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PRESS RELEASE

ELECTRICITY BLACKOUTS IN ASIA: WIDER USE OF DECENTRALIZED ENERGY WILL REDUCE RISK

**RECENT BLACKOUTS IN NORTH AMERICA AND EUROPE CAUSED BY
TRANSMISSION SYSTEM FAILURE**

**REMOVE REGULATORY BARRIERS TO DECENTRALIZED ENERGY - MASSIVE
INVESTMENT IN CENTRAL POWER AND T&D IS NOT NECESSARY**

The countries of Asia can greatly reduce their risk of electricity blackouts in future by prioritising investment in decentralized forms of power generation, according to the World Alliance for Decentralized Energy (WADE). WADE, a non-profit industry association, has highlighted the role played by transmission system failure in the recent North American and European blackouts. Decentralized energy (DE) systems require little or no transmission system and WADE believes that DE therefore offers a lower cost way to increase the resilience of electricity systems and so reduce the prospects for similar catastrophes in Asia.

DE systems produce electricity at or close to the point of consumption – with low or zero emissions. They consist of high efficiency cogeneration, decentralized renewable generation (regardless of fuel, size or technology) and on-site energy recycling. These systems include an extensive range of proven, reliable and cost-effective power generation solutions. Users of DE were the fortunate few to have a power supply amid the recent blackouts. Asia need not suffer the same risks if it invests in high efficiency DE systems with minimal requirement for transmission and distribution (T&D).

The world's centralized electricity system is now highly vulnerable to the expanding and changing demands of the 21st century. Too many power plants are sited too far away from consumers and depend critically on the effective operation of capacity constrained T&D systems to ferry the electricity to distant and ever more demanding consumers. A centralized system under strain is acutely vulnerable to minor stress that can, in seconds, become disruption on a breathtaking scale. Such systems are also more vulnerable to terrorist activity.

Asia has a choice: to make multi-billion dollar investment in central power and T&D extension; or, to achieve the same level of capacity with less capital cost and greater security through prioritisation of DE investment. The cost saving in Asia will be very significant: in the USA alone, WADE has projected that investing in DE instead of central power will save around \$400 billion in capital costs over the next 20 years.¹

The key challenge for governments and regulators in Asia is to remove barriers to DE investment. In every country that WADE and its members have studied², a range of regulatory and institutional arrangements exist which have been developed to accommodate central power generation and its accompanying network of extensive transmission and distribution systems. These act as major barriers to DE deployment and so incentivize the more costly, less efficient and more polluting central power model.

The emergence of competitive DE generation and control technologies mean that this traditional configuration is no longer optimal. But system inertia, vested interests and inappropriate regulatory structures represent major hurdles for the adoption of these DE options.

In July 2003, WADE published "Seven Guiding Principles For Effective Electricity Market Regulation" which can now be used by regulators worldwide to increase the resilience of their electricity systems and reduce overall costs. An associated report to elaborate the Principles will soon be published by WADE. The Principles can be found at www.localpower.org.

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¹ "Optimising Future Heat and Power Generation", Casten T and Collins M (WADE, Private Power), 2002.

² WADE produced "A World Survey of DE" in 2002. It has also produced a National DE Survey of China in 2003; a National Survey of Brazil will be published in August 2003.