

# Project of the Year award to Pavana

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**The Lufussa Pavana III project, a 267.4 MW power plant in Honduras built by Wärtsilä, was voted 'Best Project of the Year' for 2004 in January by Wärtsilä's Power Plant Management. The award recognizes the sales and project teams involved in the success of this project for their outstanding work in its development and execution.**

Pavana III is the largest power plant built by Wärtsilä to date. The owner is the Honduran power company Luz y Fuerza de San Lorenzo S.A. (Lufussa). The plant comprises 16 Wärtsilä 18V46 generating sets and the scope of Wärtsilä's contract covered power plant engineering, procurement, supply, construction and start-up.

The plant was completed and handed over to the customer on time. The project was well planned and carefully monitored maintaining the highest engineering quality throughout its duration and without any accidents, a record for a large construction project of this type.

The main elements of success were the professional work of the sales team, the early involvement of the project team at the sales stage, and the early start of design and negotiations with well known subcontractors. All these factors contributed to excellent stakeholder satisfaction. The fact that the EPC (engineering, procurement and construction) project was the largest in the history of the company made this an extraordinary achievement.

## Elements of success

Good communications between Lufussa and Wärtsilä were of the utmost importance during the project implementation. Both parties focused on the same goal and throughout the project both parties showed a constructive attitude and communication. Figure 2 shows the elements of a successful project and the importance of communication.

### 1. Early In Easy Out

One of the secrets behind this successful EPC project was to start work even before



Fig. 1 The winning team from left: Jan-Olof Björk, Kim Vestman, Robert Selänniemi, Kaj Tallgren, Christer Öhman, Bo Nortamo, Tarmo Borisov and Esa Yli-Rahnasto. Absent: Seppo Viitala, Nomi Ahmad and Roberto Lira.



Fig. 2 The elements of success.

the contract was finalized as this helped the project manager influence the whole process.

A flying start meant potential economic savings and a high quality of delivery. The preliminary notice to proceed (PNTP) phase of the project, in which the detailed engineering was started early, relates to 'The

Early In Easy Out' concept, a fundamental reason behind Wärtsilä's ability to handle EPC projects successfully.

### 2. Scope of work

In a perfect world, the project team has to know exactly what it has to accomplish (clear contract).

# na III team

The scope of the work to be done was especially well specified for the Pavana III project. The EPC agreement, including the scope of supply, the technical specifications and layout drawings, etc. was well prepared. The project team was able to influence the EPC agreement but the responsibility during the sales phase was of course with the business development team.

With a project on this scale it was necessary to plan a large number of areas simultaneously. The civil, electrical, and mechanical units took care of their respective areas so the large project was divided into smaller subprojects. Consequently, the responsibility was also delegated. In this phase it was crucial that the team members were experienced professionals able to handle multiple tasks.

### 3. Change management

Changes during the project were well controlled and the changes were kept under close review.

### 4. Risk management

Systematic risk analyses were performed for the Pavana III project and therefore the risk level was low.

### Conclusion

Since 1990, green field projects totalling roughly 2300 MW have been completed in Central America, mostly by Independent Power Producers. Almost 1500 MW (64%) of this total consists of reciprocating engine technology burning low-cost heavy fuel oil.

Reciprocating engines continue to be the technology of choice because of their high efficiency, economical costs, and construction cycles of 12 months or less. In the same period, Wärtsilä has installed 1300 MW in Central America, representing an 84% market share of the reciprocating engine market. In total, Wärtsilä has over 4000 MW of references in the Latin America and Caribbean region, most of them EPC contracts handled by Wärtsilä.

The key ingredient in most of these projects has been dedicated professionals working closely with our customers towards the mutual goal – success for all. ■

*Read more about the Pavana III project in Energy News 17, October 2003.*

## Pavana III highlights

