Implementation of WANO Safety Culture 10 traits at Chinese Qinshan NPP
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Overview
Qinshan nuclear power plant is located in Haiyan County, Zhejiang Province and near to Shanghai city. CNNP nuclear power operations management Co., Ltd. is responsible for the operation & management of 9 units of Qinshan nuclear power plant.
<table>
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<th>Qinshan NPP</th>
<th>Reactor Type</th>
<th>MW(e)</th>
<th>Operating Since</th>
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02 Part Two

Performance
UNITS

WANO ¼ value 93.53%
WANO ½ value 85.99%

Qinshan UCF (unit capability factor) % PIs in 2014

PLANT I

P1 I U1
92.69%

P2 U1
83.53%
P2 U2
85.01%

PLANT II

P2 U3
92%

P2 U4
89.77%

PLANT III

P3 U1
96.16%
P3 U2
90%

PLANT I
PLANT II
PLANT III

(UCF)%

UNITS
Part Three...

WANO Safety Culture
10 Traits at Qinshan
WANO Safety Culture 10 Traits at Qinshan

Organization requirements

- Nuclear technology is recognized as special and unique
- Problem identifying and solving
- Cultivating harmonious public relationship
- Organizational learning is embraced
- Leaders Demonstrate commitment to Safety
- Decision-Making reflects safety first
- Trust Permeates organization
- Everybody is responsible for Nuclear Safety
- Communication focus on Safety
- Question Attitude
- Personal commitment
Everybody is responsible for Nuclear Safety
- high accountability
- adhering high standards
- teamwork

Question Attitude
- Stop when unsure
- Challenge the assumption

Communication focus on Safety
- Work Process Communications
- Bases for Decisions
- Free Flow of Information
- Expectations

Personal commitment
Leader commitment

Leaders Demonstrate commitment to Safety
- Safety commitment
- Define Roles, Responsibilities & Authorities
- providing resources
- Incentives, Sanctions and Rewards
- Change management
- Field presence
- Leaders behaviors

Decision-Making reflects safety first
- Decision Responsibility
- Decision process
- Conservative intention

Trust Permeates organization
- Value the suggestion
- Respect is Evident
- respect the professionals
- Confliction resolution
- SCWE（Safety Conscious Work Environment）cultivation
Organization requirements

**Organizational learning is embraced**
- Avoidance to complacence
- Use operation experience
- Peer review and self evaluation
- Benchmarking
- Training
- Constant examination

**Problem identifying and solving**
- Problem identifying
- Evaluation
- Solve problem
- Trending

**Nuclear technology is recognized as special and unique**
- Recognizing the nuclear specification
- Work process risk management

**Cultivating harmonious public relationship**
Example Case:
Daily Safety Message Delivery at the beginning of everyday meeting

Communication focus on Safety
Example Cases: Management Enhancement & Standards Communication

Leaders Demonstrate commitment to Safety

Seminar

Participate in the Nuclear Professional Development Seminar (NPDS) for all the managers and the section chiefs

Corrective action Enhancement

Condition Report are required to be developed by managers and section chiefs to improve the corrective action effectiveness

Training

Senior Managers lecture the safety culture and deliver standards to the staff

Observation

Conduct field Observation and coaching to enhance expectations

*NPDS: Nuclear Professional Development Seminar, a set of manager training programs by CANDU OWNERS GROUP (COG)
Example Case: General Manager Communicate Safety Policy Commitment

Leaders Demonstrate commitment to Safety
Example Cases: 2015 Special NSC Improvement “1-3-5” Project

Leaders Demonstrate commitment to Safety

Manager tier “1”  100 managers (and above) deliver Nuclear Safety classes

Up till now, 90 managers lectured the safety management on different areas including NSC and Fundamental Safety Training Courses

Work tier “1”  1000 employee participants in safety classes

Up till now 35 safety training courses has been conducted, which cover more than 3700 staffs and 600 contractor employees
Leaders Demonstrate commitment to Safety

Example Cases: 2015 Special NSC Improvement “1-3-5” Project

Manager tier “3”  
300 leaders conduct observation and coaching  
368 observation were planned. 298 observations were completed.

Work tier “3”  
Raise 300 safety improvement suggestions  
456 safety improvement suggestions were raised.
Leaders Demonstrate commitment to Safety

Example Cases: 2015 Special NSC Improvement “1-3-5” Project

Manager tier “5”  Corrective Action Plans of 500 Condition Reports are to be developed by leaders
Up till now 523 CR were assigned while screening and evaluation standards are improved.

Work tier “5”  50 annual safety behavior models to be voted by 2015
50 safety behavior models are going to be selected at the end of this year.
135专项进展情况

公司理念：安全文化推进原则，推进载体两个“135”

评估为A的观察指导报告清单（数据统计截止到6月23日）

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各处室观察指导报告评估情况（数据统计截止到6月23日）

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公司安全文化推进原则：上宣下推；推进载体：两个“135”

两个“1”：100名处级以上干部授课，不少于1000人次听讲
两个“5”：500名处级以上干部授课，500名处级以上干部参观；500名处级以上干部策划；500名处级以上干部编写；500名处级以上干部交流；500名处级以上干部培训；
Part Four

Summary
As one of the pioneer nuclear power base in mainland China, Qinshan NPP is now experiencing a series of MAJOR CHANGES both in organization and management systems.

We keep meeting the Challenges such as multiple reactor design types, sustained behavior models and sub-culture backgrounds etc.

10 traits of WANO Safety Culture localized with Chinese culture features, could help to be better understood by staff members.
THANKS FOR ATTENTION