

Summary for Energy 21 online forums – Smart Grid thread

Glen Garner

There were a few different views around Smart Grids, but the majority of the discussion was around the underlying infrastructure for last mile communications. The largest thread of comment focussed on the topic: “Should energy distribution businesses own their own networks? Is a managed service or a hybrid network the right answer?” also this related to another question: “Can utilities design the networks of the future or will external markets define the needs?”

One view proposed that it would be a large exercise to build a private communications network for connection all the way to the meter or smart grid device. The other view says that public communications do not have the resiliency or reach for reliable communication to a high percentage of meters/smart grid devices.

For instance some people proposed a model of one network for all Utilities, based on the current principles for grid investment and operation using international open standards communications technologies. One person believed this model, based on “superior technologies”, would future proof the investment and deliver more value to utilities, governments and users.

Others counted with the issues and problems they saw confronting this model. For a Telco outsourced model for instance: many Telco cell sites today are not backed with battery power and therefore there are issues of re-energising a feeder when the cell site providing remote communications is on that de-energised feeder. It comes down to the lack of revenue driving a different architectural model for the Telco’s (ie “non profitable” M2M communications). In addition, the reach to the location of meter boxes for say a 3G service can be commonly poor outside city areas; and therefore the private mesh radio approach of many utilities seems like a more robust approach.

The matter did not have a clear outcome and is reflected in the multiple approaches being taken currently within the industry.

Topics like “Can existing technologies like SCADA support smart grid or are more analytical tools needed?” and “Can a large country like Australia afford a smart grid?” were not at all subscribed to by comment.

Summary for Energy 21 online forums – Demand Management Thread

Dean Spaccavento

Summary of "Do Customers Care About Dynamic Pricing of Electricity?"

- Research and anecdote show that electricity customers want to participate in the energy value chain and are looking for opportunities to do so. So much so that the positive participation of customers in dynamic pricing trials cannot be solidly solely attributed to the economic incentives of dynamic pricing. It is uncertain if customers are using price as a proxy for the network operator asking for assistance;
- More detailed market research, and a more granular view of customers is required to satisfactorily, but more importantly, usefully answer this question. Demographics do come into play.