



## 公司介绍

**EDF:** A European energy leader with a worldwide presence

The EDF (Electricité de France) Group was built in 1946. It is a public company (85% state, 15% listed in France) which integrates engineering, operation, transmission and distribution activities. Internationally developed, the EDF Group intends to reconcile performance and sustainable development in all the countries where it is present.

Key figures of EDF Group in 2008:

- 124.8GW total installed capacity in Europe, including 98.4GW in France: nuclear 63.1GW (64,2 %), hydro 20.4GW (20,8 %), fossil-fired 14.8GW (15 %);
- In France, EDF produced 483.9TWh per year, including 86.3% from nuclear;
- €64.3 billion in revenues, €3.4 billion in net income;
- 38.1 million Customers worldwide.

## EDF in China

In 1984, EDF became the technology contractor of Daya Bay Nuclear Power Station construction; in 1994, the representative office was set up in Beijing for stepping up with China in nuclear, hydro, fossil-fired, transmission and distribution and training. In 2002, EDF Asia-Pacific Branch was set up in Beijing.

EDF's investment in companies operating coal-fired power plants with a total installed capacity of 3,720MW and equity installed capacity of 1,308MW makes it the leading foreign investor in electricity generation in China. EDF has also developed partnerships enabling it to take part in new technological developments in the field of nuclear, coal-fired, hydro and renew energy power facilities.

EDF Investments in China:

- Laibin B Power Plant (2 X 360MW – EDF holds 100%),
- Shandong Zhonghua Power Co. Ltd. (3000MW, EDF holds 19.6%),
- EDF holds 20% of Beijing United Gas Engineering and Technology (BUGET).
- Guangdong Taishan nuclear power project: On 26th November 2007, EDF has signed the agreement with China Guangdong Nuclear Power Holding Co. Ltd to establish a joint venture, to build and operate two third-generation EPR nuclear power units in Taishan, Guangdong province. On 10th August 2008, all agreements related to the JV creation have been finalized. The JV will be created after its approval by the Chinese Government.

## 法国电力集团公司

法国电力集团公司 (Electricité de France) 成立于 1946 年，于 2005 年 11 月成功在法国上市 (法国国有控股 87%)，是一家能源生产与经营上下游业务一体化的企业，涵盖发电、输电、配电、能源交易和能源销售等各个环节。集团依靠协同效应拓展国际业务，坚持合作并与所在国可持续发展方向一致。

法国电力集团 2008 年主要数据：欧洲发电装机容量为 1.248 亿千瓦，其中法国装机容量为 9840 万千瓦 (核电 6310 万千瓦，占 64.2%；水电 2040 万千瓦，占 20.8%；火电等非核电 1480 万千瓦，占 15%)。法国全年发电量为 4839 亿千瓦时，其中核电占 86.3%；营业额为 643 亿欧元，净利润为 34 亿欧元；在全球拥有 3810 万用户。

**法国电力公司在中国：**1984 年担任大亚湾核电站建设的技术总承包。1994 年在北京成立代表处，加强了与中国在核电、水电、火电、输配电及培训等方面的合作。2002 年在北京设立亚太地区总部。

投资包括：法国电力公司 90 年代在中国参与燃煤发电，发电机组的总装机容量达 3720 兆瓦，权益装机容量 1308 兆瓦，其中包括广西来宾 B 电厂 (2 X 36 万千瓦，法国电力公司 100%持股) 和山东中华发电有限公司 (300 万千瓦，法电占 19.6% 的股份)。2009 年 11 月广东台山核电厂一期工程已获国务院批准，12 月商务部批准了建立合资合营公司。台山核电一期两台 EPR 核电机组，项目总装机 3500 兆瓦，其中法国电力集团公司占 30%，权益装机 1050 兆瓦。



## EDF DAP CHINA DIVISION

### Job Description

Department	EDF Beijing R&D	Work Place	Beijing
Job Title	Electric power grid engineer with experience	Report to	R&D Director
HR contact	<a href="mailto:hong.wang@edf.fr">hong.wang@edf.fr</a> , <a href="mailto:xavier.yang@edf.fr">xavier.yang@edf.fr</a>	Starting Date	01/02/2012

#### **YOUR MISSION**

Technical support of EDF group in China for electrical transmission/distribution/smart grid domains, you work on smart grid, smart meter and electric vehicle integration projects. You will provide expertise and solutions technically reliable and economically interesting.

#### **YOUR JOB**

Under supervision of expert engineer, your work may include following scientific and technical topics:

- You are the customer's contact point regarding to technical issues and project construction,
- You will be gradually familiar with power system simulation software and use them to solve actual electric power grid issues,
- Grid modelling, stability, reactive power compensation, voltage stability, voltage fluctuation,
- Data processing of on-site measurements,
- Demonstration of the application of scientific principles or engineering processes,
- You will be able to present your solutions to customers,
- Business travels are expected.

#### **REQUIRED SKILLS**

- Doctor degree in Electric Power Grid Engineering with at least 3-year actual experience
- Have an analytical mind and a logical approach to problem-solving
- Have the ability to apply your knowledge to actual situations
- Electrical distribution, power grid computation, knowledge in renewable energy generation and smart grid
- Power grid modelling and simulation (time domain, stability and statistical analysis)
- Be highly numerate and have good IT skills (capable to develop simple application)
- Know the state of the art and developing trend in your working domain and provide technical basis to decision-maker of your company
- Be an adept communicator both verbally and in writing, and confident when speaking to customers

Notion in:

- Electric grid, dispatching, power electronic, electric circuit modelling and simulation
- Dynamic compensation of electric grid
- Power quality assessment and application of national & international standards
- Flexible ac and dc transmission technologies
- Smart meter, smart home, HEMS and PLC communications

Language skills:

- Chinese: as mother tongue
- English: both written & spoken is a must
- French: nice to have some skill, but not absolutely necessary



## EDF DAP CHINA DIVISION 法国电力集中国部

### Job Description 职位描述

部门	法国电力集团研发中心	工作地点	北京
职务名称	具备电力系统经验的工程师	行政归属于	研发中心总经理
人事部门联络	<a href="mailto:hong.wang@edf.fr">hong.wang@edf.fr</a> , <a href="mailto:xavier.yang@edf.fr">xavier.yang@edf.fr</a>	起始时间	2012 年 2 月

#### 您的任务

为法国电力集团在中国的输电及配电项目做技术支持。您的工作领域将包括电力系统模拟，智能电网建设，智能电表及电动汽车入网等应用项目。工作任务包括实际项目技术评估，方案论证及技术及经济可行性分析。您将在由中外同事组成的团队中工作。

#### 工作范围

在法国电力集团的专家工程师指导下，您的工作范畴将涉及以下科学及技术课题：

- 您是法电客户技术咨询及项目建立的接入点
- 您将逐渐熟悉电力系统仿真软件并利用这些工具解决实际电力系统课题
- 电网建模，电力系统稳定分析，无功补偿，电能质量研究
- 现场测试，数据分析处理及建模
- 利用科学原理演示分析实际工程应用课题
- 具备向客户介绍您的解决方案的能力
- 有公出机会

#### 所需职业技能

- 工学博士文凭，至少有 3 年以上的电力系统工作及研发经验
- 具备理论分析能力并能利用逻辑方法来解决实际工程课题
- 具有运用理论知识演示解决实际课题的良好意识
- 电路计算，配电网运行，可再生能源入网，分布式发电及智能电网
- 电力系统建模与仿真能力，包括时域，频域，稳态，暂态和数理统计方法
- 掌握良好的信息及计算机技能（能够开发简单的应用程序）
- 了解本行业发展动态及趋势，为公司决策层及时提供技术参考依据
- 善于沟通，有口头和书面交流能力，与客户讲话时充满信心

#### 所需了解领域

- 电网运行及调度，电力电子技术应用，电力系统建模，用户负荷模拟
- 电网动态补偿技术
- 电能质量评估及国内国际标准应用
- 柔性交直流输电技术应用
- 智能电表，智能家居，能量管理，电力线载波通讯

语言能力：

- 汉语：母语，有技术文章写作能力
- 英语：必备说与写能力
- 法语：最好有一定的法语应付能力但不是必须