Aurora Energy also implemented a centralized numbering system, bringing uniformity across all drawings.

Accruent's training team delivered instruction in two phases, starting with the core team and then rolling it out to the wider engineering group.

"The training went really well. Susan did a wonderful job—she broke everything into clear bullet points with a nice flow, making it really easy for our customers and contacts to follow. I even recorded the session and still use her approach today. She made the basics—like searching for artifacts and uploading files—look simple and logical. Honestly, she did magic."

- Sandeep Avirineni, Drawing Management and Drafting Lead at Aurora Energy



THE RESULTS

The improvements were immediate and measurable. Version control and accountability improved dramatically. Aurora Energy introduced QR codes on drawings for tender and construction packages, ensuring that contractors and field teams always used the correct version. This simple addition created a complete audit trail of all changes and usage.

It also:

- Helped with version control
- Improved efficiency
- Reduced errors
- Saved time

Beyond version control, the team experienced tangible efficiency gains. Navigation became intuitive, allowing engineers to quickly locate and share drawings. Collaboration with other electricity distribution companies and the national grid operator, Transpower, became easier. Standardized workflows are now applied consistently across all network areas, creating clarity and alignment between offices.

FUTURE DIRECTION

Looking ahead, Aurora Energy plans to develop a photo library for substations to provide additional context alongside drawings. The Aurora Energy team continues to optimize workflows and extract additional value from RedEye's capabilities, with ongoing support from Accruent, ensuring continuous improvement.

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