

# Fit-for-Purpose Onshore Processing Facility Fast-Tracks Time to First Gas

Operator uses Production ExPRESS solutions to “keep the lights on”

**An operator fast-tracks delivery of first gas using Production ExPRESS\* rapid production response solutions, integrating Schlumberger’s domain expertise and existing surface well test equipment to deploy a temporary onshore processing facility while the dedicated facility was under construction. This enabled the operator to avoid lost revenue and interrupted power supply to local community vs. not deploying the interim solution.**

## Ensure production continuity from onshore processing facility

West Africa has a fast-growing population and economy, and ambitious targets have been set to modernize and enhance the standard of living in the region. This growth has also led to a steep increase in the demand for energy. The operator of the field carried out a multibillion-dollar integrated subsea development project to meet the growing demand and achieved first oil in just 2½ years—three months ahead of the development plan, a record time to market.

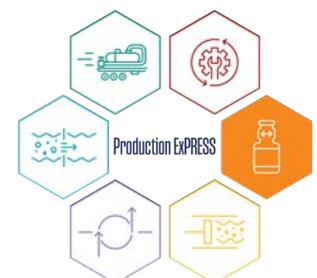
Inspired by the success, the operator made ambitious targets to quickly achieve first gas, with extensive drilling efforts to develop four deepwater gas wells to meet the timeline. However, before the publicly committed-to first-gas date, the operator experienced delays with the onshore processing facility that would disrupt electricity production and consequently lead to prolonged blackouts for the local population. The current facility capacity was not enough to handle high-rate gas wells, so the operator approached Schlumberger to design and supply a debottlenecking solution within a one-month timeframe to ensure production continuity during the construction phase of the dedicated facility.



*Aerial view of temporary onshore processing facility.*

## Fast-track a solution using an integrated approach

Part of the Production ExPRESS solutions portfolio, a debottlenecking solution was deployed to increase facility capacity. Combined with domain expertise, Production ExPRESS solutions enable quick and temporary deployment of existing Schlumberger technologies to ensure continuity during planned and unexpected interruptions. The service delivery team designed, mobilized, and operated a bypass solution to serve as a temporary production facility, allowing processing of more than 100 MMcf/d of additional gas supply to customers.



## Case study: **Fit-for-purpose onshore processing facility fast-tracks time to first gas, deepwater West Africa**

The setup met the operator's objectives while ensuring applicable safety standards were fully complied with.

The operation entailed

- globally sourced 80+ main assets
- more than 30 local and international suppliers synchronized with the project timeline to ensure each step was delivered as planned
- mobilized equipment from more than 18 locations worldwide
- assignment of more than 50 personnel during the delivery timeline
- fast-track procurement and delivery of critical materials and spares carried out within 10 days
- operational planning, maintenance, preparation, and certification of more than 100 assets and safety equipment carried out within 2 weeks, including the calibration of meters, controllers, and pilots
- equipment, pipeline, and pressure testing conducted in witness of third-party inspectors in compliance with Schlumberger and the operator's standards and requirements.

A pumping package with nitrogen was supplied to conduct extensive leak and flow testing of the setup to verify integrity before commissioning and startup. A high-accuracy fiscal flowmeter was also supplied at the outlet of the facility, and services for meter installation, commissioning, and flow measurement were provided during operations.

### **Maintain uninterrupted electrical power supply for local community and deliver project on time**

With more than 20,000 work-hours and zero incidents, the project was successfully delivered within one month, avoiding penalties. The facility was operated with 100% uptime, delivering more than 100 MMcf/d of gas for more than 35 days to key electric generation plants. The unique setup provided the necessary expansion in production capacity—avoiding lost revenue and interrupted power supply vs. not deploying the interim solution.

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