Editorial

Can we halt the charge towards central power?

'Forward the Light Brigade!'
Was there a man dismay'd?
Some one had blunder'd:
Theirs not to make reply,
Theirs not to reason why,
Theirs but to do and die,
Into the valley of death
Rode the six hundred.

'The Charge of the Light Brigade', Alfred Tennyson, October 1864

The lines above come from a short poem that can almost make you understand how it must feel to be dispatched into oblivion. Are we about to embark upon a similarly misguided pathway in respect of the world's electricity industries? In the last issue of *COSPP* I wrote of the risk that energy policymakers will respond to the spate of blackouts in 2003 by incentivizing major new investment in central plant and transmission systems. That risk looks like it is becoming a reality with almost every passing day.

In early December 2003, the European Commission launched its proposals for 'Infrastructure and Security of Supply'. They are heavily focused on the supply side and the need for major investment in transmission and distribution (T&D) infrastructure to ensure greater security of electricity supply in the future. In November, the International Energy Agency launched its *World Energy Investment Outlook*, which projects that electricity T&D alone will require US$5.3 billion of investment by 2030; that is fully one third of total investment required in the whole energy sector by 2030 – and over half that required in the power sector. In the US, where sensitivity about blackouts is greatest of all, the calls for massive investment in infrastructure are loud and frequent. What blunders!

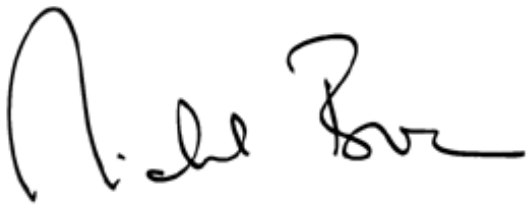
At least *we* can reason why. With the exception of a small part of the IEA report, there has been negligible reference to the significant role that cogeneration/decentralized energy (DE) can play in improving supply security while minimizing requirements for massive capital spend. WADE's own economic modelling analysis[1] suggests that future worldwide growth in demand for electricity can be met by DE systems, rather than central power alternatives, with a cost saving of over $1.6 trillion up to 2020. That saving is due entirely to the fact that DE requires much less investment in T&D than does central power. The retail cost impact is dramatic: DE will bring about a 29% *reduction* in costs to consumers compared with central power generation.

Needless to say, the energy saving and environmental benefits are equally dramatic, if not more so. Fossil fuel consumption to meet the new demand is cut by 45%, while carbon emissions are cut by 47% – a saving equivalent to over 5% of total global emissions today.

In short, WADE believes that there is no economic, energy security or environmental justification for continuing to cling to the conventional wisdom that central power is the optimal model for securing our electricity needs of the next 20 years. On the contrary, DE now offers a more advantageous alternative – worldwide.

Are there signs that disaster can be averted, that new realities are beginning to dawn? Here and there. For example, from the New York State Public Service Commission in the US, in mid-December, comes a draft of new *Standardized Interconnection Requirements and Application Process for New Distributed Generators 2 MW or Less Connected in Parallel with Utility Distribution Systems*. This promises to greatly facilitate the development of high-efficiency cogeneration systems in that state. In Portugal, you can read in this issue of a new tariff structure that recognizes the locational and environmental benefits of DE.

Here and there. Not enough yet for sure – but an indication that the generals may be beginning to have a rethink before the calamity.



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1. Presented in WADE's forthcoming *World Survey of Decentralized Energy 2004*.