Innovative training for efficient building operations staff

Case Study

Company Name: Memorial Sloan Kettering Cancer Center

Location: New York, NY

NYSERDA Program: Workforce Development and Training

Business Type: Building Operations Management

Building Operations Training

With a lack of adequately trained building operators, frequent personnel turnover, retirements, and increasingly complex building systems, many facility managers are facing staffing challenges to maintain effective and efficient building operations.

With support from the New York State Energy Research and Development Authority’s (NYSERDA) Building Operations and Maintenance Workforce Development Training Program, Memorial Sloan Kettering Cancer Center in Manhattan partnered with the Refrigeration Institute and the CUNY Building Performance Lab to establish a facility staff training curriculum on high-performance operations strategies. An innovative apprenticeship program was also developed to prepare individuals without experience to gain the knowledge and credentials needed to join the plant operations team.

- 8 locations spanning 4.5 million square feet
- 32 staff trained
- 12 apprenticeship program completions

Diverse trainees:
Participants from several different professional backgrounds

Continuing Education for Existing Operators

Thirty-two of the Center’s operators joined a Building Re-Tuning and Coaching course led by CUNY where participants investigated key systems of interest within the Center’s buildings by establishing and reviewing trend data within the building automation system. During the 15-hour course, trainees collected data from their respective buildings, created trend charts, diagnosed problem areas, developed strategies to address issues, and implemented actions for improving energy and efficiency.
In addition, a coaching pilot program was launched to allow more experienced staff to mentor new entrants to the building and operations team.

**Innovative Apprenticeship Program**

Applying a creative recruitment approach, the Center sent out an organization-wide call for interested apprentices, which generated 250 interested candidates from diverse professional backgrounds—some in environmental services and patient care roles. A total of 12 participants completed the program and received various certifications relevant to their new positions within the Center.

The intensive program lasted 18 months and included 1,200 hours of classroom training as well as on-the-job coaching sessions with senior staff. All trainees were placed in building operations and maintenance roles to gain professional experience. By the end, participants gained hands-on expertise in refrigeration systems operation, system charging and recovery, heating system operations and controls, and low-pressure boiler operations. Apprentices prepared for their EPA 608 Technical Certification and the Refrigeration System Operating Engineers written and practical exams.

The Refrigeration Institute created a new course within the program to cover high-performance operations and maintenance, energy efficiency, safety, refrigeration systems, heating systems, troubleshooting, and record keeping tailored to the Center’s needs. The program will become an ongoing, critical part of the facilities staffing plan to address senior operator retirements over the next 10 years.

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