

## 美国输电线路典型设计概况及对我国电网工程设计建设的启示

郭日彩<sup>1</sup>, 许子智<sup>1</sup>, 齐立忠<sup>2</sup>, 李喜来<sup>3</sup>, 李晋<sup>4</sup>, 张莲瑛<sup>1</sup>, 何长华<sup>5</sup>, 管顺清<sup>6</sup>

1. 国家电网公司, 北京市 西城区 100031; 2. 河北省电力勘测设计研究院, 河北省 石家庄市 050031; 3. 中国电力工程顾问集团公司, 北京市 西城区 100011; 4. 北京国电华北电力工程有限公司, 北京市 海淀区 100761; 5. 国网北京电力建设研究院, 北京市 宣武区 100055; 6. 西北电力设计院, 陕西省 西安市 710032

收稿日期 修回日期 网络版发布日期 接受日期

### 摘要

为汲取国外输电线路设计的先进经验, 国家电网公司组团考察了美国的输电线路。重点调研了美国输电线路的设计标准与我国的异同、美国在输电线路方面的杆塔规划原则及分析方法、新材料和新技术的应用情况、环境保护问题的标准和解决措施等内容, 提出了完善我国输电线路设计标准体系、加强统一规划、加大高强度应用力度等建议。

关键词 [美国输电线路; 典型设计; 电网规划与建设](#)

分类号 [TM64](#)

## General Situation of Typical Transmission Line Design in USA and Its Enlightenment to Design and Construction of Power Grids in China

GUO Ri-cai<sup>1</sup>, XU Zi-zhi<sup>1</sup>, QI Li-zhong<sup>2</sup>, LI Xi-lai<sup>3</sup>, LI Jin<sup>4</sup>, ZHANG Lian-ying<sup>1</sup>, HE Chang-hua<sup>5</sup>, GUAN Shun-qing<sup>6</sup>

1. State Grid Corporation of China, Xicheng District, Beijing 100031, China; 2. Hebei Electric Power Investigation Design & Research Institute, Shijiazhuang 050031, Hebei Province, China; 3. China Power Engineering Consulting(Group) Corporation, Xicheng District, Beijing 100011, China; 4. North China Power Engineering(Beijing) Co., Ltd, Haidian District, Beijing 100761, China; 5. Beijing Electric Power Construction Research Institute of SGCC, Xuanwu District, Beijing 100055, China; 6. Northwest Electric Power Design Institute, Xi'an 710032, Shaanxi Province, China

### Abstract

To draw advanced experiences from design of transmission line abroad, an investigation on transmission lines in USA was organized by the Capital Construction Department of State Grid Corporation of China. The emphasis of the investigation lies in following aspects, i.e., the similarities and differences in transmission line design standards adopted in USA and China respectively, the planning principle for transmission towers and its analysis method in USA, application of new materials and new technologies, standards of environmental protection and related measures and so on. On this basis the suggestions, such as perfecting the design standard system for transmission lines in China, enhancing unified programming and spreading the application of high strength steel, are proposed.

Key words [transmission lines in USA; typical design; power grid planning and construction](#)

DOI:

### 通讯作者

作者个人主页 郭日彩<sup>1</sup>;许子智<sup>1</sup>;齐立忠<sup>2</sup>;李喜来<sup>3</sup>;李晋<sup>4</sup>;张莲瑛<sup>1</sup>;何长华<sup>5</sup>;管顺清<sup>6</sup>

扩展功能	
本文信息	
▶	<a href="#">Supporting info</a>
▶	<a href="#">PDF (277KB)</a>
▶	<a href="#">[HTML全文](OKB)</a>
▶	<a href="#">参考文献[PDF]</a>
▶	<a href="#">参考文献</a>
服务与反馈	
▶	<a href="#">把本文推荐给朋友</a>
▶	<a href="#">加入我的书架</a>
▶	<a href="#">加入引用管理器</a>
▶	<a href="#">复制索引</a>
▶	<a href="#">Email Alert</a>
▶	<a href="#">文章反馈</a>
▶	<a href="#">浏览反馈信息</a>
相关信息	
▶	<a href="#">本刊中 包含“美国输电线路; 典型设计; 电网规划与建设”的 相关文章</a>
▶本文作者相关文章	
·	<a href="#">郭日彩</a>
·	<a href="#">许子智</a>
·	<a href="#">齐立忠</a>
·	<a href="#">李喜来</a>
·	<a href="#">李晋</a>
·	<a href="#">张莲瑛</a>
·	<a href="#">何长华</a>
·	<a href="#">管顺清</a>