



2007 Corporate Social Responsibility Report of State Grid Corporation of China



#### LOGO

The spherical logo stands for SGCC's promising future, global visions and commitment to be a world-class utility.

The circular design symbolizes the interaction, coordination, unity and harmony taking place both inside and outside of the company. This design further expresses the determination of SGCC in delivering the Quality Services to achieve the harmony, coexistence and common development of our customers, employees and society.

The crisscrossing on the logo stands for SGCC's core business of constructing and operating power gird. It further signifies SGCC's persistent pursuit of excellence and distinction in support of social economic development by its high quality, safe, reliable, clean and economical electricity supply to the society it serves.

The standard green color on the logo represents the green energy SGCC offers to the society, and SGCC's strive for evergreen vitality and sustainable development.

# Faster Higher Stronger

Green Olympics Hi-Tech Olympics People's Olympics

Safer Cleaner More Economical Sustainable





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# **Report Brief**

#### **Reporting Period:**

From Jan. 1, 2007 to Dec. 31, 2007 (part of the contents are beyond this period)

#### Reporting Cycle:

SGCC's CSR Report is an annual report released at the beginning of each year.

#### Organizational Coverage:

The organization covered by this report is the State Grid Corporation of China as a whole ("Company" in short).

#### **Previous Reports:**

2005 CSR Report of SGCC, released on Mar. 10, 2006. 2006 CSR Report of SGCC, released on Jan.18, 2007.

#### Key Differences in This Report:

This is the third CSR report released by SGCC. Compared with the previous two, the following contents are added into this report, "Corporate Governance", "Social Responsibility Management", "Participation of Stakeholders", "Global Compact Indicator", "GRI Content Indicator", "Independent Review Declaration", "Feedback Form", "Contribution to Olympics" and etc.

#### Key Areas of Improvements:

This Report adopts the Social Responsibility Indicator to improve on the systematic disclosure of SGCC's performances of social responsibilities; and adopts a new Feedback Form for stakeholders to feed feedback their expectations more effectively.

#### Reference Manual:

Sustainability Reporting Guidelines (2006 Version), Global Reporting Initiative. "AA1000 Assurance Standards", AccountAbility Institute, Britain.

#### Copy of This Report Can Be Obtained from:

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# Message from President



Energy is essential for human survival and development. At present, more than 15 billion tons of standard coal is consumed globally each year, 90% of which is non-renewable fossil energy with limited reserves. The excessive exploitation and consumption of the fossil energy has already caused severe environmental degradation such as climate change, ecological deterioration and etc., causing acute environmental pressures on our future. Therefore the collective option for human society is to willingly take on the social responsibility of pursuing sustainable development by balancing the pressures between economic advancement, social needs and their impact on

environment. This is also the inevitable responsibility of every enterprise in the world.

Being a developing country with a fast-growing economy and the largest population, China is challenged by severe energy and environmental issues. China's per-capita energy resource is as low as 40% of the world's average. Coal plays a dominant role in China's energy structure, constituting as high as 70% of energy consumption. The environment does not have sufficient capacity to sustain China's current economic development. The Chinese Government confronted these challenges by adopting

energy conservation and environmental protection in her National Policies. The government encourages a change in the direction of national development, emphasizes the importance of humanity, and coordinates programs of comprehensive and sustainable development. The target is to cut the energy consumption per unit GDP by around 20% by 2010 compared with that of 2005.

The power grid is not only the carrier of electricity connecting power sources with customers, but also a very important structure to optimize energy allocation. The nationwide power grid is an integral part of the overall energy strategy of the state and plays a key role in China's energy sector. As a stateowned enterprise that is crucial to national energy security and economic lifelines, we thoroughly apply the Scientific Outlook on Development and promote the corporate spirit of "In search of excellence, in pursuit of out-performance." We take every measure to secure a safer, cleaner, more economical and sustainable energy delivery to our customers and are committed to providing quality services to the country, customers and business partners. As an enterprise under direct supervision of the central government, SGCC strives to play a leading role in fulfilling its social responsibilities dedicating to the harmonious and sustainable development of the society, hence to improve the satisfaction of all stakeholders.

Incorporate CSR and sustainable development into our corporate development strategy. By clearly recognizing the geological imbalance of the primary energy distribution and economic booming area in China, SGCC advocates the transformation of the development pattern of the power grid and is fully committed to "One Ultra & Three Larges" strategy, namely Ultra High Voltage (UHV) power grid, large coal-fired plants, large hydropower plants and large nuclear power plants. We push forward the building of a three-tier power market i.e. national, regional and provincial level to optimize energy allocations by means of large grid and market mechanisms. At the same time, we also facilitate conversion of coal to electricity, developing the abundant hydro resource, and cross-border energy cooperation. By transporting clean energy from the west and the north to central and eastern areas,

the power network therefore optimizes the utilization of energy resources from a wider area and in a larger scale. Through this arrangement, SGCC facilities the coordinated development of western, central and eastern China to achieve tangible economic, social and environmental benefits. The development of the 1000kV UHVAC transmission system and the  $\pm$ 800kV UHVDC transmission system have been officially included in China National Plan to Address Climate Changes.

Incorporate CSR and sustainable development requirement into our daily business. Safety in power supply is always our first priority. In the past few years, we overcame the challenges posed by the rapid growth of the power demands, the lagging in power grid construction and impacts of several natural calamities, and operated our power grid safely and reliably to ensure stable power supply to our customers, which was crucial to sustain economic growth and maintain social stability. We spent lots of efforts to further improve our customer services. We pledged a series of promises to the public, including Ten Promises on the Power Supply Services, Ten Measures on Open, Fair and Just Power Dispatching and Ten Prohibitions against Employee Misconduct. We rigorously abide by these pledges. The campaign of Quality Service for All was launched to improve the standard of our service and to foster a premium image of SGCC. Our Power for All Project is designed to bring electricity to 3.64 million rural people (981,000 households). By 2010, almost every household in our service area will be electrified. SGCC also embraces technical innovations, researches into cutting-edge technologies, develops advanced equipment to support our drive for environmentfriendly, resource-efficient and energy-saving operations. In addition to energy conservation and emission reduction, we have been active in the development of renewable energy. We set up Loving Care Fund to finance many charity activities. We also actively support our employees in voluntary service and other social work in building a harmonious society.

Incorporate corporate social restonsibility and sustainable development into our corporate culture. Being a leading public utility, SGCC recognizes that its operation will directly affect the national economy and influence

# Message from President

the livelihood of many. As a state owned business entity, SGCC has the responsibility to preserve and increase the value of its state assets. As a good corporate citizen, SGCC promotes social harmony by applying high ethical standards and good social conduct in its business practices. Based on the corporate value of Quality Services, we stipulated the Employees' Code of Conduct and published the Guidelines for Fulfilling Corporate Social Responsibilities, the first of the kind in China. Social responsibility management system and the culture of SGCC gives full play to the enthusiasm, initiative and creativity of all the stakeholders and hopes to combine all their efforts to solve hard issues and raise the quality and efficiency to achieve the sound development of our company. SGCC also taps into the best practice about the undertaking of the corporate social responsibilities both at home and abroad. SGCC has become a signatory of United Nations Global Compact and joined China Business Council for Sustainable Development. SGCC helped the International Standard Organization to formulate ISO 26000 Guidance on Social Responsibility. In the future, SGCC will be driven and motivated by its social responsibilities on its way to become a top-notch utility with a strong power grid and capable of delivering the energy in a safer, cleaner, more economical and sustainable way. Because of our contributions, the economic and social development will be healthier, people's lives will be better and the society as a whole will ultimately be more harmonious.

In retrospect we have realized that fulfilling the social responsibilities gives us better chances to transform corporate development pattern, to optimize the resources allocation, to promote the sustainable development of the company and the society, to apply the Scientific Development Outlook, to contribute to the building of the harmonious society, to coordinate the economic benefits with social and environmental ones and to maximize the comprehensive values.

The way ahead is long. As the official partner of the Beijing 2008 Olympic Games, SGCC takes every chance to support and publicize the Olympic spirit of Faster, Higher and Stronger and cherish Olympic dream of Solidarity, Friendship, Peace and Progress. We will fully support the ten principles of the UN Global Compact and stick to our social responsibility statement, namely to develop the company, to serve the society, to be human-oriented and to achive common growth. As a State Owned Enterprise (SOE), we attach great importance to The Guidelines for SOEs on CSR Fulfillment and strive to take the lead in this area. In the coming years, SGCC will speed up the process of building a modern utility with a strong power grid and excellent assets, services and performance. Facing the challenges of climate change and energy shortage, SGCC is working closely with our stakeholders to ensure the safe, efficient operation of the power grid while upholding the highest environmental standards and to realize the sustainable development of the energy supply.

We are ready and eager to cooperate with international peers to make more contribution to a harmonious society and world.

加粮鱼

# **Corporate Overview**



State Grid Corporation of China (SGCC) was established on December 29th, 2002. It is a government owned enterprise approved by the State Council to carry out the government authorized investment activities.By the end of 2007, SGCC's net assets reached RMB 545.95 billion Yuan. SGCC ranked 29th in the Fortune Global 500 in 2007 and the largest utility in the world.

As a key enterprise that is crucial to national energy security and economic lifelines, SGCC's core business is focused on investment, construction and operation of power grid as well as electric power supply, so as to facilitate the development of economy and a harmonious society. The Company and its 1,486,000 employees provide direct service to a population of more than one billion. The corporate service area covers 26 provinces, autonomous regions and municipalities, over 88% of the national territory.

| Indicators                               | 2005    | 2006      | 2007      | Remarks             |
|--|---------|-----------|-----------|---------------------|
| Electricity sales (TWh)                  | 1,464.6 | 1,709.7   | 1,974.2   |                     |
| Length of the transmission circuits (km) | 381,764 | 413,219   | 467,693   | 110(66)kV and above |
| Transformation capacity (MVA)            | 983,380 | 1,137,790 | 1,350,830 | 110(66)kV and above |
| Core business revenue (RMB billion Yuan) | 712.7   | 854.5     | 1015.7    |                     |
| Total Assets (RMB billion Yuan)          | 1169.7  | 1212.8    | 1365.9    |                     |
| Urban power supply reliability rate (%)  | 99.755  | 99.839    | 99.880    |                     |
| Rural power supply reliability rate (%)  | 99.382  | 99.491    | 99.541    |                     |
| Line loss (%)                            | 6.59    | 6.40      | 6.29      |                     |

# **Corporate Overview**

# Organizational Structure

| □ De | partments in headquarters                      |     |   |
|------|--|-----|---|
| No.  | Departments                                    | No. | Departments   |
| 1    | Administration Office                          | 16  | Department of Auditing                                |
| 2    | Department of Strategic Development & Planning | 17  | Department of Legal Affairs                           |
| 3    | Department of Finance                          | 18  | Department of Personnel                               |
| 4    | Department of Safety Supervision               | 19  | Department of Human Resources                         |
| 5    | Department of Production & Technology          | 20  | Restructuring Office                                  |
| 6    | Department of Marketing                        | 21  | Department for Retirees Management                    |
| 7    | Department of Rural Electrification            | 22  | Department of Logistics                               |
| 8    | Department of Science & Technology             | 23  | Department of Corporate Culture                       |
| 9    | Department of Construction                     | 24  | Bureau of Supervision                                 |
| 10   | Department of Operation                        | 25  | National Power Dispatching & Telecommunication Center |
| 11   | Department of UHV Construction                 | 26  | SGCC Power Exchange Center                            |
| 12   | Department of Information Technology           | 27  | Bidding Management Center                             |
| 13   | Department of Enterprise Development           |     |   |
| 14   | Department of Public Relations (News Center)   |     | Labor Union   |
| 15   | Department of International Cooperation        |     | Association of Enterprises Management                 |

| ☐ Regional & provincial compan      | у                               |  |
|-------------------------------------|---------------------------------|--|
| North China Power Grid Company      | East China Power Grid Company   | Central China Power Grid Company   |
| Beijing Electric Power Company      | Shanghai Electric Power Company | Hubei Electric Power Company   |
| Tianjin Electric Power Company      | Zhejiang Electric Power Company | Hunan Electric Power Company   |
| Heibei Electric Power Company       | Jiangsu Electric Power Company  | Henan Electric Power Company   |
| Shanxi Electric Power Company       | Anhui Electric Power Company    | Jiangxi Electric Power Company   |
| Shandong Electric Power Company     | Fujian Electric Power Company   | Sichuan Electric Power Company   |
|                                     |                                 | Chongqing Electric Power Company   |
| Northeast China Power Grid Company  | West China Power Grid Company   |  |
| Liaoning Electric Power Company     | Shaanxi Electric Power Company  |  |
| Jilin Electric Power Company        | Gansu Electric Power Company    |  |
| Heilongjiang Electric Power Company | Ningxia Electric Power Company  |  |
|                                     | Qinghai Electric Power Company  | Tibet Electric Power Company was   |
|                                     | Xinjiang Electric Power Company | jointly established by SGCC and People's                                   |
|                                     | Tibet Electric Power Company    | Government of Tibet Autonomous Region, with SGCC holding 51% equity share. |

|     | Entities owned or controlled by SGCC                               |     |  |
|-----|--|-----|--|
| No. | . Entities   |     | Entities   |
| 1   | SGCC HV Operation Company Limited                                  | 14. | China Electricity Technology Export and Import Company           |
| 2.  | SGCC DC Engineering Construction Company                           | 15. | Zhongxin Power Industrial Development Company                    |
| 3.  | SGCC AC Engineering Construction Company                           | 16. | China Anneng Construction Corporation                            |
| 4.  | China Electric Power Research Institute of the SGCC                | 17. | China Electric Power Press Ltd.                                  |
| 5.  | Nanjing Automation Research institute of the SGCC                  | 18. | State Grid News  |
| 6.  | Wuhan High Voltage Research Institute of the SGCC                  | 19. | China Power Finance Corporation Ltd.                             |
| 7.  | Beijing Electric Power Construction Research Institute of the SGCC | 20. | SGCC Financial Asset Management Company                          |
| 8.  | Beijing Economy and Technology Research Institute of the SGCC      | 21. | Yingda Taihe Property Insurance Holding Company (in preparation) |
| 9.  | State Grid Xinyuan Company   | 22. | YIngda International Trust and Investment Company                |
| 10. | Shenzhen Energy Development Corporation of the SGCC                | 23. | Yingda Security Corporation Ltd.                                 |
| 11. | SGCC Telecommunication Center                                      | 24. | SGCC Hong Kong Corporation Ltd.                                  |
| 12. | SGCC Information Center  | 25. | Zhongneng Electricity Fuel Company                               |
| 13. | State Grid Senior Management Training Center                       |     |  |

In Search of Excellence, In Pursuit of Out-performance





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An Shaohua, an Olympic torch bearer, working in Urumchi Power Supply Company, successfully surmounted Everest Mount of Himalaya Mountains at A.M 8:03, May 16, 2007 with his four teammates.





# **Corporate Values**

### O Core Values

| Corporate Tenet      | To serve the country, customers, business partners To promote economic and social development |
|----------------------|---|
| Corporate Spirit     | In search of excellence, in pursuit of out-performance  |
| Corporate Philosophy | Oriented to people, faithful to company and committed to serving the society                  |
| Corporate Vision     | Become a world-class power grid and a world-class enterprise                                  |

# O Corporate Social Responsibility

| CSR Goals | To develop the company, to serve the society | We develop our business to enable employee development, customer satisfaction and investor return and to promote economic development and social harmony.   |
|-----------|--|---|
| CSR Code  | Human-oriented,<br>common growth             | We respect and take good care of our employees, customers and partners and reconcile the benefits of ourselves, the industry and the society in the belief of sincere service and joint development. We act as a win-win cooperation promoter with other busniss partners and as good corporate citizen to push forward the sustainable development of the company, the power sector and the society. |

# Development Strategy

| Strategic Goals             | To build a modern utility with a reliable grid, excellent assets, and service and performance.  |
|-----------------------------|---|
| Strategy<br>Implementation  | Change the corporate development pattern by implementing conglomerated operation, consolidated development, streamlined management and standardized construction.  Change the power gird development pattern by building a strong national grid with the Ultra High Voltage power grid as the backbone and subordinate grids operated in coordination.              |
| Guiding<br>Methodology      | Achieve first-class performance by focusing on development, management and team-building  |
| Development<br>Requirements | Enhance core competence, including competence in safety, efficiency, high technology, quality and team-building.  Shape the corporate image, including the images of an earnest and responsible SOE, a sincere and standardized service supplier, a stringent and efficient administrator, a fair and trustworthy market player and a united and enterprising team. |

### • Code of Conduct

| Be disciplined, act in commendable manner and pursue good employee behaviours;          | Be oriented to people, attentive to duties and ensure safe operation;                      |
|---|--|
| Be loyal to company, devoted to public service and committed to shaping the SGCC brand; | Be insistant, keep promises and deliver quality services;                                  |
| Be dedicated to duties, responsive to ordinance and fulfill job responsibilities;       | Be industrious and thrifty, promote cost control and enhance efficiency and effectiveness; |
| Be cooperative as a team player, diligent in learning and innovative;                   | Be commited to excellence, eye on out-performance and contribute to a world-class utility. |

## **Corporate Values**

### Ten Promises on Power Supply Service

- We maintain power supply reliability rate at no lower than 99.90%, and the voltage qualification rate at 96% at residential customer side for urban area. We verify and facilitate provincial level power companies to announce the promised indicators for rural area.
- We make transparent tariffs, fees and service procedures at all our power supply business centers.
- We, upon request for power supply, provide supply scheme in no more than 3 working days for residential customers, 7 working days for low-voltage power users, 15 working days for single circuit high-voltage power users and 30 working days for double circuit high-voltage power users.
- We start to supply power within 3 working days after user-side electrical equipment is checked eligible and certified in the case of urban or rural residential users.
- We start to supply power within 5 working days after user-side electrical equipment is checked qualified and certified in the case of urban or rural non-residential users.

- We strictly follow the load shedding schedule as approved by the government in case of interruption due to power shortage.
- We make public planned outage for maintenance to the public 7 days in advance.
- We provide 7x24 clockwise trouble-shooting services and repair electricians arrive in no more than 45 minutes in urban areas, 90 minutes in rural areas and 2 hours in special or remote areas.
- We deliver Outage Notice 7 days in advance to customers in arrears to whom we're authorized under laws to suspend power supply.
- We attend 7x24 clockwise to consulting, enquiries, complaints and trouble reports through our power service hotline 95598.

### • Ten Measures for the "Open, Fair and Just" Power Dispatching

- Firmly follow the principle of "Open, Fair and Just" dispatching to safeguard the secure and reliable operation of the power system.
- Strictly comply with the Regulations on Electric Power Supervision and submit dispatching performance report to the regulator on a quarterly basis.
- Issue SGCC's Rules of Open, Fair and Just Power Dispatch to standardize dispatching management.
- Strictly implement signed Power Purchase Contracts and Grid Connection and Dispatching Agreements and operate the grid in a scientific and rational mode.
- Routinely release the dispatching information to the public with the standardized content, form and frequency. The related website is updated on the 10th day of each month.

- Establish enquiry reply system to ensure that all inquiries from interconnected power plants be replied within 10 working days.
- Strengthen the communication mechanism between grid companies and power plants. At least two joint conferences should be held annually.
- Engage public observers to supervise dispatching activities and establish an external supervision mechanism.
- Set up accountability system to tighten the supervision and inspection, and take the "Open, Fair and Just Dispatching" as an important assessment criterion.
- Strictly enforce the discipline of power dispatch and abide by the Five Shall-not Regulation for SGCC Power Dispatching Personnel.

### O Ten Prohibitions against Employee Misbehavior

- Employees are prohibited from imposing unjustified power cut or delaying the power supply to the customers.
- Employees are prohibited from concocting any charging items or tampering with the charging standard.
- Employees are prohibited from designating designing, construction or supply companies to customers.
- Employees are prohibited from evading responsibilities when handling complaints or enquiries from customers.
- Employees are prohibited from seeking personal gains for his/her relatives or friends.

- Employees are prohibited from disclosing customers' confidential commercial information.
- Employees are prohibited from accepting gifts, cash or cash equivalent from customers.
- Employees are prohibited from accepting invitations to banquet, travel and entertainment activities provided by customers.
- Employees are prohibited from drinking or being affected by alcohol during work time.
- Employees are prohibited from receiving any improper personal benefits as a result of his or her position in the company.

## **Corporate Governance**

In line with the best practices of modern enterprise, we are committed to optimizing our legal person management structure, establishing a scientific, democratic and legal-binding decision-making mechanism, increasing satisfaction of stakeholders and maximizing economic, social and environmental benefits to propel sustainable development of both SGCC and the society.

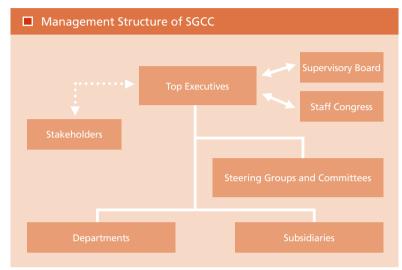
The president is responsible for corporate performance. All important strategic decisions are made collectively. Steering Committees and Professional Committees are responsible for reviewing specified working regulations and making proposals on major events. Various departments and subsidiaries are involved in the reviewing process and subsequent implementation.

SGCC is supervised by Supervisory Board designated by the State Council under Regulations on the Surveillance and Management of the SOEs' Assets.

Staff Congress plays a positive role in democratic management and democratic supervision. All important strategic decisions have to be reviewed and approved by the Congress.

The participation mechanism of SGCC ensures that stakeholders' expectations and requests will be fully considered and highly respected in the process of decision-making.

SGCC assumes investor's responsibilities on its subsidiaries, including the designation, appointment and dismissal of their supervisors, directors, and executives. SGCC conducts comprehensive performance evaluation and internal audit on its subsidiaries per annum and per tenure. SGCC has dispatched over 50 person-times of board directors and inspectors to its regional grid companies and subsidiaries.



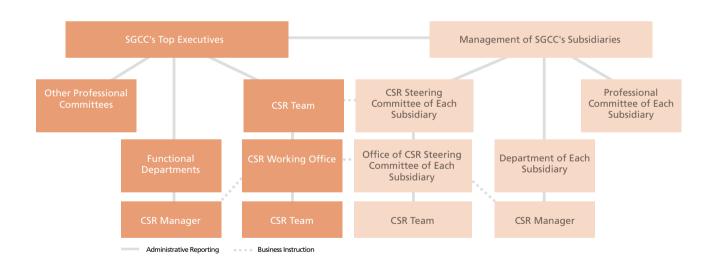


### Corporate Social Management

SGCC has established a comprehensive organization system of social responsibility and set up the CSR Steering Committee, with SGCC's President as director general and other top executives as deputy directors. Members of the Committee are either the chief of SGCC's functional departments, or the head of subsidiaries. CSR Office is set up under the Steering Committee, with Administration Office handling daily affairs.

Each subsidiary of SGCC has set up their respective CSR Steering Committee, with the top executive as the director and a member of senior management as the vice director to handle all CSR work. The Working Office (Administrative Office) is set up under Steering Committee to handle daily affairs.

SGCC has enacted a SGCC CSR Performance Guide and has assigned the social responsibility to various departments, subsidiaries and job positions. By incorporating social responsibilities into development, engineering, construction and daily operation of the power grid and supply systems, SGCC strives to fulfill its social responsibilities by "Being Safe, Efficient, Green and Harmonious" in an all-round way.

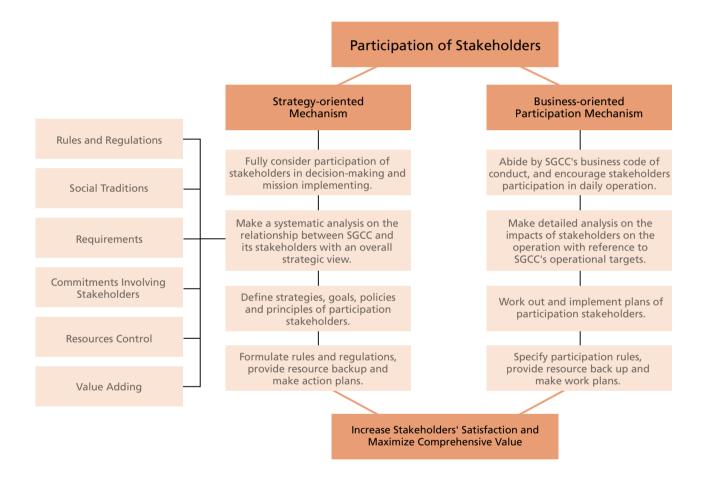


- CSR Committee is responsible for defining CSR missions and principles, approving the strategy and planning, recruiting CSR experts and organizing significant CSR events.
- CSR Office assists CSR Committee in fulfilling CSR requirements.
- CSR Office is responsible for the implementing of the approved decisions and plans, coordinating management system, drafting work plans, proposing budget and training schemes and developing social responsibility management tools.
- Each department is responsible for providing CSR subjects, optimizing the scope of job responsibility, management system and work procedures and implementing CSR evaluation, in accordance with the requirements of CSR performance.
- CSR Manager is responsible for coordinating CSR tasks, proposing and sorting out specified CSR subjects.
- The responsibilities of CSR Steering Committee of each subsidiary and its office are set with reference to the responsibilities of CSR Team of SGCC and its office.

### **Corporate Governance**

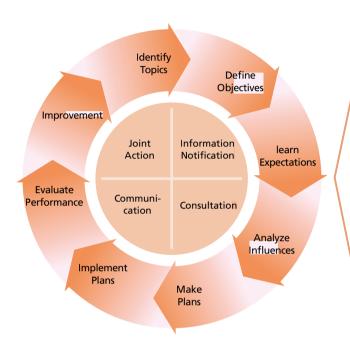
#### Participation of Stakeholders

Clearly recognized that stakeholders' trust and support will motivate and guarantee the sustained development of SGCC, we shall make continuous efforts to maintain an open and transparent operation, build and optimize stakeholders' participation mechanism and draft rules and plans, thus jointly promoting sustainability.



The participation approaches include notification, consultation, communication and joint action. The participation processes cover 8 steps featured by inter-connected and recycling procedures.

- Information Notification: Help stakeholders to gain a better understanding of SGCC through information release and collect stakeholders' expectations.
- Consultation: Understand and response to the expectations of stakeholders in a direct and effective way through consultation on specific topics.
- Communication: Make dialogues with the representatives of stakeholders to find out solutions and to incorporate their advices into SGCC's decisions.
- Joint Action: Deepen cooperation, integrate resources, complement each other, share risks and benefits to achieve a win-win situation



**Identify Topics:** Collect and sort out subjects

**Define Objectives:** Make clearly expectations on the role and

result of participation stakeholders.

**learn Expectations:** Analyze expectations and requirements

of stakeholders

Analyze Influences: Analyze the possible impacts from

stakeholders

Make Plans: Specify participation rules, resource back-up and

work plan

**Implement Plans:** Draft participation plans

**Evaluate Performance:** Evaluate results and efficiency

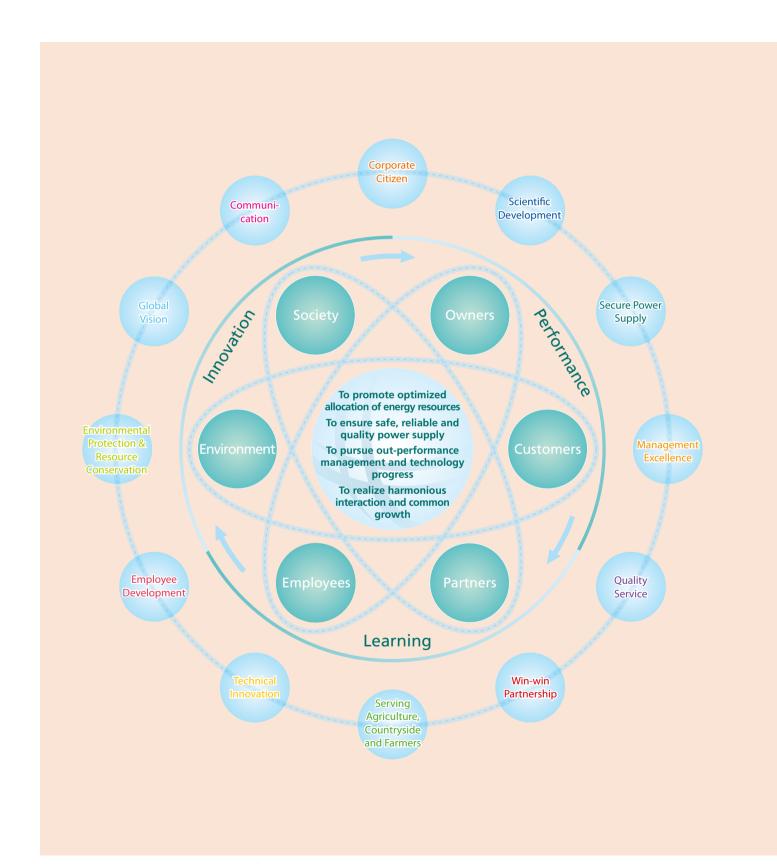
Improvement: Timely summarize experiences, optimize

regulations and process and keep progressing

### Main Associations and Organizations SGCC Participated

| Name of Association and Organization                  | Role of SGCC  |       | Name of Association and Organization               | Role of SGCC       |
|---|---------------|-------|--|--------------------|
| China Enterprise Confederation                        | Vice Chairman |       | China Electricity Council                          | President          |
| China Federation of Industrial Economics<br>(CFIE)    | Chairman      |       | China Society for Electrical Engineering           | Vice-President     |
| China Business Council for Sustainable<br>Development | Councilor     |       | China Society for Hydropower Engineering           | Vice-President     |
| China Work Safety Association                         | Vice Chairman | ••••• | China Electric Power Construction<br>Association   | Vice Chairman      |
| China Audit Society                                   | Member        |       | China Electric Equipment<br>Management Association | Standing Councilor |
|   |               |       |  |                    |

# Social Responsibility Module



# Actively Implement Social Responsibilities to Push Sustainable Development in an All-around Way

SGCC's social responsibilities can be categorized into responsibilities for owners, customers, employees, partners, environment and citizen respectively. As SGCC is a state-owned utility to ensure reliable power supply, therefore the ownership of SGCC is the people and social responsibilities cannot be represented by a single entity.

To promote optimized allocation of energy resources

To ensure safe, reliable and quality power supply

To pursue out-performance management and technology progress

To realize harmonious interaction and common growth

The above slogans depicted in the spherical logo describe the responsibilities to be carried by all stakeholders. These responsibilities include scientific development, safety in supply, excellence management, technical innovation, communication and global vision.

Apart from common responsibilities to each stakeholder, SGCC assumes specific responsibilities to customers, employees, partners, environment and society, namely responsibility of quality service, employee development, win-win cooperation, environmental protection and corporate citizen respectively. SGCC has also made important decisions on the coordination of rural and urban development and the construction of new socialist countryside. The service for agriculture, rural areas and farmers is highlighted as an important social responsibility.

The inner circle of the LOGO represents SGCC. The six circles in the middle represent stakeholders. The outer 12 circles represent social responsibilities. With continued dotted lines, the elliptic orbit stands for power transmission. The mid orbit shows how SGCC and its stakeholders work together to realize sustained development through mutual learning and innovation. The design of parallel circles represents the spirit of harmony. Circulating lines show that the approach to CSR fulfillment is an endless endeavor, always progressing and improving.

Become A World-class Power Grid, A Worldclass Enterprise



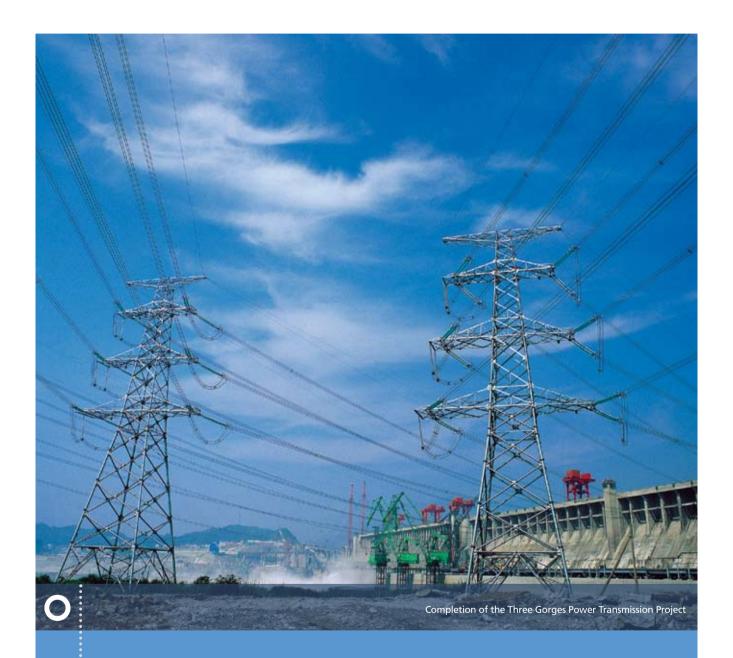


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Gao Kunlun, an Olympic torch bearer, is deputy director of Information Safety Research Department of China Electric Power Research Institute. He received second-class National Scientific and Technological Progress Award. Being a member of Beijing Marathon Club, he participated in 2006 and 2007 Beijing International Marathon.



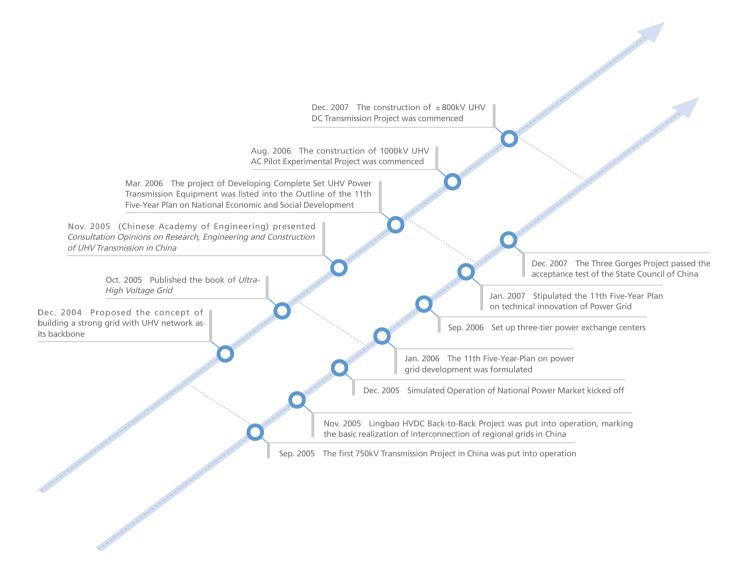




In order to meet our target of "Achieving a healthier development, making a better life and building a more harmonious society", we work hard to propel the change of gird development pattern, optimize the capability of allocating energy resources and eventually guarantee a safer, cleaner, more economical and sustainable power supply.

Scientific Development

#### O Scientific Development



| Year Indicators   | 2004 | 2005  | 2006  | 2007  |
|---|------|-------|-------|-------|
| Investment in power grid construction (RMB100 million Yuan)                   | 874  | 1,160 | 1,769 | 2,130 |
| Length of transmission lines of 110(66)kV and above on production (10,000 km) | 2.5  | 3.2   | 4.5   | 5.4   |
| Transformation capacity of 110(66)kV and above on production (MVA)            | 120  | 130   | 180   | 210   |
| Annual power trading volume of national power market (TWh)                    | 66.2 | 77.5  | 168.5 | 213   |

### • Make the Most of Power Grid's Optimization Capability in Energy Resource Allocation

Implement the strategy of "Constructing UHV Grid to facilitate Large Thermal, Large Hydro and Large Nuclear Power Plants". Such strategy will promote the intensive exploitation and efficient use of energy resources and promote the optimized allocation of energy resources in the country and even in a wider range.

The Jindongnan-Nanyang-Jingmen 1000 kV UHV AC Pilot Experimental Project progresses smoothly. The Sichuan-Shanghai ±800 kV UHV DC Pilot Project has kicked off. It is a DC power transmission project with highest voltage, largest transmission capacity and longest transmission distance.

It is estimated that by 2020, the total power transmission capacity of UHV grid will be over 260,000 MW. With this, a total installed capacity of 25,000 MW can be cut and water discarding equivalent to 6 TWh can be avoided.

**Promote balanced development of power grids at various levels.** SGCC is constructing cross-regional and inter-provincial grids, strengthening backbone network of the provincial grid and the power distribution and transmission network of some key cities to improve the grid's resource allocating capability.





Jindongnan Substation, UHV AC Pilot Experimental Project



Fulong Current Converter Station, Sichuan Province, UHV DC Pilot Project

### Completion of the Three Gorges Power Transmission Project

The Three Gorges Power Transmission Project is an important part of the Three Gorges Project, bearing the task of transmitting power generated by the Three Gorges Power Plant to its destination safely and reliably. The Project extends over 9,500 km across Hubei, Hunan, Henan, Jiangxi, Shanghai, Jiangsu, Zhejiang, Anhui, Guangdong, Chongqing and Sichuan. The project was commenced in 1997 and was completed at the end of 2007, one year ahead of schedule.

The static investment of the project was RMB 32.274 billion Yuan (based on 1993). The project comprised 6,519 km of 500 kV AC power transmission line with transformation capacity of 22,750 MVA , and 2,965 km of  $\pm 500$  kV DC power transmission line with current converter stations capacity of 18,000 MW.

The Project began to delivering electricity since 2003. By the end of 2007, it has transmitted 206.8 TWh electricity, which is more than the annual power consumption of Zhejiang Province in 2006, saving standard coal by 73.82 million tons, reducing the emission of  $CO_2$  by 211 million tons and  $SO_2$  emission by 1.654 million tons. The economic and social benefits are significant.

The Project realizes a series of major independent innovations and leads the world in model selection of insulators, Helava line selection, river-crossing transmission lines, compact power transmission lines, design and application of 720mm<sup>2</sup> conductors, contributing greatly to the overall upgrading of construction management, technical innovation and localization level of China's power transmission projects.

The Three Gorges Project comprises three components, i.e. the Three Gorges Hub Project, the Three Gorges Power Transmission, Transformation Project and the Three Gorges Resettlement Project. The total static investment comprises 26 units of 700 MW hydropower generators and 6 units of 700 MW underground hydropower generators, totaling 22,400 MW.



A picture taken at the construction site of the Yangtze River crossing line

### • Tap the Potential of Resource Allocation Capability

Since Feb. 2005, we have carried out four-phase projects to increase the existing transmission capability, completed 2,764 projects with additional transmission capability of 120,000 MW at various grid levels, which equals to the total transmission capacity of 120 circuits of 500 kV lines.

7,978 projects have been completed and 43,300 km transmission line and 79,870 MVA transformation capacity upgraded in 2007. Safety and stability of the power grid are enhanced and grid loss is reduced.



Use dynamic reactive compensation technology and increase power resources efficiency

### Market's Role in Allocating Power Resources

SGCC establishes an open and orderly power market system tailored to China's situation by opening provincial power market, developing regional power market and fostering national power market.

In 2007, all the power exchange halls were built and put into service at national, regional and provincial levels. Since then, the power trading volume has been growing up dramatically.

In 2007, the total power trading at the national power market was 213 TWh, amounted to 3.5 times of the total output of the Three Gorges Project, of which, the transregional power exchange reached 153.36 TWh.

In 2007, SGCC's trans-provincial power trading reached 157 TWh, a 7.5% over last year.



Power Trading Hall



#### Participation of Stakeholders

SGCC integrates power grid development into the national energy strategy. Since 2006, SGCC started in-depth study on the construction of energy bases, mid and long term development of electric power market together with generation companies, coal miners, environmental protection agencies and water resource, transportation and policy research organizations. The findings are used in the overall planning and the coordinated development of Large Thermal Plant, Large Hydropower Plant and Large Nuclear Power Plant facilitated by UHV network.

From the environment perspective, we conducted analysis on regional development, and compared two options: local balancing and cross-region power allocation via UHV. Conclusions show that, the option of cross-region power allocation via UHV could remarkably reduce losses due to air pollution. By 2020, we estimate that loss reduction will be RMB 2.1 billion Yuan.

----Chinese Academy For Environmental Planning

The strategy of delivering both coal and electricity, with focus on electricity is the future developing direction of Shanxi Province to build a new-type energy base in China; therefore, we must follow the road map of UHV and wide grid interconnection for energy transmission, to construct Large Thermal Plant and find Large Market so as to further increase large-scale delivering capability.

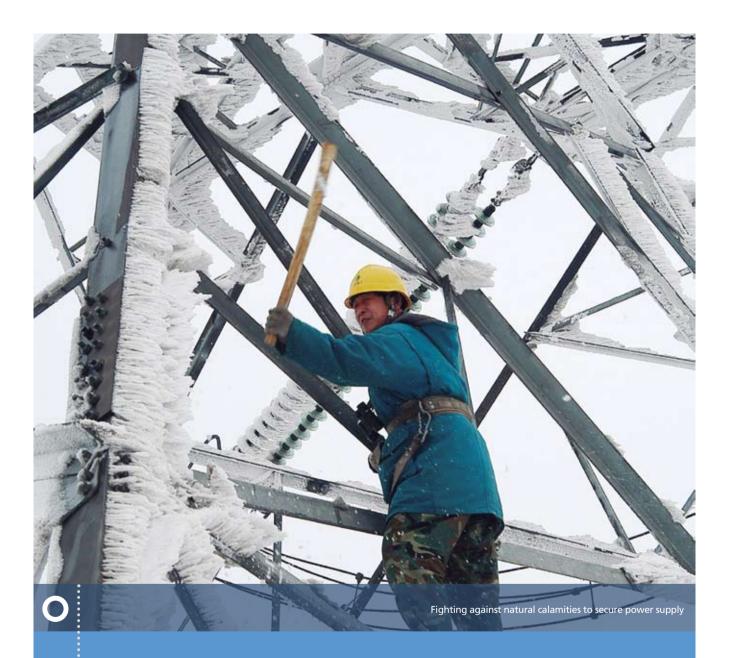
——Jin Shanzhong, Vice Governor of Shanxi Province

The research into establishing new energy bases suggests the following principles for the development of water resources: overall planning, balancing interests, optimizing allocation, enhancing water conservation, effective protection and efficient utilization. These principles on the use of water resources are consistent with the national and provincial overall strategies in resolving water shortage problem. This study result can be used as the basis for allocating water resource when designing thermal plants within North Shaanxi Energy Base. The water resource in north Shanxi energy base can satisfy the water demand of more than 70,000MW of power generation installed capacity with water supply and capacity guarantee rate being higher than 97%.



### High Quality Power Projects for Olympic Games

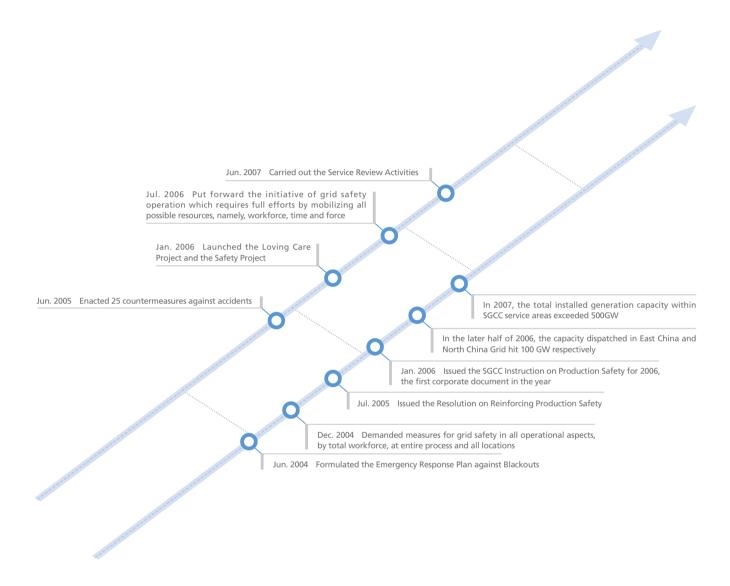
SGCC undertakes more than 150 power facility constructions and over 300 power supply and service tasks for all Olympic stadiums, except equestrian events. These stadiums and facilities are primarily located in Beijing, Tianjin, Hebei, Shandong, Shanghai and Liaoning. We initiated the program of Power Projects for Beijing 2008 Olympic Games and "0811" Welcome Olympic Project. With the completion of the major part of the Olympic power projects on September 20, 2007, the power supply capability of Beijing power grid has been significantly improved.



We adhere to the principles of Safety First, Prevention Predominant and Overall Control and take comprehensive approaches involving all operational aspects, total workforce, entire process and all locations to ensure safe and stable operation of the grid by mobilizing both internal and external forces.

**Power Supply Safety** 

#### O Power Supply Safety



| Year Indicator                            | 2005   | 2006    | 2007    |
|---|--------|---------|---------|
| Maximum consumption in North China (MW)   | 80,350 | 100,610 | 112,650 |
| Maximum consumption in East China (MW)    | 85,880 | 106,540 | 122,370 |
| Maximum consumption in Central China (MW) | 59,720 | 63,750  | 79,360  |
| Maximum consumption in Northeast (MW)     | 28,420 | 30,220  | 34,240  |
| Maximum consumption in Northwest (MW)     | 19,930 | 23,190  | 26,090  |

### Ensuring Grid Safety in All Respects



- Take power supply safety as a paramount priority in fulfilling social responsibilities.
- Follow the principle of safety first with emphasis on prevention and overall control so that the grid safety is controllable and under control.
- Ensure safe and stable grid in all operational aspects, by total workforce, at entire process and all locations.
- Mobilize all possible resources to jointly secure power supply.

Ensuring power supply for a number of significant events, including the 17th National Congress of the Communist Party of China, the 2007 Two National Conferences (the National People's Congress and the Chinese People's Political Consultative Conference) and the launch of Lunar Probe Chang'e-1.



### Intensifying Grid Safety Management

In 2007, we coped with challenges of excessive power load and heavy construction tasks and managed to get through a series of natural calamities affecting grid safety like snow tide, typhoon and flood. The grid was maintained under safe operation, with no occurrence of major accidents in terms of human, grid and equipment safety.

We carry out the Service Review activities and spare no effort to identify and resolve hidden risks. The management over power supply safety is intensified for major customers. Further Progress is made in anti-accident campaigns.

We promote standardized operation and risk management, prohibiting any instruction or operation in conflict with the regulations. We build the safety culture by carrying out the Loving Care Project and Safety Project.

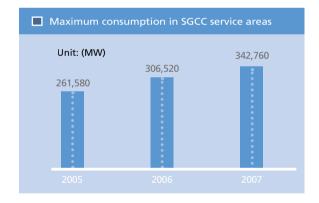
We increase investment in safety operation and technical innovation to upgrade equipment and technology for reliable grids with the support of intensified scientific research.

We strengthen safety supervision and management, follow strict processes for safety performance evaluation and accident investigation and reporting and implement accountability for safety at clearly defined levels.

We work closely with generation companies, customers, the government and society to ensure grid safety. Campaigns are also launched in collaboration with local authorities to crack down any misbehavior that vandalizes electricity facilities.



Fighting against natural calamities and risks to secure power supply





Supplying safe and reliable power to the Two National Conferences



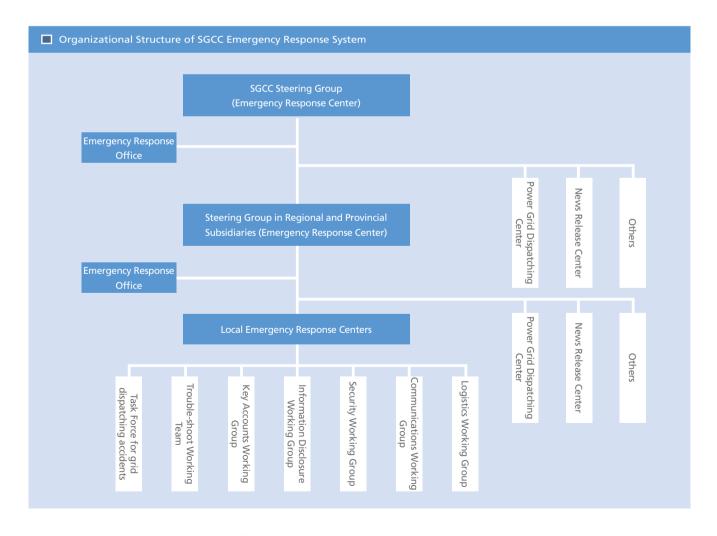
Ensuring power supply for the successful launch of Lunar Probe Chang'e-1



### • Building a Sound Emergency Response Mechanism to Secure Power Grid

We establish a complete mechanism of emergency response counterplan on safety, including emergency response, grid safety, equipment and facilities safety, personal safety, network information security, social safety, etc. More emphasis is placed on the implementation of these counterplans with joint drills for blackouts to further improve our capability of handling emergencies.

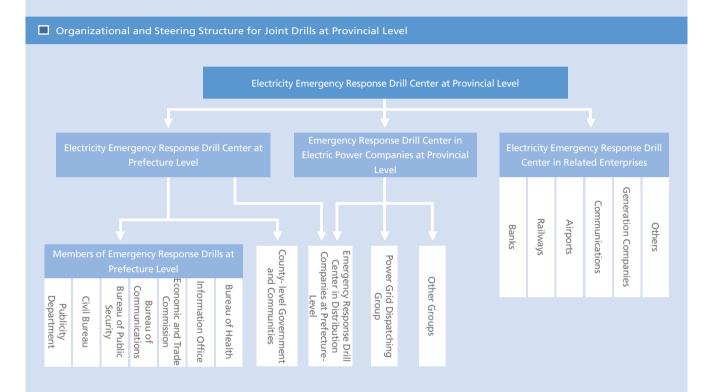






#### Participation of Stakeholders

With governmental and social support, we carry out joint drills for emergency response to blackouts.



The capability of the government, utilities and enterprises was enhanced to coordinate and handle blackouts in the form of joint drills.

——Han Zhenxiang, Academician of the Chinese Academy of Sciences

The drills proved to be a big success with the support of the government and society. The emergency response counterplan of power companies was further improved through these drills. When real accidents come up, the incurred impact and loss will be minimized.

——Fan Genchu, Deputy Director General, Hanzhou Economic and Trade Commission



# Ensuring Safe and Reliable Power Supply for the Olympics

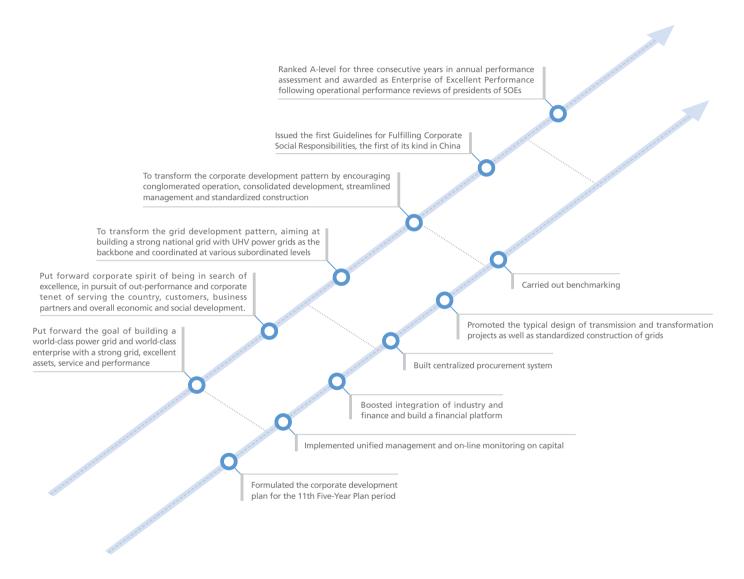
We set up a steering system for the Olympic power supply, provide sufficient power supply with certain redundancy, assemble trouble-shooting teams, formulate repair schemes and conduct emergency response drills to ensure safe power supply for the Olympics.



We work vigorously to transform the development pattern by pursuing conglomerated operation, consolidated development, streamlined management and standardized construction and establish a participation mechanism involving all stakeholders. To increase stakeholders' satisfaction to our corporation and maximize corporate and social benefits, we make efforts to allocate corporate resources and energy resource efficiently.

Management Excellence

#### Management Excellence



| Year  | 2005   | 2006   | 2007   |
|---|--------|--------|--------|
| Total Workforce Productivity (RMB thousand Yuan / Person-year)* | 219.8  | 244.0  | 278.0  |
| Total Profits (RMB Million Yuan )                               | 14,398 | 26,985 | 47,085 |
| Return on Net Assets (%)  | 2.23   | 4.02   | 6.66   |
| Turnover of Total Assets (Day)                                  | 577    | 500    | 457    |



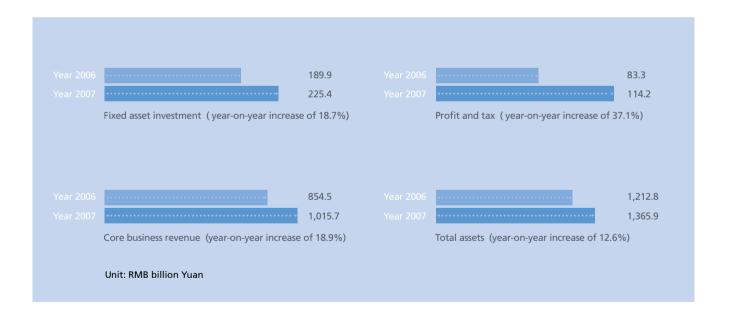
# Propelling Conglomerated Operation, Consolidated Development, Streamlined Management and Standardized Construction

We work hard to build a competent headquarters with management mechanisms to optimize development strategy, corporate planning, overall budgeting, performance assessment and internal control. Corporate control capability shall be further enhanced to strengthen risk management.

We work to exert overall corporate strength, integrate internal resources in an efficient way, improve operational efficiency and maximize comprehensive benefits in the economy, society and environment.



Ranking A-level for three consecutive years in performance review Winning the Enterprise of Excellent Performance Award in the first tenure performance review of President



#### Allocation of Various Corporate Resources is Further Optimized

We strengthen intensive management and online monitoring of funds, and as a result, a total of over 13,000 bank accounts were closed. About 90% of funds in regional and provincial subsidiaries were centralized. With optimization of the financing structure, SGCC's internal financing ratio has been further increased. These measures work effectively to bring funds risk under control and increase the efficiency and return of funds.

We promote the integration of industry and finance and integrate financial assets. With these efforts, a financial platform covering financial companies, insurance, trust, securities and futures business has taken preliminary form.

We enlarge the scope of centralized procurement, focusing on energy-saving and environmental friendly equipment. The awarded bid value in three consecutive years totaled RMB 296.8 billion Yuan, saving 7% capital. The centralized supervision is adopted in major equipment manufacturing to guarantee equipment quality.

Vigorous effort is made in standardized construction. We work hard to effectively minimize the cost, improve the quality and enhance the capabilities of saving energy, land, water and materials. We promote universal design, equipment, cost quota and standard processing. Also,

we keep furnishing standards in relation to operation, marketing and other aspects.

We deepen the work on benchmarking, improve benchmarking system and share best practices of management with leading counterparts in China and abroad.

We fully implement the SG186 projects and build an integrated corporate information platform. We are actively engaged in building digitalized power grids and IT-based utilities.

We incorporate brand-related resources and promote SGCC brand to gain the trust and confidence of the government and society.





Research findings for standardized construction

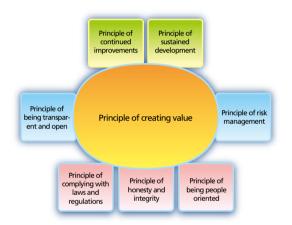


Online centralized procurement



#### Strengthening Social Responsibility Management

We consciously incorporate the requirement of fulfilling social responsibilities into the corporate mission, strategy, performance and culture, and effectively minimize the negative impacts of our business to stakeholders and environment. We are working hard for safety, efficiency, environmental friendliness and harmony by fulfilling our social duties in all respects.

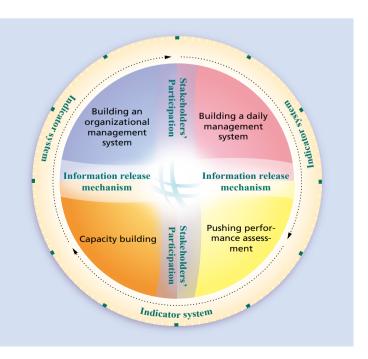




A conference on issuing SGCC Guidelines for Fulfilling Corporate Social Responsibilities

We are dedicated to the 8 established principles as shown in left diagram.

We have established organizational approaches and indicator system for social responsibility management. Efforts also cover daily management, capability building, performance appraisal, stakeholder participation and information disclosure in relation to fulfillment of social responsibilities. We drive the sustainable development of SGCC and the society, enhance satisfaction among stakeholders and maximize SGCC's comprehensive value.





#### **Participation of Stakeholders**

Li Rongrong, Chairman of the SASAC, stated in the first- tenure evaluation meeting of the SOEs that all SOEs must bear their responsibilities in mind, deepen the reform, optimize the structure, strengthen the management and transform the development pattern to achieve a better and faster growth.

While following the requirements of SASAC, we have achieved continual fast growth in financial return. The corporate profit increased from RMB 6 billion Yuan in 2003 to RMB 47.1 billion Yuan in 2007. The return on net assets grew from 0.57% in 2003 to 6.66% in 2007. Since 2003, the incremental revenue from the increased transmission and distribution tariff could hardly cover the depreciation and financial cost arising from newly added grid assets. The enormous growth of profits, while partly due to the increase of electricity sales volume, is mainly attributable to constantly improved management and optimal allocation of conglomerated resources.

Ensuring to maintain and add value of the state-owned assets, we need to further strengthen our awareness of social responsibilities, push forward sustainable development, drive the change in development pattern, make further progress in the corporate development and maximize comprehensive benefits in the economy, society and environment.

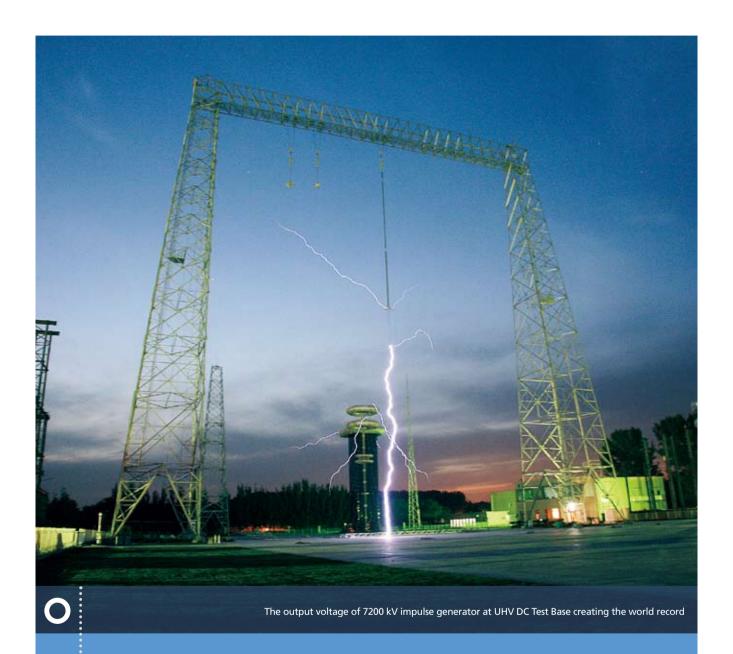
In January 2008, SASAC issued The Guidelines on Fulfillment of Social Responsibilities by SOEs. As SASAC representative said to the media: "In recent years, a group of SOEs like SGCC, PetroChina and COSCO released their corporate social responsibility reports to the public and received positive responses from the society. However, the SOEs in general should think more about how to fulfill their social responsibilities. The meanings, approaches and methods concerning fulfilling social responsibility also need to be standardized."

As a social responsibility leader among SOEs, we issued the Guidelines on Fulfillment of Social Responsibilities by SOEs, making it clear that four general requirements be seriously implemented, eight principles fulfilled and seven management systems established. Solid steps are taken to improve various aspects covering corporate mission, development strategy, operational mode, performance evaluation, external communications and cultural construction. We effectively control the impact of corporate operation on stakeholders and the environment and take steps to improve stakeholders' satisfaction, strive for maximal comprehensive value and push sustainable development of SGCC and the society.



# Olympic Spirit, Our Passion

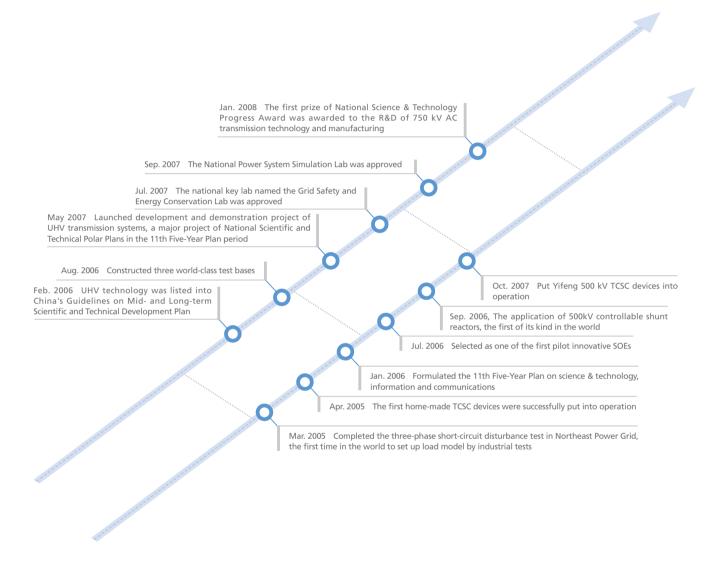
In the spirit of Solidarity, Friendship, Peace and Progress, we experience the Olympic passions and joys by participating in, contributing to and publicizing the Olympics. With synergy and innovation, we pursue the overall efficiency of economy, society and environment.



As a leader of SOEs in technical breakthrough, SGCC sticks to the policies of innovation and pioneer to provide strong scientific and technical support for a safe, economic, clean and sustainable energy supply and contribute to an innovative country.

**Technical Innovation** 

#### O Technical Innovation



| Year  | 2004 | 2005 | 2006 | 2007  |
|---|------|------|------|-------|
| Investment in Technologies ( RMB billion Yuan ) | 3.79 | 4.82 | 6.48 | 10.16 |
| Number of Patents (Items)                       | 739  | 866  | 1012 | 1427  |
| Total National-level Prizes (Items)*            | 7    | 10   | 13   | 18    |



#### • Increasing Scientific and Technologic Investment

SGCC makes intensive efforts to implement the 11th Five-Year Plan on Scientific and Technological Innovation, integrates scientific and technological resources and reinforces the team building of scientific and technological personnel. In the past three years, the investment in science and technology grew by 45% annually. In 2007, the scientific and technological investment reached RMB10.16 billion Yuan.

SGCC owns 407 different kinds of laboratories, of which two are national-level, 13 are key labs and 23 are corporate labs.

SGCC runs five subsidiary scientific research institutes and 35 power research and design institutions affiliated to regional and provincial power supply companies, which employ a total of 130,000 technical personnel and 5 academicians.



National key lab for power grid safety and energy conservation is under construction

| ☐ The national key projects undertaken by SGCC   | in the 11th Five-Year Plan period   |                              |
|--|---|------------------------------|
| Project Type   | Project Names   | Progress                     |
| Major project in the National Science and Technology<br>Pillar Program in the 11th Five-Year Plan period | Extra/Ultra high voltage technical study of Southwest<br>China Hydro-power Transmission Project | Passed acceptance inspection |
| Major project in the National Science and Technology<br>Pillar Program in the 11th Five-Year Plan period | Development and demonstration of UHV transmission system  | Kicking-off                  |
| National fundamental study and development plan  | Fundamental study on reliability increase of very large interconnected power grid operation     | Passed mid-term examination  |
| Key project in the National Science and Technology<br>Pillar Program in the 11th Five-Year Plan Period   | Key technical study and development of very large power grid safety                             | Approved                     |
| Key project in the National Science and Technology<br>Pillar Program in the 11th Five-Year Plan Period   | Key technical study of wind farm synchronized with power systems                                | Approved                     |

#### • Fully Propelling Technical Innovation

SGCC sticks to pushing forward the scientific development strategy of building first-class talent's team, carrying out key scientific researches, producing key researches findings and fostering key industry, and perfects the innovation system.

The UHV AC and DC test bases have been put into operation, with a number of remarkable achievements in key technology study, a strong support for UHV demonstration project construction.

The construction of SGCC's Simulation Center and Data Center is proceeding smoothly. SGCC strengths the study and application of key technologies such as UHV, large grid safety and power electronics and enhances the R&D of significant projects including high-efficient conductors and large-capacity energy storage cells.

Accelerating the application of scientific and technical findings, SGCC promotes the application of latest technology and new equipment. Latest achievement includes over 10,000 km of newly added 500 kV/330 kV double-circuit, compact lines and large cross-section thermal-resisting conductors, 4,432 Mvar of series compensation equipment, 720 Mvar of home made SVC and 35 large-capacity transformers.

SGCC reinforces the management on intellectual property rights (IPR) and works out SGCC's Measures on IPR Management.



UHV AC Test Base



**UHV DC Test Base** 



#### Commercializing the First-Class Scientific Outcome

SGCC is leading the world in terms of UHV key technical research with over 100 remarkable findings obtained.  $\pm$  800 kV DC transmission capacity has been increased to 7,200 MW. The UHV AC test base and UHV DC test base are expected to achieve 27 the world's No.1 in terms of testing conditions and capacity, 15 items being already achieved up to date.

We have achieved key breakthrough in the research of key technologies for very large grids. The world leading technology of real-time alarming and coordinated control for grid safe operation have been put into service at both regional and provincial power grids. The key technological study on Flexible AC Transmission Systems(FACTS) has realized a big stride, with Lingbao Back-to-Back DC Project achieving full localization. TCSC core technology with self-owned IPR has taken the leading position over the world. The World's first 500kV controllable shunt reactor has been successfully put into operation.

The R&D of future-oriented technologies makes significant breakthrough. The 650Ah single-cell batteries are successfully developed. NAS R&D base has been established. Test project for MW level large capacity grid energy storage proceeds smoothly. The prototype of self-developed comprehensive automation system for biomass power plants has been completed. New progress has been made in R&D of carbon fiber composite conductors.

#### Awards in 2007 **National Awards Project Name** Key technology study, equipment manufacturing and application for 750kV AC First Prize of National Science and Technology transmission **Progress Award** SGCC's study and implementation of increasing transmission capacity Second Prize of National Science and **Technology Progress Award** Second Prize of National Science and PCS-9500 HV DC control and protection system and application **Technology Progress Award** Second Prize of National Science and Standard platform-based grid dispatching automation integration system **Technology Progress Award** (OPEN-3000) Contribution Award on China Innovation Construction and Operation of the vertical ship lift of 2×500 ton in Fujian Shuikou Hydropower Station Contribution Award on China Innovation Three-phase Synchronous Motors Testing Methods (GB/T 1029-2005) China Patent Award Transmission mode of distribution lines and signal sampling devices of transmission system China Patent Award $ucos\, \varphi$ -based Methodology on testing and identifying power system desynchronization China Patent Award Power system digital simulation devices



#### **Participation of Stakeholders**

Thanks for the support of Ministry of Science and Technology of China (MOST) and so on, SGCC sincerely cooperates with manufacturers to push equipment localization.

MOST is in full support of SGCC's studies on such key scientific and technical projects as UHV AC and DC transmission technology so that China's grid expressway could be established at an early date.

I can feel SGCC's confidence and determination in UHV transmission during my visit to the UHV DC test base. I am excited that the testing base can deliver so many achievements in a short period of time. It's not only Ultra High Voltage, but also Ultra High Speed and Ultra High Quality. China has witnessed great changes in mechanical manufacturing technology and strength. We are willing to join hands with SGCC to contribute to the construction of China's UHV projects.

——Cai Weici, Vice President of China's Mechanical Industry Association

It is a necessity for China's economic development to build 1000kV power grid. It is a great contribution to the world power industry and a rare opportunity for China's academic and engineering fields. I believe UHV power grid will be built according to time schedule and technical specification.

——Xue Yusheng, Academician of Chinese Academy of Engineering

The development of UHV equipment will drive the self-innovation of domestic power equipment manufacturers. Steady efforts will be made to study and explore the new technology and skills to master the key and core UHV technology and develop significant equipment compatible with various operation conditions.

——Wang Jinian, Chairman and President of Xuji Group



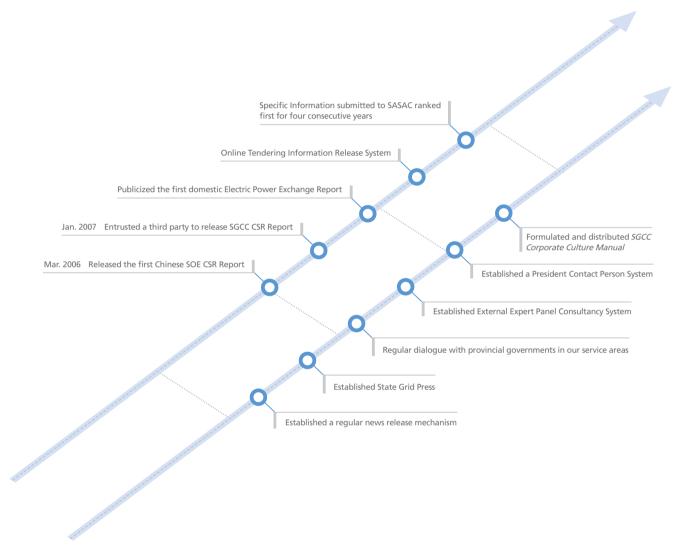
# • High-Tech Initiatives for Olympics

SGCC has invested RMB140 million Yuan as a special fund in Olympic-related scientific research. Achievements, up to date, include a technical support system for Olympic power supply safety, a technical support system for power emergency response and an emergency commanding vehicle. A number of studies are performed on grid equipment status monitoring, safety evaluation and electricity quality assessment. A lightning protection system for the Olympic-related power grids is established. Equipment for power customization, the solid quick switch and dynamic voltage restorer is successfully commissioned, providing a high-quality energy supply.



Committed to transparent and open business operation and better communication with stakeholders, we seek to learn the expectations of stakeholders and make timely response, build harmonious relations with stakeholders, develop consensus with them on future development, integrate their force in tackling challenges and promote the sustainable development of the society with concerted effort.

#### Communication



| Year   | 2005   | 2006   | 2007   |
|--|--------|--------|--------|
| Press Conference (times)                                   | 9      | 11     | 16     |
| Power Dispatching and Exchange Information Release (times) | 390    | 480    | 510    |
| Calls Answered by staff at 95598 Hotline (thousand times)  | 32,000 | 36,000 | 38,000 |
| Portal Website Traffic (thousand hits)                     | 1756   | 2121   | 2315   |
| Circulation of State Grid Press (thousand copies)          | -      | 130    | 150    |

#### Reinforcing Corporate Information Release

Fully aware of the importance of communication to the transformation of development pattern, as well as to the sustainable development of SGCC and the society, we consciously take communication as an essential managerial tool, and embed it into our business operations.

We clearly define the information release responsibilities of every department, subsidiary, and position, so that communication becomes an intrinsic capacity and conscious initiative of each employee.

The information release management system is enhanced through establishing news centers across all organizational levels and enhancing the coordination and management of the information release.

With continuous improvement of the channels, models, and procedures the information release mechanism also go through further development, so as to ensure timely response to the expectations of stakeholders and protect the stakeholders' right to know and supervise.

Furthermore, we strengthen the supervision and evaluation of corporate information release process with a constant focus on assessing and analyzing the feedback from the stakeholders, aiming at continuous improvement of the efficiency and effects of information release.

In May 2007, we launched a large-scale theme activity in 12 provinces/cities, including Shandong, Jilin, Jiangsu, etc. to solicit opinions and suggestions on power supply service and grid construction from all walks of life. The interview covered over 30 government officials, 20 enterprise customers, 10 generation companies, and many experts, journalists, and residents.



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SGCC CSR Website

Power Market Exchange Information Release

#### Extensively Listening to Opinions of Stakeholders

We have set up a sound mechanism of regular dialogue with provincial governments. In 2007, we held meetings with 26 provincial governments to learn their opinions and suggestions on future development, which lasted for five months. This is an important move to guarantee the consistency between power grid planning, national energy development planning, and local economic and social development planning.



Meeting with government officials from Hunan Province

# • Fully Demonstrating the CSR Report's Role as A Communication Platform

We established SGCC CSR Committee and Office for coordination improvement.

All departments and subsidiaries are encouraged to participate in the compilation, publication and promotion of the CSR Report to reach consensus on sustainable development.

We are actively soliciting comments and participation of external stakeholders in compilation and publication of CSR Report to better represent their expectations.

A third party was also invited to review SGCC CSR Report to raise its creditability.



SGCC CSR innovations recognized by the academia



SGCC CSR performance wins wide social credits

# • Active Interaction with Stakeholders

|                         | Stakeholders' Expectation   | SGCC's Response   | Stakeholders | Stakeholders' Expectation                         | SGCC's Response  |
|-------------------------|---|---|--------------|---|--|
|                         | Provide steady tax income   | Maintain healthy corporate<br>development, pay tax in compliance<br>with the law                          |              | Provide training opportunities                    | Invest more on training  |
|                         | Ensure national energy security and public secutiry                                     | Ensure safe, economical, clean and sustainable energy supply, propose suggestion on energy development    |              | Guarantee fair career path                        | Optimize employment mechanism  |
| Government              | Secure power supply   | Support coordinated development of SGCC and the society as a whole  | Employee     | Reinforce staff democratic management             | Establish staff congress mechanism   |
|                         | Implement major state policies and guarantee the value and appreciation of state assets | Carry out major state policy on macro-<br>control, and accomplish task objectives<br>stipulated by SASAC  |              | Broaden communication channels                    | Set up President Mailbox   |
|                         |   |   |              |   |  |
|                         | Reliable power supply   | Ensure safe and stable grid operation   |              | Enhance information disclosure                    | Establish news release mechanism   |
|                         | Safeguard power market order  | Strictly carry out "Open, Fair and<br>Just" power dispatching   |              | Accept social surveillance                        | Respond objectively to press report  |
| Regulatory<br>authority | Tariff and quality of electricity   | Implement state policy on tariff and ensure power quality   | Media        | Publicize corporate information                   | Invite interviews, update SGCC Website   |
|                         | Timely submit information   | Submit information in compliance with regulations   |              | Support media development                         | Issue SGCC advertisement   |
|                         |   |   |              |   |  |
|                         | Secure power supply   | Enhance power supply security and voltage qualification rate  |              | Support community construction                    | Launch volunteer activites   |
|                         | Quality power supply service  | Raise customer satisfaction   |              | Support social welfare undertakings               | Participate in social welfare undertakings   |
| Customer                | Fully informed of power demand  | Set up "95598" hotline; make public electricity tariff mechanism  | Community    | Be enviorment-friendly                            | Stictly comply with laws & regulations on enviorment protection; ensure 100% EIA rate of major grid construction projects      |
|                         | Provide feedback channel  | Solicit advice and suggestions from customers   |              | Disseminate power operation knowledge             | Reinforce promotion of safe, energy<br>saving and scientific power usage as<br>well as electromagnetic enviorment<br>education |
|                         |   |   |              |   |  |
|                         | Offer more space for development  | Promote coordinated development<br>between power plants and grids; push<br>forward equipment localization |              | Enrollment  | Participate association  |
|                         | Protect fair power trade  | Competive connection to grid; competitive bidding   |              | Support association development                   | Pay membership due   |
| Partner                 | Guarantee information sharing   | Share information and joint R&D   | Association  | Support association to play a more important role | Participate in major events organized<br>by associations;<br>Develop common research   |
|                         | Establish communication platform  | Establish liason meeting mechanism  |              | Build IT platform                                 | Organize and participate important workshops   |
|                         |   | between power plants and grids; hold<br>regular workshop with manufacturers                               |              |   |  |



#### Participation of Stakeholders

We held extensive meetings with 26 provincial governments within our service area, during which we learned local needs, defined both parties' responsibility and tasks, and win us more understanding, trust and support.

Most local governments have set up an organizational system to support the growth of power grids, and integrated grid planning into local social and economic development. Some regions even incorporate the substations and transmission corridors in the regional land use and regulatory planning well in advance to guarantee concrete implementation of power grid planning.

All local governments take power grid projects as top priorities. Preferential policies are formulated to simplify project approval procedure, support land acquisition and help rationalize local electricity tariff.

We come to an agreement on sustainable development and gather concerted efforts to support faster development of UHV power grid and optimize large-scale resource allocation. With a view of energy-saving and emission-reduction, as well as coordinating and balancing the resources of the eastern and western region, some provinces and cities even volunteered to reduce their electricity generation and increase power import.

Power facilities are better protected. Many provinces have put forward a series of local legislation to combat electric power related crimes and establish a lasting mechanism of power facility protection.



#### Sharing Olympic Spirit

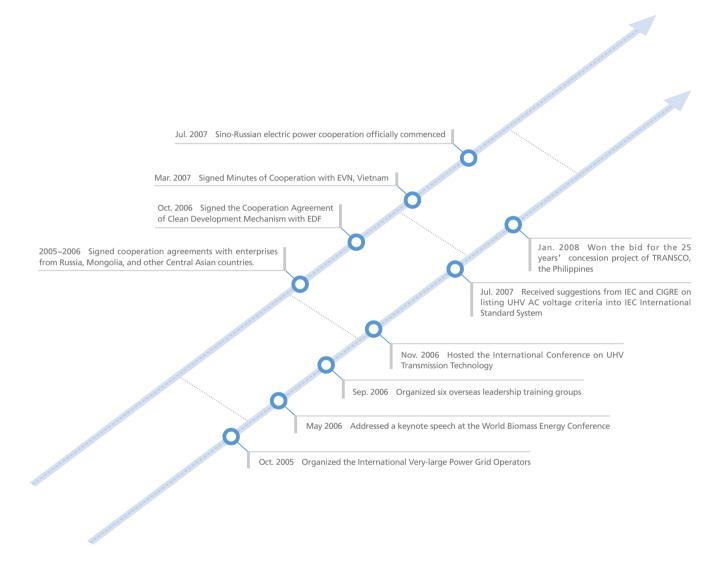
We are committed to carrying forward the Olympic Spirit of "Faster, Higher, Stronger", and promoting the corporate spirit of "In Search of Excellence, In Pursuit of Out-Performance". In line with our CSR outlook, i.e. "Develop the company, Serve the society, Be human-oriented and Seek common growth", we are constantly pursuing sustainable development and joining hands with all stakeholders to usher in a better future.



**Global Vision** 

We actively participate in the economic globalization process, implement globalization strategy, attend to international energy cooperation and transnational operation, and strengthen international cooperation. We are keen to ensure safe, economical, clean and sustainable energy supply and have been making great contribution to addressing issues regarding the global environment and energy.

#### O Global Vision



| year   | 2005  | 2006  | 2007  |
|--|-------|-------|-------|
| Number of overseas projects  | 69    | 76    | 251   |
| Total overseas contract price (USD billion)                                      | 1.926 | 4.305 | 8.176 |
| Number of important international conferences attended and hosted by headquarter | 17    | 11    | 15    |

#### • Implementing the Global Strategy and Improving Sustainable Development Capacity

With a global vision, we are fully aware of the significance of the economic globalization. Involved in the trend of sustainable development, we deepen our global strategy, fully take advantage of different resources and exchange management experience to guarantee safe, economic, clean and sustainable energy supply.

- Developing international energy cooperation on win-win basis, providing local job opportunities to promote local social development and improving the Company's energy supply capacity.
- Adhering to integral operation on international business, fully complying with international practice, local laws and regulations, respecting local cultures and religions, and supporting local community construction.
- Participating in the competition in international power engineering and hi-tech product markets, and conducting renewable energy cooperation.
- Absorbing international advanced technologies and management experience, improving safe, efficient and environment-friendly power grid operation, maintaining energy sustainability and actively handling issues such as international climate changes and energy problems.





Global recruitment

Meeting with Sweden delegation

# Expanding International Operation

Promoting international operation. We were selected as the winning bidder for the 25 years' concession project of TRANSCO, the Philippines.

Accelerating Sino-Russian power cooperation. Phase I of the transmission project is under construction.

Signing long-term cooperation agreements with the power enterprises from Mongolia, Kazakhstan, Vietnam and so on.

Pioneering the international market and expanding the market share of Chinese-made products such as relay protection and safety control equipment.Contract volume of EPC projects have been increased steadily.





Discussion with foreign experts

#### Deepening International Cooperation

We hosted the International Conference on UHV Transmission Technology, accelerated the establishment of UHV technological standards and actively participated in international standards formulation.

We organized international conferences, workshops and seminars concerning power system technology and grid planning, such as 2007 HVDC Users Conference.

We attended World Biomass Energy Conference, World Economic Forum and were deeply involved in CIGRE and VLPGO activities.

We enhance the cooperation with developing countries by exporting technologies and management experience.

We successfully organized four overseas leadership training groups.

We attended the Global Compact Summit, shared ideas on fulfilling CSR and addressing common challenges with enterprises, governments and NGOs both at home and abroad.

We actively participated in international exchanges on CSR and formulated ISO26000 international social responsibility standards.

We kept close contact with EDF, TEPCO, REE, ESKOM etc. and shared management and technological experience.





Seminar on UHV international standards

Overseas leadership training



#### Participation of Stakeholders

SGCC actively participates in international CSR exchange. It joined UN Global Compact in September 2006 and China Business Council for Sustainable Development in October 2006.

SGCC was selected as the first ISO26000 observer in September 2007. In November the same year in Vienna, SGCC became the first Chinese SOE that sent a delegation to attend the ISO26000 formulation conference,



"As a representative of Chinese enterprises, SGCC for the first time steps on the international stage of formulating international standards. It proves that Chinese enterprises have gradually realized the importance of participating in such activity and have taken substantial actions. The participation of Chinese enterprises will bring about positive influence on the formulation of international standards." said Chen Yuanqiao, Chinese delegation director and researcher of China National Institute of Standardization.



#### One World One Dream

We learn brand and business management experience from global Olympic sponsors and partners to accelerate constructing a world-class utility. In September 2007, we co-organized One World One Dream Chinese Essay Activity with China News Agency.

Develop SGCC Serve the Society Put People First Grow Jointly



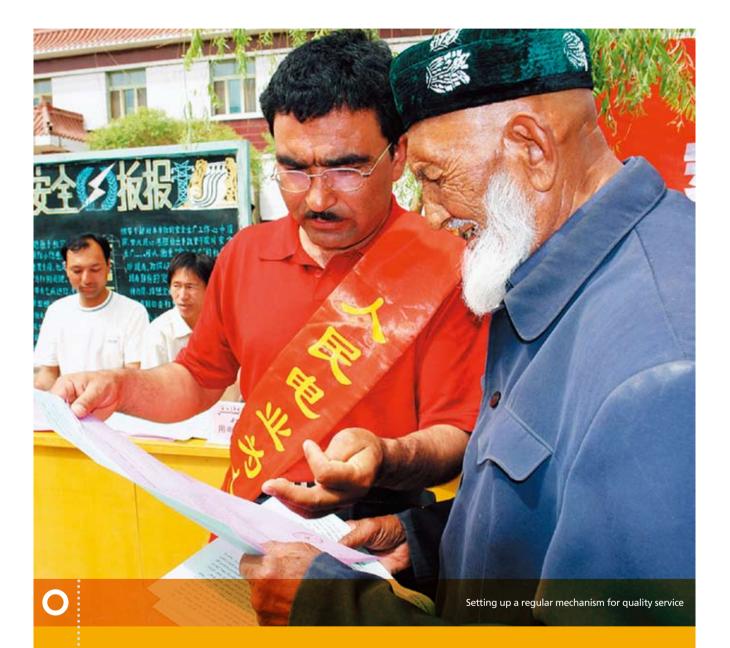


北京2008年奥运会合作伙伴 OFFICIAL PARTNER OF THE BEIJING 2008 OLYMPIC GAMES

Liuping, an Olympic torch bearer and assistant to Director General of the Service Center of Nanjing Power Supply Company, Jiangsu Province, always regards coustomers as family members and shapes a warm service brand.



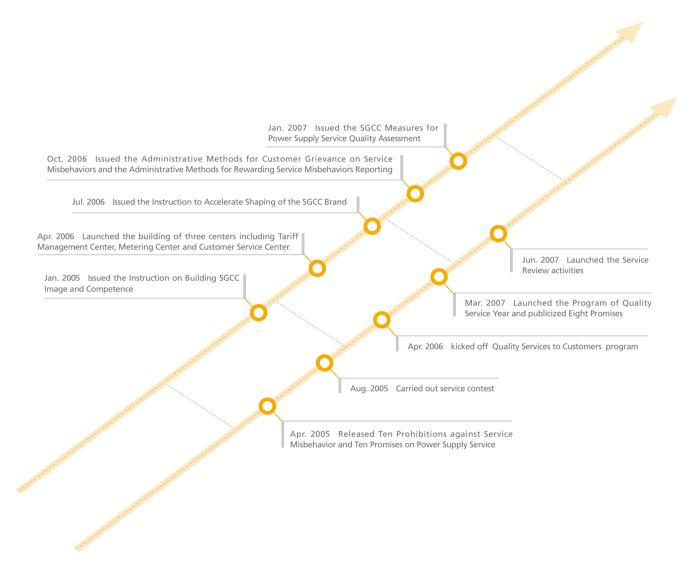




Fulfillment of social responsibilities starts from knowing customer needs and ends at satisfaction of such needs. We provide safe, reliable and quality power products and services for customers with high level of customer satisfaction, and realize SGCC's corporate value while creating value for customers.

**Quality Service** 

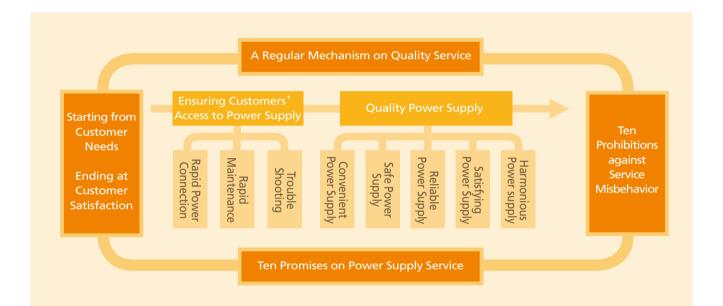
#### O Quality Service



| Year  | 2005    | 2006    | 2007    |
|---|---------|---------|---------|
| Average outage time per urban household (hour)    | 21.5    | 14.1    | 10.5    |
| Voltage qualification rate of urban end-users (%) | 99.136  | 99.157  | 99.266  |
| Fulfillment rate of Ten Promises (%)              | 99.95   | 99.99   | 99.99   |
| Newly connected capacity (MVA )                   | 122,810 | 135,080 | 166,010 |



# Improving a Regular Mechanism for Quality Service



Strictly implement Ten Prohibitions against Service Misbehavior, Ten Promises on Power Supply Service and the related supervision and regulation measures.

Integrate service resources, uphold all-staff service concept, upgrade service infrastructure and business centers and innovate service methods and standards.

Carry out the Service Review activities, increase service standards and establish an effective-lasting mechanism on quality service.

Make regular surveys about customer satisfaction, participate in ethics appraisals, impose supervision over the assessment process and results and strengthen mechanism on rewards and punishments.





Carrying out the Service Review activities

Standardized services

#### Engaging Full Efforts for Reliable Power Supply

During the summer peak in 2007, the consumption in 23 regional and provincial grids in SGCC service areas hit new record high. Power shortage occurred in areas like Beijing, Tianjin, Tangshan, Liaoning Province, Shanghai, Hubei Province, Jiangsu Province, Zhejiang Province, Anhui Province and Tibet Autonomous Region.

We leverage the advantage of large power grid to alleviate power shortage and ensure power supply to the highest possible extent by means of scientific dispatching, demand-side management and rational load shedding.



Ensuring power supply during the summer peak

#### Supplying Safe Electricity

We formulate the regulations on ensuring power supply safety and provide customers with consultation, guidance and technical support in order to eliminate hidden risks. In 2007, we carried out a general survey on safety for high-risk customers with 19,800 hidden risks identified.

We promote the publicity of power consumption safety in school, communities and households.

Promoting safe power use in communities

# Supplying Reliable Electricity

We follow the principle of openness and transparency, making public the levels of tariff and fees at service centers and strictly implementing the state tariff policies.

Sticking to the principle of honesty and integrity, fairness and justness, we speed up the construction of energy information acquisition system and ensure the precision of energy metering.

We take concrete steps to protect customer information.



Calibrating energy metering devices

#### Supplying Convenient Electricity

We pursue customer manager system and provide special access for key projects and major power supply projects.

We unify logos at all service centers, publicize service procedures, and standardize service processes.

Seven-day-a-week service, the first-call responsibility system and one-stop service are pursued.

Onsite service is offered to communities, supermarkets, neighborhood and etc.

A variety of convenient billing services can be approached through financial institutes, internet, telephone or pre-paid electricity card.

Customers are notified seven days prior to planned outage for maintenance. We make efforts to refine maintenance and overhaul schedules, promote live-line operation, and strengthen construction management to reduce the frequency and duration of power outage.

We keep the promise to supply power within 3 working days for residential users and 5 working days for non-residential users after power receiving devices are checked up to standard and relevant formalities completed.

We provide  $7\times24$  clockwise trouble-shooting services. Repairing electricians shall arrive in no more than 45 minutes in urban area, 90 minutes in rural area and 2 hours in special or remote areas.

#### One-Stop Service

"It's incredible! I made one call only!" The staff at the customer service center of Haidian Electric Power Supply Company helped a blind couple go through electricity meter installation formalities. Considering their special difficulties, the staff provided the onsite service for the blind family, and presented a Loving Care service card to them with sign language printed. "One-stop service is so good. Now we've got an easier access to electricity with this loving care card." The blind couple said gratefully.



Trouble shooting



Mobile service centers

#### Supplying Satisfying Electricity

Being customer-oriented, we provide tailored and caring services. Customers are directed to optimize the way of power use and save electricity expenditure.

We are keen to improve power supply service quality. In order to know the level of customer satisfaction, we engaged third parties to survey customer satisfaction in addition to internal evaluation. A large group of provincial and municipal power supply companies ranked top in both local ethics appraisals and customer satisfaction surveys.



Listening to the voice of customers

#### Power Advisors Serving the New High-tech Zone

On June 1, 2007, a team of power advisors from Jingmen Power Supply Company, Hubei Province, came to the high-tech industrial zone in the city and provided technical support on power use. They explained in detail the policies, engineering plan and design of power supply systems, and the formalities for increase of load capacity. The also gave advices on grid refurbishment due to plant relocation. The enterprises in the zone were very satisfied with the service. They said, "the power supply service is always available wherever we are". The onsite services of power advisors helped to keep the power users satisfied and comforted.

# Supplying Harmonious Electricity

We strengthen communication with customers, invite customer representatives to visit our companies and experience power supply service in person. We visit customers, listen to their voice and solicit their opinions and suggestions.

We employ 74,349 ethics surveillants, build a network to process customer complaints and reports, set up more supervision channels and are active to accept social surveillance.



Participating in ethics appraisals

#### Shaping SGCC Brand

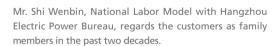
We set up a unified "95588" Customer Service Hotline, unify logos on service centers, and meanings and specification of service brand. In 2007, 38 million calls were accommodated.

With unified brand of SGCC, tailored services, excellent service teams and outstanding service stars emerge from different subsidiaries





Mr. Li Qingchang, National Labor Model with Harbin Electric Power Company, has cultivated a number of excellent service teams.





#### Building SGCC Brand with Customized Service

On October 30, 2007, Yinghu On-water Power Supply Service Center affiliated to Ankang Power Supply Bureau of Shaanxi Electric Power Company was put into operation. The on-water service center consists of service boats, facility boats and repair boats. The center employs modern facilities, integrating a wide range of services including power use consulting, application for installation and connection, trouble shooting, tariff collection and the "95598" remote terminal. The center serves a population of 22,000 in 5,009 households, 163 villages, 6 towns in the area surrounding Yinghu Reservoir and provides solutions for such difficulties in respects of application for power supply, payment of bills and emergency repairs.



#### Participation of Stakeholders

We are actively engaged in ethics appraisals and consciously subject to governmental and social supervision to increase customer satisfaction.

Shaanxi Electric Power Company set up a network to intensify ethics supervision. It employed 1,000 surveillants and established a fund of RMB 2 million Yuan to reward complaints. It publicized the grievance telephone number and encourage the general public to monitor the power service quality. Mr. Zhang Zhengyou, Deputy Secretary General of Shaanxi Provincial Consumer Association said, "I've been working for the Association since 1992. I received complaints about power supply companies several years ago. But in recent years, I've never dealt with any complaint concerning electric power companies as they are doing very well in terms of business ethics. In 2007, we conducted a large-scale survey on well-known enterprises involving more than 500 companies in 44 industries. Shaanxi Electric Power Company ranked first among utilities."

Immediate upon receipt of a Prestige Hubei magazine's report on suspected charging misconduct of Sanzhou Power Supply Center in Jianli County, Jingzhou Power Supply Company in Hubei Province started investigation and formulated rectification decisions the next day and refunded RMB 15,220 Yuan as overcharged from 239 farmer households on the 3rd day. The company circulated the criticism to Sanzhou Power Supply Center and took due disciplinary action against persons involved. In 2007, all county level power supply centers affiliated to the company ranked first in local ethics appraisals.

Pingdingshan Power Supply Company in Henan Province wins customers' trust and support by constantly increasing their service quality and enhancing communication with society. Mr. Yao Yinzhu, Director of Financial and Economical Working Committee of the Standing Committee of National People's Congress in Pingdingshan, said, "We inspected the work of all power supply enterprises in the city regarding their implementation of a series of laws and regulations, such as Electricity Law of the People's Republic of China, Regulations on Power Supply and Consumption, Administrative Regulations on Power Dispatching, Regulations on Protecting Electric Power Facilities, and evaluated their performance by a ballot. The result showed Pingdingshan Power Supply Company passed all votes in joint appraisals for two concecutive terms." In April of 2007, the company was honored National Model Company for Honesty and Integrity by the Chinese Association of Consumers.



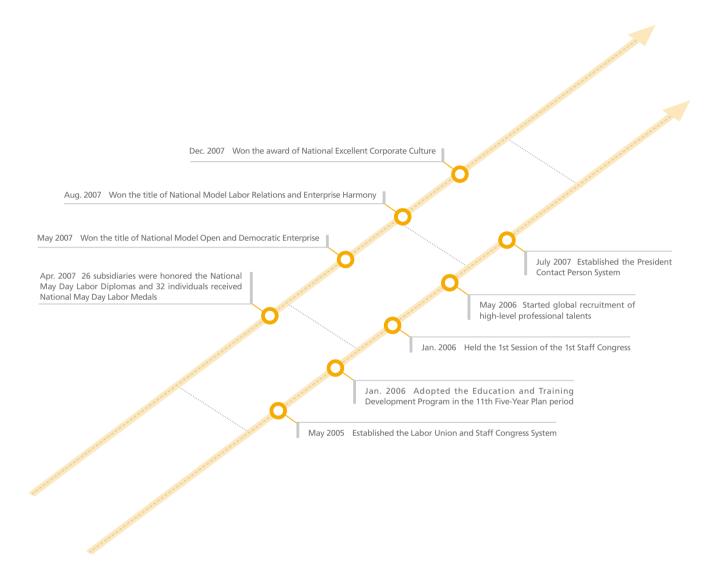
# Ensuring Quality Power Service for the Olympics

We open special access and set up service counters for the Olympic power supply projects. Project managers are also appointed to offer one-to-one specialized service. Activities are organized to identify and resolve hidden risks for designated hospitals and hotels. Power supply is secured for the good luck Beijing 2007 Qlympic test events.



SGCC sticks to the managerial philosophy that talents are the most invaluable resources of an enterprise, and implements the strategy of vitalizing the company through human resource development. Great importance has been attached to the employees' civil rights, their professional capability has been improved, and the personal performance development mechanism has been enhanced. The employees are mobilized to achieve personal value through the democratic management and to support the development of the Company.

### O Employee Development



| year<br>Indicator                                  | 2005  | 2006  | 2007  |
|--|-------|-------|-------|
| Investment in employee training (RMB million Yuan) | 617   | 954   | 2,171 |
| Employee training (million person-times)           | 2.20  | 2.50  | 2.75  |
| All staff training-attendance rate (%)             | 78.00 | 88.14 | 90.00 |
| Percentage of female employees (%)                 | 26.2  | 26.3  | 26.4  |
| Number of labor union branches                     | 834   | 886   | 930   |



### • Ensuring the Safety and Health of the Employees, Gaining Their Loyalty to the Company

We are in compliance with labor laws, respect the employees' legal rights and benefits, and make sure our recruitment policy is free from discrimination in terms of gender, age, race, religion and so on. The employees of ethnic minorities account for 3.89% of the total. Female and male employees are equal in salary distribution, and we forbid forced labor or employment of child labor.

Investment into the improvement of the working conditions is increased to guarantee the employees' health and safety. We hold various activities to uplift the employees' safety awareness, and establish a safety management mechanism. In addition, we establish health records for the employees and organize regular medical check-ups.

We provide rational remuneration, welfare and social security system in accordance with national and corporate conditions, and implement Provisional Regulations on Paid Annual Vacation of the Employees. By carrying out SGCC Incentive Measures for Scientific and Technological Advancement, we improve the employees' creativity and capability of independent innovation. In addition, we enrich the employees' cultural life through organizing recreational activities, and help to address practical problems for the employees in harsh conditions.

We hold high regards for the retired employees, and establish 1,481 clubs and 37 universities for the aged. There are over 60,000 person-times attending all sorts of activities every day.



Employees' show time



Colorful life of retired employees

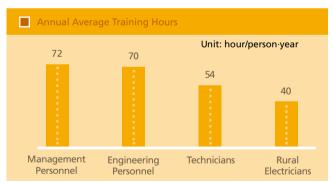
### Strengthening the Employee Training

We implement the Education and Training Program in the 11th Five-Year Plan period.

The best way of improving the training effect is to integrate training resources and improve training methods. We have set up 1,361 training bases in order to build a remote education platform and a training network which covers all types of work in the electric power industry.

Aiming at different professional fields, we implement the professional talents training program, and organize activities and contests to improve the employees' competence.

In 2007, eight employees won the honors of National Top Technical Performer and Top SOE-Technical Performer. In addition, 1,087 senior technician and over 4,900 technicians were certified in the year.





Diversified technical contests

### Perfecting the Employee Personal Development Mechanism

We standardize the management of labor contracts and establish an open, fair and just recruitment mechanism. In accordance with the division of labor, employee development proposals have been raised, and specific development channels for management, engineering and technical personnel have been provided respectively.

Females take up 6.43% among all senior management personnel.

The 1551 High-caliber Talents Development Program has been implemented (fostering 100 business elites, 500 management talents, 500 engineering experts as well as 1.000 technicians)

The executive team is required with integral political caliber, business performance, team spirit and morality. A series of regulations have been formulated to identify labor models and to further mobilize them to play an exemplary role in daily work. In addition, SGCC pays much attention to the selection of senior experts, and 504 have been identified.

The management personnel have been well fostered through position shift and reshuffling. Forty-one management staff members participated in such activities in 2007.



Post competition

### Deepening Democratic Management and Supervisory System

We make Staff Congress System play a more important role to ensure issues concerning the decision-making process and the employees' interests are deliberated and approved by the Staff Congress. Meanwhile, we promote transparent management as well as strengthen scientific and democratic decision-making process.

The employee representatives are offered with a wide platform to fully exercise democratic rights, and their proposals are properly addressed. We regularly organize employee representatives to inspect the follow-up implementation of their proposals.

184 and 131 proposals were put forth at the 1st and 2nd session of the 1st Staff Congress respectively and all of them have been properly and effectively handled.

We have established the President Contact Person System, appointing 36 contact persons to president, to make smooth the communication between the Company and employees. The employees are encouraged to contribute constructive suggestions to impel the sustainable and healthy development of the Company.







Bring the Staff Congress System into full play







Employee representatives are inspecting work



### Participation of Stakeholders

We carried out the President Contact Person System in 2007. The first 36 contact persons can directly report issues and suggestions to president via letter, telephone or email.

The implementation of the President Contact Person System has worked soundly. Contact persons at different levels make investigations and collect ideas to facilitate the enthusiasm of the employees to put forward good ideas for the development of the company.

"My colleagues were even happier than me when I was appointed as a contact person. They told me that what they said should be delivered to our president since I could directly report our issues." said Li Ming, Labor Union Chairman of a Power Supply Office, Jiangxi and a president contact person, "Therefore I feel heavy responsibilities. What I shall do is to briefly and clearly deliver the thoughts to our president."

Lujian, former president of North East China Grid Company Limited said, "A contact person acts as a bridge transmitting information between the leaders and employees, and as a transformer in establishing a harmonious enterprise. They make comprehensive analysis about the focuses and difficulties of the company and employees. They could either report significant issues directly up to president or present specific problems down to local subsidiaries."



### • We dream, we share and we participate

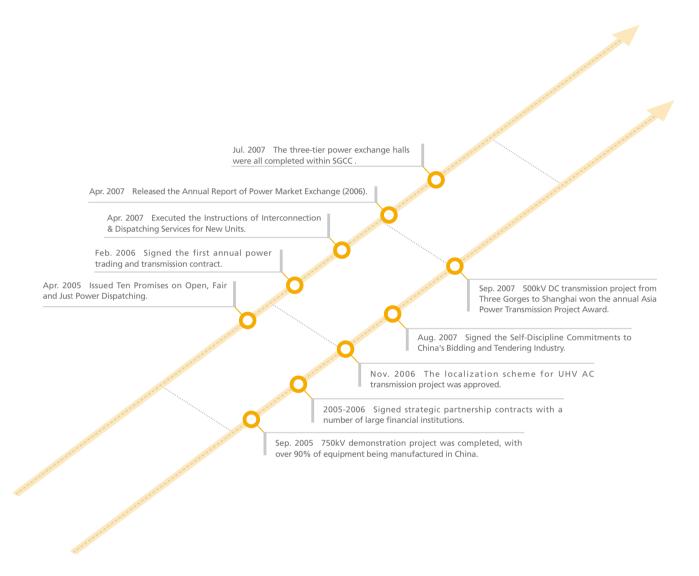
SGCC raised the idea of "We dream and grow with the Olympics; we participate, and make the Olympic dream come true; we participate and do things better". 1.5 million SGCC employees will provide excellent service for the Beijing 2008 Olympics. In October 2007, the selection of My Favorite Torch Bearers was launched, and 20 employees were honored as Olympic torch bearers.





Sticking to a principle of long-lasting, sincere win-win cooperation and mutual benefits, SGCC strengthens cooperation and closely collaborates with generation companies, suppliers, scientific and research institutes, construction companies as well as banking and financial agencies for mutual benefits and sustainable development.

### Win-Win Cooperation



| year   | 2005  | 2006  | 2007  |
|--|-------|-------|-------|
| Total Interconnected Capacity in SGCC's service areas (GW) | 407   | 486   | 540   |
| Total Off-take Electricity in SGCC's service areas (TWh)   | 1,640 | 1,840 | 2,150 |
| Central Procurement Volume (%)                             | 94.79 | 96.79 | 97.42 |
|  |       |       |       |



### O Coordinated Development between Power Plants and Grids

SGCC promotes the integrated planning and optimized distribution between power grid and generators, arranges a rational scheme for outgoing transmission lines and guarantees the timely transmission for generation projects. In 2007, SGCC interconnected 66GW of units in the service areas.

SGCC is fully in compliance with the principle of Open, Fair and Just Dispatching, perfects the communication mechanisms between power plants and power grids and strengthens the information disclosure on power dispatching and transaction.

SGCC sticks to sound coordination between power generators and the power grid so that the grid is jointly maintained safe and stable and joint efforts are made to explore the power market.

SGCC coordinates with goremmental organizations and generation companies to implement shut-down of small coall-fired power plants. By accelerating power grid construction and working out power supply plans, SGCC ensures power supply in areas where small units are shut down.

Power dispatching is optimized by carefully arranging the operational mode of hydro power stations and raising utilization rate of hydro-energy. The saved hydro-energy contributes to additional generation of 11 TWh in 2007.

SGCC tries to establish market compensation mechanism for retirement of small coal-fired units and launch transaction of generation right. The power generation quota of small units is transferred to efficient large-size units, largely promoting the shut-down of small units.



### Strengthening Cooperation with Manufacturers

SGCC increases the extensive cooperation with manufacturers, planning and designing institutions as well as construction companies to encourage self-innovation and technical upgrading and propels localization of key equipment.

SGCC and equipment manufacturers make common efforts to develop key techniques and equipment. Xidian Transformer Co. developed China's first 1000kV transformer. Jiangsu Power Test Research Institute takes the lead in developing fittings of UHV transmission lines.

SGCC reinforces the self-discipline, signs Self-Disciplined Commitment to China's Bidding and Tendering Industry, and maintains a fair and competitive market environment.

SGCC enhances engineering management by integrating efforts of designing, supervisory and construction enterprises, propels the application of new equipment, new techniques and new skills of energy conservation and low emission to raise the project quality. As a result, the project qualification rate reached 100%, with one national best construction prize, six China's silver prizes and a prize of the annual Asia Power Transmission Project Award in 2007.

### Localization Process of DC Transmission Projects

The localization rate of DC transmission equipment witnessed a steady increase. In 2003, the localization rate of Three Gorges-Changzhou DC Transmission Project was 30%, while 50% for the Three Gorges-Guangdong Project, in 2004 and 70% for the Three Gorges-Shanghai DC Project in 2006. Lingbao DC Back-to-Back Project realized complete localization, a great leap in China's DC transmission equipment localization.



North Beijing 500kV Substation was awarded the Luban Prize (China's top construction prize) in 2007



Three Gorges—Shanghai DC Transmission Project won the annual Asia Transmission Project Award



### • Launching Cooperation with Universities

SGCC strengthens the cooperation with scientific research institutes and promotes the establishment of innovative systems based on industry-university-research linkage to enhance innovation capability. From 2006~2007, SGCC invested RMB 20 million yuan and jointly developed new technology with dozens of universities to tackle key technical issues, regarding UHV technology and stability analysis and control of large grid. Significant breakthrough has been made in theoretical study.



Key project studies

### Advancing the Cooperation between Banks and Enterprises

SGCC intensifies the cooperation with financial institutions to ensure sufficient funds for power grid construction. Efforts are also made to increase capital efficiency and effectively hedge risks. Convenience of customer's billing system helps SGCC to ensure timely tariff collection.



Convenient billing service



Billing function demonstration



### Participation of Stakeholders

By actively exploring the new cooperation mechanism between plants and grid, Fujian Power Industry Association organized high–level symposium between power plants and grid companies, jointly propelling the sustained and healthy development of local power industry.

Fujian Electric Power Association organized its members to formulate the high-level regular symposium mechanism between generation and grid companies. The mechanism specifies the meeting purpose, the organization structure and the approaches. Before meetings, all members make in-depth communications and jointly decide subjects. During the meeting, they express their ideas and finalize the common solutions. It is proved such mechanism is significant to coordinated development.

### A senior executive of Fujian Provincial Power Co. :

Though the power plants were separated from grid companies, the industrial nature of simultaneousness in the production and sales remains unchanged. Both power plants and grid companies shall care each others' interests and jointly explore an effective way to communicate and promote the new mechanism of coordinated development. Such a coordination mechanism between power plants and grid companies in Fujian is an important breakthrough.

Huang Xianpei, President, Fujian Branch Co. of China Huadian Group:

The liaison mechanism creates a regular opportunity for power plants and grid companies to coordinate businesses, which builds a bridge for the communication between them. The relationship between power plants and grid companies is tightened and cooperation is closer.



# Jointly Ensuring Safe, Reliable and Quality Supply for Olympic Games

Cherishing the Olympic value of "respect, excellence and friendship", we respond to stakeholders' expectation and requirement for sustainable development. We reinforce cooperation with generation companies and manufactures to jointly ensure the safe and reliable power supply and excellent service for Olympic Games. By the end of 2007, Beijing Guanting Wind Farm Phase I was completed and synchronized with grid. The annual power generation will be 100GWh. The wind farm will supply green power for Olympic Games.

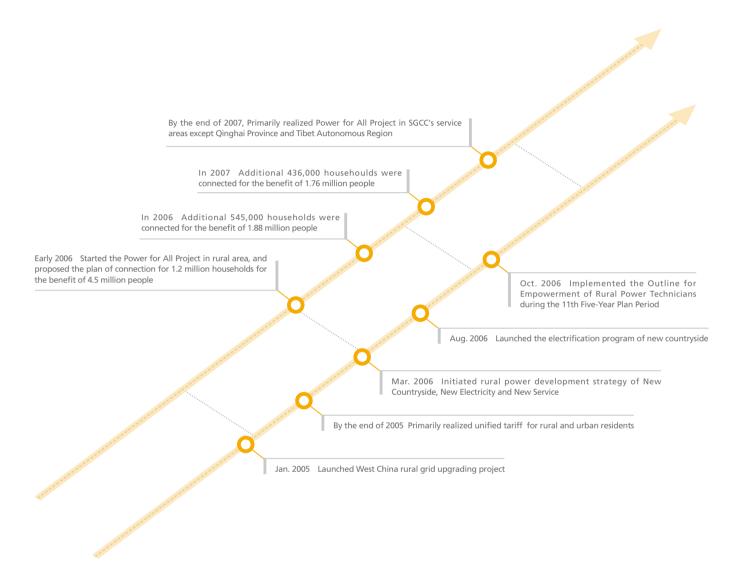


Timely power, timely irrigation

Serving Agriculture, Countryside and Farmers

We concretely carry out the Central Government's strategy of building new socialist countryside, make industry support agriculture and urban area support rural areas, and offer more favorable and flexible policies to the countryside. Given the advantage of conglomerated resources, we are dedicated to serving the rural economy and farmers.

### O Serving Agriculture, Countryside and Farmers



| year  | 2004   | 2005   | 2006   | 2007  |
|---|--------|--------|--------|-------|
| Investment on rural grid (RMB billion Yuan)                   | 26.8   | 38.3   | 33.9   | 44.6  |
| Rate of Rural Power Supply (%)                                | 99.308 | 99.382 | 99.491 | 99.54 |
| Voltage qualification rate of rural end-user (%)              | 93.20  | 93.80  | 94.20  | 94.4  |
| Incremental Population of Electrification ( million persons ) | -      | -      | 1.88   | 1.76  |

# • Promoting the "Power for All" Project in Rural Areas.



Thanks to strong support of the governments, SGCC overcame all difficulties and implemented the Power for All Project in rural areas. Since the Project was implemented, 981,000 new households with 3.64 million people had access to power.

Up to now, Power for All Project has been primarily realized in SGCC's service areas, except Qinghai Province and Tibet Autonomous Region.

SGCC's employees donated RMB 39.82 million Yuan to help poor farmers to get access to electricity.







### • Rural Electrification Construction

SGCC puts forward the strategy of New Countryside, New Electricity and New Service aiming at expediting the rural power grid construction and rehabilitation

Rural power grid construction and rehabilitation is preliminarily completed at county level. We invested RMB 8.1 billion Yuan to improve rural grids in central and western region, which accounts for 87% of planned investment.

We advance the construction of new countryside electrification project. Based on the completion of pilot projects in the 11th Five-Year Plan period, great efforts have been made to facilitate over 20% of counties to achieve the goals of new countryside electrification with reliable and economical power supply. By 2020, around 70% of the counties will enjoy the same service.

By the end of 2007, a total of 86 counties, 999 towns and 16,505 villages realized electrification.













### O Strengthening the Rural Power Management

SGCC issues the Instructions to County Power Supply Enterprise Management and Standards for Power Supply Station Management. We will innovate rural electricity management, service and technology to improve supply quality and realize the quality service commitment in an all-around way.

Benchmarking initiatives are promoted, with 44 county-level power supply companies reaching the first-class standards.

We formulate the Measures to Prevent Personal Casualty in Rural Distribution Operations to propel standardized operation and enhance the publicity and management of power consumption.

SGCC implements the training programs for rural electricians to improve their professional competence.

We strictly follow the unified tariff mechanism between urban and rural areas. Within our service area, a total of 1,663 counties in 24 provinces, autonomous regions and municipalities have realized the same residential tariff. Tariffs on various catalogues have been unified for 1,078 counties in 17 provinces, autonomous regions and municipalities.







Training of rural electricians



### Participation of Stakeholders

Power for All Project benefits people in rural areas and gains wide support.

Rulang Village is a typical poor village in mountainous region. Last year, SGCC built transmission lines on the mountains and installed switches and bulbs for more than 10,000 households for free. Now the lamp is brightened and rice mill runs. We are grateful to the government and SGCC for bringing us brightness and warmness.

—Liu Changfu, head of Rulang Village, Pengshui County, Chongqing

We have had electricity since June 2006. Although in July we suffered from severe flood disasters, mud-rock flow and landslide, light was still on.

——Zhang Shurong, Guaitang Village, Zhao'an County, Fujian Province

In the past, I didn't want to go home even during the vacation because we had no electricity and had nothing to do but sleep after dinner. I had to read in candle light. But now electricity is available at home. I don't have to envy my classmates during holidays.

——Li Ke, Highschool Student, Qixian County, Henan Province

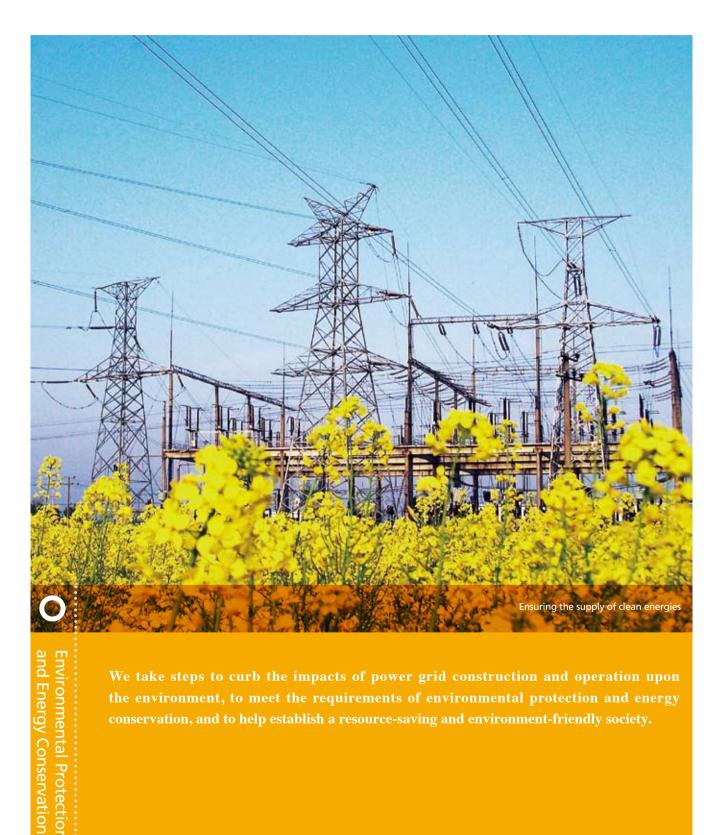
My Kerosene lamp shall be retired because we have electric light for the Shadow Puppet Play now. In the first month of China's Lunar New Year, the shadow play was shown for five successive nights in my village. I will teach my grandson the art of shadow puppet and pass on to next generations.

——Zhang Ruifang, Local Shadow Puppet Player, Sangmugou Village, Chifeng City, Inner Mongolia



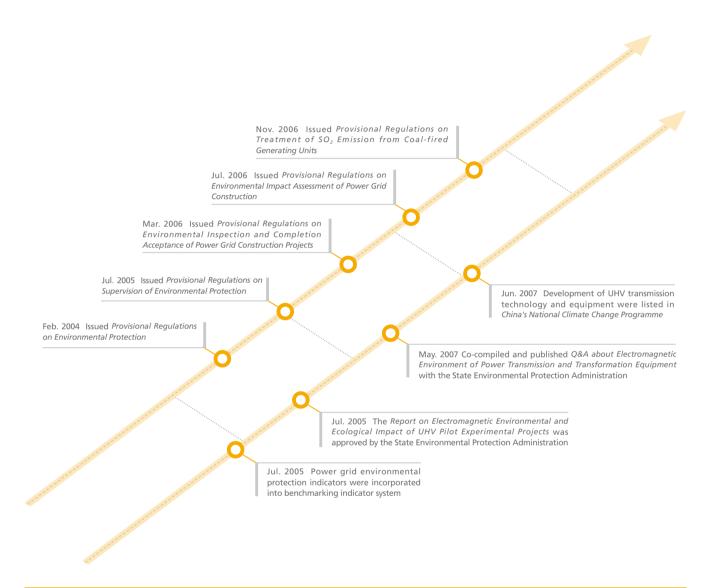
# O Power for All, All can Watch the Olympic Games

SGCC makes intensive effort to implement the Power for All Project, pays special attention to solve the most concerned, relevant and imminent difficulties of those farmers without access to electricity. At the same time, we will provide safe and reliable electricity to enable them to enjoy Olympic Games. We share passion and dreams of the Olympic Games.



We take steps to curb the impacts of power grid construction and operation upon the environment, to meet the requirements of environmental protection and energy conservation, and to help establish a resource-saving and environment-friendly society.

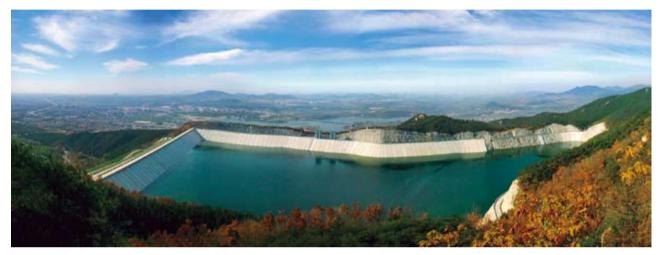
### O Environmental Protection and Energy Conservation



| year  | 2005    | 2006    | 2007    |
|---|---------|---------|---------|
| Line loss (%)   | 6.59    | 6.40    | 6.29    |
| Annual electricity saved due to decline of line loss (TWh)  | 5.64    | 3.47    | 2.30    |
| Synchronized capacity from renewable energies (MW) *  | 1,278.6 | 2,285.4 | 4,075.8 |
| Total Offtake Electricity from renewable energies (TWh) *   | 1.979   | 3.376   | 6.151   |
| Environmental impact assessment (EIA) rate of power grid construction projects at or above 330kV(%) | 100     | 100     | 100     |



### • Implementing Sustainable Development Strategy



Tai'an Pumped Storage Power Station, Shandong Province

The development of the UHV grid contributes to lowering line loss, optimizing the power network structure, saving land resources and investment. We take advantage of the environmental capacity, alleviate environmental impact and, as a result, save reserve capacity and shift peak loads. Other benefits include cross-drainage compensation, mutual complementation between hydropower and thermal power generation.

It is expected that the transmission capacity of the UHV grid will be above 260GW, which will help save 25GW of the installed capacity by 2020. The transportation and consumption of 480 million tons of standard coal will be saved annually in eastern regions, which will cut down  $CO_2$  emission by 1370 million tons,  $SO_2$  emission by 10.75 million tons as well as  $NO_X$  emission by 1.4 million tons.

The development of pumped storage power stations could meet the demand of peak loads, maintain the operational stability of the power grid, optimize the quality and reliability of the power supply, and enhance energy conservation and reduce consumption.

We develop environment-friendly, economized and energy-efficient technology to facilitate the study and application of new technologies and equipment such as energy storage, NAS battery and electric vehicles.

The recharge time of the battery-capacitor hybrid electric car invented by SGCC is less than 3 hours, realizing unattended automatic recharging. The car with the highest speed of 100 km/h has been used as repair and service vehicle. It is estimated to run a maximum distance of 100~300 kilometers, and the power consumption is no higher than 1.16 kWh per kilometer. We believe that 5,000 electric buses and taxis will be introduced by 2010 so that 75,000 tons of oil consumption, 157,000 tons of CO<sub>2</sub> and 2,104 tons of CO as well as 252 tons of CH<sub>x</sub> will be reduced every year.



95598 power service car

### • Satisfying the Requirements for Environmental Protection and Energy Conservation

We strictly comply with national environmental regulations, conduct EIA and environmental acceptance of power grid projects as well as standardize environmental protection management.

We have taken fully into consideration environmental factors in the selection of transmission line and substation sites. We apply compact lines and multi-circuit lines on the same tower to improve the transmission capacity and reduce land use. The utilization of high-tensile steel lowers the weight of towers by 3% ~10% and the steel consumption runs lower by 40,000~120,000 tons annually.

We optimize substation design, promote general design, and enhance noise control to save more energy, water and material. Nearly one million m<sup>3</sup> of water can be saved each year resulting from the use of gravel sites within substations.

By utilizing green construction processing and well-tailored technologies, we alleviate the damages of the power grid construction to vegetation and forests, reduce soil erosion, restore the natural environment after construction and minimize negative impact upon the environment.



500kV double-circuit line on the same tower



Barriers are used in converter stations to absorb noises



Placing leading string in the air, and alleviating damage to the nature

### O Promoting Energy Conservation and Emission Reduction

We carried out the energy conservation and consumption reduction program and optimized the energy-saving and environment-friendly dispatching in 2007, thus saved 12.818 million tons of standard coal, and cut back on 36.716 million tons of  $CO_2$  as well as 287.000 tons of  $SO_2$  emission.

The national differential tariff policy is strictly enforced to constrain disorderly development of energy-intensive industries. We advocate scientific, efficient and energy-saving power utilization, and publicize the knowledge about saving power.



Environmental protection publicity

- Strictly strengthening line loss management. The line loss has been lowered by 0.11 percentage point compared with the same period of last year, and 2.3 TWh of electricity and 821,000 tons of standard coal has been
- Enhancing water resource utilization efficiency. The saved hydro energy contributes to additional 11 TWh of electricity, equal to standard coal consumption reduction of 3.927 million tons.
- Applying alternative power generation. 53.6 TWh of electricity has been traded and 6.16 million tons of standard coal has been saved.

- Constructing 12 demand-side management pilot projects.
   4.3 TWh of electricity and, namely, 1.535 million tons of stardard coal has been saved.
- The coal consumption of the generating units managed by SGCC has been lowered by 1.1 g/KWh,equal to the standard coal consumption reduction of 89,000 tons.
- Pushing forward biomass energy generation, with the total capacity of 800 GWh. In other words, 286,000 tons of standard coal has been saved.

### Supporting the Development of Renewable Energies

We abide by the Renewable Energy Law and other national industrial policies, and formulate supporting rules to promote the development of renewable energies such as wind power, biomass energy and solar energy. We study the influence of wind power interconnection upon the safe operation of the power system and take active measures to guarantee timely new energy generation. Customers are encouraged to use green energy to expand the renewable energy market.



Supporting the development of wind farms



### Participation of Stakeholders

Q: is the electromagnetic field of transmission lines and electric facilities harmful to people's health?

A: The impact of electromagnetic environment upon creatures is decided by the frequency and energy of the electromagnetic source. Only biological action beyond human compensation mechanism can be harmful to our health. The ultra low frequency field of 50Hz formed around transmission lines and facilities can hardly influence people's health because of low frequency, long wave length and inability of forming effective electromagnetic radiation. In other words, the power of electromagnetic radiation formed by typical transmission lines is lower than 1/2000 of the energy radiation from the full moon to the surface of the earth. The WHO indicates that the frequency field around transmission and distribution lines is too low to incur any hazard for people's health.

Q: Why are some substations built close to residence areas? Can the electromagnetic environment measurement data reassure the residents?

A: Most of the medium-voltage distribution networks in China are at 10 kV. We have to build substations in load centers because the supply radius of a substation is approximately 1.5 km. The power supply quality and voltage stability will be negatively affected out of this scope. As a matter of fact, whether 220 kV or 500 kV substation, the intensity of the electric and magnetic field is much lower than current national environmental criteria, and the intensity of the electromagnetic field 20 meters away from the substation enclosure has little harm to the natural environment.



# Contributing to the Green Olympics

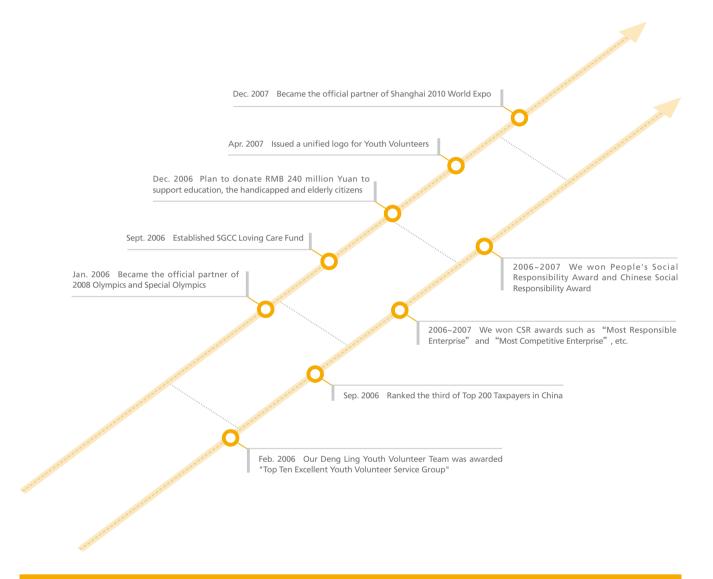
In the guidance the Green Olympics philosophy, we plan, design and build Olympic power projects in accordance with the sustainable development principle to save land, widely apply environment-friendly and energy-saving equipment, support the development of renewable energies, ensure 20% of power supply for Olympic stadiums comes from green energy and provide electric vehicles.



Playing a leading role in SOEs, we fulfill our obligations as a responsible corporate citizen and comply with laws, regulations and social value standards. With a strong commitment to promoting social morality, welfare, and justice, we contribute to the construction of a harmonious socialist society.

Corporate Citizen

### O Corporate Citizen



| Indicator                                  | 2004   | 2005   | 2006   | 2007   |
|--|--------|--------|--------|--------|
| Tax Paid (RMB billion Yuan)                | 42.261 | 51.559 | 65.456 | 81.312 |
| Public Donation (RMB billion Yuan)*        | 0.148  | 0.159  | 0.296  | 0.220  |
| Number of Employed Demobilized Servicemen  | 2,930  | 2,742  | 2,712  | 2,454  |
| Volunteer Service (thousand person-times)* | 490    | 540    | 560    | 570    |

### • Credible Business Operation

We strictly comply with laws and regulations, social ethics and industrial standards, fulfill taxation obligations and actively implement the idea of law-based corporate governance.

We carry out the 11th Five-Year Plan for ethical and cultural progress, such as implementing the SGCC Employee Code of Conduct and the SGCC Corporate Culture Mannual.

We strengthened prevention, detection and treatment of corruption to render a fair and self-disciplined management team. Committed to promotion of social morality and business ethics, we step up to be the official partner of Beijing 2008 Olympics and 2010 Shanghai World Expo.

We employ 23,641 financial personnel, 2,925 internal auditors, 1,222 discipline inspectors, 716 law experts. The strong human resource and a well-operated internal control and monitoring process contribute to SGCC's high-level compliance with laws and regulations.



Official Partner of Beijing 2008 Olympic Games



Official Partner of 2010 Shanghai World Expo

### Active Participation in Public Undertakings

**SGCC Loving Care Fund.** We are committed to serving social development, supporting social welfare, and addressing social issues that challenge the harmony of the society. Incomplete statistics show that corporate and staff donations totaled up to RMB 220 million Yuan in 2007.

**Steadily boosting Tibet-aiding program.** From 2007 to 2008, SGCC allocated RMB 35 million Yuan as the financial aid for agricultural, livestock breeding, medical care, and transportation programs in Cuoqin County, Tibet.

**Poverty-relief program.** In the past three years, 48 poverty-relief projects have been executed with a total investment of RMB 50.77 million Yuan.





Housing Project and Broadcast Center donated by SGCC in Tibet



Hope Primary School donated by SGCC



Poverty-relief donation



### Volunteer Activities

**Building up SGCC youth volunteer service network.** We set up a SGCC Youth Volunteer Service Headquarter and a multi-tiered service network by integrating various resources such as the Youth Volunteer Association, Service Team, and Volunteer Group from all subsidiaries.

A guidebook of SGCC Youth Volunteer Logo and Application Standards was formulated to unify the logos of all SGCC volunteer activities.





# 国家电网公司青年志愿者

Leveraging the brand effect to boost the volunteer activities. Since 2003, a total of 500,000 man-times of SGCC volunteer service have been recorded in "Youth Sunshine Day" theme activities. They visited over 150,000 impoverished households, 30,000 villages and communities, and contributed a total donation of 140,000 items.

**Devoting to communities and fostering harmony.** We rolled out "Into the Community, Closer to SGCC" harmony-promoting scheme, which aims at enhancing social harmony by solving evident difficulties of residents.

Zhejiang Company organized 36 youth volunteer service teams with 1300 members, and the total volunteer service activities account for approximately 10,000 man-times.

Tianjin Electrical Power Company signed a cooperation agreement with community volunteer associations to jointly promote volunteer service programs in unified name, theme and management.

Hubei Provincial Company signed "Loving Care Mutual Assistance Agreement" with impoverished households in Wuhan, under which the Youth Volunteer Service Team carry out power supply service activities periodically for citizens. In 2007, they installed a total of over 500 information boxes for collecting electricity fee.





Volunteer service in communities



### Participation of Stakeholders

SGCC has set up Loving Care Fund Management Committee and Office, and formulated *Management Measures for SGCC Loving Care Fund* in order to systemize involvement in social welfare undertaking.

By setting up SGCC Loving Care Helpage Fund to provide welfare service to poor or widowed elders in social welfare institutions, SGCC has become the first-ever large SOE to set up a special fund for and provide regular assistance to the elderly, thus providing a strong exemplary impetus to raise the social welfare awareness among domestic enterprises and promote our national social welfare undertaking.

——Zhang Xiaofeng, Official of Social Welfare and Affairs Division, Ministry of Civil Affairs

SGCC's devotion to social welfare has three features:

Firstly, social welfare undertaking has become the strategic orientation for enterprise development. Social responsibility has secured a strategic position in SGCC and a strong sense of dedication to social welfare undertaking has been instilled into each employee's mind;

Secondly, SGCC takes systemized approaches to drive this undertaking, which could generate long-term influence. Thirdly, SGCC is well focused on the practical result of its devotion to social welfare, such as the building of the Hope Primary School the real benefits of donations to those in need, etc.

——Tu Meng, General Secretary of China Youth Development Foundation

My dream of going to college finally came true thanks to people from SGCC, and I've never been so determined to strive myself in studies and become a solid and useful person. Whatever I do in future, I will take every action to help those in need just as what SGCC has done for me.

—Li Pengfei, student of Department of Chemistry and Pharmaceutics, Heilongjiang University



# O Volunteer Service for 2008 Olympic Games

While the Olympics lighten our life, responsibility sharing fosters more harmony. We inspire the employees with the Olympic spirit and responsibility sharing to forge a united and devoted team. SGCC has also set up Olympic Light Youth Volunteer Service Team, and leveraged the foreign language strengths of its members to provide English service to the Olympics and consultancy on power use to foreign friends.

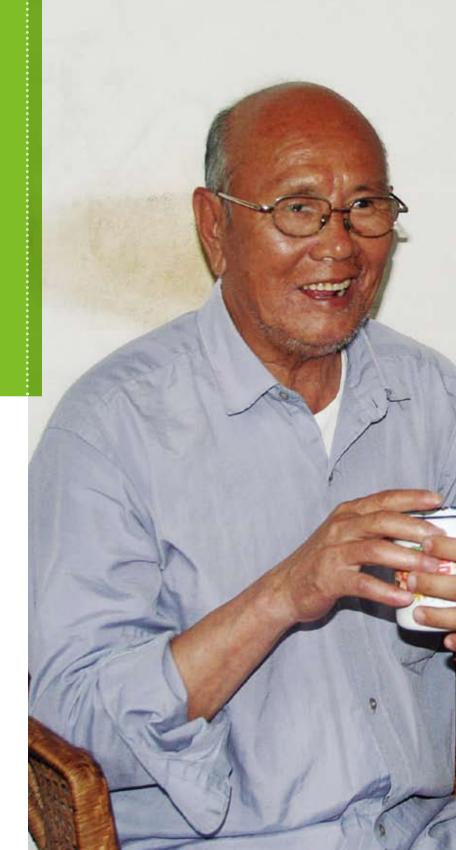
# Fulfill Responsibilities, Create Value





北京2008年奥运会合作伙伴 OFFICIAL PARTNER OF THE BEIJING 2008 OLYMPIC GAMES

Chen Zhongsheng, an Olympic torch bearer, is a car mechanic with Quanzhou Power Bureau, Fujian Province and awarded as "China Five-Star Volunteer". His voluntary service totalled up to 2,000 hours.





### Outlook for 2008

# Scientific Development

We will put UHV AC Pilot Experimental Project into operation and push forward the smooth progress of UHV DC Demonstration Project. We will invest a total of RMB 253.2 billion Yuan in grid construction with 62,000 km of 110(66) kV and above AC transmission lines and transformation capacity of 260,000 MVA. With continued efforts in promoting power trading, we have set target for a record trading volume of 256 TWh in the national power exchange market. Meanwhile, we will continue to enhance transmission capacity of present grid.

# Power Supply Safety

We will take every step to guarantee safe and reliable power supply. Our target is to minimize the occurrences of grid stability damages or blackouts, serious personal casualties and negligence accidents. We promise reliable power supply for the 2008 Olympic Games.

# Management Excellence

In the year to come, we will strive to accomplish an electricity sales of 2,210 TWh, reap a revenue of RMB 1,147 billion Yuan, achieve a total profit and tax of RMB 138.8 billion Yuan, and an overall productivity of RMB 311,000 Yuan/person-year. Under the *Guidelines on fulfillment of Social Responsibilities by SOEs*, we will implement *SGCC CSR Performance Guide* in concrete steps to improve our CSR management system.

# Technical Innovation

More investment in science and technology will be secured to build a pioneer rennovative state-owned enterprise. We will step up the extension projects of UHV AC and UHV DC Test Base and make sure that the SGCC Simulation Center be put into operation in 2008. We will continue to reinforce the fundamental as well as pilot research on ±1000 kV DC transmission and grid construction in high altitude areas, in an attempt to foster breakthroughs in such fields as UHV transmission, very large power grid safety and energy-saving and emission-reduction, etc. Furthermore, we will make major progress in "SG 186"Information Project of SGCC.

### Communication

2008 CSR Report will remain an essential task. We will commit to open and transparent operations, establish a sound CSR information release system, and reinforce disclosure of major events. Meanwhile, we will enhance dialogue with government, regulatory organizations, associations and partners, and actively respond to government regulation and social surveillance. The existing President Contact Person System will be further improved.

### **Global Vision**

We will actively promote energy cooperation with enterprises from Russia and Mongolia, etc, and spare no efforts to ensure quality high-quality commissioning of the Sino-Russian Back-to-Back DC Transmission Project, well perform the concession operation of TransCo, the Philippines, after the contract is awarded, innovate international cooperation approaches and build up an international tendering platform. Moreover, we will play a more active role in the formulation of international standard systems such as UHV technology and CSR international standard (ISO 26000).

### **Quality Service**

We will fulfill our "Ten Promises" of power supply service, and implement "Ten Prohibitions" against employee's misbehaviors. It is expected that the urban comprehensive voltage qualification rate should reach 99.348%, up by 0.082 percentage points, that the urban power supply reliability ratio should reach 99.893%, up by 0.013 percentage points, and annual electricity outage time per household should drop 1.1 hours compared with that of 2007.

# Employee Development

The investment in staff training programs will steadily increase. We will further optimize the Corporate Staff Congress and carry on "1551 Elites Program" to foster a top-level professional team with cutting-edge expertise. We will also protect employees' legitimate rights and interests, their health and working safety to guarantee the harmony and stability of the workforce and take measures to avoid any event with serious social implications.

# Win-win Cooperation

We will insist on "Open, Fair and Just" power dispatching and facilitate coordinated development of power grid and power plant. We will cooperate more closely with research institutions and equipment suppliers to develop key equipments and core technologies for UHV projects, etc. and step up the localization of electric power equipment. Moreover, we will ensure 100% operation qualification rate of all newly launched construction projects, fulfill our commitments of self-discipline in all tendering and bidding activities, and strengthen the cooperation with banking institutions.

# Serving Agriculture, Countryside, and Farmers

We will reinforce "Power for All" Project to provide electricity access to 190,000 households without electric power supply. The regional target of "Power for All" Project in Qinghai Province shall basically be realized and remarkable progress shall be made in Tibet. We will also promote the standardization of rural power grid companies to achieve rural comprehensive voltage qualification rate of 96.9%, up by 0.132 percentage points, and rural power supply reliability ratio of 99.591%, up by 0.05 percentage points, and a reduction of 4.4 hours as annual average electricity outage time per household. Meanwhile, we are going to electrify 70 more counties, 900 more towns, and 15,000 more villages.

# Environmental Protection and Energy Conservation

We will roll out energy-saving and consumption-reduction program, with a target of achieving actual line loss of 6.2%, a drop of 0.09 percentage points compared with that of 2007. We will continue to encourage trading of generation right, and accelerate the building of auxiliary transmission facilities for "Replacement of Small Units by Larger Ones" Projet. Moreover, we will strictly implement differential tariff policy, support renewable energy development, and educate the public on electromagnetic impact.

### Corporate Citizen

We will actively participate in social welfare undertakings, promote poverty-relief and Tibet-aid projet. We will boost staff voluntary activities, and make efforts to become an excellent partner of Beijing 2008 Olympics and 2010 Shanghai World Expo. All our business will be operated in compliance with laws and regulations with integrity and ethics, so as to avoid and combat commercial bribes and corruption.

# **UN Global Compact: Initiatives and Performance**

In 2007, we committed to our tenet of "Quality Services", and actively promoted the ten principles of United Nations Global Compact, in the spirit of which we developed a Global Compact social responsibility management system to foster better performance in economic, social and environmental aspects.

| U                | nited Nations Global Compact  | 2007 Initiatives and Performance  |  |  |
|------------------|---|---|--|--|
| Human Rights     | Support and respect the protection of internationally proclaimed human rights   | Comply with Chinese laws, regulations and standards, international conventions and practices recognized by Chinese government. We fully respect Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, International Covenant on Economic, Social and Cultual Rights.   |  |  |
|                  | Ensure company is not complicit in human rights abuses  |   |  |  |
|                  | Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining | Establish staff congress and labour union at all levels of SGCC to promo equal consultation and collective contract system, enhance democratic stamanagement and supervision, and protect the lawful rights and benefits  |  |  |
| Labour Standards | 4. Eliminate all forms of forced or compulsory labor  | employees.  Prohibit forced or compulsory labor, and the use of child labour.  Establish fair and open selective employment mechanism based on the principle  |  |  |
|                  | 5. Effectively abolish child labor  | of competition, eliminate all kinds of discrimination in respect of nationality, gender, sexual orientation, religious belief, national or regional difference, age   |  |  |
|                  | Elimination of discrimination in respect of employment and occupation.  | and disease, etc.   |  |  |
|                  | 7. Take a precautionary approach to environmental challenges  | Implement sustainable development strategy and develop UHV grid to reduce installation, loss and transmission corridor, and optimize resource allocation. The power grid construction projects all went through strict EIA procedures and met high environmental protection standards. The 1000 kV UHV transmission line implemented even the same electromagnetic environmental standards as that of 500 kV transmission line. |  |  |
| Environment      | 8. Undertake initiatives to promote greater environmental responsibility  | Promote standardized construction, universal design, equipment and cost, standardized technology to cut down on resource consumption. Encourage efficient use of energy and green energy to support sustainable development.  |  |  |
|                  | 9. Encourage the development and diffusion of environmentally friendly technologies                                     | Develop energy-saving, environment-friendly, and high-efficiengy technologies to reduce line loss and increase the transmission capacity of present grid. Promote R&D and application of new technologies and facilities such as energy-storage technology, NAS battery, plug-in hybrid vehicle, and amorphous alloy transformer, etc. Promote the clean coal combustion technology.  |  |  |
| Anti-Corruption  | 10. Businesses should work against corruption in all its forms, including extortion and bribery.                        | Foster honesty and self-discipline in management by setting up a mechanism for prevention and treatment of corruption. Combat business bribery by liability auditing and performance surveilance of chief executives of SGCC during their tenures. Provide anti-corruption policy training to each and every employee.  |  |  |

# **GRI Index**

|                        | No. | GRI  | G3 Standards  | Index              |
|------------------------|-----|------|---|--------------------|
| Strategy and Analysis  | 1   | 1.1  | Statement from the most senior decision-maker of the organization about the relevance of sustainability to the organization and its strategy.   | P2~4/P18~19        |
|                        | 2   | 1.2  | Description of key impacts, risks, and opportunities.   | P2~4/P18~19        |
| Organizational Profile | 3   | 2.1  | Name of the organization.   | Cover/P5           |
|                        | 4   | 2.2  | Primary brands, products, and/or services.  | Cover/P5/P61       |
|                        | 5   | 2.3  | Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.   | P6~7               |
|                        | 6   | 2.4  | Location of organization's headquarters.  | Report Brief       |
|                        | 7   | 2.5  | Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.  | P5/P52~57          |
|                        | 8   | 2.6  | Nature of ownership and legal form.   | P5                 |
|                        | 9   | 2.7  | Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).  | P5/P52~57          |
|                        | 10  | 2.8  | Scale of the reporting organization, including: number of employees, net revenues, quantity of products or services provided and total assets.  | P5/P36             |
|                        | 11  | 2.9  | Significant changes during the reporting period regarding size, structure, or ownership.  | P6                 |
|                        | 12  | 2.10 | Awards received in the reporting period.  | P36/P44/P77/P93~94 |
| leport Parameters      | 13  | 3.1  | Reporting period (e.g., fiscal/calendar year) for information provided.   | Report Brief       |
|                        | 14  | 3.2  | Date of most recent previous report (if any).   | Report Brief       |
|                        | 15  | 3.3  | Reporting cycle (annual, biennial, etc.)  | Report Brief       |
|                        | 16  | 3.4  | Contact point for questions regarding the report or its contents.   | Report Brief       |
|                        | 17  | 3.5  | Process for defining report content, including: determining materiality; prioritizing topics within the report; and identifying stakeholders the organization expects to use the report.  | Brief/P14~17       |
|                        | 18  | 3.6  | Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers).  | Report Brief       |
|                        | 19  | 3.7  | State any specific limitations on the scope or boundary of the report.  | Report Brief       |
|                        | 20  | 3.8  | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.                     | P6~7/P14~17        |
|                        | 21  | 3.9  | Data measurement techniques and the bases of calculations.  | Report Brief       |
|                        | 22  | 3.10 | Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods). | Report Brief       |
|                        | 23  | 3.11 | Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.   | Report Brief       |
|                        | 24  | 3.12 | Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links.   | P103~106           |
|                        | 25  | 3.13 | Policy and current practice with regard to seeking external assurance for the report.   | P107~108           |
| overnance              | 26  | 4.1  | Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.  | P14~17             |
|                        | 27  | 4.2  | Indicate whether the Chair of the highest governance body is also an executive officer.   | P5/P14~17          |
|                        | 28  | 4.3  | For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.  | P14~17             |
|                        | 29  | 4.4  | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.   | P68~73             |
|                        | 30  | 4.5  | Linkage between compensation for members of the highest governance body, senior managers, and executives and the organization's performance.  | P14/P40/P43        |
|                        | 31  | 4.6  | Processes in place for the highest governance body to ensure conflicts of interest are avoided.   | P14~17             |

|                                  | No.      | GRI   | G3 Standards   | Index   |
|----------------------------------|----------|-------|--|---|
|                                  | 32       | 4.7   | Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.  | P18   |
|                                  | 33       | 4.8   | Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.   | Cover/P2~4/P10~13   |
|                                  | 34       | 4.9   | Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles. | P14~17  |
|                                  | 35       | 4.10  | Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.  | P14~17/P58~60   |
|                                  | 36       | 4.11  | Explanation of whether and how the precautionary approach or principle is addressed by the organization.   | P14~17/P28~33   |
|                                  | 37       | 4.12  | Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.  | P2~4/P102~106   |
|                                  | 38       | 4.13  | Memberships in associations (such as industry associations) and/or national/international advocacy organizations.  | P17   |
|                                  | 39       | 4.14  | List of stakeholder groups engaged by the organization.  | P18~19/P46~51   |
|                                  | 40       | 4.15  | Basis for identification and selection of stakeholders with whom to engage.  | P18~19/P46~51   |
|                                  | 41       |       | Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.  | P18~21、P58~61   |
|                                  | 42       | 4.17  | Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.  | P27/P33/P39/P45<br>P46~51/P57/P67/P73/<br>P79/P85/P91/P97 |
| conomic Performance<br>ndicators | 43       | EC1   | Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.  | P35~39/P93~97   |
|                                  | 44       | EC2   | Financial implications and other risks and opportunities for the organization's activities due to climate change.  | P6~8/P92~95   |
|                                  | 45       | EC3   | Coverage of the organization's defined benefit plan obligations.   | P68~73  |
|                                  | 46       | EC4   | Significant financial assistance received from government.   | Not in this case  |
|                                  | 47       | EC5*  | Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.   | P68~73  |
|                                  | 48       | EC6   | Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.  | P74~79  |
|                                  | 49       | EC7   | Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.  | P68~73  |
|                                  | 50       | EC8   | Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.   | P80~85/P92~97   |
|                                  | 51       | EC9*  | Understanding and describing significant indirect economic impacts, including the extent of impacts.   | P80~85/P92~97   |
| nvironmental Performance         | 52       | EN1   | Materials used by weight or volume.  | P34~39  |
| ndicators                        | 53       | EN2   | Percentage of materials used that are recycled input materials.  | P34~39  |
|                                  | 54       | EN3   | Direct energy consumption by primary energy source.  | P86~91  |
|                                  | 55       | EN4   | Indirect energy consumption by primary source.   | P86~91  |
|                                  | 56       | EN5*  | Energy saved due to conservation and efficiency improvements.  | P86~91  |
|                                  | 57       | EN6*  | Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.   | P86~91  |
|                                  | 58       | EN7*  | Initiatives to reduce indirect energy consumption and reductions achieved.   | P86~91  |
|                                  | 50<br>59 | EN8   | Total water withdrawal by source.  | Not in this case  |
| -                                |          |       |  |   |
|                                  | 60       | EN9*  | Water sources significantly affected by withdrawal of water.   | Not in this case  |
|                                  | 61<br>   | EN10* | Percentage and total volume of water recycled and reused.  | Not in this case  |
|                                  | 62       | EN11  | Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.   | Not in this case  |

### O GRI Index

|                                   | No. | GRI   | G3 Standards  | Index                |
|-----------------------------------|-----|-------|---|----------------------|
|                                   | 63  | EN12  | Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.                                     | Not in this case     |
|                                   | 64  | EN13* | Habitats protected or restored.   | Not in this case     |
|                                   | 65  | EN14* | Strategies, current actions, and future plans for managing impacts on biodiversity.   | P86~91               |
|                                   | 66  | EN15* | Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.  | Not in this case     |
|                                   | 67  | EN16  | Total direct and indirect greenhouse gas emissions by weight.   | P86~91               |
|                                   | 68  | EN17  | Other relevant indirect greenhouse gas emissions by weight.   | Not in this case     |
|                                   | 69  | EN18* | Initiatives to reduce greenhouse gas emissions and reductions achieved.   | P86~91               |
|                                   | 70  | EN19  | Emissions of ozone-depleting substances by weight.  | Not in this case     |
|                                   | 71  | EN20  | NO, SO, and other significant air emissions by type and weight.   | P86~91               |
|                                   | 72  | EN21  | Total water discharge by quality and destination.   | Not in this case     |
|                                   | 73  | EN22  | Total weight of waste by type and disposal method.  | Not in this case     |
|                                   | 74  | EN23  | Total number and volume of significant spills.  | No similar situation |
|                                   | 75  | EN24* | Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally. | Not in this case     |
|                                   | 76  | EN25* | Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.                          | Not in this case     |
|                                   | 77  | EN26  | Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.  | Not in this case     |
|                                   | 78  | EN27  | Percentage of products sold and their packaging materials that are reclaimed by category.   | NA                   |
|                                   | 79  | EN28  | Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.   | P86~91               |
|                                   | 80  | EN29* | Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.                                   | Not in this case     |
|                                   | 81  | EN30* | Total environmental protection expenditures and investments by type.  | Not in this case     |
| cial—Labor Practices and          | 82  | LA1   | Total workforce by employment type, employment contract, and region.  | P68~73/P80~85        |
| cent Work Performance<br>dicators | 83  | LA2   | Total number and rate of employee turnover by age group, gender, and region.  | NA                   |
|                                   | 84  | LA3*  | Benefits provided to full-time employees that are not provided to temporary or part-<br>time employees, by major operations.  | P68~73               |
|                                   | 85  | LA4   | Percentage of employees covered by collective bargaining agreements.  | P68~73               |
|                                   | 86  | LA5   | Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.   | P68~73               |
|                                   | 87  | LA6*  | Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs.                             | P68~73               |
|                                   | 88  | LA7   | Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.  | P68~73               |
|                                   | 89  | LA8   | Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.                                 | P68~73               |
|                                   | 90  | LA9*  | Health and safety topics covered in formal agreements with trade unions.  | P68~73               |
|                                   | 91  | LA10  | Average hours of training per year per employee by employee category.   | P68~73               |
|                                   | 92  | LA11* | Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.  | P68~73               |
|                                   | 93  | LA12* | Percentage of employees receiving regular performance and career development reviews.   | P68~73               |
|                                   | 94  | LA13  | Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.  | P68~73               |
|                                   | 95  | LA14  | Ratio of basic salary of men to women by employee category.   | P68~73               |

|  | No. | GRI  | G3 Standards   | Index                |
|--|-----|------|--|----------------------|
| Social—Human Rights<br>Performance Indicators              | 96  | HR1  | Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.  | Not in this case     |
|  | 97  | HR2  | Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.   | Not in this case     |
|  | 98  | HR3* | Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.                         | Not in this case     |
|  | 99  | HR4  | Total number of incidents of discrimination and actions taken.   | No similar situation |
|  | 100 | HR5  | Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.                           | Not in this case     |
|  | 101 | HR6  | Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.   | P68~73               |
|  | 102 | HR7  | Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.                             | P68~73               |
|  | 103 | HR8* | Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.  | Not in this case     |
|  | 104 | HR9* | Total number of incidents of violations involving rights of indigenous people and actions taken.   | No similar situation |
| Social—Society<br>Performance Indicators                   | 105 | SO1  | Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.                            | P92~97               |
|  | 106 | SO2  | Percentage and total number of business units analyzed for risks related to corruption.  | P92~97               |
|  | 107 | SO3  | Percentage of employees trained in organization's anti-corruption policies and procedures.   | P68~73               |
|  | 108 | SO4  | Actions taken in response to incidents of corruption.  | No similar situation |
|  | 109 | SO5  | Public policy positions and participation in public policy development and lobbying.   | P92~97               |
|  | 110 | SO6* | Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.   | No similar situation |
|  | 111 | SO7* | Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.   | No similar situation |
|  | 112 | SO8  | Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.  | No similar situation |
| Social—Product<br>Responsibility Performance<br>Indicators | 113 | PR1  | Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures. | P60~67               |
|  | 114 | PR2* | Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.           | P60~67               |
|  | 115 | PR3  | Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.  | P60~67               |
|  | 116 | PR4* | Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.   | No similar situation |
|  | 117 | PR5* | Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.  | P60~67               |
|  | 118 | PR6  | Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.   | P60~67/P92~97        |
|  | 119 | PR7* | Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.           | No similar situation |
|  | 120 | PR8* | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.   | P60~67               |
|  | 121 | PR9  | Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.   | No similar situation |

Note: Indicators marked with \* are additional indicators and those without are core indicators; "no similar case" means the indicator is not related with electric power industry or no such case has ever occurred; "no involvement" means the Report does not involve a disclosure of the indicator.

### O GRI Index

| No.                                     | GRI*   | G3 Standards   | Index                |
|---|--------|--|----------------------|
| 1                                       | EU1    | Installed capacity (MW), broken down by energy source and by country or  | P75                  |
|   |        | regulatoryregime.**  |                      |
| 2                                       | EU2    | Number of residential, industrial and commercial customer accounts.***   | P107                 |
| 3                                       | EU3    | Length of transmission and distribution lines by voltage.  | P5                   |
| 4                                       | EU4    | Allocation of CO₂ emissions permits, broken down by country or regulatory regime.  | NA                   |
| 5                                       | EU5    | Planning to ensure short and long-term electricity availability and reliability.   | P22~27/P52~57/P60~67 |
| 6                                       | EU6    | Demand-side management programs including residential, commercial and industrial   | P60~67/P90           |
| 7                                       | EU7    | programs.  Research and development activity aimed at providing reliable and affordable electricity and promoting sustainable development. | P22~27/P40~45        |
| 8                                       | EU8    | Provisions for decommissioning of nuclear power sites.   | NA NA                |
| 9                                       | EU9    | Planned capacity (MW) against projected electricity demand over the long term,   | NA NA                |
|   |        | broken down by energy source and country or regulatory regime.   |                      |
| 10                                      | EU10   | Estimated capacity (MW) saved through demand-side management programs.   | Not in this case     |
| 11                                      | EU11   | Estimated energy (MWh) saved through demand-side management programs, broken   | P90                  |
|   |        | down by residential, commercial and industrial customers.  |                      |
| 12                                      | EU12   | Average generation efficiency by energy source and by country or regulatory regime.  | NA                   |
| 13                                      | EU13   | Transmission and distribution efficiency.  | P86~91               |
| 14                                      | EU14   | Biodiversity of replacement habitats compared to the biodiversity of the areas that are  | P86~91               |
| • •                                     | 2011   | being replaced.  | 100 31               |
| <br>15                                  | EU15   | Processes to ensure retention and renewal of skilled workforce.  | P68~73               |
| 16                                      | EU16   | Total subcontracted workforce.   | NA                   |
| 13<br>17                                | EU17   | Percentage of contractors and subcontractors that have undergone relevant health   | P68~73               |
| 17                                      | [ [017 | and safety training.   | F06~75               |
| <br>18                                  | EU18   | Participatory decision making processes with stakeholders and outcomes of engagement.  | P46~51               |
| 18<br>19                                | EU19   | Approach to managing the impacts of involuntary displacement.  | P92~97               |
| • | ļ      |  | P28~33               |
| 20                                      | EU20   | Contingency planning measures and disaster/emergency management plan and training programs, and recovery/restoration plans.                | P28~33               |
| 21                                      | EU21   | Number of people displaced by new or expansion projects related to generation facilities   | P80~85               |
|   |        | and transmission lines, broken down by physical and economic displacement.   |                      |
| 22                                      | EU22   | Programs, including those in partnership with government, to improve or maintain access  | P60~67               |
|   |        | to electricity services.   |                      |
| 23                                      | EU23   | Practices to address language, cultural, low literacy and disability related barriers to   | P60~67/P92~97        |
|   |        | accessing and safely using electricity services.   |                      |
| 24                                      | EU24   | Number of injuries and fatalities to the public involving company assets, including legal  | Not in this case     |
|   |        | judgements, settlements and pending legal cases of diseases.   |                      |
| <br>25                                  | EU25   | Percentage of population unserved in licensed distribution areas, broken down by   | P60~67               |
|   | -323   | population in rural areas and urban areas.   | . 33 37              |
| 26                                      | EU26   | Number of residential disconnections for non-payment, broken by duration of  | Not in this case     |
| _5                                      | 2320   | disconnection.   | TOCHT WIIS CASE      |
| 27                                      | EU27   | Power outage frequency.  | P12                  |
| 27<br>28                                | EU28   | Average power outage duration.   | P5/P61/P81           |
| 28<br>29                                | EU29   | Average plant availability factor by energy source and by country or regulatory regime.  | NA                   |
| 29                                      | E029   | Average plant availability factor by energy source and by country or regulatory regime.  | NA                   |

<sup>\*</sup>GRI Electric Utility Sector Supplement.

<sup>\*\*</sup>Total Installed Capacity in SGCC service area.

<sup>\*\*\*</sup>By the end of 2007, SGCC directly served 170 million households, including 5.61 million industrial households, 152 million residential households, 9.195 million commercial households and 3.19 million rural households.

### **Assurance Statements**

### DNV Assurance Statements

# 2007 Corporate Social Responsibility Report of State Grid Corporation of China

Det Norske Veritas (DNV) has been commissioned by the management of State Grid to carry out the verification of 2007 Corporate Social Responsibility Report of State Grid Corporation of China ('the Report'). Our responsibility in performing this work is to the management team of State Grid Head Office only, in accordance with terms of reference agreed. We disclaim any liability or responsibility to a third party for decisions, whether investment or otherwise, based upon this assurance statement.

#### Scope of assurance

Our scope of work has included:

- The Verification of selected critical indicators and statements based on risk principles.
- A comparison between the contexts of 2005, 2006 and 2007 reports

#### Limitations

As requested by State Grid, we have performed all our work at their Group Head Office, Beijing. We have not visited any other locations.

### Verification approach

The verification was conducted during January 2008. The engagement was planned and performed in accordance with DNV's Verification Protocol for Sustainability Reporting (VeriSustain). The report has been evaluated against the following criteria:

- adherence to the principles of Materiality, Completeness and Responsiveness as set out in the AA1000 Assurance Standard; and
- compliance to the criteria of Accuracy, Neutrality, Comparability and Timeliness as stipulated in VeriSustain.
   In reaching our conclusions, we have conducted the following
- interviewed the senior management team to understand the top level commitment and strategy to sustainability;
- understanding of the systems used to generate, aggregate and report the selected indicator data at reporting unit, regional and group level;
- challenged the performance indicators, related statements and claims made in the report;
- reviewed specific documents, data and information made available by State Grid;

### Conclusions

In our opinion, 2007 Corporate Social Responsibility Report of State Grid Corporation of China provides a fair representation of the level of implementation of sustainability policies, and DNV has not found any systematic or major errors.

In comparison to the contexts of the 2005 and 2006 reports, the 2007 report has enhanced the following features:

 reporting of governance and sustainability management mechanisms,

### MANAGING RISK



- reporting of engagement processes and responsiveness to stakeholders.
- data collection system has been improved, data quality such as comparability and integrity has also been improved;
- disclosure of 2008 performance targets.

#### Accuracy

 Good, the data assurance procedures and collecting mechanism are established. The reported data are in response to stakeholder's critical concerns.

#### Timeliness

Exceptional

#### Responsiveness

The overall responsiveness toward external parties is good.
 Relevant strategy and processes for stakeholder engagement are clearly specified.

#### Completeness

 Acceptable, the reporting on environmental performance should be improved.

### Comparability

 Good, The information in the report is presented in a format that allows users to see positive and negative trends in performance on a year to-year basis, however external bench marking data is not sufficient;

### Neutrality

 Acceptable, We conclude that the information contained in the report is unbiased; however, the sustainability context can be improved by reporting more data in certain field.

### Recommendations

In conducting our work, we also have the following recommendations for State Grid as opportunities for improvement:

- Ensure every units within State Grid will start to adopt the requirements of internal document-"Corporate Social Responsibility Implementation Guideline"
- Enhance the capacity of data collecting information management system and deploy to all units,

As the biggest utility organization globally, State Grid is encouraged to lead the effort to develop bench mark indicators for the utility industry.

Sangem Hsu

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Vice President, Det Norske Veritas Jan. 2008

David Xue Zhu Wang, June Zhan Lead Assessor, Det Norske Veritas

Jan. 2008

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DNV Assurance Statements -

# In Search of Excellence, In Pursuit of Out-performance

# O Feedback

In order to improve our fulfillment of social responsibilities, we warmly welcome your valuable comments on our performance and CSR Report:

| 1 | 2007 CSR Report of SGCC is:  ○ Excellent ○ Good ○ Fair  |
|---|---|
| 2 | SGCC's performance in actively serving the government and customers is:  ○ Excellent ○ Good ○ Fair ○ Poor ○ Not well-informed   |
| 3 | SGCC's effort in environmental protection and promoting sustainable development is:  ○ Excellent ○ Good ○ Fair ○ Poor ○ Not well-informed   |
| 4 | The communication between SGCC and stakeholders is:  ○ Excellent ○ Good ○ Fair ○ Poor ○ Not well-informed   |
| 5 | Do you think this Report can reflect the major influence of SGCC on the economy, environment and society: $\bigcirc$ Yes $\bigcirc$ Fairly $\bigcirc$ No  |
| 6 | The clarity, accuracy and completeness of the information, statistics and indicators released in this report are: $\bigcirc$ High $\bigcirc$ Relatively high $\bigcirc$ Fair $\bigcirc$ Relatively low $\bigcirc$ Low |
| 7 | Do you think this Report is reader-friendly:  ○ Yes ○ Fairly ○ No   |
| 8 | We welcome your comments and suggestions on our performance and CSR Report:   |
|   |   |
|   |   |
|   |   |

Note: Please tick " $\sqrt{}$ " in the " $\bigcirc$ " before the item that fits your opinion.

# **Related Publications**

State Grid News State Grid Journal State Grid Technology









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