

**Sino-German Cooperation China Wind Power Research and
Training Project**

**Suzhou Longyuan Bailu Wind Power Vocational Training
Center**

**Notice of Advanced Training Course on “Technical Operations
Management and Optimal Operation of Wind Power Project”**

During recent years, the annual increase of wind power installed capacity is around 100%, the development speed is far beyond the prediction. By the end of 2008, the wind power total installed capacity reached 12GW. To meet the rapid development of wind power, improve the WTG operational & maintenance skill, reinforce the operation management and optimal operation of wind power projects, Suzhou longyuan bailu training center will organize an advanced training course on “Technical Operations Management and Optimal Operation of Wind Power Project” from 14th, December, 2009 till 18th, December, 2009. The training course is supported by the Sino-German wind power research & training project.

The training course will invite:

Mr Ortwin Fritsche and Mr Holger Piper from WindGuard, Germany. Both of them are experts in wind farm operation and management field, and they will share the valuable experiences on technical management and optimal operation of wind power projects during the course.

Mr Holger Piper, Wind power technical head of WindGuard, Germany. Expert on WTG fault diagnosis and blade quality balance measurement.

Mr Ortwin Fritsche, wind power projects supervisor from WindGuard Germany, aerodynamic expert.

The training content includes WTG technical management and economical analysis, WTG operation situation and Wind farm efficiency, introduction on the \methods to improve the WTG operation performance, experiences and examples on WTG and wind farm optimal operation, WTG vibration and condition monitoring technology. The detail training content please refer to attachment 1.

The detail arrangement of the training course:

1. Registration Time: 13th, December, 2009.
2. Registration Location: Suzhou Huaqiao Hotel.
Sanxiang Road 178#, Suzhou. 0512-88880008
3. Training Period: 14th, December, 2009—18th, December, 2009.
4. Training Content:
5. Training fee: 3800 Yuan/ Person
Contact Person: Li xiaoxue 0512-68602807; 13812691816
Zhu huiping 0512-68602803; 13616275191
Fax: 0512-68602023 0512-68602083
Email: lbwt_2006@163.com
6. Please send back the registration form to us before the 9th, December, 2009.
7. Transportation: 4 km away from Suzhou train station, 90km away from Shanghai Hongqiao airport, 50km away from Wuxi airport.

P.S: Accommodation will be organized by the training organizer, Trainee will be responsible for the expense

Attachment:

Attachment 1: Training Content

Attachment 2: Registration form

Attachment 1

Technical Operation of Wind Energy Projects & Optimisation of Wind Turbines

Day 1: Introduction and Technical Management

- Brief course overview & introduction of participants
- Technical management vs. economic management
- Maintenance strategies
- Advantages of periodical technical inspections

Day 2: Background Knowledge of Turbine and Site

- Concepts of wind turbine and component to maintain
- Climatic impact on wind turbine operation I (General conditions)
- Climatic impact on wind turbine operation II (Extreme conditions: wind, sand, snow, ice, etc.)
- Wind farm effects

Day 3: Improving Knowledge on Wind Turbine Operation

- Technical issues on wind turbine performance (power curve, availability)
- Analysis of operational data
- Blade angle deviation and aerodynamic imbalance I (theory)
- Blade angle deviation and aerodynamic imbalance II (reasons, consequences)

Day 4: Wind Turbine and Wind Farm optimisation ■ Experiences and consequences from wind turbine operation

- Technical vs. economic optimisation
- Statistics on failures
- Vibrations and Condition Monitoring I

Day 5: Advantages of Additional Performance Improving Measures

- Vibrations and Condition Monitoring II
- Vibrations and Condition Monitoring III + IV (alternative: Practical vibration measurements at a model)
- Review of the training course

Schedule Of The Training Course 培训课程安排

	Monday 星期一	Tuesday 星期二	Wednesday 星期三	Thursday 星期四	Friday 星期五
8.30 – 10.00	Brief course overview & introduction of participants 课程概述及与会者介绍	Concepts of wind turbine and components to maintain 风机与主要部件的概念	Technical issues on wind turbine performance 有关风机性能的技术细则	Experiences from wind turbine operation and consequences 风机运行经验与相关措施	Vibrations and condition monitoring II 振动和状态监测 II
10.00 – 10.30	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇
10.30 – 12.00	Technical management vs. economic management 技术管理与经济管理	Climatic impact on wind turbine operation I 风机运行的气候影响 (I)	Analysis of operational data 运行数据分析	Technical vs. economic optimisation 技术方面和经济方面的优化	(Practical vibration measurements at a model) 在模型上进行振动和状态监测实践
12.00 – 13.30	Lunch break 午餐	Lunch break 午餐	Lunch break 午餐	Lunch break 午餐	Lunch break 午餐
13.30 – 15.00	Maintenance Strategies 维修策略	Climatic impact on wind turbine operation II 风机运行的气候影响 (II)	Blade angle deviation and aerodynamic imbalance I 叶片角度偏差和空气动力不平衡 (I)	Statistics and Failures 故障统计	(Practical vibration measurements at a model) 在模型上进行振动和状态监测实践
15.00 – 15.30	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇	Coffee break 茶歇
15.30 – 17.00	Advantages of periodical technical inspections 先进的定期技术检查	Wind farm effects 风电场效率	Blade angle deviation and aerodynamic imbalance II 叶片角度偏差和空气动力不平衡 (II)	Vibrations and condition monitoring I 振动和状态监测 I	Summary of the last 5 days 小结

附件 2

“风电项目技术运营管理及风电机组优化运行高级研讨班” 报名回执

单位名称					联系人		电话	
参加人员	姓名	性别	职务	专业	电话	手机	风电工作经历	
备注								
帐户信息	名称	苏州龙源白鹭风电职业技术培训中心有限公司						
	开户银行	中国工商银行苏州市新区支行	帐号	1102021119002140775				