

Integrated Services

Wet Gas Pipework

Aurora successfully delivered a Wet Gas process piping replacement project on an offshore asset in the North Sea. The scope involved laser surveying and scanning, engineering, design, fabrication, and offshore construction. A total of 300 metres of 14" duplex steel pipework was replaced, comprising 89 spools and 23 supports. The project required a fully integrated approach to meet tight schedule demands and ensure high-precision execution in a complex offshore environment.

Our Solution

Aurora delivered a fully integrated in-house solution that enabled

- Parallel execution of survey, design, fabrication, and offshore installation
- Streamlined scheduling, reducing overall project duration.
- High-precision fabrication using duplex steel to enhance system durability.

At a Glance

Challenges

- Digital Marketing & SEO Rank
- Project Design & Engineering
- Data Analysis & Data Visualization
- Technical System Support

Value to client

The project delivered significant value by minimising operational disruption through efficient planning and parallel workflows. Aurora's end-to-end approach—from laser scanning and design through to offshore construction—ensured accurate execution and reduced rework.

The use of duplex steel provided enhanced corrosion resistance, supporting the long-term integrity of the asset. This smart, coordinated approach enabled successful delivery of a complex Brownfield modification within critical time constraints.



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Hydro Power Station

Aurora was awarded £1.7M to deliver EPC works on a hydro power station between 2025 and 2027. The scope included full-site laser scanning, detailed pipework design, fabrication, installation, and inspection of replacement systems. The project involved complex pipework replacement and valve upgrades within an operational hydroelectric facility. The objective was to design, fabricate, and install replacement pipework and valves while ensuring safe lifting operations and maintaining system integrity within a live hydro power station environment.

Our Solution

- Full-site laser survey and detailed design, including isometrics for 2,300m of pipework
- In-house pipework fabrication, NDT, and hydrotesting
- Management of site lifting operations and installation of replacement valves (including 60te valves)

At a Glance

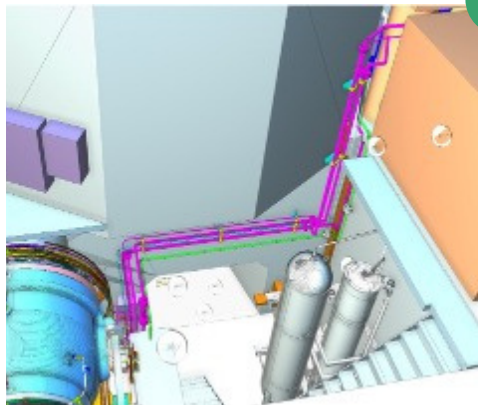
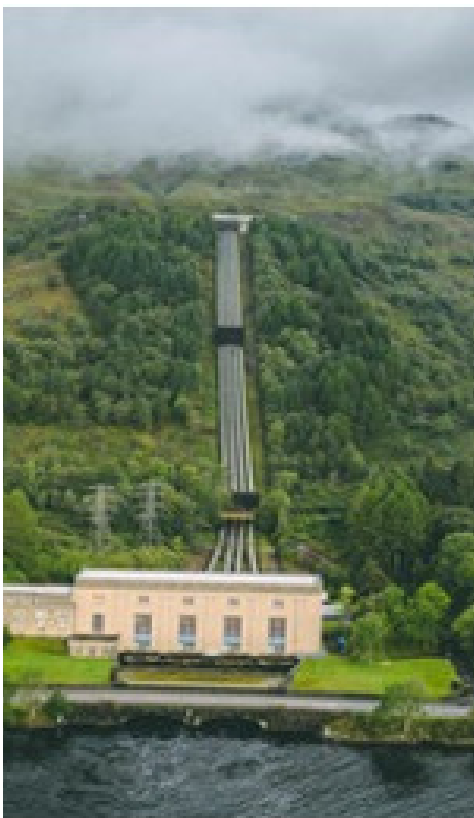
Challenges

- Working within an operational hydro power facility
- Handling and installing large, heavy components (up to 60te valves)
- Integration of new pipework into existing infrastructure, including concrete-embedded sections

Value to client

Aurora delivered a fully integrated EPC solution, managing the project from initial survey through to final installation, ensuring a seamless and efficient execution. High-quality fabrication and testing were achieved through in-house capabilities, enhancing overall quality control and reliability.

The upgraded pipework and valves improved the performance and longevity of the hydropower system, while all lifting and installation operations were carried out safely and efficiently. This approach provided the client with a dependable, high-quality outcome and long-term operational benefits.



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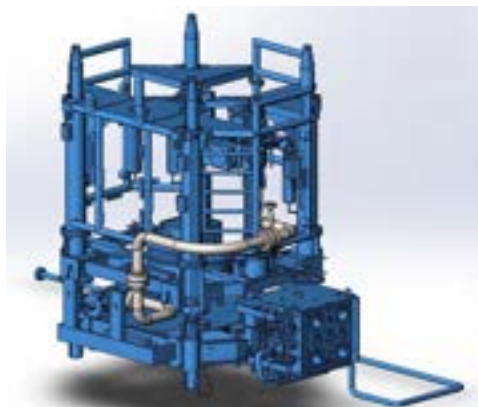
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Cook Spool

Our client identified a leak on the Cook Production XT at the connection to the flow base. As a temporary production-critical solution, Aurora was contracted to design and fabricate a bypass spool to reinstate production. The project was delivered on a fast-track schedule, with engineering and fabrication teams working around the clock to meet tight deadlines. The objective was to design, fabricate, and deliver a 6" bypass spool solution to safely restore production from the Cook field within a highly compressed timeframe.

Our Solution

- Full engineering design including isometrics, stress analysis (PD8010-2 / ASME B31.4), and vibration screening (DNV standards)
- Fabrication of 6" bypass spool and 1600mm contingency spool using client-supplied super duplex materials
- End-to-end delivery including trial fit, NDT, hydrotesting, coating, and final delivery for offshore installation



At a Glance

Challenges

- Production-critical scope requiring accelerated delivery and 24/7 working
- Dependency on flow base availability for survey and trial fit at HCS Inverurie
- Complex engineering requirements including stress, vibration (VIV/FIV), and HISC assessments
- Tight integration tolerances requiring laser scanning and physical mock-up verification

Value to client

Aurora successfully delivered the full scope within a highly compressed schedule, enabling rapid offshore installation and restoration of production by 31 December 2025.

High-quality fabrication ensured zero issues during trial fit and installation, demonstrating reliability under pressure. The project highlighted Aurora's agility and technical capability in executing fast-track, production-critical scopes, minimising downtime and protecting asset performance.

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Toilet Module

Engineering, Procurement, and Construction (EPC) delivery of a toilet module for a platform. The project involved extensive fabrication, piping, and integration works, with a focus on efficient offshore installation and minimal disruption to operations. The objective was To design, fabricate, and deliver a fully integrated toilet module, ensuring seamless tie-in to existing platform systems while avoiding operational shutdowns.

Our Solution

- Delivered full EPC scope including fabrication and system integration.
- Completed 275m of piping, GRP & cabling with detailed design and isometrics.
- Executed 6 system tie-ins (potable water, wastewater, drains, PA/GA, instrument air & power) prior to HSE improvements node date.

At a Glance

Challenges

- Complex integration with multiple live platform systems.
- Requirement to complete tie-ins without causing platform shutdown.
- Coordination of multiple disciplines within tight timelines.

Value to client


The project was delivered with an exceptional safety and performance record, completing 1,176 onshore manhours without a Lost Time Incident (LTI). The module was handed over ahead of the HSE improvement deadline, eliminating the need for a costly platform shutdown and ensuring continued operations.

High-quality delivery, combined with strong collaboration throughout, reinforced client confidence and demonstrated Aurora's ability to execute critical scopes safely, efficiently, and to a high standard.



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AUK Flare Ignition

In April 2025, our client expanded the flare ignition replacement scope from a single line to all three lines between the ignition valves and flare tip. Aurora Energy Services delivered inspection, fabrication, and installation works within a tight schedule, supporting critical offshore flare system upgrades. The Objective was to successfully upgrade and replace flare ignition lines across all three systems, ensuring safe, reliable operation while meeting strict offshore schedule and safety requirements.

Our Solution

- Remediation of ignitor lines and inspection of John Zink manifold and ignitors
- Fabrication of pipework spools and integration of Lokring joints
- Inspection and installation of pilot line closing spool and full system completion

At a Glance

Challenges

- Expansion of project scope after initial award
- Tight turnaround from engineering through to offshore construction
- Working at height and within a complex offshore flare structure

Value to client

The project was delivered in full alignment with the agreed schedule, with fabrication and shipping completed in line with the project plan and MC-1 achieved on time. A strong focus on safety ensured zero incidents throughout execution, while agile delivery and effective planning enabled a smooth and efficient project outcome.

This approach resulted in full client satisfaction and reinforced confidence in Aurora's ability to deliver reliably on time-critical scopes.



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Fabrication Services

SUDS

Aurora supported its valued client in the delivery of subsea structures for an Enhanced Oil Recovery (EOR) project. The scope included the fabrication and handling of multiple Subsea Umbilical Distribution Structures (SUDS), riser bases and pile pipes. The works demonstrated Aurora's capability to execute large-scale, heavy subsea fabrication with precision, efficiency and a strong commitment to safety. The objective was to fabricate, assemble and deliver subsea structures and piling for the EOR project, ensuring strict compliance with dimensional, weight and quality specifications to support safe offshore installation.

Our Solution

Aurora delivered a comprehensive engineering and fabrication package that included:

- Subsea Structures – Fabrication of multiple SUDS structures, including:
 - Area D SUDS (32 tonnes, 6m × 6m × 3.8m)
 - Area E SUDS (32 tonnes, 6m × 6m × 3.8m)
 - Riser Base SUDS (34 tonnes, 6m × 10m × 3.7m)
- Pile Pipes – Fabrication of 8 × pile pipes, each weighing 10.5 tonnes and measuring 28.8m in length with a 0.6m diameter.
- Delivery & Support – Coordination of heavy lift handling, coating, and transportation to support offshore installation.

At a Glance

Challenges

The project required precise fabrication and handling of very large and heavy subsea structures, demanding careful coordination of lifting operations, specialist logistics and strict adherence to tolerances and offshore specifications.

Value to client

Aurora provided significant value through:

- Precision Fabrication – All subsea structures manufactured to exacting standards, ensuring offshore installation readiness.
- Safe Execution – Complex heavy lifts and handling completed without incident.
- Efficient Delivery – On-time completion of all structures and pile pipes, enabling seamless project integration.
- Trusted Partnership – Supported the client in delivering critical subsea infrastructure for the EOR development.

