



Han La Poutré

Rational Middle

Everyone has an opinion based on facts and senses. We seek for experts that stand on opposite sites when it comes to intelligent networks. Should we make them smart or should we make them simple. Read their opinions and make up your mind. There is always a rational middle...

Intelligent networks, make them as smart as possible! Or not?

YES

In future energy systems, renewable energy will only be intermittently available. Demand and supply must be continuously matched, and the user will have to be flexible. He'll have to get used to think about what he wants instead of how a device consumes energy in order to achieve that. For example, an electric car parked in the evening usually doesn't have to be fully charged until the next morning. In the end, it is important that devices do their work according to the wishes of the user, but with minimal hassle. A user doesn't want to continuously check the current electricity price to charge his car. Just as he'd like the temperature of a room to be automatically controlled by a thermostat: as long as it yields the correct temperature.

In order to break through with renewable energy to the big public, the technology has to be available to cope with fluctuations in the energy supply. And it should be as simple as possible for the consumer, while preserving privacy. We need good software to regulate this. Preferably with a simple button for the customer, and for the enthusiast advanced features like on current PC's. The PC had got its big advance only after its operation got simple. This is the same with energy: we want a comfortable system, besides our energy awareness. Now you can simply put in the power plug. In the future this will be less easy, but we rather hope for software that will manage it the way we want it ■

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NO

Consumers and other end users appreciate ease of use very much. Therefore, its importance can't be underestimated sufficiently. For acceptance of intelligence in energy networks by end users ease of use is crucial. Some believe that the degree of ease of use is equal to the degree of complexity, or as you like, intelligence of the network concerned. Nothing could be further from the truth. Ease of use is above all an experience and within that experience a large degree of autonomy plays a decisive role. The classic example of this is formed by the fierce reactions of users to 'the smart meter'. Up to now the need for privacy proved to be the 'killer app'. The end user wants to retain the control over his or her use of energy. Ease of use is lovely, (full) dependence of an intelligent network is not.

Another argument for the as least intelligent as possible network is the fact that the potential for interference increases as the network becomes more complex. A well designed network is as simple as possible. Components, including software, that won't be used, simply can not break. Also, an as limited as possible intelligence contributes to the transparency of a network. Therefore, the network is easier to adapt, simpler to link and much more versatile. Because of this, one can respond effectively and efficiently to potentially strong fluctuating supply and demand in a network. A situation which will become common increasingly, due to the increase of the distributed generation. In short, simplicity is the sign of truth ■

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