

Case Study of an Industrial Trust Visit to EDF Energy at Heathrow Airport

As part of National Enterprise Week, year 10 students from Gumley House Convent School Hounslow visited EDF Energy Airports Division at Heathrow to understand the business operation and power engineering.

Background

Gumley House RC Covent School is an 11-18 specialist Business and Enterprise Roman Catholic secondary school with around 1200 students.

EDF Energy Networks is part of the EDF Group which operates in 23 countries and employs over 161,000 employees world wide with approximately 11,500 in the UK, where it generates, distributes and sells electricity to nearly 8 million customers. One of its high profile customers is BAA at Heathrow Airport where it is responsible for “keeping the lights on”. This safety and commercially critical activity is managed by a team based at Heathrow Airport.

Learning objectives

The teacher at the all girls school saw an opportunity to inspire the students in both the commercial aspects of such a critical enterprise and also the opportunities for the students to consider vocations in engineering. After discussions with the company about the learning objectives that the school wanted the visit to achieve, a format for the event was agreed. In advance of the visit the teacher briefed the students to ensure that they were properly prepared to benefit from what they were about to see. Due to a cancellation of another school this was all achieved within one weeks notice.

The visit

The visit, in November 2006, was held in the Boardroom overlooking Heathrow Terminal 4 and the runway and started with an overview of EDF Group and EDF Energy to help put the visit into context. There was then a discussion on the commercial aspects of the contract that EDF Energy hold with BAA which included the term, value and responsibilities. The next session was hosted by a female engineer who was responsible for all the maintenance of the electricity infrastructure at Heathrow. The day also included a “Solve a Real Business Issue” (SARBI) activity where the students were taken through a real event where electricity supplies were lost in Terminal 3, 4, Cargo area and fuel dump. The students had to work with electricity plans and decide who they would restore electricity supplies too first. The event closed with a tour of the T5 construction site.



Sue Agate from EDF Energy helping the students Solve a Real Business Issue

The students were greatly enthused by what they heard and saw. With plenty of questions for both EDF Energy and the T5 tour guide.

Learning outcomes

By the end of the visit the students had a much better understanding of the activities EDF Energy undertook and specifically their role in keeping Heathrow Airport both safe and operational, other learning outcomes included:

- The role of an electricity distribution company;
- An improved understanding of 'behind the scenes' activities at Heathrow;
- How electricity distribution networks can be switched to restore electricity supplies;
- What a commercial relationship looks like between companies; and
- An appreciation of the detailed project management required to construct a project like T5.

Conclusion

The school felt that the visit had been very successful and that it had had a significant impact on the students attending, giving them a far better understanding of the both what a business looks like from the inside and how engineering could be both a valid and exciting vocation for females. All the students either 'agreed' or 'strongly agreed' that the visit would be useful for school work and would like a career in design and or manufacturing.

"I can't tell you how invaluable it is for the girls to see role models such Sue Agate proving that 'they can do it too'. One of the girls wants to go into engineering now.....we had a fantastic morning; the girls were fascinated and engaged"

Andrew Macdonald-Brown
Director of Business & Enterprise
Gumley House Convent School

EDF Energy were also pleased with the visit which had given their staff an opportunity to demonstrate their work to young people and to share with them some of the excitement that both commercial and electrical engineering vocations hold: possibly encouraging them to aspire to be electrical engineers themselves in the future. Sue Agate the female engineer who hosted the visit is now working directly with this school to continue to inspire the girls in electrical engineering.

December 2006