

## Africa's Largest Electricity Producer Chooses Nu Flow

Nu Flow's innovative pipe rehabilitation solutions are implemented by some of the most powerful companies in the world, including some of the world's largest energy companies. Nu Flow is the only inside infrastructure company that manufactures and installs its solutions, providing our customers a monumental amount of quality control, quicker project completion time and the ability to create a tailored solution.

**Project:** Use the Nu Line process to rehabilitate chiller pipes in-place.

**Customer:** Eskom, established in 1923, is the largest producer of electricity in Africa. It is the primary public electricity utility company in South Africa (95% of all electricity for the country), provides Africa with about 45% of its electricity and controls the only nuclear power plant on the continent. Eskom is also listed in the world's top 7 electricity companies for their generating capacity.

**Site:** The coal-fired power station in Mpumalanga, South Africa, called the Matla Power Station. It was commissioned in 1983.

**System:** Chiller pipes with a diameter of 110mm (4 inches) that run through 6-story structural columns and floor slabs throughout the entire building.

**Problem:** The chiller pipes experienced heavy corrosion and scale build-up that reduced their efficiency. There was also the threat of leaks, which could damage the building. The customer wanted to find a long-term solution that would not cause destruction or business downtime.

**Circumvention:** If the customer had chosen a traditional repipe, where the structural columns and flooring would be destroyed in order to replace the pipes, the work would have taken four months. Scaffolding would have been erected around the entire building block, the building would have been defaced, floors removed, structural columns torn down, the pipes pulled out, then replaced and new concrete would be poured over the pipes. The extremely strict health and safety regulations at the power station further ruled out the option of replacing the pipes.

**Solution:** Nu Flow's patented Nu Line process was used to rehabilitate the pipes and the project only took three days. First, the chiller pipes were descaled using an abrasive agent pushed through the pipes with clean, compressed air. Once the pipes were back to their original diameter, the pipe system (throughout six stories) was rehabilitated with our epoxy coating process. Using a unique, blown-in technology, our red epoxy was pushed throughout the pipes to cover their interiors, creating a barrier coating that will prevent scale build-up, corrosion, pinhole leaks and other common failures.

This entire process was completed utilizing existing access points, so there was not any destruction to the building. Since there wasn't any destruction and the job was completed in such a short amount of time, there was not any business disruption or lost revenue for the customer. Nu Flow's unique pipe lining solutions keep predominant businesses and facilities running.



A traditional repipe for this power station would have taken four months. Nu Flow completed the work within three days.