

# BlueCielo



## CASE STUDY

## IMPROVING OPERATIONAL EFFICIENCY AT RWE



## CUSTOMER PROFILE



With almost 60,000 employees supplying energy to over 16 million electricity customers and 7 million gas customers, RWE AG is one of the leading power generation companies in Europe. The company produces energy by regular and brown power stations, as well as nuclear and regenerative power plants. RWE continually works on methods to improve and optimize the efficiency of its new and existing power stations. Optimization is a key aspect in the engineering, design and construction of new and existing power stations. Efficiency is an important factor in the planning of the operations and maintenance of the power stations.

### Industry

- Utilities

### BlueCielo Software

- BlueCielo Meridian

### Integrated Applications

- AutoCAD
- Microsoft Office

# BLUECIELO MERIDIAN IN THE BROWN COAL DIVISION



Energy extracted from brown coal covers approximately 25% of Germany's electricity requirements. Despite the lack of subsidy, burning brown coal produces cheap energy, so brown coal power plants are used to meet the daily basic need for energy. RWE has a station of this type in Frimmersdorf, Germany, with 14 units and a gross production of 1,665 megawatts. In the immediate neighborhood, there is a second station with five units in Grevenbroich-Neurath. In addition, work is currently being carried out on extensions involving two modern brown coal power stations with optimized technology (BoA 2&3), an investment of €2.6 billion.

In 2003, the brown coal division of RWE initiated the selection of an Engineering Information Management (EIM) solution for the Construction and Documentation Department. BlueCielo Meridian was selected based on integration capabilities with native CAD and Office applications, as well as the ability for batch-type processing of metadata for multiple documents and the mass import of data. BlueCielo Meridian also offered the possibility of saving documents for further integration in SAP with just a simple mouse click.

Currently, the Construction and Documentation Department manages over one million documents using BlueCielo Meridian, with a total volume of some 720 gigabytes in document data. This consists of scanned and hybrid drawings, plus MicroStation, AutoCAD drawings, Ruplan documents, and Elcad projects stored as PDF documents. There is also operational documentation, controlled statistics, and Microsoft Excel tables, such as calculations and photos of the current BoA 2&3 construction sites.

**REDUCED  
DOWNTIME  
IN EMERGENCY  
SITUATIONS**





# BLUECIELO MERIDIAN IN THE REGENERATIVE POWER DIVISION

RWE also concentrates on regenerative energy, especially hydro power. In addition to run-of-the-river plants, water pumped storage plants are also used for storing electricity and energy. While there was no central system for managing documents relative to the various separate regenerative energy stations, it was often necessary to go to the location in question to obtain a relevant document. The implementation of BlueCielo Meridian solved this problem by ensuring that current documentation relative to the various power plants is accessible at different locations and at all times. Prior to the implementation, no other document management system had been deployed. Therefore, RWE used the opportunity to remove all superfluous and inconsistent contents from the documents, ensuring that only the most up-to-date version of a document was displayed. In the case of a revision, an overview of the document status was also available.

All technicians and central engineering working in the field of regenerative energy have full access to all the documents they manage. In contrast, there are users who only have reading rights. These users can consult the managed documents via a simple program, the search term passing through a small number of search values, providing simple search results such as the river on which the station in question is situated or the name of the station. While in the brown coal sector documents available from different systems were merged in BlueCielo Meridian, the regenerative energy sector started from scratch. The implementation and employee training had to be carried out in various locations. However, after internal training sessions of just one hour for normal users and half a day for more intensive users, employees were able to use the system.

“BLUECIELO MERIDIAN MAKES IT POSSIBLE TO GET RAPID ACCESS TO THE TECHNICAL DOCUMENTS WITHIN THE SYSTEM, NOT LEAST BECAUSE OF THE WIDE-RANGING SEARCH FUNCTIONS. THE SYSTEM HAS BEEN WELL-RECEIVED BY THE EMPLOYEES BECAUSE OF ITS EASE OF OPERATION. **WITHOUT BLUECIELO MERIDIAN, ANY PROGRESS AT THE NEW CONSTRUCTION SITE WOULD HAVE BEEN UNTHINKABLE.**”

**Jürgen Ecken** - Manager of Construction and Documentation Department, RWE

# RESULTS & BENEFITS

BlueCielo Meridian optimizes the business processes at RWE to ensure operational excellence, economic efficiency, and plant health and safety. According to Jürgen Ecken, Manager of the Construction and Documentation Department at RWE, employees are very positive about the solution.

BlueCielo Meridian not only allows access to relevant documents for maintenance purposes and new projects, but also helps reduce downtime in emergency situations. The brown coal station in Frimmersdorf has put this to the test. A fire in 2006 caused the entire station to burn down, impacting both the power supply and the computers and making required documents unavailable. However, because the data in BlueCielo Meridian was stored on two different servers outside the power station, it was still possible to access the data from the station in neighbouring Neurath. Thanks to the rapid availability of the required documents, it was possible to restore basic electricity supply using generators. Later, the various separate central units were gradually switched over again.

## Key Features

- Installation-oriented archive of technical documents
- Great flexibility
- User friendly interface
- Integrated AutoCAD and Microsoft Office applications

## Key Benefits

- Improved collaboration with external planning agencies
- Easy and fast access to all key engineering information
- Save time with full search capabilities
- Ensure and maintain license to operate

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