



CGN Power Co., Ltd.

(A joint stock company incorporated in the People's Republic of China with limited liability)



About this Report

Report Introduction

This is the Company's second Environmental, Social and Governance Report which discloses our strategies, management, works and performances in relation to sustainable development. We hope that this report will enable you to better understand our effort, so as to enhance mutual trust in each other.

Period

The reporting period extends from January 1, 2016 to December 31, 2016, and certain contents are extended to increase the comparability.

The report is in relation to CGN Power Co., Ltd. and the affiliated companies and main associated companies thereof.

Preparation Basis

- The Ten Principles of the UN Global Compact
- ISO 26000:2010 Guidance on Social Responsibility of International Organization for Standardization
- G4 Sustainability Reporting Guidelines of Global Reporting Initiative
- Standards Press Of China GB/T 36001-2015: Guidance on Social Responsibility Reporting
- The Environmental, Social and Governance Reporting Guide of The Stock Exchange of Hong Kong Limited

Name Description

For convenience, "CGN Power Co., Ltd." in this report is also expressed as "CGN Power", "the Company" or "We". CGN Power and affiliated companies are also expressed as "the Group" Unless specifically defined otherwise in this report, the terms used in this report shall have the same meanings as defined in the 2016 Annual Report of the Company dated April 6, 2017.

Reliability Assurance

The Company assures that the contents of this report, for which the Company accepts full responsibility for its truthfulness, accuracy and completeness, are free of any false statements, misleading representations or material omissions.

Access of this Report

This report is written in both Chinese and English, and in case of discrepancy between the two versions, the Chinese version shall prevail. The electronic copy of this report is available for download at CGN Power's website (www.cgnp.com.cn).



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About Us

Focus in 2016

Safe Development of Nuclear Power



Operating revenue

RMB **32.89**



On-grid power generation

115,583.57_{GWh}



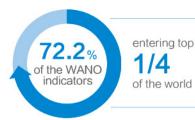
Installed capacity under construction

11,356 MW



Installed capacity in operation

20,384 MW





entering top of the world

nuclear event of level 2 or above on the International Nuclear Event Scale

Friendly Co-existence with



Clean energy equivalent to carbon dioxide emission reduction

90 million tons



Equivalent to forest area 250,000 hectares











Harmonious Common Development



Cooperative Suppliers

7,892



Total number of employees

20,327



Training hours per employee about

207 hours



Visitors of nuclear power bases add up to over

500,000



Cumulative hours for public service participated by our employees

23,000



Charity donations

5.535 RMB million



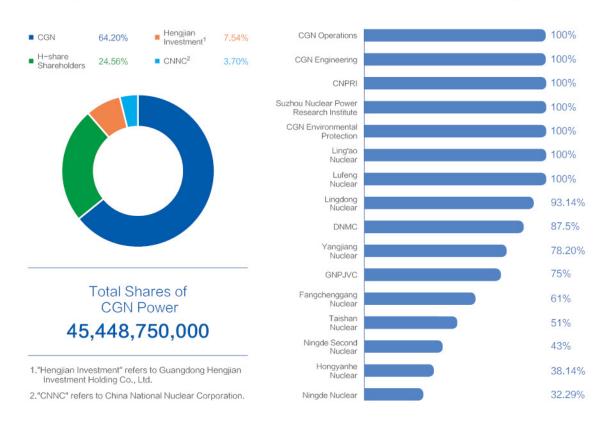
Company Overview

Company Profile

CGN Power (stock code: 1816) was incorporated on March 25, 2014 and its controlling shareholder is China General Nuclear Power Corporation ("CGN"). It has been listed on the Main Board of the Hong Kong Stock Exchange since December 10, 2014 and was the only listed company in the world that solely operated nuclear power generation.

Always upholding the basic principles of "Safety First, Quality Foremost, Pursuit of Excellence", CGN Power has been practicing its core value—"Do Things Right in One Go." Upon the completion of Daya Bay Nuclear Power Plant, the Company has developed specialized nuclear power production, scientific research and development, and supply support systems in line with international practices, and gained the ability to simultaneously and safely construct, operate and manage multiple nuclear power projects in different regions and bases across China. As at the end of 2016, the Company had 19 nuclear power units in operation and the total installed capacity of 20,384 MW, taking up 60.60% of Mainland China's installed capacity in operation; there were 9 nuclear power units under construction with the total installed capacity of 11,356 MW, taking up 46.44% of Mainland China's installed capacity under construction.

Equity Structure and Main Affiliated and Associated Companies

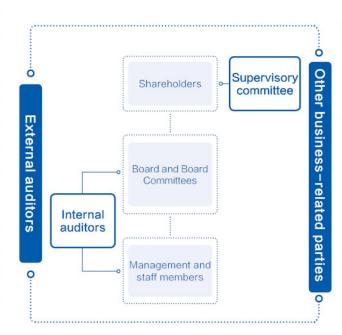




Corporate Governance

Structure of Corporate Governance

In accordance with the Company Law of the People's Republic of China, Securities Law of the People's Republic of China, and the Code on Corporate Governance Practices issued by the Hong Kong Stock Exchange, we have established a standard internal structure of corporate governance. The structure of internal governance mainly consists of shareholders, the board of directors and special committees of the board, the supervisory committee, internal auditors as well as management and employees. External auditors are employed to conduct independent review of the Company's governance to help us optimize our internal governance; meanwhile, the relationship between the Company and stakeholders (including customers, partners, social environment, regulatory bodies, etc.) also reflect our effectiveness in terms of corporate governance.



For more details on corporate governance, please see the Corporate Governance section of the 2016 Annual Report.

Communication with Shareholders

The shareholders' general meeting enjoys the rights of decision-making as stipulated by the laws and regulations and the Articles of Association of the Company, and is entitled to legally exercise its voting rights on various material matters including operation policies and profit distribution of the Company. We held 1 annual general meeting and 1 extraordinary general meeting in 2016.

Placing great emphasis on the opinions and feedback of shareholders and investors, we maintain transparent communication with shareholders and investors through business performance conferences, roadshows, reverse roadshows and teleconferences. We seriously listen to their suggestions or comments in respect of development strategy, business model, production and construction, investment and financing strategy, and financial management of the Company, and reflect such feedback in our operations management to keep the business development in line with the shareholders' value.

In 2016, the Company conducted 3 roadshows on the annual results, interim results and Acquisitions, held 3 teleconferences on the quarterly operations, 270 investors participated. The company arranged 30 visits for 63 investors. In terms of reverse roadshows, the Company organized 2 field trips for 39 investors and analysts to Yangjiang Nuclear Power Base and Fangchenggang Nuclear Power Base. Bridging multichannel communication, we have helped investors gain a full understanding on the development of the Company and clarified their doubts.



CGN Power Deliberated and Passed the Acquisition of Fangchenggang Case · Nuclear Power Base and Other Assets at an Extraordinary General Meeting Held in Hong Kong

At the extraordinary general meeting held in Hong Kong on November 16 2016, CGN Power deliberated and passed the equity transfer agreement concluded with CGN. As specified in the equity transfer agreement, the Company will acquire 61% of the equity of Fangchenggang Nuclear, 100% of the equity of Lufeng Nuclear and 100% of the equity of CGN Engineering from our controlling shareholder CGN.



Board of Directors

Pursuant to the Articles of Association, the board of directors of the Company shall consist of 9 members. Except Gao Ligang who is concurrently an executive director and the president, all other directors are non-executive directors (including three independent non-executive directors) independent from the management. Directors shall be elected at the shareholders' general meeting and each has a term of 3 years. Upon the expiry of the term of office of a director, the term is renewable upon re-election.

Candidates for director other than those for independent non-executive directors shall be nominated by the board of directors, the supervisory committee or shareholders who individually or jointly hold 3% or more of the Company's voting shares and be elected at shareholders' general meeting.

Candidates for independent non-executive directors of the Company shall be nominated by the Company's board of directors, the supervisory committee or shareholders who individually or jointly hold 1% or more of the Company's voting shares and be elected at shareholders' general meeting.

In accordance with the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, the Company has established the Audit and Risk Management Committee, The Remuneration Committee and The Nomination Committee under the board of directors; according to industry characteristics, we have added the Nuclear Safety Committee. The special committees conduct studies and provide advice and recommendation on professional matters for the reference of the board of directors in decision-making.

In 2016, a total of 8 meetings of the board of directors and 10 meetings of special committees were held, and a total of 34 important resolutions were deliberated and approved during the whole year.

In 2016, a total of 8 meetings of the board of directors

10 meetings of special committees were held

A total of 34 important resolutions were deliberated and approved during the whole year



Board members

Name	Position
Zhang Shanming	Chairman of the Board, non-executive director Chairman of the Nuclear Safety Committee and member of the Nomination Committee
Gao Ligang	Executive director, President, and member of the Nuclear Safety Committee
Zhang Weiqing*	Non-executive director
Shi Bing	Non-executive director
Xiao Xue	Non-executive director, member of the Remuneration Committee, and member of the Nuclear Safety Committee
Zhuo Yuyun	Non-executive director, member of the Audit and Risk Management Committee, and member of the Nuclear Safety Committee
Na Xizhi	Independent non-executive director, Chairman of the Nomination Committee, member of the Audit and Risk Management Committee, and member of the Nuclear Safety Committee
Hu Yiguang	Independent non-executive director, Chairman of the Remuneration Committee, and member of the Nomination Committee
Francis Siu Wai Keung	Independent non-executive director, Chairman of the Audit and Risk Management Committee, and member of the Remuneration Committee

■ Note: Non-executive director Zhang Weiqing retired on July 22 2016.

At the conference held at the end of 2016, the Nomination Committee reviewed the structure of the board of directors, examined the independence of independent non–executive directors and deliberated the director re–election plan. The members of the Nomination Committee voiced their independent opinions and agreed to push forward the re–election according to the re–election plan proposed by the board of directors. As at the issue date of the report, the re–election is proceeding as per the re–election plan.

Audit and Risk Management

We have continuously improved our total risk management system, enhanced our risk management ability and developed a good risk management culture. We identify, analyze, evaluate and manage related risks in order to create a safe, healthy, efficient and environmentally friendly working environment for our employees and contractors, and minimize our impact on the environment.

We have established an efficient internal audit system, under which an internal audit department has been set up. Without restrictions, the internal audit department is responsible for reviewing all business operations and internal control activities of the Company, and unfolding special audits on functionaries, business centers, affiliated and main associated companies in respect of business, procedures, expenditure and internal control. Efficient internal audit has guaranteed the effective execution of applicable laws and internal regulations, and effective reduction of corruption risk and default risk.

In 2016, the internal audit department conducted special audits on internal control, safety management and corporate governance of the Company, and reviewed the management's concerns. The audit results had been reported to the senior management.

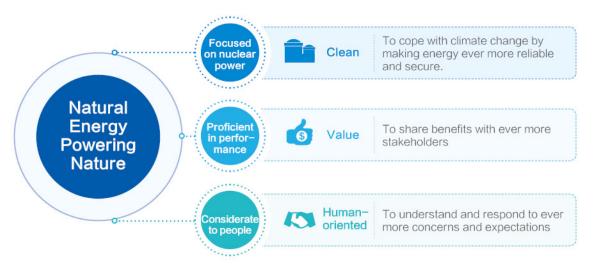
Legal Compliance

We have firmly established the concept of legal compliance with institutional improvement and cultural development as starting points, and actively promoted legal and anti-corruption work. We strictly observe the judicial interpretations in Criminal Law of the People's Republic of China, Law for Countering Unfair Competition of the People's Republic of China, Interim Provisions on Banning Commercial Bribery, Several Issues Concerning the Application of the Law in Handling Criminal Commercial Bribery Cases, Interpretation for Several Issues Concerning the Application of the Law in Handling Criminal Commercial Bribery Cases, etc. Employee Disciplinary and Regulatory Violation Management Rules and Discipline Handbook of Listed Companies have been formulated applicable to all employees and the management to deal with disciplinary and regulatory violations. In 2016, we issued the latest version of Employee Disciplinary and Regulatory Violation Management Rules, and released the Implementation Rules on the Implementation of Eight Rules. Furthermore, we drew up the Integrated Regulation and Management Methods, and Discipline Inspection Supervision and Management Methods to develop an inclusive regulatory system and enhance regulatory effectiveness. We further set up proper whistle-blowing channels to encourage employees and third parties in relation to the Company (for example, suppliers) to report malpractices and violations regarding the Company's business. In 2016, there was no corruption lawsuit filed against our employees.

Responsibility Management

Guided by the idea of "Natural Energy Powering Nature", the Company performs its social responsibilities by taking management measures methodically and orderly, while considering the possible overall effects of its decisions and actions on the economy, society and environment. The Company values the benefit of each stakeholder in a responsible way under the management model with characteristics of CGN Power.

Responsibilities Ideas



ESG Introduction

In 2015, the Hong Kong Stock Exchange released the latest version of The Environmental, Social and Governance Reporting Guide ("ESG Guide"). By an in-depth study on the requirements and indicators of ESG Guide, we have started to introduce ESG into the Company, so as to enhance our risk control abilities in respect of management, environment and society.

ESG Trainings

External experts have been invited to give ESG trainings, from which all departments can learn about the general requirements and latest requirements of ESG indicators and lay a foundation for the introduction of ESG.

ESG Diagnosis

ESG benchmarking has been conducted in all departments to reveal work management and indicator coverage level.

ESG Indicator Integration

ESG indicators have been integrated into the works of all departments to guide their work implementation.

Communication with stakeholders

Establishing close relationships with stakeholders is vitally important to the sustainable development of the Company. Therefore, we have established the stakeholder communication and participation mechanism to address the expectations and concerns of stakeholders, and establish mutually trustful relationships.

Method of communication Stakeholder Expectations and demands and response · Execution of national energy · Assurance of nuclear safety policies Optimization of energy mix · Improvement in corporate Government · Observance of law and discipline and governance payment of tax according to law Supervision review Regular reporting of work Timely disclosure of information Regular reporting of operating · Constant and steady return information · Transparent disclosure of information Shareholder · Protection of shareholder's rights · Improvement in daily management Various communicating activities Enhancement of communication from time to time · Maintaining of close · Stable supply of clean and economical communication Customer electricity Active cooperation for power grid dispatching · Strategic cooperation Performance of undertaking · Disclosure of procurement Partner · Openness, Fairness and impartiality information Experience sharing Regular communication activities · Competitive remuneration package · Building healthy working conditions Employee health and safety · Establishing fair promotion channel **Employee** · Strengthening training for employees Fair promotion and development · Care for distressed employees · Care for employees Regular press conferences Interview arrangement Media · Transparent disclosure of information · Timely disclosure of public information Development of clean energies Energy conservation and emission **Environment** reduction · Enhancement of environment monitoring and protection Ecological protection · Participation in community Community Service of community construction and · Disclosure of nuclear and radiation and general development information public · Assurance of safety operation Education and promotion of nuclear

-- Background -----

Safety is the precondition for the development of nuclear power enterprise, and nuclear safety is our lifeline. Establishing the core value that Do Things Right in One Go, we have stuck to the bottom line of safety to enhance the safety level of construction of nuclear power projects and operation of nuclear power plants, and underpin the development of nuclear power.

Actions ◦----

- Further advance nuclear safety culture development and develop an atmosphere and habit of safety from top to bottom;
- Continue to implement team building and benchmarking efforts to ensure project construction quality;
- Advance standardized, specialized and centralized management, improve multi-plant management mechanism and ensure safe operation.

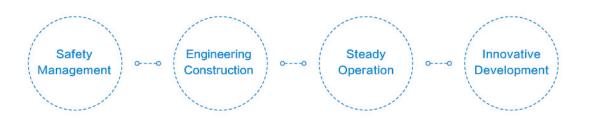
-- Achievements ------

Zero death, zero severe injury in the construction of nuclear power projects

72.2% of the WANO indicators of all units in operation enter top 1/4 of the world

INES event of level 2 or above







Safety Management

As a nuclear power generation-based power supplier and service provider, all nuclear power plants under our control are located in China. In terms of safety, we abide by the relevant national laws and regulations on the nuclear power industry and utility industry, including the Regulations of the People's Republic of China on the Safety Supervision and Administration of Civil Nuclear Facilities, the Regulations of Site Selection for Nuclear Power Plant, the Safety Requirements for Nuclear Power Station Operation, the Electric Power Law of the PRC,etc., as shown in "Regulatory Environment" of prospectus released by the company on November 27, 2014.

Always taking nuclear safety as its primary responsibility, CGN Power has made continuous improvements in safety culture, institutional improvement, regulatory management, feedback and emergency response, so as to realize the goal that "everyone is a barrier".

Safety Culture Development

Aware that an excellent safety culture atmosphere supports nuclear safety, CGN Power has persistently launched safety culture development programs like nuclear safety culture trainings and nuclear safety culture promotional meetings. The goal is to advance management leadership by example and full-staff involvement, develop a safe culture atmosphere from top to bottom, and maintain a sense of awe to safety.

Safety Culture Leadership Forum and Response Events

On April 26 2016, the executive managers of the Group gathered in Daya Bay Nuclear Power Base and held a Forum themed with "consolidating the foundation and making safety a habit". With a focus on safety issues, they probed into the discussions of how leaders should manage safety, and undertook solemn commitments. In response to the April 26 Forum, subsidiaries under the Company launched promotional events centered on the leaders to the site and on site initiative. Managers at all levels were urged to go to the job sites, interact with front–line employees, identify and resolve the management issues on the job sites in the timely manner, enhance working efficiency and further upgrade the safe production and management level of the Company.

Safety Culture Oath

- Always "put nuclear safety first"
- Always insist on "Safety First, Quality Foremost, Pursuing Excellence"
- Always "Do Things Right in One Go"
- Always insist on "compliance with procedures, honesty and transparency, continuous improvement"
- Always "take the lead, set an example and people oriented"

"Procedure Compliance and Violation Elimination" Action

The "Procedure Compliance and Violation Elimination" Action was launched from top to bottom to further implement the "one post, dual responsibilities" and "Party and government same responsibilities" regulations. Positive guidance, well-defined reward and punishment system, and problem solving in respect of the symptoms and root causes have been used to reduce the ratio of habitual violations.





"Egret Cup" Nuclear Safety Elite Challenge

On November 2 2016, the CGN's first "Egret Cup" Nuclear Safety Elite Challenge was held in Daya Bay Nuclear Power Base. Shift operation supervisors, maintenance managers, safety engineers and equipment managers from Daya Bay, Taishan, Yangjiang, Hongyanhe, Ningde and Fangchenggang Nuclear Power Plants joined the competition. Featuring live broadcast, the well–received competition strengthened safety ideas among the Group.



Safety Supervision

Safety supervision can effectively guarantee the reduction of potential safety hazards and promotion of safety improvement. Taking advantage of the complementation of internal supervision and external supervision, therefore, we have established independent and complementary multi-tier nuclear safety supervision and management systems to fully protect the safe operation of units.



Internal Supervision

- We have established a three-tier safety supervision system in respect of organizational, institutional and
 evaluation regulations, so that safety supervision organizations can independently and objectively voice
 their opinions, and effectively implement put a stop and supervision measures.
- In 2016, all of our nuclear power plants implemented the three-shift working mode for nuclear safety supervisors to ensure 24-hours nuclear safety supervision and further strengthen nuclear safety supervision.



Peer Review

- In 2016, we invited World Association of Nuclear Operators ("WANO") to conduct 6 peer reviews and follow-up visits on the nuclear power plants managed by the Company in respect of operational team supervision, operator's knowledge and skills, organization and management, fire control and other aspects.
- Meanwhile, we received the CPR conducted by WANO on level I member companies. Speaking highly of our nuclear emergency management and multi-plant production management conference system, the review team rated these two aspects our strengths to be promoted among other nuclear power operators. Meanwhile, the review team put forward 5 areas for improvement to be made. After the WANO review, the Company immediately set up a leadership team and 5 executive teams. With a focus on improving operational safety, production management and performance level, these teams are expected to work out comprehensive performance improvement plans and improvement action plans, and implement these plans in our work at all levels.



Government Regulation

 In 2016, the National Nuclear Safety Administration conducted 22 routine nuclear safety inspections on the Company, all of which received favorable results. The National Nuclear Safety Administration, Nuclear and Radiation Safety Inspection Office and other external regulatory bodies carried nuclear safety checks on the Company on an irregular basis, all of which were well rated.

Experience Feedback

We have started to establish a full life-cycle experience feedback system that covers the construction, operation and management of nuclear power projects. The system is aimed to help us analyze and summarize the deviations, equipment faults and human errors in the construction and production activities, take corrective actions, and effectively prevent event re-occurrence and facilitate continuous improvement.

In 2016, we focused on the improvement of experience feedback effectiveness to strengthen the foundation and continuously improve the effectiveness of experience feedback in operations engineering.



- ▶ The Quality Control Plan of Experience Feedback Business of Nuclear Power Plants and the standard procedure Classification Rules on Abnormal Events have been formulated and implemented. The pertinence and effectiveness of experience feedback of the nuclear power plants have been improved.
- Rules on Feedback from Operation to Engineering have been formulated, and the Management Regulations on Engineering and Operation Experience Feedback of the Company amended. The top ten categories of concerns on feedback from operation to engineering have been identified, and a regular coordination conference mechanism of engineering and operation experience feedback on the corporate level established.
- WANO SOER TSM* has been organized, and improvement actions and support issues after SOER TSM discussions with WANO representatives have been worked out.
- Multi-plant experience feedback system exchanges and technical exchanges have been made with enterprises of the same industry to share domestically leading experience feedback technologies.





- ▶ The SOER management method, case study materials and secondary analysis trainings have been used to enhance the level of professionalism of experience feedback personnel. Outage reports, unit shutdown and reactor shutdown reports, special feedback sheets and pre-job feedback sheets have been prepared to bring experience feedback closer to day-to-day safe production activities.
- Note: SOER: Significant Operating Experience Report; TSM: Technical Support Mission.

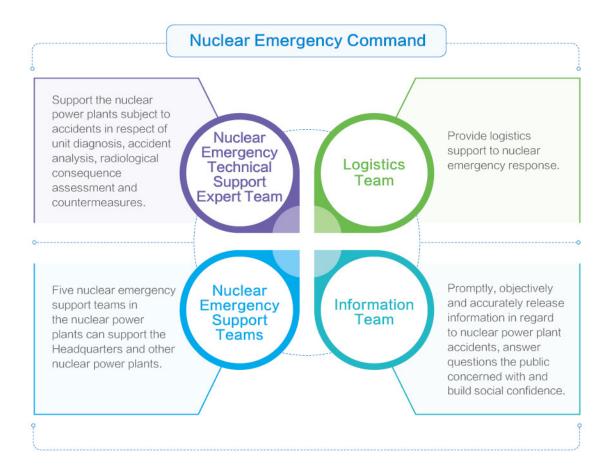




Emergency Management

With a well-established and effective emergency response system, we have organized a variety of emergency drills at the nuclear power plants on a regular basis to enhance our emergency response ability.

In 2016, the nuclear power plants managed by the Company carried out 3 joint drills, 13 integrated drills, and 230 special drills. The 356 class sessions for emergency personnel accumulatively trained 3,605 person–times with a coverage rate of 100%.

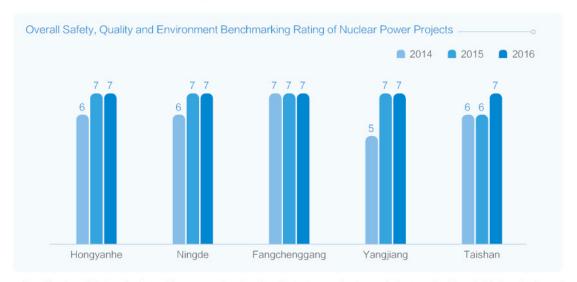


Case • CGN Nuclear Power Plants Remain Safe in Face of Typhoon Nida

In the morning of August 2 2016, the super typhoon Nida registering 14 on the Beaufort scale landed in Dapeng Peninsula, Shenzhen where Daya Bay Nuclear Power Base is located. Shenzhen issued its first red alert for the typhoon since the establishment of the city. Upon receipt of the typhoon alert, bases including Daya Bay, Taishan and Yangjiang Nuclear Power Bases had immediately put Super Typhoon Prevention and Resistance Emergency Command into motion. Diesel Engine Assurance Team, Cold Source Assurance Team, Circuit Assurance Team, Emergency Rescue Team and other emergency teams were requested to stand by for the safe operation of the bases.

Engineering Construction

The engineering quality of nuclear power projects affects the safety and operation level of nuclear power units put into commercial operation. Hence, we have continuously enhanced the engineering construction and management level, and practiced the basic principle of "Safety First, Quality Foremost, Pursuing Excellence" in engineering design, construction and installation, commissioning and trial operation. We strive to improve the quality safety management level in all aspects of engineering construction, so as to lay a foundation for the safe and stable operation of nuclear power plants.



Note: The Overall Safety, Quality and Environment Benchmarking Rating is an evaluation on the basis on the Manual of Safety, Quality and Environment Standardization and International Benchmarking Evaluation of Nuclear Power Projects. The integrated evaluation is conducted from performance standardization, site standardization, and management standardization. It's rated in ten levels, of which level 5 and level 6 indicate a fine benchmark, Level 7 and Level 8 an advanced benchmark, Level 9 and Level 10 an international benchmark.

Safety Assurance

We have continuously worked on safety risk prevention and control, implemented safety responsibility system and ensured the safety of engineering construction. In 2016, the Company reported "zero death and zero severe injury".



Intensive Trainings

Courses like Potential HSE Hazard Identification of Nuclear Power Projects (Management), and Potential HSE Hazard Identification of Nuclear Power Projects (Execution) have been developed, and intensive trainings and assessments have been conducted on project departments at different levels. Accumulatively about 1000 employees had been trained.



Regular Tracking

The leaders of Construction Subdivisions, Commissioning Subdivisions, Safety Teams and Project Departments have been required to report on potential hazard identification on a daily basis; the data of potential hazard identification provided by the executive level and regulatory level of Construction Subdivisions and Commissioning Subdivisions has been analyzed, and compared with the data provided by contractors on a weekly basis.



Timely Summarization

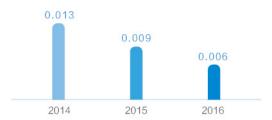
The potential hazard identification has been evaluated and summarized in benchmarking evaluation, management review and internal audit, and relevant suggestions, opinions and improvement measures have been proposed and worked out.

Note: HSE refers to the management system in respect of Health, Safety and Environment.



Safety Accident Rate of Nuclear Power Projects——

(200,000 Man-hours)





Case

Improve Standard Awareness through Experience

Although safety regulations have been clearly specified, employees lack a strong awareness of compliance, and deviations may occur. For this, CGN Engineering set up a Safety Helmet Impact Experience Zone, Fall into a Hole Experience Zone, and other safety experience zones. These zones were designed to help employees understand the importance of safety protection tools, and enhance their awareness to comply with the procedures and regulations.



Quality Assurance

Quality is fundamental to safety. Insisting on high standards and rigorous requirements, therefore, we strive to achieve compliance with quality requirements in each engineering construction task, and lay a foundation of safety for quality engineering construction.



The Zero Defect Team Building efforts have been made to resolve prominent issues by team registration and management, better process guidance and evaluation. The teams have been evaluated to urge the members to improve and prevent key issues at construction sites. In 2016, 20 teams were honored as benchmarking teams and 80 teams rated as outstanding teams.



Continuous efforts have been made in potential quality hazard identification, and potential hazard identification and control regulations at all levels have been defined for the implementation of responsibility system. Meanwhile, employees have been specially assigned to monitor the implementation of potential hazard identification system real time, and improve potential hazard identification ability.



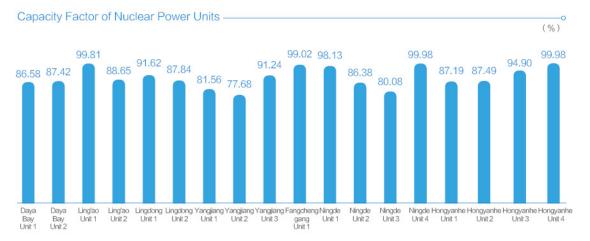
The Behavioral Improvement Action has been launched, Implementation Guide to Quality Behavior Observation prepared and issued to involve all employees in quality behavior observations, eliminate non-standard behaviors and guarantee engineering construction quality.

Steady Operation

Daya Bay Nuclear Power Operations won the 16th China Quality Award Always putting nuclear safety first, CGN Power has continuously strengthened the operations and management of nuclear power plants, enhanced the unit operating capacity and operated in strict accordance with procedures to ensure operational safety of nuclear power plants.

Reliable Power Generation

By continuously improving the safe power generation capacity of our units in operation, we endeavor to provide stable and reliable power supply. In 2016, five units were put into commercial operation. The 18 units in operation* had an average capacity factor of 90.31%.



Note: Put into commercial operation on October 1, 2016, Fangchenggang Unit 2 hasn't been included into the annual statistics because it didn't meet the requirement of a period of one quarter after operation.





Equipment Maintenance

Equipment reliability has a direct impact on the safe operation of nuclear power plants. To strengthen the control and management of major sensitive equipment risks, therefore, we have conducted regular maintenance inspections on the equipment of nuclear power plants in accordance with the operation specifications and other regulatory requirements applicable to nuclear power plants to enhance equipment safety and stability.

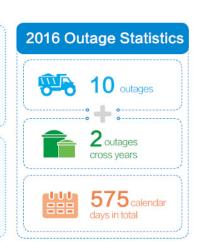
Equipment maintenance is composed of routine maintenance and refueling outage. According to the design of pressurized water reactor nuclear power plants, the nuclear reactor of the units has to be shut down and refueled. For the safety and economical efficiency of nuclear power plants, the nuclear power plant operators usually arrange certain preventive and corrective maintenance activities and modification works during refueling, which is known as refueling outage. In 2016, we successfully unfolded 12 refueling outages and completed 10 refueling outages, including 2 first–time outages in ten years.

The increase of units in operation has gradually increased the refueling outages every year. To meet the outage demand, we have uniformly planned, and outage personnel rationally deployed the outage activities. meanwhile, the equipment of nuclear power plants has been systemized and analyzed, and equipment abnormalities tracked to ensure orderly outage management.

ETPG Team

In July 2016, the ETPG Team was established. Resolving common and major technical issues of the plants, the ETPG Team has facilitated the sharing of good practices and experience feedback, enhanced equipment safety and stability, and improved safe production level.

Multi-base outage management and operation mechanism The multi-base outage management brief meeting and three-tier feedback mechanism has been established. Weekly meetings and information feedback have effectively realized multi-base information sharing, coordination and communication, and outage management and operation.



Operational Safety

Human error is an important factor that results in unit safety issues. Therefore, we have continuously improved the professional skills of employees and implemented the responsibility system to make sure that each operation is conducted in strict accordance with procedures.

Human Error Reduction Measures



A pre-job meeting is a job preparation meeting to define the purpose and procedures of operations before a field operation or a change of equipment status and certain other important project activities. For an operation to be completed by over two persons, the operation supervisor must hold a pre-job meeting right before field operation as much as possible.



The STAR is a primary human error–proofing tool before the execution of major operational activities. The STAR, short for STOP, THINK, ACT and REVIEW, requires us to stop to focus on the job on hand; think about what to do, how to make a plan and how to cope with an accident; complete the job as planned; and review the results against our expectations. Essentially speaking, the STAR is to stop in case of uncertainties or inconsistency with expectations.



Operations that may result in serious consequences in case of errors must be supervised. The operator, supervisor and supervision point must be clarified first. Before the operation, the operator shall describe the operational instructions and point to the equipment. The operator shall not operate before the supervisor confirms the pointed equipment, verifies the instructions, and gives consent.



An effective communication approach implemented by nuclear power plants, the three–stage communication requires the deliverer to state the receiver's name and clearly and accurately deliver the instructions or messages to the receiver; the receiver explains and repeats the messages received to the deliverer; the deliver confirms the completeness of the repeated messages and actions can be taken upon provision of the correction messages. The key to three–stage communication is to clarify doubts in a timely manner.

Customer Service

Customer demand oriented, we communicate with our customers on a regular basis and are open to feedback. In 2016, we received 0 customer complaint in regard of our products and service.

Considering that information safety is one of the concerns of our customers, CGN Power has established a corporate information safety assurance system in accordance with Chinese classified protection and power monitoring safety regulations, ISO/IEC 27001: 2013 and IAEA best practices. A Network Safety and Informationization Committee has been further set up to lead and coordinate network safety operations, and advance informationization and application, effectively protect the safety of information property and prevent information leakage.

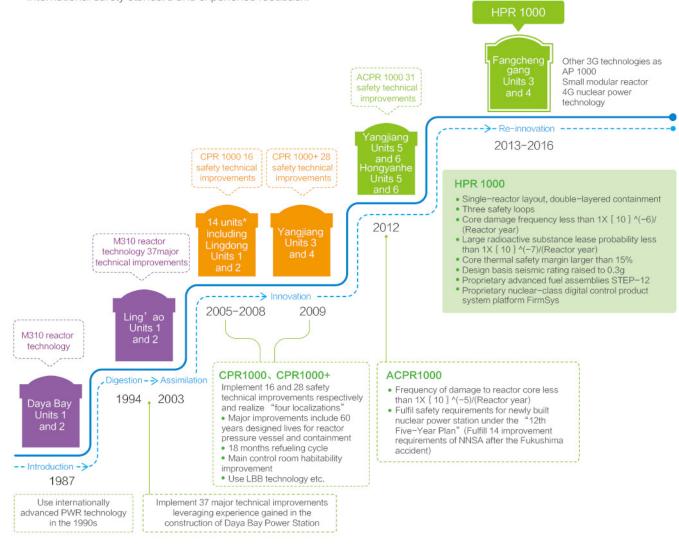


Innovative Development

Believing that science and technology is the driving force of development, we have continuously improved our scientific and technological innovation system and advanced independent innovation to lay a foundation for the development of safer, smarter and cleaner nuclear power.

Selection and development of nuclear power technology route

We focus on developing pressurized water reactor (PWR). Since from the foundation of Daya Bay Nuclear Power Station in the 1980s, we have always been adhering to "Introduction, Digestion, Assimilation and Innovation" to carry out technological improvements unceasingly. Based on the M310 reactor technology adopted at Daya Bay Nuclear Power Base jointly founded by CGN and our company, we have implemented a series of major technical improvements (including 16 safety technology improvement items), and have developed the 2nd generation of CPR1000 series nuclear power technology with self-owned brand; in addition, we have implemented 31 safety technology improvement items based on CRP1000 technology, and have developed ACPR1000 technology with the 3rd generation of nuclear power technical characteristics referring to the latest international safety standard and experience feedback.



■ Including Lingdong Units 1 and 2, Hongyanhe Units 1-4, Ningde Units 1-4, Yangjiang Units 1 and 2 and Fangchenggang Units 1 and 2 (entrusted by the controlling shareholder)

We have developed HPR1000 with self-owned intellectual property produced following the 3rd generation of nuclear power technology. HPR1000 is a product of the 3rd generation of 1000MW nuclear power technology with self-owned intellectual property developed on the basis of the experience, technology and talent base accumulated during the nuclear power plant design, construction, operation and R&D of China in the past three decades. HPR1000 adopts the top level of international safety standard. Its performance indexes on safety and economical efficiency etc. have been up to international advanced level. Comparing with other 3rd generation nuclear power technologies, it is competitive both on safety and economical efficiency. The independent R&D of HPR1000 has laid a technique foundation for the subsequent nuclear power development of the company. Fangchenggang 3# and 4# unit are demonstration projects of HPR1000. Fangchenggang 3# and 4# unit have started the construction on December 24, 2015 and December 23, 2016 respectively. At present, the two units are under normal construction.



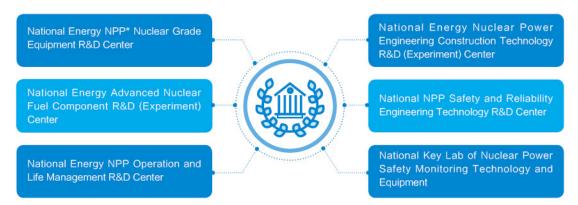
China has stated that new nuclear power projects should show priority to select the 3rd generation of nuclear power technology. We are optimistic and confident that HPR1000 with self-owned intellectual property produced following the 3rd generation of nuclear power technology will have wide market prospect.





Technical R&D Platforms

We have set up industry-leading labs to provide strong R&D support for technological innovation.



Note: NPP is short for Nuclear Power Plant



On October 18 2016, saw the VR Engineering Application Lab of our affiliated company CNPDI established in Shenzhen. It marks our official introduction of the industry-leading VR technology into the design process, and an important step in the innovation of design instruments.

VR (Virtual Reality) is a brand new man-machine interaction method created with computer and the latest sensor technology. By creating a virtual information environment in the multi-dimensional information space, the VR technology gives the users an immersive experience and the ability of interaction in a perfect environment. Involving a wide range of disciplines in construction engineering, the highly practical VR technology has huge technical potential and promising application prospect.

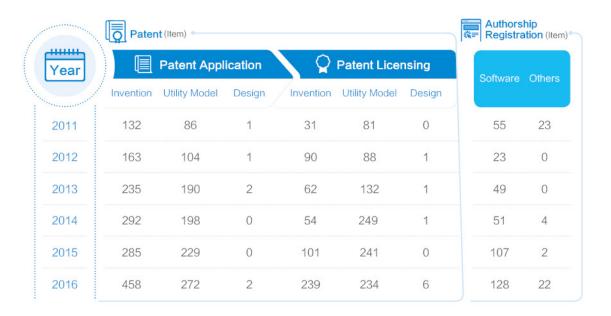


China's First Nuclear Power Thermal Hazard Production, Teaching and Research Lab Approved to be Established

In November 2016, the Thermal Hazard Production, Teaching and Research Lab jointly established by CGN Engineering, Institute of Advanced Technology, University of Science and Technology of China, and Institute of Industry Technology Guangzhou, Chinese Academy of Scienceswas rated as Guangdong Nuclear Power Thermal Hazard Prevention and Control Engineering Technology R&D Center. As China's first specialized production, teaching and research platform for researches on nuclear power thermal hazards, the Center will conduct quantitative analysis and technical development, and experiment validation in light of the thermal hazard and safety issues in nuclear power plant design to meet the development demands of domestic nuclear power plants. It will work with the design teams to technically support the thermal hazard protective design of HPR1000. The Center will render technical support for the review of nuclear safety in China and preparation of relevant standards.

Scientific and Technological Achievements

In 2016, we filed 732 patent applications, 479 of which had been approved. "A supply power method of cold state functional test for nuclear power plants" filed by CGN Engineering and "A method and device for the disposal of radioactive wastes" filed by the CNPRI were honored with the Excellence Award at the 18th China Patent Awards presented by the State Intellectual Property Office.



Attaching great importance to the protection and management of intellectual properties, we have incorporated intellectual property management into project approval, execution, interim inspection and final acceptance inspection to fully protect intellectual property rights. Meanwhile, We continuously improve organizational building and procedural system and set up IP positions to effectively advance the management of intellectual properties.



In October 2016, the proprietary RGL System for Yangjiang Unit 5 developed by CNPRI was successfully accepted after inspection, marking our first localized supply of the equipment.

The RGL system is primarily designed to control the lifting or inserting of the rod, so as to adjust the power level or shut down the reactor of the nuclear power plant. Previously monopolized by foreign companies, the RGL equipment brought higher operations and maintenance costs to nuclear power plants. The proprietary design and localized manufacturing of RGL has further enhanced the localization rate of 1,000MW nuclear power plants, shortened the construction cycle, and technically guaranteed the operations and maintenance of nuclear power plants.





Feature

The "Dark Technologies" for Nuclear Safety

From biological identification and Internet of Things technology to aviation technology, visualized power plant system and low flying object control...the nuclear power bases are equipped with much advanced safety technologies than the public can imagine for rigorous safety management. What cutting-edge "dark technologies" are adopted to keep the nuclear power plants leak-tight?

o FirmSys o-

As a central nervous system of the nuclear power plant, the FirmSys developed by CGN is China's first proprietary nuclear grade DCS. The FirmSys meets extremely high network safety requirements and offers a high degree of network safety to effectively prevent malicious hacking against the control systems of the nuclear power plant.

Visualized Power of Plant System

Composed of reality scenario visualization and virtual visualization, the visualized smart power plant system realizes visualized safety protection and smart operations and maintenance of power stations.

The specialized power station network provides visualized live scenarios, strengthens the sense of awe of safety protection and enhances the safety protection management level of nuclear power stations.

NPP Network Hacking Monitoring Management System

Part of the NPP data center network safety management system, the NPP network monitoring management system integrates the data of multiple manufacturers and realizes alarm fusion and correlation to generate proper response to attacks.



On the basis of the nuclear grade DCS, the all-inclusive nuclear safety DCS software V&V system has incorporated the experience of aviation, military industry and high temperature gas cooled reactor, and adopted the model of"project summarization, technical research and engineering implementation". Now the system has been used in the FirmSys Engineering Prototype of Yangjiang Nuclear Power Plant.

Software Safety Verification on and Validation (V&V) System

Based on the structuring of front-end equipment data, the CISS accurately identifies targets and conducts detailed analysis on behaviors through big data analysis, data model deduction and diagnosis. Adopting the latest smart security protection framework, the CISS flexibly configured with the new smart front-end security protection products has realized functional modularization, providing the basis for subsequent system upgrade and local modification.

NPP CISS

Background

Coming into effect in November 2016 as promoted by the United Nations, the Paris Agreement signed by about 200 signatories under the United Nations Framework Convention on Climate Change has provided clear direction to how to launch greenhouse gas emission reduction programs. Under the Paris Agreement, China undertook to reach the peak carbon dioxide emissions around 2030 and realize the goal of 20% of non-fossil energy by 2030.

As a kind of non-fossil energy, the clean, stable and efficient nuclear power has played an important part in the promotion of greenhouse gas emission reduction and energy transformation. Active in advancing the development of nuclear power, strengthening environmental protection and improving resource utilization efficiency, we are embracing the opportunities and challenges of green development.

· Actions ·-

- Pool efforts to develope nuclear power, generate more on–grid power and provide more clean power;
- Incorporate environmental factors into the development strategy and continuously improve the environmental management system;
- Improve environmental monitoring system and continuously monitor nuclear radiation.

- Achievements -----

Our on–grid power equals to a reduction of about 90 million tons of carbon dioxide and the planting of about 250,000 hectares forest.

0 environmental pollution incident



Friendly Co-existence with the Environment





Responses to Climate Change

In response to the deteriorating environment and aggravating haze, all members in the community need to work together to promote the reduction of greenhouse gas emissions and the transformation of energy. As a clean energy supplier, we have been active in the development of nuclear power to generate more on–grid power in support of low carbon energy development. With a focus on emission reduction, we have maintained zero emission in our production and operation.

Development of Clean Nuclear Power

By steadying advancing the development of nuclear power and supporting the optimization of energy mix, we have been making our contributions to the reduction of greenhouse gas emissions and promotion of green development.



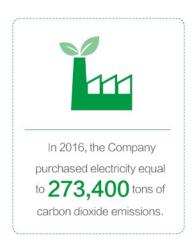


Greenhouse Gas Emissions

Always attaching great importance to carbon management in its operation and development, CGN Power has been reducing greenhouse gas emissions generated from production and operation by renovating the heat supply system, saving electricity for production and operation, and other measures.

The greenhouse gas emissions of the Company essentially come from electricity for production and operation. In 2016, the Company purchased *349,520.000 KWH of electricity, equal to 273,400 tons of carbon dioxide emissions.

Year	Purchased electricity of CGN Power
2014	383,260,000 KWH
2015	583,690,000 KWH
2016	349,520,000 KWH



 Note: The purchased electricity of CGN Power is mainly used for production and used in the living areas of the power plants.

Located in Northeast China, Hongyanhe NPP is established to provide heat for factories, systems and equipment in winter to ensure normal operation and for workers to meet their daily needs. In Phase 1 construction, the Plant has 4x14MW temporary coal–fired boilers for heating and consumes 12,000 tons of standard coals during the heat supply period every year. Disusing the temporary boilers since the fourth quarter of 2015, the Plant has been adopting the SES system for heat supply. In comparison to 2014, the Plant reduced its standard coal consumption by 11,565.5 tons, cut its carbon dioxide emissions by 28,832.8 tons and decreased its sulfur dioxide emissions by 95.895 tons. By far, the Plant has realized zero emission for heat supply.



The vehicles for the Company are now managed by a third party specialized vehicle management company. Some vehicles are new energy cars. Adopting a low energy consumption system, the vehicle management company has tried to reduce automotive gasoline consumption and exhaust emission as much as possible.

Improvement of Resource Utilization Efficiency

In line with the state and local environmental protection polices and requirements, we have established energy conservation and emission reduction statistical, monitoring and assessment systems to advance energy conservation and emission reduction programs, manage resource utilization and improve resource utilization efficiency.



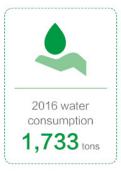
Fuel Management

Nuclear power plants primarily use nuclear fuels for power generation at a refueling cycle from 12 to 18 months. Continuously developing technically reliable and economic fuel cycle modes and innovative refueling modes, we aim to enhance nuclear fuel utilization efficiency and save nuclear fuels



Management of Water Resources

Our water is mainly used for production, office operation and daily life in the nuclear power plants. We have continuously monitored our total water consumption and wastewater discharge, and adopted advanced recycling equipment and processes to reduce water consumption.







Wastewater Management

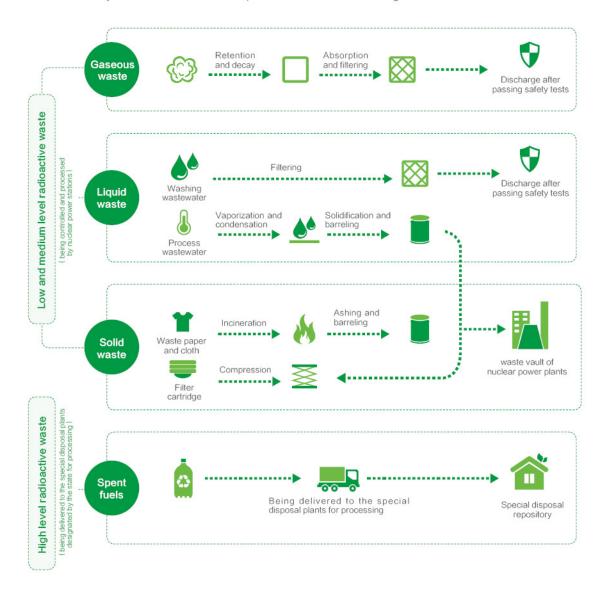
Our wastewater is treated as per radioactive wastewater and nonradioactive wastewater. (For radioactive wastewater treatment details, please see the Radioactive Waste Management section.) We strictly comply with Environmental Protection Law of the People 's Republic of China , Law of the People 's Republic of China on Marine Environmental Protection and other national laws, regulations and local standards on disposal of radioactive waste water, perform online monitoring, and entrust the test to qualified units as required to ensure that the waste water emission can meet environment protection requirements. Meanwhile, the recycled water system has been established to use treated recycled water for watering plants and cleaning roads, so as to reduce wastewater discharge and save water.

Waste Management

We have established well-defined waste management standards, and disposed the wastes as per the type of waste and applicable regulations to reduce the impact of our production activities on the environment.

Management of Radioactive Waste

In accordance with national and industry standards, the Regulations on Environmental Radiation Protection of Nuclear Power Plants (GB 6249–2011) and Technical Requirements for Discharge of Liquid Radioactive Waste of Nuclear Power Plants (GB 14587–2011), we have put into place a well–established radioactive waste management system. The gaseous and liquid wastes must be discharged after they are found compliant upon sampling and testing. The discharge is monitored real–time by online continuous monitoring system. In the event that abnormality is detected by the online monitoring system, discharge will be automatically terminated to ensure compliance with relevant state regulations.



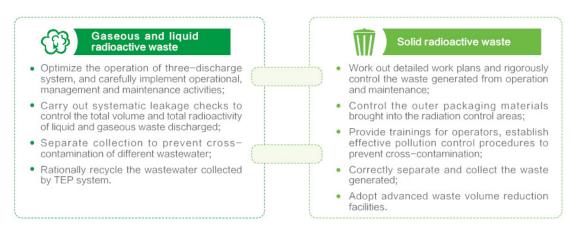
In 2016, the radioactive wastes discharged by our nuclear power plants were lower than the applicable state limits.

Item	Daya Bay NPP Base		Yangjiang NPP		Fangchenggang NPP		Ningde NPP		Hongyanhe NPP	
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Discharged liquid adioactive waste adionuclides other nan tritium) to the tate's annual limit	0.21%	0.17%	0.5%	0.49%	NA	0.09%	0.24%	0.32%	0.47%	0.23%
Discharged gaseous adioactive waste to the state's annual limit	0.13%	0.14%	0.18%	0.35%	NA	0.26%	0.15%	0.58%	0.14%	0.18%
Solid radioactive waste (m³)	317.6	180.4	24.4	21.2	NA	12.9	149.6	183.6	183.1	114.4

Note: Daya Bay NPP Base consists of Daya Bay NPP, Ling'ao NPP and Lingdong NPP. The main causes for data variation include: different refueling and overhauling schedules among different units; difference on overhauling items; and Yangjiang 3# unit, Fangchenggang 1# unit, Hongyanhe 4# unit, Ningde 4# unit and Fangchenggang 2# unit being put into commercial operation in 2016.

Emission Reduction Measures

We have continuously optimized production management processes, and adopted advanced technologies to refine discharge disposal, so as to effectively reduce the emissions of radioactive wastes.



Management of Solid Nonradioactive Waste

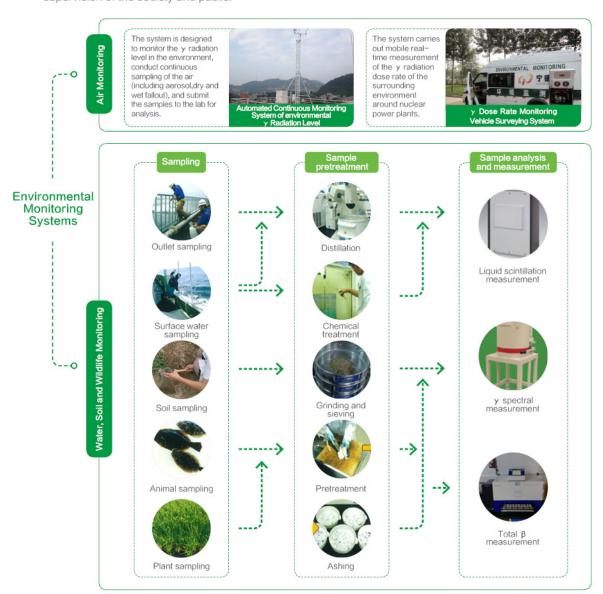
The solid nonradioactive waste of the Company is primarily generated from engineering construction and day-to-day office operation, including construction waste, waste paper, domestic waste and building green waste. It is disposed by qualified third-party treatment constitution. Recycling and emission reduction have been adopted to fully utilize resources and minimize the impact on the environment as much as possible.

Environmental Monitoring

Taking the impact of nuclear power construction on the surrounding environment into full account, we have developed well-established environmental monitoring systems to promptly track environmental impact and take actions, and prevent environmental damage by production. Meanwhile, the Company has worked with third-party regulators to ensure controllable environmental impact.

Internal Monitoring Systems

We have established the environmental monitoring systems and environmental surveying record systems to continuously monitor on the air, soil, water and wildlife within a radius of 10 KM around our nuclear power plants on a regular basis. We timely release monitoring data through web portal of each station, and accept supervision of the society and public.



Case

The Public Were Invited to Sampling of Marine Organisms Near the NPP

On October 27 2016, Ningde NPP invited the public to join their sampling of marine organisms near the Plant. The participants set out to the sea and worked together to catch the seafood by casting, dragging and drawing in the net. While the small fish and shrimps were released into the sea, the rest was categorized and submitted to the laboratory for testing. When being asked how he felt about this event, one of the participants responded with excitement, "Living around the nuclear power plant, we are excited about this event and happy to witness how



professionals monitor the sea water, so that we can be more reassured of living here. We also hope for an opportunity to work at the nuclear power plant."

External Monitoring

The Ministry of Environmental Protection --

As required by National Monitoring Plan of Radioactive Environment, and Technical Specifications of Radioactive Environmental Monitoring (HJ/T 61-2001), the Ministry of Environmental Protection has monitored the surrounding radioactive environment of nuclear power plants. The monitoring results in 2016 indicate that the absorbed dose rate in air measured in the surrounding areas of nuclear power bases in operation in China is within the local natural background fluctuation range. The activity and concentration of radionuclides in such environmental media as water, soil and organism around the nuclear power plants remain the same as previous years, and no impact is exerted on the environment and public health.

Hong Kong Observatory

The Hong Kong Observatory has set up 12 radiation monitoring stations to continuously measure the environmental gamma radiation level of Hong Kong 24 hours a day and release the data to the Hong Kong people. Years of monitoring results indicate no increase of artificial radionuclides from Daya Bay NPP.



Biodiversity Protection

A wide variety of organisms are valuable treasures of mankind. Acting according to circumstances, therefore, we have been attaching great importance to wildlife protection in our engineering construction and operation to safeguard the biodiversity around our nuclear power plants.



Pre-construction



During Construction



During Operation

 Field trips are taken to identify the impact of construction on the diversity of local species, verify the scope of works, and reduce the impact of construction on the wildlife.



- Forests are grown to optimize and improve the biological areas:
- The plants are afforested as planned to maintain ecological balance.
- environment in the surrounding
- Rigorous discharge disposal processes and regulations have been established;
- The surrounding environment is monitored real-time to ensure no impact on the surrounding species by radioactive discharges and thermal discharges.



"Mermaids" Visited Yangjiang NPP

In the morning of June 22 2016, several Chinese white dolphins, known as "Mermaid" and "Panda" on the Water, were spotted on the waters of Heavy Cargo Wharf of Yangjiang NPP. These dolphins dancing show marks the results of our continuous efforts in the protection of biodiversity in the surrounding areas.





Egrets Arrived at Hongyanhe

In the summer of 2016, about 100 Chinese egrets settled on Wentuozi Island approximately 600 meters away from the shore of Hongyanhe NPP. According to the chief of Information Section of Lyshun Laotieshan National Nature Reserve Administration, the Chinese egrets have an innate fear for water and are very particular about water purity and other survival elements, the green waters around Hongyanhe NPP where farming or fishing activities are prohibited create superior conditions



for living and breeding. Hongyanhe NPP has planned to take special bird protection measures to create better living and breeding environment and conditions for the birds.

Background

Maintaining good relationships with stakeholders such as government, regulators, customers, suppliers, partners, employees and community residents is vitally important to the sustainable development of the Company. Aiming to be a responsible corporate citizen, we have made full use of our resources and given full play to our strengths, and worked with the stakeholders to create shared value.

Action ∘--

- Improve talent recruitment, training and development mechanism, and provide platforms for employees to realize their self-worth;
- Establish an ecosystem for nuclear power industry chain, conclude strategic cooperation agreements with partners inside and outside of the industry, advance cooperation and development;
- Maintain transparent communication, support community development, launch welfare programs and promote community harmony.

Achievements

Average training hours per employee about 207 hours

Visitors of nuclear power bases add up to over 500,000

Charity donations RMB **5.535** million





Harmonious Common Development





Employee Care and Growth

Employees are the core driving force for sustainable development of a business. Practicing the idea of "Talents Lead Corporate Development" in employee recruitment, training and development, the Company has been fully protecting employees' rights, supporting their overall development, caring about their work and life, and providing platforms for them to realize their self–worth.

Employees' Rights

Total number of employees in 2016

20,327

In strict accordance with the provisions as set forth in the Company Law of the People's Republic of China and the Labor Law of the People's Republic of China, we prohibit child Labor and any form of forced labor. Our recruitment, remuneration, training and promotions policies have been formulated and implemented in a way that each employee is equally treated and respected regardless of their race, color, gender or age. The legitimate interests of the employees have been well protected.

The Company has prepared CGN Power Labor Employment Management System, CGN Power Recruitment and Deployment Management System, etc. in accordance with Labor Law of the People's Republic of China and Labor Contract Law of the People's Republic of China to standardize the management of labor employment and determine relevant policies and working procedures that should be observed during recruitment. Prior to employment interview, ID card, education and other information of candidates will be checked to prevent the participation of those candidates under the age of 16. In addition, the company has signed a Collective Contract with the company's trade union organization, in which working hours, rest and vacation, labor safety and health, insurance and welfare, etc., are also defined; if any violation is found, the employee may protect his/her rights and interests according to Labor Law of the People's Republic of China and Collective Contract, effectively restraining forced labor.



Employee social security coverage

100%

Average per capita annual paid leaves

12 days

Remuneration Protection

In strict accordance with the state's revenue distribution policies, we have implemented the principle of post-based salary and performance-based remuneration to provide employees with competitive remuneration in the industry. Meanwhile, we have continuously improved our social security and benefit systems to maintain the quality of work and life of the employees.

Democratic Management and Communication

Fully respecting the employees' ideas on corporate development and management, we have been continuously improving our democratic corporate management system composed of Trade Union and Employee Assembly. All major issues in relation to the employees' benefits have been deliberated and decided by the Employee Assembly.



Occupational Health Protection

We strictly comply with laws and regulations such as Safe Production Law of the People's Republic of China ,Fire Control Law of the People's Republic of China, Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, Interim Measures for the Supervision and Administration of Production Safety of Central Enterprises etc. Concerned about employees' occupational health and safety, we have continuously improved our occupational safety and health protection system to strengthen the identification and protection against occupational safety and health risks. Employee mental health assistance program has been worked out, and partnerships with external medical institutions have been established to provide professional medical support and assistance for employees in need and ensure their physical and psychological health.

The company consistently maintained excellent occupational safety and health performance in 2016. For nuclear power operation sector, we conducted statistics on the employee industrial safety accident rate of 200,000 MH and contractor industrial safety accident rate of 200,000 MH respectively of each nuclear power plant. One slip accidental injury caused lost work of employee occurred at Hongyanhe NPP in 2016 which caused the employee industrial safety accident rate of 200,000 MH as 0.07. The rate of all other plants is zero. One slip fatal accident of contractor personnel occurred at Daya Bay Nuclear Power Base which caused the contractor industrial safety accident rate of 200,000 MH as 0.06; one slip accidental injury lost work of contractor personnel and one door crushing injury accident restricted work of contractor personnel occurred at Ling'ao NPP which caused the contractor industrial safety accident rate of 200,000 MH as 0.17; the rate of all other plants is zero. Two slip accidental injury lost work of employee occurred at nuclear power engineering construction field which caused the employee industrial safety accident rate of 200,000 MH as 0.006. In 2016, the lost days due to work injury is 59 days.

Health Hazard

- Special operators have been provided with special protective devices like ear protectors, protective suits, and protective footwear
- The working environment of employees has been under continuous monitoring, and working hours in areas subject to radioactive substances, high temperature, high pressure and noise have been strictly restricted

Mental

- Professional psychological counselors are available for employees to make an online reservation 24 hours a day
- The WeChat account of psychological counseling has been opened to share mental health knowledge on a regular

rofessional Support

- We have worked with specialized medical organizations to analyze the health conditions of and make adaptability assessments on employees at certain posts, and provide professional medical support and assistance for employees in
- Free physical examinations have been arranged for employees on a regular basis, and online employee health management platform has been established.

Maximum Individual Radiation Dose Limit of Personnel (including employees, contractors and other people) Entering the Control Area of the NPPs Operated and Managed by the Company (Unit: mSv)

NPP/Unit	In 2012	In 2013	In 2014	In 2015	In 2016*
Daya Bay NPP	8.12	13.35	6.91	7.14	8.277
Ling'ao NPP	6.06	13.70	7.73	8.51	6.071
Lingdong NPP	6.59	5.66	4.10	5.26	6.834
Unit 1, 2 &3 of Yangjiang NPP			1.02	6.72	13.078
Unit 1, 2, 3 &4 of Hongyanhe NPP		1.11	8.08	5.62	5.404
Unit 1, 2, 3 &4 of Ningde NPP		1.27	6.06	12.01	7.537
Unit 1&2 of Fangchenggang NPP					0.432

Note: The primary factor affecting the maximum individual radiation dose limit of nuclear power plants is the annual outage. Daya Bay NPP, Ling'ao NPP, Lingdong NPP and Hongyanhe NPP had basically the same outages in 2016 as in 2015 and the maximum individual radiation dose limit had little change from 2015; with new units put into operation, Yangjiang NPP increased outages and thus the maximum individual radiation dose limit rose slightly than that of 2015; Ningde NPP had basically the same outages in 2016 as in 2015, but saw a lower maximum individual radiation dose limit than 2015 due to optimized control of radiation dose. Generally, the annual maximum individual radiation dose limit of our nuclear power plants is much lower than our management target value and the state's annual limit.

Employee Growth

Average training hours per employee about 207

Insisting on the development strategy of invigorating the enterprise with talents, we have been providing employees with well-defined career development plans and targeted trainings to tap their potential and realize the growth of employees and the Company.

Employee Ability Enhancement

The training rate of senior-managers is

100%

The training rate of middle–managers is 90%

The training rate of male employees is

The training rate of female employees is 98%

Upholding the ideas of "total staff training, authorized employment and lifelong education", we have established our own talent training systems and efficient training management regulations on the basis on internationally advanced talent training experience and our development requirements to meet the employees' growth demand.

Training

52 skill training rooms to launch over 100 skill training programs.

The management cadres teach certain courses and share their knowledge and experience. In 2016, the Company's management cadres had 7 teaching hours on average.

Over 10,000 training courses of various types, 2,500 online courses designed for employees.

Innovative technical competitions are organized to create an inspiring learning atmosphere. In 2016, we held 470 junior employee skills contests joined by 27,000 employee contestants.

Expedite Development Paths

We have established two career development paths, innovated internal talents market to provide sufficient opportunities for employees.





Employee Care

Concerned about our employees, we have been launching a wide range of recreational and sports activities to help them balance their work and life, keep energetic and create a happy workplace.

Reach out for the Financially-strained Employees

In response to employee needs, we have launched special support programs for financially-strained employees and spread the spirit of mutual assistance and mutual love. In 2016, the Company reached out for 4592 family members of financially-strained employees and employees on long-term business trips in 123 visits.



A Lifesaving Race of Blood Donation

From 11:00 to 16:00 on April 1 2016, five batches of our employees started a lifesaving race in response to the blood shortage in the hospital. They rushed to the hospital to donate blood for the wife of a coworker at Yangjiang NPP suffering from postpartum hemorrhage. Eleven donators matched and donated 3,300ml of blood to the patient who no long had the symptom, of severe anemia in the morning of April 2.



Develop a Healthy Lifestyle

An advocate of hard working and healthy living, we have been encouraging employees to participate in a variety of health-promoting recreational and sports activities to relief their work pressure and enhance their sense of well-being.

Dapeng Marathon |



Food Festival



Racing





Employee Library



Sports Meet



Football Match



Win-win with Partners

Upholding the mutual benefit and win-win cooperation philosophy, the Company has been communicating actively and working closely with our partners to jointly address the challenges and share the benefits.

Building a Nuclear Power Industry Alliance

Active in advancing the synergy and innovation of the industry chain, we have been striving to enhance the upstream and downstream quality management level, integrate the resources of the industry, and pushing forward the common development of nuclear power industry.

Transparent Sourcing

We uphold transparent sourcing in the principle of openness, fairness, justice and standard. Continuously improving our tendering system, we have put our responsible procurement ideas into practice. At the end of 2016, the Group and affiliated companies have made purchases from 7,892 suppliers from 29 provinces and municipalities of China.



Case ECP Bidding Client-side Put into Use

On October 24 2016, saw the ECP Bidding Client-side put into use. The Client-side is mainly used for submitting bid offers and bid opening decoding in respect of bidding-based and non-bidding-based procurement projects on the ECP. It has greatly enhanced the compatibility and reliability of the current ECP and better protected the interests of bidders.



New potential suppliers in

4,658

Suppliers evaluated

3,683

Qualified suppliers

3,381

Complete Supplier Management

We have established a complete supplier management system for rigorous review of supplier qualifications and advancement of supplier product quality management level.

Supplier Performance Evaluation Management Methods

As required by the state's nuclear safety laws and regulations, we have developed rigorous supplier performance evaluation management methods to evaluate and review supplier qualifications from four aspects—equipment procurement process, contract execution, quality supervision and quality assurance. Suppliers are accordingly divided into ABCDE categories.

Blacklist

To further standardize the behaviors of suppliers and boost the competitiveness of suppliers, we have developed a blacklist system. Under the blacklist system, suppliers with such malpractices as improper bidding, bribery, material breach, serious accidents involving serious consequences, and significant negative social evaluations will be blacklisted.



Multi-party Cooperation

Active in seeking cooperation opportunities in the industry and outside of the industry, we have formed extensive partnerships with a number of companies and research institutions by hosting technical seminars, unfolding collaborative researches and establishing consortiums. Through multi-party cooperation, we aim to create greater value for the community.

May 6, 2016



The Seminar on Key Technologies of Life Management of NPPs hosted by Suzhou Nuclear Power Research Institute was held in Suzhou. Domestically and internationally leading experts, including 7 academicians of the CAS and CAE, attended the seminar and unfolded in-depth discussions on the technical difficulties in the research and development of life management of nuclear power plants.



CGN Engineering entered into a Cooperative Framework Agreement on Chongging Proton and Heavy Ion Therapy Hospital Project with Banan District People's Government and Chongqing Cancer Hospital. Domestically and internationally advanced proton and heavy ion cancer therapies will be introduced for the construction and operation of a proton and heavy ion therapy hospital in Chongqing.



October 18, 2016

CNPRI and ENN Envirotech formed a partnership to transform new technical achievements in environmental protection and introduce innovative commercial models. Respective technical strengths, customer resources, operating capacity and financing capacity will be brought into full play to provide customers with onestop solutions featuring zero pollution and internal recycling.



November 8, 2016



Community Communication and Involvement

Harmonious and stable community environment is an important guarantee for the sustainable development of enterprises. We timely disclosure information, and actively communicate with the community residents, and strive to promote community development, participate in volunteer activities, build a harmonious community together.

Advancement of Transparent Communication

Exploring transparent communication mechanisms, we have continuously expanded communication channels to allow the public to gain a comprehensive understanding on nuclear power and build their trust on nuclear power.

Information Transparency

We have established the nuclear and radiation safety information reporting and disclosure system. After the units putting into production, the nuclear power bases of our company will disclose the monthly operating data and accident status through the Nuclear and Radiation Safety Information Disclosure Platform on their websites. All Level 0 and above operational events will release within 2 working days (or 72 hours during holidays). Furthermore, we have adopted other measures to address the public concerns about the development of nuclear power to ensure the public's right to know and right of supervision of safe operation of nuclear power.



Case

Case: News Spokesmen Attended the News Conference

On August 6 2016, the 2016 CGN Power Public Open Day News Conference was held in Shenzhen. The news spokesmen of CGN Power and its six subordinated nuclear power plants in operation attended the news conference to address the media's concerns.

From regular news release of nuclear and radiation information to large-scale public visits and to science popularization programs, the Company has been expanding communication channels with the community to strengthen communication with the public. The joint appearance of news spokesmen marks a new step ahead towards the path of openness and transparency.





Nuclear Power Popularization

As a nuclear power enterprise, the Company has been undertaking the responsibility of popularizing nuclear power knowledge. Through a variety of fun activities, we have been spreading nuclear power knowledge to the primary and middle school students, community residents and media to develop a rational and correct understanding of nuclear power among the public.

Introducing Nuclear Power Popularization Courses to Schools

"Lesson One"and many other nuclear popularization courses opened around the six nuclear power bases have been well received. As at the end of 2016, over 16,000 students in 100 schools had taken these courses.





Summer Camps at the NPPs

Summer camps have been offered to primary and middle school students for them to learn about cutting-edge scientific and technological theories at the nuclear power plants and have funny scientific practices. Firsthand experience will allow the students to better feel the charm of scientific and technological innovation.

Attending Nuclear Industry Fairs

The China International Nuclear Industry Exhibition, China Hightech Fair, World Nuclear Exhibition and other domestic and international comprehensive exhibitions have been used to present the advanced nuclear technologies like HPR1000 to the public. Over 60,000 visitors joined these exhibitions.





Opening Nuclear Popularization Showrooms

There are 9 nuclear popularization showrooms opened to the public free of charge across China. Demonstrating how nuclear power plants operate with lifelike models and offering funny games, these showrooms allow the visitors to gain common knowledge of nuclear power from experience.

Public Involvement

For transparency and openness, we have organized "August 7 Public Open Day". People from all walks of life are welcome to visit our nuclear power plants to experience the safety of these nuclear power plants.

Thirty four representatives from 17 government departments of Macao Special Administrative Region, including the Secretariat for Security, Information Bureau and IACM, and social organizations like UGAMM, FAOM and Macau





The 500,000th Visitor on August 7 Public Open Day

On the August 7 Public Open Day in 2016, postgraduate student Zhang from Chongging University became the 500,000th Visitor to NPP. This lucky visitor was presented with a certificate of commemoration and a gift bag.







Support of Community Development

Guided by the 3N idea, we have been actively involved in community to lead local employment and be a good neighbor in the community.



Care about People's Livelihood Issues



Taking advantage of their expertise, the employees of Yangjiang NPP has launched the volunteering program of Safe Electricity in the Village. The program was to help the villagers of Dongping Town upgrade electrical wires and ensure electrical safety.

Support Community



After field surveys on the types and sales of crop farming industry of surrounding areas, employees of Hongyanhe NPP opened online stores via the Internet to help local farmers sell their cherries to all corners of China.

Provide Community Job Opportunities



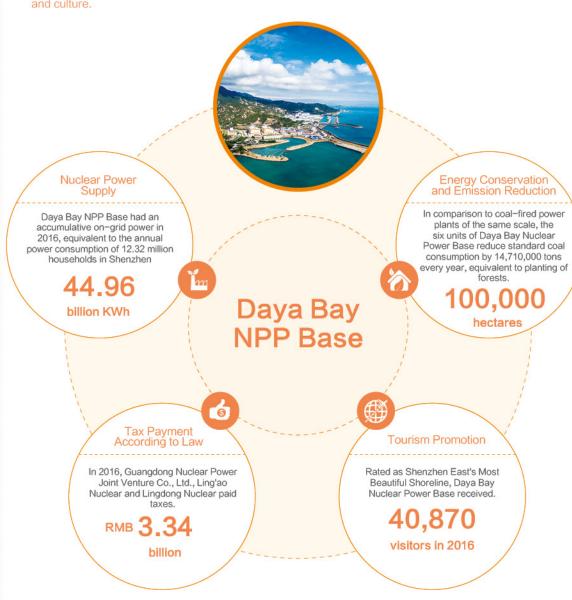
Over the years, Fangcheng -gang NPP has recruited over 2,800 locals and Guangxi employees to work at its subordinated companies.



Feature

The Benefits of Nuclear Power Plant

Corporate development is closely related to the progress of surrounding community. As China's first commercial nuclear power plant put into operation over 20 years, Daya Bay Nuclear Power Base has been providing reliable and clean electricity for the community, fulfilling its responsibilities as a corporate citizen and resolving community issues with its resources. Making excellent contributions to the economic development of Guangdong and Hong Kong, it has become a model for the industry. In the future, it will continue to create greater value for the community in respect of economy, environment and culture.





Charity Programs

In the volunteering spirit of "dedication, love, mutual assistance and progress", we actively involve in charity programs to support the disadvantaged groups and continuously give back to the community.



Outlook

Safe Development of Nuclear Power

- Construct more nuclear power units on the basis of safety and quality assurance;
- Fully implement nuclear power safety management actions and responsibilities to support the safe operation of nuclear power units in operation;
- Enhance the safety performance of nuclear power units by science and technology-led and market-oriented transformation of innovative scientific and technological achievements and technological transformation;
- Optimize the marketing systems and mechanism of power market in response to the market changes, and generate more on-grid power.

Friendly Coexistence with the Environment

- Continuously advance the development of nuclear power clean energy and endeavor to generate more power;
- Enhance energy utilization efficiency, strengthen carbon management, reduce greenhouse gas emissions;
- Implement environmental protection regulations, control and reduce pollutant emissions and lower the impact on the environment;
- Continuously carry out environmental monitoring, work with research institutions and protect the wildlife around the nuclear power plants.

Harmonious Common Development

- Improve talent training plans, enrich employee training forms and resources, optimize performance evaluation and promotion systems to support employee growth;
- Work more closely with nuclear power industry alliances and enhance the responsible competitiveness of nuclear power industry chain;
- Continuously implement transparent communication, accept public oversight and enhance the public recognition and acceptance of nuclear power;
- Increase community involvement efforts, implement charity programs and inject vitality into the community.



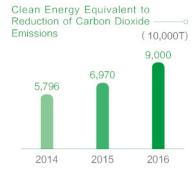
Data Form

Safety

		Indicates		Comparison
Item	Indicator		in 2015	in 2016
	Nuclear power ger	nerating units in operation (unit)	14	19
		nced value achieved for WANO licators of units	71.4%	72.2%*
Nuclear	Unplanned	reactor shutdown (time)	0	0
Safety		Level 2 or above nuclear events	0	0
	LOE events (time)	Level 1	1	2
	,	Level 0*	8	36
Personal	Death (person)		0	1
Safety (including	Death rate per 100,000 persons in engineering construction		0	0
employees and contractors)	Serious injury (person)		0	2
Fire Safety	Fire hazards (case)		0	W0
	Accidental overexposure (case) Loss of radioactive sources (case)		0	0
Radiation Protection			0	0
	Internal contamination accident (case)		0	0
	,	neering man-hours (100,000,000 man-hours)	1.1	0.9
Engineering Risk		neering man-hours (100,000,000 man-hours)	0.27	0.2
	Total (100),000,000 man-hours)	1.37	1.1

Note1: These data including 18 units in operation.

Environment



Management of Water Resources

Indicator	2015年	2016年
water consumption (10,000T)	1,362	1,733

[■] Note2: As shown in the International Nuclear Event Scale prepared by the International Atomic Energy Agency, nuclear events are graded at 7 levels: level 1 to 3 are defined as events; level 4 to 7 are defined as incidents. Level 0 (not included in the Scale) has no impact on the operation of the power plant and on the environment, and thus no consideration should be taken from the perspective of safety.

Radioactive Waste Management

Indicator		ay NPP ise		gjiang PP		enggang PP		gde PP	Hong N	yanhe PP
	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016
Discharged liquid radioactive waste (radionuclides other than tritium) to the state's annual limit	0.21%	0.17%	0.5%	0.49%	NA	0.09%	0.24%	0.32%	0.47%	0.23%
Discharged gaseous radioactive waste to the state's annual limit	0.13%	0.14%	0.18%	0.35%	NA	0.26%	0.15%	0.58%	0.14%	0.18%
Solid radioactive waste (m³)	317.6	180.4	24.4	21.2	NA	12.9	149.6	183.6	183.1	114.4
Results of environmental monitoring	Normal	Normal	Normal	Normal	NA	Normal	Normal	Normal	Normal	Normal

Society

Total Employ	20,327	
Employees by	2016	Ratio to total employees
0	Male	89.04%
Gender	Female	10.96%
Type of	Administrative employees	6.72%
Employee	Technicians	93.28%
	Below 28	33.89%
A 100 100	29-35	40.63%
Age	36-45	16.93%
	46 or above	8.55%

Emplo	Employees by		
Candan	Male	2.02%	
Gender	Female	0.93%	
Б.:	Shenzhen	1.65%	
Region	Outside of Shenzhen	2.31%	
	Below 25	0.81%	
A ===	26-35	1.87%	
Age	36-45	0.20%	
	46 or above	0.07%	

Average Training	Average Training Hours Completed per Employee					
Od	Male	207				
Gender	Female	207				
Type of	Administrative employees	163				
Employee	Technicians	206				

	2015	2016
Total donations (RMB 10,000)	157.5	553.5*
Volunteering Hours	about 15,000	about 23,000
News conferences	6	15

[■] Note: The Company acquired 61% of the equity of Fangchenggang Nuclear, 100% of the equity of Lufeng Nuclear and 100% of the equity of CGN Engineering from our controlling shareholder CGN in 2016, the data of which has been incorporated in this report.

ESG Index

Aspect	Indicator No.	Indicator Description	Disclosures	Pages/ Remarks
		Environmental		
	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous andnonhazardous waste.	•	P29-P33
	A1.1	The types of emissions and respective emissions data.	•	P29-P33
A1:	A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	•	P29-P30
Emissions	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity ((e.g. per unit of production volume, per facility).	•	P32-P33
	A1.4	Total nonhazardous waste produced (in tonnes) and, where appropriate, intensity ((e.g. per unit of production volume, per facility).	•	P31/P33
	A1.5	Description of measures to mitigate emissions and results achieved.	•	P31/P33/P35
	A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	•	P31/P33/P35
	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	•	P30-P31
	A2.1	Direct and/or indirect total energy consumption by type (e.g. electricity, gas or oil) (in 1,000 KWH) and intensity (per unit of production volume, per facility).	•	P30-P31
A2: Resource	A2.2	Water consumption in total and intensity (per unitof production volume, per facility).	•	P31
Utilization	A2.3	Description of energy use efficiency initiatives and results achieved.	•	P30-P33/P35
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	•	P31
	A2.5	Total packaging materials (in tone) used for finished products and with reference to per unit produced where applicable.		e to electricity ducts
A3: The Environment	General Disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	•	P27-P36
and Natural Resources	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	•	P27-P36
		Social		
B1:	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	•	P39-P40
Employment	B1.1	Total number of workforce by gender, employment type, age group and geographical region.	•	P39/P53
	B1.2	Employee turnover rate by gender, age group and geographical region.	•	P53

	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	•	P40
B2: Health and	B2.1	Number and rate of work-related fatalities.	•	P52
Safety	B2.2	Lost days due to work injury.		P40
	B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	•	P40
	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	•	P41
B3: Development and Training	B3.1	The percentage of employees trained by gender and employee category(e. g. senior management, middle management).	•	P41
and Training	B3.2	The average training hours completed per employee by gender and employee category.	•	P41/P53
	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labor.	•	P39
B4: Labor Code	B4.1	Description of measures to review employment practices to avoid child and forced labor.	•	P39
	B4.2	Description of steps taken to eliminate such practices when discovered.	•	P39
	General	Policies on managing environmental and social risks of the supply chain.	•	P43
B5:	Disclosure B5.1	Number of suppliers by geographical region.	•	P43
Supply Chain Management	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	•	P43
	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labeling and privacy matters relating to products and services provided and methods of redress.*	•	Health and safety P11-21 Privacy P21 Advertising and Labeling Not Applicable
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.		applicable to icity products
B6: Product	B6.2	Number of products and service related complaints received and how they are dealt with.	•	P21
Liability	B6.3	Description of practices relating to observing and protecting intellectual property rights.	•	P25
	B6.4	Description of quality assurance process and recall procedures.*	•	P11-P21 Recall procedures Not Applicable
	B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	•	P21
B7:	General Disclosure	Information on the policies and compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	•	P08
Anti- corruption	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	•	P08
	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	•	P08
B8:	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities to take into consideration thecommunities' interests.	•	P45-P50
Community Investment	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labourneeds, health, culture, sport).	•	P45-P50
	B8.2	Resources allocated (e.g. money or time) to the focus areas.	•	P45-P50/P53

Feedback Form

Dear readers,

Thanks for taking time out to read the Environmental, Social and Governance Report of CGN Power Co., Ltd. for 2016. In order to better meet your needs and provide you with more valuable information, and for our improvement in performance, capacity and level in fulfilling corporate social responsibility, we are eagerly looking forward to your precious opinions and suggestions on this report. You can mail, e-mail after scanning or fax the completed feedback form back to us, or call us to give your thoughts. Thank you!

	ostal Code: { ax: (86) 755	518026		allitoau	, onenzhei
Your opinion on this report: (please tick "	√" where app	oropriate)			
	Very good	Good	Acceptable	Bad	Very Bad
Highlight of our works and influence in economy, environmental and social sectors					
Clearness, accuracy and completeness of the information and indicators disclosed in this report					
Readability from the perspective of content layout and design style of this report					
Which parts of this report are you most interested	l in?				
What additional information do you expect to be p	provided in this	report?			
	nmental Soci	al and Gov	/ernance Repor	t?	

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