

REFERENCE CASE POWER PLANT



Independent Third-Party Inspection for Combined-Cycle Power Station in Dormagen, Germany

RWE Energie AG required an experienced partner to provide professional monitoring and supervision throughout the manufacturing and construction of their combined-cycle power station. That's why they turned to TÜV Rheinland.

Basic Facts	
Client	RWE Energie AG
Timeframe	March 1999 - May 2000
Project location	Dormagen, Germany
Main services	<ul style="list-style-type: none"> ▪ Independent inspections ▪ Well-qualified, experienced personnel on site ▪ Comprehensive monitoring and supervision throughout the manufacture and construction phases ▪ In-process inspection at the manufacturer's works across Europe

Initial situation and requirements

RWE Energie AG, one of Europe's premier energy companies, is specialized in the generation, trading, transmission and supply of electricity and gas. In 1999, the company commissioned a combined-cycle power station (CCPP) in Dormagen, Germany. As a result, RWE Energie AG required expert third-party inspection of components and systems.

Solutions, results

As a leading provider of third-party inspection services for the energy industry, TÜV Rheinland was the preferred choice for RWE Energie AG. We provided comprehensive monitoring and supervision throughout the manufacture and construction of the components and systems needed for the CCPP power plant, such as waste heat boilers, the water-steam circuit, pressure vessels, ducts and smokestacks.

Our consultation services covered all quality assurance matters, including the generation of the associated corresponding documentation. In the planning phase, we coordinated and inspected planning documents such as drawings, welding plans and test plans to ensure all quality requirements were met.

We supervised the construction of the various components at manufacturing plants across Europe and verified the qualifications of plant personnel.

During the construction phase, we provided on-site supervision of both assembly and installation activities. We also identified, analyzed and evaluated constructional deviations and welding seam faults, recommended corrective measures and inspected completed repairs.

All of our findings were regularly reported in construction journals, monthly progress reports and ultimately summarized in a final report. At hand over, we provided acceptance tests to ensure the plant coherent to all specifications and quality requirements.

Did you know?

The CCPP has an electrical net output capacity of 560 MW.

Benefits for the client

TÜV Rheinland provided RWE Energie AG with:

- Extensive experience of energy projects and quality issues.
- Independent inspections with trusted neutral results.
- Well-qualified, experienced personnel on site.
- Comprehensive monitoring and supervision throughout the manufacture and construction of the components and systems.
- In-process inspection at the manufacturer's works across Europe.

About TÜV Rheinland:

Founded 140 years ago, TÜV Rheinland is a global leader in independent inspection services, ensuring quality and safety for people, the environment, and technology in nearly all aspects of life.

We inspect technical equipment, products and services, oversee projects and help to shape processes for companies around the world. Since 2006 we have been a member of the United Nations Global Compact to promote sustainability and combat corruption.

We offer you extensive energy sector experience, providing specialized solutions for all types of power plants –traditional, renewable and nuclear – as well as oil and gas plants and pipelines, and manufacturing plants for industrial products. Our comprehensive portfolio offers a wide range of services in all project phases including design, manufacturing, construction, commissioning, operation and maintenance. We can also provide consultancy for safety, environmental, system certification and data management issues.

Your contact:

TÜV Rheinland Group
Industrial Services
is@tuv.com
www.tuv.com