Benefits of implementing “On-the-job demonstrations” as mandatory training program for field personnel

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Abstract
Rapidly changing technology and the introduction of new suppliers has made the turbines more efficient operationally but at the same time, effective knowledge transfer of the technological aspects has become more important and challenging.

To add to this situation, the manpower available in the remote locations (where most wind farms are located) is coming from very diverse backgrounds e.g. technical people from wood industry, cattle, and small electrical industries, increasing the need for effective trainings.

Classroom training has always been in place but their actual effect on site environment was not well pronounced. On-the-job demonstrations were introduced to ensure that field personnel’s across the world, irrespective of the location and background, have the same level of understanding for safety and quality across the whole fleet.

Additionally for better sink in of theoretical information and the special topics which can’t be simulated in classroom environment, the approach has been incredibly useful.

Methods
- Integration of classroom training and actual on-site experience
- Documentation of site learnings and field personnel’s competencies
- Constant mentoring of new service technicians for initial months to ensure their learnings are top notch
- Constantly reviewing and improving the onsite documentation content as soon as new supplier/software changes are introduced in service manuals

Objectives
The main objective is to bring out the personnel to be trained (mostly service technicians) out of their comfort zone. Many stakeholders still believe that the classroom or supplier training (with a little bit of hands-on practice on the test bench) is enough to ensure safe and quality operation on site.

Results
- Safety incident
  - Safe colleagues
  - Safer environment for new technicians
- Competency levels
  - Improved first time fix rate by ~15%
  - Less turbine visits by ~10%
  - Fault finding time reduction by ~20%
- Troubleshooting time
  - Improved availability by ~0.25%
  - Less downtimes

Conclusions
Nordex Acciona introduced a very comprehensive site training documentation for On-the-job demonstrations, which includes everything that a service technician needs to perform on a wind turbine.

Introduction of On the job demonstrations have improved performance in almost all important service KPIs i.e. troubleshooting time, quality and safety.

With the positive effect of implementing the on the job demonstration methodology, Nordex Acciona is inspired to take this further in construction phase and offer it to subcontractors as well to our customers.

We are further developing the training methodology for expert training requirements!