Is IT a Disaster Waiting to Happen?

By Fereidoon P. Stoshanssi*

There is an old adage that says when disaster hits, those who refuse to panic are those who don't know what's happened. And this may be the case for the "official" calm that currently prevails while people on both sides of the Atlantic prepare for the arrival of 1998 and the logistical implementation of retail access in a number of jurisdictions.

What disaster? Many within and outside the industry are convinced that the policymakers who have restructured the electric power industry to allow customers to switch retailers (or suppliers, as they are called in the UK) don't have a clue about the enormity and the complexities of operating in the new environment. Among the things that the technical "nerds" in the industry worry about are the following:

- **Independent System Operator (ISO) and the Power Exchange (PX)** - Will it work? Will it be fully functional? Will it be tested and reliable? Some skeptics are not so sure. Enormous effort and money is being spent on system development (e.g., California PUC has approved $250 million for the development of the ISO/PX), but no one is sure the work will be done on time, or that it will work.

- **Settlements & Reconciliation** - Utilities currently buy and sell at wholesale level. But all customers in a given service area buy from the same (monopoly) retailer. In the competitive arena, both the volume and complexity of these transactions will balloon. Each competing retailer has to figure out quickly - how much its customers used in aggregate hourly and pay the generators for the delivered energy. Would the various players be able to figure out who bought what from whom, got what he bought, and paid for it? This is not as trivial an issue as it may sound because most customers' meters will not be read for weeks or months after the fact. But the parties need to settle based on estimates, and then reconcile for any errors or deviations. Easier said than done.

- **Metering & Billing** - Moving from an environment where most customers buy a highly bundled product and get extremely simple bills (total kWh consumption for the month multiplied by a fixed S/kWh price) to a far more complex environment gives every information technology (IT) expert and computer billing nerd a chill and many a sleepless night. Further complications arise because customers may be able to switch suppliers at will, and retailers are allowed to charge customers whatever they please. Moreover, there are currently no established protocol or standards for meter accuracy, data transfer among utilities, bill collection, and data processing. None of this, of course, is rocket science, but given the large numbers of potential transactions, and potentials for introducing errors, it begins to look like rocket science.

The upshot is nervousness among the IT and billing system "techies" in the industry - many of whom are skeptical that all this will be sorted out by the time retail access is to be rolled out in California and a few other states.

*Fereidoon P. Stoshanssi is a Senior Consultant with the National Economic Research Associates (NERA), San Francisco, CA. This is an edited version of his article that appeared in the May 1997 issue of Energy Informer.

Conference Proceedings

Transport, Energy and Environment

Elsinore, Denmark, October 3-4, 1996

The Proceedings from the Regional European Conference, Transport, Energy and Environment, held in Elsinore, Denmark, are now available for the price of US$ 50. To order copies, please contact:

Secretariat, Danish Association for Energy Economics
Maersk Olie og Gas AS
Esplanaden 50
1263 Copenhagen K, Denmark
Tel: +45-3363-4081
Fax: +45-3363-4063