An American, privately-held supermarket chain needed to expand their snack food production and modernize their manufacturing facilities. With $26 billion in annual sales and more than 116,000 partners (employees), the company is recognized for its commitment to its customers, the communities it serves, philanthropy, diversity and sustainability. The supermarket chain operates several manufacturing facilities in the United States, and produces many of its own-brand products.

Starting-up New Production on Schedule Calls for an Experienced Advisor

A project to build a high-tech food plant had begun construction when the supermarket chain contacted Life Cycle Engineering (LCE) to assist in the operational readiness phase of the project. With new technologies, a new methodology for operation, and a tight schedule to get the facility up and running at design rate, the construction team was looking for guidance to develop a detailed step-by-step plan to accomplish the operational readiness activities as well as commissioning and start-up for the new plant.

Creating Operational Readiness Begins with Auditing Preparedness for all Functional Areas

The construction team had a detailed construction schedule, however the operational readiness details were only developed at the highest level, and tactical details to accomplish the objectives resided in silos within the organization. LCE was hired to first perform an audit of all functional areas needed for operational readiness, and determine the preparedness level for each of the functional areas, with respect to project, organization and knowledge development, as well as people and materials management.

One of the audit’s goals was to better understand the operating teams’ involvement in the project development, and activities that might have been missed given the construction of the site had already
begun and detailed engineering was completed. LCE provided a detailed audit checklist to the leads of each of the nine functional areas reviewed (Safety, Environmental, Project Management, Materials Management, HR, Finance, Maintenance, Operations, and Commissioning.) The checklist included approximately 1200 areas that needed to be reviewed for operational readiness. Based on the feedback from leads as they assessed their areas, LCE’s expert developed an audit to dig deeper into areas that were deemed inadequate or behind schedule. He conducted interviews with each of the functional area leads, and reviewed documents to determine work quality and progress against the projected start-up date.

**Operational Readiness Audit Report Identifies Gaps and Recommends Strategies for a Successful Start-up**

The result was a detailed report that identified all gaps and recommended actions to close those gaps. The audit uncovered numerous issues as well as pockets of excellence. Significant issues included:

**Teams were acting in silos:** Although they were having weekly meetings, the communication structure did not close all the gaps between the various groups (operations, maintenance, safety, finance, etc.) LCE helped the team develop a War Room strategy to make the deliverables visible to all parties. A daily standup meeting was structured to deliver daily plans and critical activities to the entire team.

**The hiring schedule wasn’t aggressive enough:** The existing plan to hire all operations/maintenance technicians to deliver the required amount of information to run the plant at optimal design specifications was never going to meet the goal. The amount of Maintenance plans, operating procedures, LOTO procedures, and required information to optimally run the a high-tech food plant could not be achieved with the limited resources on site, and the number of hours available between the audit and the commissioning start date.

**Planning for commissioning and start-up was behind schedule:** The commissioning and start-up plans had not been started. The resources to develop those plans were not available and there were no plans to hire them within the required timeframe. Another planning oversight was a lack of hot commissioning materials scheduled to be available for validating equipment specifications. LCE’s expert provided the commissioning team with a management structure and approach, as well as Excel-based tools to manage the commissioning of the project.

Starting up a new capital project can be a daunting task, especially when a new facility incorporates new technology and a new methodology for operation. By engaging with an experienced external advisor to conduct an Operational Readiness audit, the construction team was able to pinpoint potential trouble areas, implement new strategies, and identify all the activities that needed to be completed prior to commissioning and start-up of its new state-of-the-art, high-tech food plant. The start-up performance for the plant was so strong that the supermarket chain plans to repeat the same approach as it plans for future expansion of its manufacturing capacity.

**About LCE**

*LIFE CYCLE ENGINEERING* (LCE) provides consulting, engineering, information technology and education solutions that deliver lasting results for private industry, the Department of Defense and other government organizations. The quality, expertise and dedication of our employees enable Life Cycle Engineering to serve as a trusted resource that helps people and organizations to achieve their full potential. Founded in 1976, LCE is headquartered in Charleston, South Carolina with offices across North America and experience around the globe. Follow us on LinkedIn, Twitter and YouTube for company updates.