



International Copper Promotion Council (India)

Launch of Asia Power Quality Initiative (APQI) in India

APQI India was launched on September 13, 2008 at New Delhi in a workshop organized by ICPCI. The National Support Network (NSN) Workshop brought together technical and functional experts from key Indian academic, regulatory and professional institutions such as IIT's of Delhi, Kanpur and Madras, Central Power Research Institute, ERDA, Dept of Information & Technology, Bureau of Indian Standards, FICCI, BSNL, Calcutta Electric Supply Corporation, TNEB and various key manufacturers and service providers.

APQI India is envisioned to be a network of key Indian organizations (PQ advocates, industry associations, universities, etc.) that will support the awareness raising and capacity building activities to be implemented under the APQI project in India. The assembled participants were addressed by APQI project advisors who elucidated on the APQI India Chapter and the role it would play to address the vital issue of power quality in India.

Ms. Isabelle Heriakian, Electricity and Energy Project Manager, European Copper Institute, Brussels, Belgium addressing the workshop brought forth the power quality concern in industries, stating that, "Poor PQ results not only in higher maintenance costs and replacement of electrical and electronic devices, but also in production chain interruption, production-batch losses, higher electricity bills, lower production output quality, etc. The financial losses due to poor power quality are estimated at more than 15 billion euros per year among industry and commerce in Europe."

Speaking on the occasion Mr. Manas Kundu, Associate Director (Tech), ICPCI added "Talking about India and our year on year investment in the distribution system up-gradation, this figure could be astronomical. Poor power quality therefore significantly hampers the competitiveness of our manufacturing and service industry, in terms of our ability to meet customers' needs and investing partners' requirements on various production outputs.

Pointing out on the increasing demand - supply gap, he emphasized that, "In India power quality concerns are especially relevant given the acute power shortage which has created an alarming situation in the industrial sector. This apart, power quality problems like voltage fluctuation, frequency variation, generation of spikes, impulses, surges and sags, harmonics, high earth leakage current, missing cycles, black-outs, brown-outs, etc. are playing havoc on our assets. Besides downtime and production losses they cause incalculable damage to our costly capital equipment."

Poor quality of the electricity supply from the grid causes not only significant problems in internal electrical distribution systems in manufacturing industries but also buildings, by disrupting the functioning of electrical and electronic devices. Such pollutants are known as over / under voltage, over or under frequency, harmonics, electromagnetic interference (EMI), voltage flicker, and sag / swell etc. Such unusual phenomena in the electrical systems can cause equipment tripping, overheating of transformers, switch gears, cables etc and result in electrical failure or system breakdown.

China, Thailand, India, Malaysia, Vietnam, Indonesia and the Philippines are fast-growing economies, driven notably by their manufacturing and service industries. As far as trade and investment flows between Europe and these countries are concerned, the competitiveness of these industries is essential to ensure steady supply of good quality manufactured goods and service outflows and attract investment in foreign direct investments (FDI). The competitiveness of these industries is limited by several factors, and the APQI project will focus on some of them.

A survey conducted in China revealed that some factories lose up to 1 million euros per year due to poor power quality. Whereas solving power quality problems is inexpensive (estimated at 5% of the annual losses in Europe), the level of awareness on the origin of such problems, and the technical and managerial capacity to solve power quality problems is comparatively low in Asia. With the manufacturing industry constituting the heart of Asian economies and the cornerstone of EU-Asia trade and investment flows, the APQI project is therefore relevant to the needs and constraints of the target Asian countries.

The specific objective of the APQI project is to raise awareness of managers and decision-makers in manufacturing and service industries in India and to build the capacity of electrical engineers and electrical system designers on power quality as a means to enhance the competitiveness of these manufacturing industries in terms of better production output quality, reduced production costs and improve financial strength, reduced production line interruption and consequent production batch losses.

The workshop participants felt that in order to support government in formulating pro-PQ policies & standards and to have a thorough understanding on the full cost of poor power quality; actual data needs to be collated through a nation wide study about the impact of poor PQ on the national economy. The results would assist policy makers in formulating relevant product standards and regulations, while helping industry decision makers to invest in PQ solutions and equipment.

The workshop concluded with participants and speakers identifying a common India roadmap aimed at capacity building and knowledge dissemination through

an online dedicated APQI-PQ knowledge center (www.apqi.org), seminars, e-newsletters and other communication means.

About International Copper Association, Ltd.:

Headquartered in New York, the International Copper Association (ICA) is a leading not for profit organization for promotion of Copper worldwide. Its mission is to promote copper and communicate its unique attributes that make this sustainable element an essential contributor to the formation of life, towards advances in science and technology and lead to a higher standard of life worldwide. This objective is attained by guiding policy makers, strengthening the supply chain, and funding of international initiatives which enable end-users to better exploit the many strengths of mankind's most useful metal - Copper. ICA's activities reach over 24 countries every year through its 31 centers in 6 continents.

About International Copper Promotion Council (India):

International Copper Promotion Council (India), (ICPCI) is the Indian centre of the International Copper Association, Limited, the leading organization for the promotion and defense of copper worldwide. ICPCI is driven by the same objective as its parent organization, which is to promote the beneficial usage of copper for safety, health, environment and energy savings. ICPCI's activities focus on helping end-users to better understand and appreciate the positive attributes of Copper. ICPCI actively promotes copper through seminars, workshops and training programs throughout India, in collaboration with other organizations, institutions and trade bodies.

For more information visit: www.copperindia.org or write to info_copper@icpci.org