

The JUCCE China Smart Grid Cooperative

Join a Select Group of Experts
to Accelerate the
Development of
Smart Grid in China



3 China Workshops

Workshop 1
ROI
Nov 12, 2008
Beijing

Members will present case studies about costs and benefits of Smart Grid

Workshop 2
Technology
May 26, 27 2009
Shanghai

What are the key levers that will shape China's Smart Grid? What makes sense for China?

Workshop 3
Planning
Fall 2009

Moving forward a feasibility study & business case for a China pilot

Help Open the Market for China's Smart Grid

Kicking Off Smart Grid

China's electricity demand is growing at a tremendous rate. Yet its infrastructure is still developing. Faced with this challenge, China has responded by becoming a world leader in innovative grid solutions.

A logical next step in improving the efficiency and stability of Chinese electricity grids is to embrace Smart Grid capabilities. Initial interest in Smart Grid has developed through JUCCE's meetings with our Chinese partners.

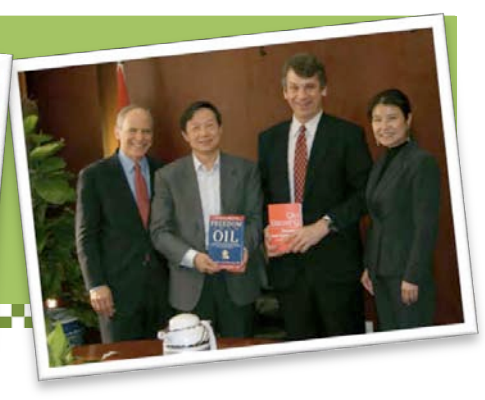
China's challenge is that the Smart Grid concept is a complex system involving multiple sectors. No single stakeholder group can drive forward this concept singlehandedly, and no single entity has taken up the banner for Smart Grid in China. The China Smart Grid Cooperative will help these stakeholders work together to take the crucial first steps toward a Smart Grid.

Duke Energy is a leader in deploying Smart Grid technology and has partnered with JUCCE to launch this cooperative and facilitate the sharing of knowledge between the U.S. and China.

Joint US-China Cooperation on Clean Energy

JUCCE is a non-profit organization that aims to accelerate the use of clean and efficient energy in China through international cooperation on impactful programs. www.jucce.com





Now is the Time for China's Smart Grid

China invested USD35 billion on electricity infrastructure in 2007. Of that, USD18 billion was sourced internationally.

Why Look to China?

Gain access to the world's largest market for grid equipment.

China's installed electricity capacity reached 713 gigawatts by end of 2007.¹ By the year 2020, China will need at least 1000 gigawatts to power over 470 million households.

China moves quickly and moves BIG.

In Dec. 2004, the State Grid first proposed the concept of UHV. Today, they have a pilot deployed of 645km of AC lines, and will have 2000km of DC lines by 2012.

Take advantage of China's large grid investment to commercialize

technologies faster and bring equipment prices down.

In the next 10 years, China's power industry will have an average annual growth rate of 6.6% to 7.0%.² The ratio of power transmission & distribution assets to power generation assets is 6:4 in the developed countries, but the ratio in China is still smaller than 4:6.³

China can use its purchasing power to **lead the market** in deployment and standards.

Help China Go Green

Achieve a **renewables mix** of 15% by 2020.

Reduce energy intensity by 20% by 2010.

Reduce emissions by 10% by 2010

Increase **national security**.

New equipment installed now is **cheaper** than retrofitting later.

Our Cooperative Goals

Members will accelerate Smart Grid development in China by:

- Creating dialogue to help define Smart Grid for China
- Providing concrete ROI examples to justify grid investment
- Identifying the best Smart Grid technologies for China

The JUCCE China Smart Grid Cooperative was highlighted as a commitment at the Clinton Global Initiative 2008

The first phase of action for the Cooperative is a series of three workshops that follow on top of JUCCE's initial meetings.

Cooperative members will receive unparalleled access to Chinese electricity grid stakeholders in an international shared learning environment.

Join Chinese representatives from

utilities, industry and regulatory agencies in active dialogue.

International members of the Cooperative will be limited to a small group of select experts.

Cooperative members will jointly explore next steps with Chinese grid partners, leading to a feasibility study and cooperation on a Smart Grid demonstration project.



Reserve Your Seat at Our Smart Grid Workshops Now

SmartGrid@jucce.com



“China has the opportunity to be at the forefront in finding solutions to the energy problem the world faces. JUCCE will provide the vehicle to make this happen.”

- Sir Richard Branson, chairman of the Virgin Group, and member of JUCCE honorary committee



“JUCCE is impressive. Its talented team focuses on projects that matter, helping tackle China’s clean energy challenges at the ground level.”

- David Sandalow, Sr. Fellow of Foreign Policy at The Brookings Institution

JUCCE’s Role

At the request of NDRC's Investment Association Committee and the US President's Council of Advisors on Science and Technology (PCAST), JUCCE has been introducing the Smart Grid concept to Chinese government bodies.

In November 2007, JUCCE arranged for Steve Papermaster, Energy Committee co-chair of PCAST, to meet with select stakeholders in Beijing.

With the help of international industry experts and independent advocacy groups, an introductory report on Smart Grid was delivered to Chinese stakeholders in February 2008.

In April 2008, JUCCE organized follow-up meetings with Commissioner Dian Grueneich of the California Public Utilities Commission and representatives from the US Commercial Services in Beijing.

Acting as a neutral convener, JUCCE is bringing together a consortium of experts to share knowledge on Smart Grid. By working together to create a turnkey solution for China’s power grids, we can open up the Smart Grid market more quickly.

China’s Stakeholders

The 2nd workshop will be jointly organized with JUCCE and

- China Electric Power Research Institutes (CEPRI) of State Grid
- East China Grid Company
- Shanghai Municipal Electric Power Company (SMEPC)

Other stakeholders involved in our prior meetings include:

- State Electricity Regulatory Commission (SERC)
- Energy Research Institute (ERI) of the National Development and Reform Commission (NDRC)
- Investment Association Committee (IAC) of the NDRC.

The Smart Grid concept is still in development everywhere. Both international and Chinese players have much to learn from each other.

We hope you will join our efforts.

Contact JUCCE now.



Be a Founding Member of the China Smart Grid Cooperative

We need your help to make Smart Grid in China a reality, quickly. We invite you to become a member of the Cooperative and help influence China's future.

Join Duke Energy, GridPoint, Quanta Technology, IBM, Cisco, Optimal Technologies, KEMA, Current, President's Council of Advisors on Science and Technology, Nexant, and many others in shaping our JUCCE Cooperative.

Next Workshop May 26-27, 2009

JUCCE China Smart Grid Cooperative Membership Benefits 2008-2009	Platinum \$50K¹ (\$15K for small companies²)	Gold \$25K¹ (\$5K for small companies²)	Silver \$10K¹
Voting rights- shape direction of workshop contents	√		
Inclusion in special <i>China Daily</i> /JUCCE supplement 11/10/08 and future newspaper supplements	√		
Inclusion as a partner in Clinton Global Initiative Commitment and follow-on reports	√		
Inclusion in press releases	√	√	
On-stage recognition at JUCCE China Energy Forum (Beijing)	√	√	
Company description in feasibility study and pilot marketing materials	Logo and quarter page	Logo and paragraph	Logo and sentence
# Seats at each Smart Grid workshop ³	3	2	1
Inclusion of corporate materials in workshop handouts	One Page	Half Page	Quarter Page
JUCCE China Energy Forum VIP passes (worth \$1300 each)	3	2	1
Logo Recognition at Workshops	Large	Medium	Small
Executive Recognition as JUCCE Strategic Advisor	√	√	√
2008-9 JUCCE China Smart Grid Cooperative Member	√	√	√

¹Membership fees are not pro-rated. Sponsorship of the Cooperative does not automatically include sponsor in demonstration projects.

²Small Company is \$10 million in revenue or less AND \$10 million in total capitalization or less.

³Additional fees may be required to cover costs of workshop attendees.