

# BACnet Today & the Smart Grid

## Commentary

### BACnet and the Smart Grid

Smart Grid activities have been increasing throughout our industry since the Energy Independence and Security Act of 2007. ASHRAE Standards Project Committee (SPC) 201P sent its Facility Smart Grid Information Model out this summer for an Advisory Public Review. We also saw the openADR 2.0a specification released in August and the first crop of certified openADR 2.0a products were announced. The Smart Grid Interoperability Panel changed from a government-funded organization to one financed by industry, which shows the widespread support for Smart Grid within our industry.



Carl Neilson

Members of the BACnet committee (SSPC 135) participate in meetings for all of these efforts. This cross-organization participation facilitates the flow of information from the various Smart Grid activities to the BACnet world, which helps to focus the BACnet Smart Grid efforts. Currently, the BACnet committee is actively reviewing the public review draft from SPC 201P. The review process is working on identifying the portion of the model that is directly applicable to BACnet and how that model can be realized within the BACnet standardized object model.

Within the BACnet committee, the Smart Grid Working Group is responsible for this effort. Fortunately, they are not alone in the task; they are taking work product from other BACnet working groups to bring the object model to fruition. From the joint effort of the Application Profiles working group and the XML working group, the framework that is being developed for standardized equipment and system definitions is being applied to the Smart Grid model. The timing of the Smart Grid work could not be better. At a time when the committee needs validation of the application profile framework,

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the Smart Grid model brings a complex information model that will tax the framework and prove whether we are on the right track or not.

With all the attention on improving the grid, standardized interoperability between facilities and utilities looks like a foregone conclusion, but there remains a lot of work to be done. Moving forward with openADR as the communication protocol between the utility and the building, and with the ASHRAE Facility Smart Grid Information Model adopted by the BACnet standard, there is a reasonable chance we can agree on what the gateway that connects the utility and the building will look like. With a standardized gateway, there is hope for wider adoption of utility integration in facilities of all sizes from light commercial through large campuses.

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Standing Standards Project Committee 135

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