

# Power Design: Setting the standard for specialty contractors.

Electrical | Power Design | Case Study



*Power Design Inc. is one of the largest electrical subcontractors in the US, specializing in multi-family projects. The company has completed nearly 1,000 projects, frequently gaining national acclaim for their work. In 2014, after a year of intense testing and identifying significant potential savings, they made PlanGrid their official field solution.*

## Problem

Power Design (PDI) is known for innovative technology, but prior to PlanGrid, they didn't have an effective mobile solution in place for plan management. Tons of paper was going in and out of the field, making it impossible to keep up with the most current set, and there were huge delays getting new plans between change orders. Often, multiple change orders would be issued before they could distribute revised plans for the first one.

More than 5 years before PlanGrid, Power Design used other software to access digital drawings. Unfortunately, this required files to be passed back and forth for edits, which took extra time and caused versioning issues. Uploading, hyperlinking, and distribution processes were also cumbersome—uploading plans took up to two hours, and they had to hire someone full-time specifically to perform that task.

When mobile blueprint technology started to appear on the construction jobsite, Power Design knew they had to get on board. They created a Mobile Subcommittee to identify and solve gaps in plan management, and they found 3 key areas for improvement: they needed easier access to the most current set of drawings, a more efficient process for uploading plans, and greater collaboration between field and office staff.

### 3 key areas of improvement:

- Easier access to the current set
- A more efficient process for uploading plans
- Greater collaboration between office and field

### Sample requirements:

- Quick plan uploading
- Version control
- Tags, filters, and linking
- Issue tracking and photos
- Document attachments
- iOS mobile app with offline mode
- Multi-user collaboration

*“Assurance that the team is using the most up-to-date plans is a huge benefit. It is much easier to keep plans updated, posting RFIs, issues and redlines than the old-fashioned way with paper.”*

**–Jenny Schnackenberg**, Project Executive, Mid-Atlantic



## Solution and implementation

Power Design evaluated almost every mobile solution on the market, executing a strict vetting process: extensive meetings in the office, interviewing the field on their main use cases, and establishing an exhaustive list of requirements to narrow down the options.

Their list of requirements included: uploading, versioning, and tagging plans; multi-user collaboration; mobile functionality, including offline mode; managing issues on the jobsite; and a toolbar with calibration, hyperlinking, attachments, and photos. Above all else, the Mobile Subcommittee felt that plan management was their highest priority issue.

PlanGrid checked off each of these items on the list, and then some. Subsequently, Power Design piloted PlanGrid as their primary mobile app on the Arbor Row, Block E project, which was a 461-unit apartment building in Fairfax, VA. The job was entirely paperless, and ultimately saved their company millions of dollars in project costs after they rolled out the software to their field and office.

*“We researched many different applications and solutions over the last year to address the gaps identified by the Mobile Subcommittee, and none were as efficient as PlanGrid.”*

–**Taylor Precourt**, IT Release Manager

After distributing PlanGrid and iPads to superintendents, project managers and foremen, Power Design found that the app solved their needs perfectly. The team initially noted that PlanGrid solved their issue of access to the current set by making it easy to sync both the mobile and desktop apps.

They also noticed PlanGrid eliminated hours of manual data entry from their former workflow. The Power Design uploading process became a simple drag-and-drop from a PDF onto PlanGrid.com, which would sync to their mobile devices in real-time and automatically name each sheet.

Finally, the mobile app allowed for remote users to collaborate with annotations, punch lists, and progress photos from anywhere—on or off the jobsite. Over the course of a year, they monitored PlanGrid’s efficiencies on Arbor Row, coming to their final decision with some great numbers and justifications.

After deciding to expand usage to all projects, the executive team released a statement to announce their findings: “We researched many different applications and solutions over the last year to address the gaps identified by the Mobile Subcommittee, and none were as efficient as PlanGrid.”



## Results

Power Design calculated PlanGrid's ROI by interviewing their field team about their average time savings. They calculated those savings by noting their average hourly rates, and multiplied those by the number of employees. Then, they input conservative estimates for both paper and rework savings on an average project, and extrapolated those savings across all projects.

Time-wise, the foremen, supers and project managers were saving an average of 8 hours per person per week. As a company, this meant that they would save more than \$4.3 million per year if their entire field staff was using PlanGrid. Paper savings ran up to about \$600,000 per year, and rework savings were projected at \$2.4 million.

After subtracting their total spend on PlanGrid, they realized a \$6.7 million/year savings from providing their VPs, PMs, superintendents, and foremen with licenses. The decision was unanimous three years ago, and since then, they've scaled up to over 900 users working on over 950 PlanGrid-based projects.

### **\$4.3 million per year in productivity savings**

with users averaging 8 hours saved per person per week, across foremen, supers, PMs, and PEs.

### **\$2.4 million per year in rework savings**

### **\$600,000 per year in paper savings**

### **900+ users**

managing over 950 projects on PlanGrid





*“As the company’s staff continued to grow 40% year after year, it became mission-critical to bridge the communication gap. Adopting a mobile solution like PlanGrid was key in supporting the field.”*

**–Taylor Precourt, IT Release Manager**



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