



Business Impact

Successful plant launch
with no recorded accidents

100% of respondents rated
the course materials and
design as **Excellent/Good**

Increased production output

CASE STUDY

Optimizing the Workforce to Support Solar Power: Plant Launch Success

Situation

Solar power has become one of the world's fastest growing energy industries over the last decade. In fact, two-thirds of the entire world's solar photovoltaic (PV) capacity was installed after 2011, meaning that the industry may just be beginning to reach its potential. Commercial solar plants did not begin to appear until the mid-2000s, but they quickly became an emergent form of power generation due to solar energy's positive environmental impact and low operating costs. As the energy landscape changes, it takes a versatile company like GP Strategies® to alter its training strategies to account for evolving industries and new technologies.

- • • Optimize the workforce to ensure **operational readiness success** for **plant launches**.

A Fortune 200 company was building a 250-megawatt (MW) concentrated solar power plant spread out over 1,950 acres in the western United States. This plant is a "first of its kind" in the United States and became one of the largest solar plants in the world when fully commissioned. It generates enough electricity to power nearly 88,000 homes annually and requires no supplemental fuel. Also, this solar plant avoids producing approximately 330,000 tons of carbon dioxide annually that would have resulted if the company generated the electricity using fossil fuels.

The Challenge

The goal was to train operators and maintenance staff to operate a unique concentrated solar power plant once construction was complete. The engineering, procurement, and construction (EPC) company in charge of building the plant and its associated systems used original equipment manufacturers (OEMs) to provide basic equipment training. Although that meant the staff was able to learn the basic functions of the equipment, that training only satisfied half of the equation. The workforce also needed to know how this equipment fits together as a whole, and the interconnections between individual parts as a functioning, optimized system. GP Strategies was able to lend its expertise to the situation and fill this gap, and provided training from an operating perspective, through systems training and an integrated operations approach.

••• Training was provided from an operating perspective through **systems training** and an **integrated operations approach**.

GP Strategies Solution

GP Strategies provided the following phases to accomplish the goals set by plant management during the project kick-off meeting:

- Developed a project plan utilizing a needs-assessment approach, which defined the scope, project schedule, and resources tied to the construction and third party vendor training milestones.
- Enrolled plant staff in GPiLEARN+™ learning management system (LMS), to provide solar fundamentals training prior to the start of instructor-led training courses.
- Developed critical system procedures and associated job performance measures.
- Developed and conducted instructor-led training courses for operators and maintenance personnel to operate the plant and equipment safely and efficiently.
- Developed and conducted an instructor-led turbine generator course for operators to ensure that they operate and maintain the turbine generator set, as specified by the OEM.

GP Strategies was able to complete these goals in a concentrated timeline of five months.

Business Impact

The impact GP Strategies had on the project was vital to its success. Newly hired plant staff were trained and qualified on time in a safe, efficient manner. This process contributed to a successful plant launch with no recorded accidents. The plant went on to exceed its projected production output in 2015 and 2016. In addition, in a survey taken by students after the completion of the course, 100 percent of respondents rated the Course Material & Design as Excellent/Good, and 100 percent rated the Overall Course as Excellent/Good.

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About GP Strategies

GP Strategies is a leading workforce transformation partner—one of the few truly dedicated global providers in the marketplace providing custom solutions. We believe our transformation focus, when paired with deep listening, a customer-centric approach, and innovative expertise, enables our clients to routinely achieve superior business and operational results from our evidence-driven and technology agnostic recommendations.

Whether your business success requires a change in employee performance and mindsets, learning technologies, or critical processes, GP Strategies is the transformation partner you can trust.

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