

# TenneT TSO GmbH in Germany

Customer Story - primtech



*„primtech is perfectly capable of checking the lightning protection of a substation, because the check in a 3D model is more accurate.*

*primtech additionally supports - through integrated checking of clearances - the optimization of the substation layout and thereby reduces investment costs.“*

Sascha Wodarczyk,  
Technical Engineer, B.Eng,  
TenneT TSO GmbH, Germany



## primtech – greatly eases the work in Brownfield projects

### About TenneT TSO

TenneT is the first cross-border electricity transmission system operator in Europe. In the Engineering & Construction Office, TenneT analyzes, calculates and constructs primary and secondary technology for high- and ultra-high voltage substations. They also create design documentation and ensure that the norms and standards are adhered to.

### Why primtech?

#### Application of Standards

“TenneT, as a transmission system operator, decided early to develop standards for the design and construction of its substations. The standards can be precisely implemented and systematically applied in primtech.”, emphasizes Sascha Wodarczyk.

#### Evaluation of Project Feasibility

Through the primtech reference technology, TenneT can now create complex and extensive substations within a short time as well as evaluate their feasibility and implementation.

#### Design Studies for Approvals

For Greenfield and Brownfield (refurbishment) substation projects, TenneT creates beforehand so-called „Design Studies“ in order to be able to realistically assess the scope of work involved. Now, with primtech, documentation for approvals and tenders can be derived easily.

The modular structure of standard bays in primtech allows for the especially fast creation of the Design Studies.

### primtech for Brownfield Projects

An ultra-high-voltage substation near Passau was constructed completely in primtech by TenneT. The refurbishment needs elaborate provisional solutions. The representation in primtech greatly eases hereby the work of the project manager and contractors.

### Optimize Substation Utilization

In future, substations must be operated even more efficiently. However, in existing substations, there is not much space available. primtech supports the optimization of the substation layout e.g. through the integrated checking of clearances, thereby reducing investment costs.

### Conclusion

The operational reliability of substations is very important for TenneT. This includes lightning protection calculation and the effects of short circuit currents. The consideration of dynamic short-circuit effects in substations is becoming ever more important. In this, primtech provides not only calculational reliability, but also a visual display of changes in transient processes.

Visit us at [www.primtech.com](http://www.primtech.com) or contact [sales@primtech.com](mailto:sales@primtech.com)

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