HOW DOES AN ENERGY PROVIDER MANAGE ITS CONSTRUCTION PROJECTS?

Vattenfall Europe Generation AG is responsible for client-side management of all active Vattenfall power plant construction projects, with a current value of 5 billion euros. In order to improve the communication between its employees and external project partners, the company decided to introduce an online project collaboration platform to its internal IT landscape.

Construction of the *Moorburg power plant*, which is scheduled to go on the grid in 2012

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Dieter Oetjeng, Head of New Power Plant Construction,
Vattenfall Europe Generation AG

The deregulation of northern European energy markets in the 1990s enabled Vattenfall to expand its operations beyond Sweden to become one of Europe's leading energy providers. Vattenfall's growth demanded an increase in the number of new power plants being built, requiring the participation of multiple external project partners. Vattenfall decided to implement a central database for both internal and external participants, and found that an online project collaboration platform was the most appropriate solution. Its additional ability to provide flexible representation and optimisation of the processes and workflows specific to power plant construction led Vattenfall to opt for think project!.

think project! was extensively tested during a three-month pilot phase, and was used in the *Moorburg power plant* project, which was already underway. think project! now also supports communication and document management for the commissioning of the *Boxberg power plant* and is slated for use in the planned construction of a demonstration facility for carbon capture at the *Jänschwalde power plant.*

think project! is used by Vattenfall to manage plans and drawings, approval documents, technical documentation, contracts, meeting minutes, emails and faxes – with well over 20,000 files stored for the new *Moorburg power plant* alone. Over 600 Vattenfall employees and external project partners collaborate via the platform, with roles ranging from project, construction and departmental managers, surveyors and suppliers, foremen from construction companies and safety experts – through to coordinators and team assistants. Even security personnel at the *Moorburg power plant* are connected to think project!, as visitor registration is managed via the platform.

Vattenfall Europe Generation AG is based in Cottbus and is a subsidiary of Vattenfall Europe AG. It was formed in 2002 following a merger of the long-established companies Bewag, HEW, LAUBAG and VEAG, and is part of the Swedish Vattenfall Group, now the fifth-largest energy company in Europe.

INTERVIEW

THE SYSTEM MUST FOLLOW OUR PROCESSES

We speak with Dieter Oetjeng, Head of New Power Plant Construction, Vattenfall Europe Generation AG, about the goals, strategies and methods of implementing an online project collaboration platform – and how acceptance can be improved among internal and external project partners. Dr Sven Billhardt, Managing Director of s+p Ingenieure Prof. Sturm + Partner GmbH, also explains how an external IT consulting company can support an energy company in implementing a new IT system for managing construction tasks.

Mr Oetjeng, what decision-making process did Vattenfall employ when choosing to implement think project!?
With various projects currently in the planning and construction stage in the New Power Plants division at Vattenfall Europe Generation AG, we decided to manage them using a suitable project and document management system. To ensure we selected the right system, we developed a matrix of our requirements. Our most important consideration was that the platform should be able to map our very specific processes for power plant construction. After comparing three providers who met the conditions of our tender process, we identified think project! as the most suitable system.

Were you satisfied with our ability to meet your requirements?
Our core objective was to manage all project-relevant documents and related communications via a single platform. The think project! team worked closely with us to configure the project platform to meet our requirements over nearly three months, addressing our very specific requirements for client-side management of our power plant construction processes. To map the processes precisely, we established user groups that are integrated in internal and external processes. For example, internal groups include project management, site management, surveyors, quality assurance and contract managers and partners, and external groups include planners, suppliers and surveyors.

How do you integrate internal departments and external project partners using think project!?
All colleagues involved in a project – from our various departments, locations or contractors – use think project! to work together. A roles and rights framework was developed by the think project! team to ensure that levels of access were properly assigned. Depending on the needs of each project, we vary our approach to integrating external partners. For ongoing projects, we rely on voluntary cooperation. For new construction projects, we define the use of the platform in contracts – integrating our partners within think project! from the very beginning. Access authorisations and training courses for external

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Dr Sven Billhardt, Managing Director, s+p Ingenieure Prof. Sturm + Partner GmbH

An internal Vattenfall poster campaign encouraging the use of think project!

partners are assigned solely by internal project administrators – and we cover the associated costs.
External project partners without access authorisation use a project email address to communicate with internal users, ensuring that all communication and exchange of important documents is performed wholly within the project platform. Internal project members receive access authorisation to think project!. Immediately following the assignment of their credentials, all authorised employees attend a training course – although the focus of individual training courses can vary depending on the type and scope of usage.
We also progressively restrict the option to save files to internal IT folders by gradually deleting Windows folders that are no longer needed on internal network drives – either because the content has been transferred to think project! or because it is no longer categorised as relevant to the project. We use this approach to exercise a certain amount of 'soft pressure' on project members so that, in future, they will work with us exclusively within think project!. This requires a certain amount of discipline from all project members, so day-to-day habits need to be adjusted.

How important is acceptance of think project! by your employees and external project partners – and how do you encourage it?
Naturally, acceptance by all project members is very important to us. Through ongoing history updates and display of the current status of all documents, our employees and project partners have access to a high level of transparency and traceability within individual processes – so they're able to see the advantages for themselves.
We also ensure and increase acceptance of think project! through close personal support to individual users from our service support team. This ranges from refresher or advanced training courses to individual assistance and telephone support for users in need of help. Both of our administrators also regularly meet with different participant groups to explain the latest additions to our project environment or to answer questions about using think project!.

Which processes are mapped within the project platform?
Within our company, we not only use think project! as a standard file storage and exchange system for 'traditional' documents – we also take the opportunity to make other document types available to a wider group of people and departments via the platform. This includes, for example, all the contract-relevant documents that we distribute via think project!. We also support the actual construction phase of power plants by running all processes or project activities via the platform. Examples of this include recording and reporting on open items, quality discrepancies and technical change alerts.

How do you expect use of think project! to develop at Vattenfall Europe Generation AG?
Since we first received internal authorisation to use think project! for a year, we believe there is a good chance that we will continue developing and using think project! for our construction projects. An internal comparison between the usefulness of an online project collaboration platform against our company's previous standard practices has come down in favour of think project!. The company is currently deciding what steps would be needed to use the platform during the runtime of all projects.

Dr Billhardt, what is the relationship between s+p Ingenieure Prof. Sturm + Partner and Vattenfall Europe Generation AG?
We provide services and consulting to Vattenfall Europe Generation AG across many areas, including support in selecting and implementing an information system for document management of new power plant construction projects. We also support Vattenfall in project management and integrating think project! within its internal IT infrastructure. We define their requirements and create specifications – and are also responsible for migrating data to the platform from their legacy systems.

In your experience, what are the benefits of using an online project collaboration platform for a power plant construction project?
From an energy company's point of view, managing construction projects is not a core competency – energy generation is. So deploying an easy-to-configure solution that can be installed quickly and hosted externally makes a lot of sense. It's also very important to provide a central platform that is independent of the different internal systems of the various project members, and which provides clear version management for all the required documents. think project! also makes it simple to map very individual workflows as well as standard processes such as print orders, documentation of quality discrepancies or daily construction records.