

**The Bureau Veritas Group**

Sacramento, California
www.bureauveritas.com

Results

- Reduced review time by up to 95%
- Saved approximately \$200,000 in document administration costs per project
- Improved collaboration and input on all stages of design, minimizing construction delays
- Addressed environmental sustainability goals

Bureau Veritas Group

Sustainable collaboration and development

Global engineering consulting firm helps clients save big and go green by using Adobe® Acrobat® Pro to accelerate document review and approval

Built on a reputation of delivering economic value through solid risk management and performance improvement, the Bureau Veritas Group has helped clients comply with quality, environmental, construction, and health and safety standards since 1828. Bureau Veritas' network of regional and local offices—comprised of 900 global locations and more than 40,000 employees—manages client relationships and delivers a comprehensive range of services including inspection, testing, auditing, certification, training, and others.

As the delegate Chief Building Official for the State of California's Energy Commission, Bureau Veritas has focused its expertise on maximizing the safety, fiscal, and environmental efficiency of state energy projects, including solar, wind, and traditional power plant construction. Leveraging Adobe Acrobat Pro and a document management system developed in-house, Bureau Veritas created the Green VISION (View Intelligent Submittals Improved Online Notification) program which provides an effective and environmentally friendly way to reign in the soaring costs of reviewing and managing the huge volume of documents associated with facility construction.

"With the growing strain on resources and an economic climate that has everyone seeking greater efficiency, we are always looking to reduce costs and improve collaboration with construction partners," says Kevin Wedman, vice president at Bureau Veritas. "Better managing document review, approval, and tracking brings much-needed efficiencies to construction processes."

A simple, cost-effective solution

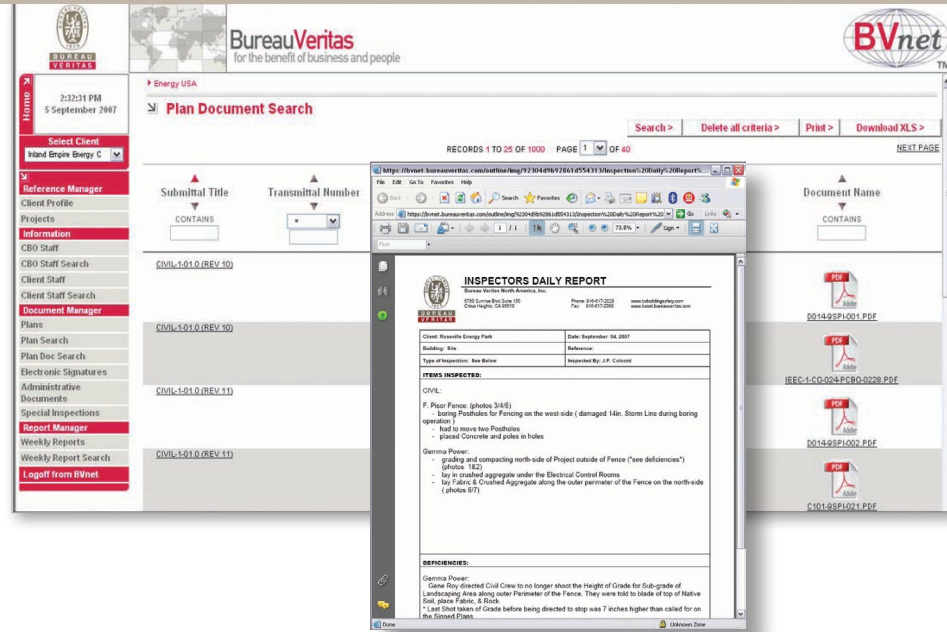
With multiple ongoing projects valued at over \$3 billion, the company set out to streamline reviewing and approving hundreds of thousands of engineering documents from the dozens of design and construction firms involved in each project. Traditionally, documents such as blueprints, environmental impact studies, and CAD files were printed and reprinted during each round of review. The stacks of paper were then hand-delivered to team members in dispersed offices. Considering document production, shipping delays, and turnaround time, the time and cost of each review cycle were a drain on people, paper, and schedules.

"Our aim was to put systems in place to more efficiently and securely share building plans and collaborate with construction professionals anywhere at anytime," explains Wedman.

To address the challenge, the company uses *BVnet* as an electronic data repository that allows for easy file sharing and management across project teams. With Adobe Acrobat Pro, Bureau Veritas reliably delivers all engineering documents as platform- and application-independent PDF files to staff and construction partners for rapid review. Construction partners are also required submit all documents to Bureau Veritas in PDF.

Bureau Veritas selected Adobe Acrobat Pro because it supports a wide range of file types, including complex engineering drawings, as well as for the ease of distributing PDF files to diverse audiences. Requiring only the free Adobe Reader software, recipients have rapid, reliable access to construction materials where and when they need them.

Bureau Veritas' *BVnet* is an electronic data repository that allows for easy file sharing and management across project teams. Collaboration with Acrobat Pro enables project teams to review designs faster and minimize mistakes and delays in the construction process.



Challenge

- Streamline review of design and engineering construction documents
- Improve collaboration across diverse user groups and computing environments

Solution

- Engineering design review and collaboration

Bureau Veritas uses Adobe Acrobat Pro to improve the process of reviewing and approving engineering and design documents for construction projects for the State of California Energy Commission.

Systems at a Glance

Adobe Acrobat Pro
Adobe Reader*

Minimizing construction rework and delays

A typical power plant project can require more than 50,000 pages of blueprints, calculations, specifications, and supplemental documentation. Because all construction project documents must be signed and stamped by the engineer of record, the frequent plotting, reprinting, and shipping of documents to secure the appropriate signatures only add to the high costs.

An important advantage of collaborating with Acrobat Pro is the ability to review designs faster, helping to minimize mistakes and delays in the construction process. Bureau Veritas engineers can quickly receive and review electronic blueprints and planning documents in PDF to ensure compliance with safety regulations. Recommended changes can be digitally annotated on the PDF files and returned to design engineers. At the same time, project and construction managers in the field can review changes as they are made and posted online.

"This approach brings tremendous clarity to design review and collaboration," says Wedman. "Our engineers can log into *BVnet* and easily review files and add comments as needed, including digitally signing documents." Once documents have been reviewed and modified, an e-mail is automatically generated and distributed to all project team members, replacing the need to plot or print and ship documents.

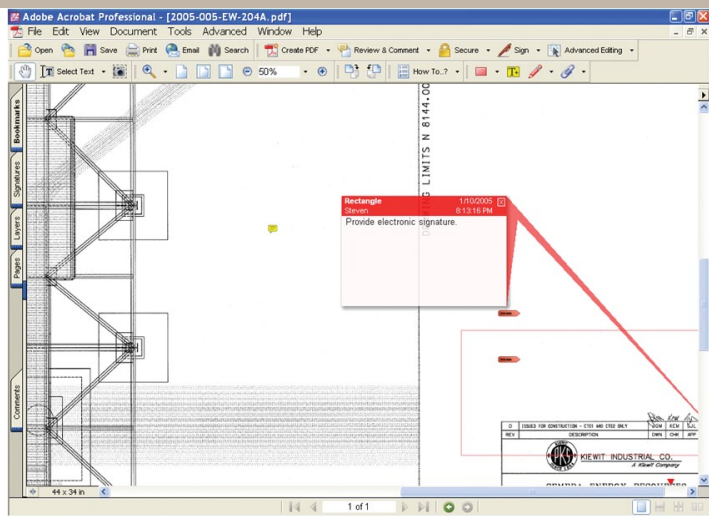
Project team members can use built-in measurement tools to electronically verify blueprint dimensions, lengths, and allowable square footage, bringing greater control and consistency to design reviews. Equally important, regulatory staff can efficiently track and approve comments and modifications made to each set of plans to help ensure changes are made as needed.

Saving time, money, and the environment

With Adobe Acrobat Pro, Bureau Veritas is eliminating printing of thousands of unnecessary documents, reallocating hundreds of man-hours to more higher-value uses, and reducing the carbon footprint of each project.

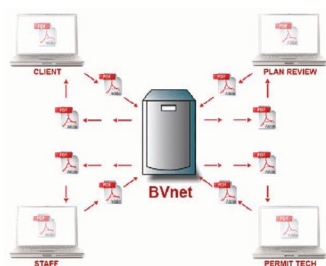
According to Wedman, the financial impact is considerable. "With Acrobat Pro, we eliminated the need to share printed documents with our staff and design partners," he says. "Everything happens faster and more efficiently. In just printing, shipping, and document administration costs alone, we save more than \$200,000 on a typical project."

With Adobe Acrobat Pro, Bureau Veritas' review cycle times have been cut by as much as 95% by exchanging all engineering documents reliably in PDF, commenting on them, and having required changes made in a few hours if needed.



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Kevin Wedman
Vice president,
Bureau Veritas Group



The savings, however, are more than just monetary. Bureau Veritas has also saved time and boosted staff productivity, enabling engineers to focus on driving projects to completion faster. "Manually shipping documents back and forth to locations for approval could take days," says Wedman. "We can now exchange all engineering documents reliably in PDF, comment on them, and have required changes made in a few hours if needed. Review cycle times have been cut by as much as 95%. This can have a direct impact on helping to keep a project on time and on or under budget."

An added advantage to the streamlined digital review processes is reducing the carbon footprint of each project. "The Adobe solution is an important element in our green initiatives," says Wedman. "By digitizing design and review processes, we can greatly reduce our use of paper and fuel costs for manually delivering materials. It's aiding our overall goal of more eco-friendly development practices."

As companies and government bodies move steadily toward more sustainable commercial practices, the ability to eliminate scanning, printing, and shipping engineering and construction documents on paper is invaluable. "Adobe Acrobat Pro provides an easy-to-use solution that fits the needs of our internal staff, as well as the wide range of partners we collaborate with daily," says Wedman.

For more information

www.adobe.com/products/acrobatpro



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