

Energy Management (EMAN) Applicability Statement

draft-tychon-eman-applicability-statement-02

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EMAN Applicability Statement

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- Draft based on Working Charter

“6. The EMAN WG will develop an applicability statement, describing the variety of applications that can use the energy framework and associated MIB modules. Potential examples are building networks, home energy gateway, etc. Finally, the document will also discuss relationships of the framework to other architectures and frameworks (such as smartgrid). The applicability statement will explain the relationship between the work in this WG and the other existing standards such as those from the IEC, ANSI, DMTF, and others.”

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- What is new in version 02 ?
 - Use case scenarios for EMAN
 - Abstraction of use cases to use case patterns
 - Updated the related standards

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- Areas of focus
 - Overview of EMAN
 - some definitions - Energy management
 - How can EMAN framework be used ?
 - Use Case scenarios and Target devices for EMAN
 - Use case patterns
 - EMAN and related standards
 - IEC
 - ANSI
 - DMTF
 - ...

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- Use case Scenarios & Target devices
 - Network devices - Routers, switches and their components
 - Devices attached to a network - PoE powered devices
 - Power probes and Smart Meters PDUs
 - Mid-level managers
 - Gateways to building networks
 - Home energy gateways
 - Data center devices
 - Ganged outlets on a PDU-Multiple power sources
- Industrial Automation scenario
- Load shedding/Demand Response

Rich Morgan – ODVA’s comment

Patrick Grossetete comment

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- Use case Scenarios
 - A question from the last IETF – Can we use Entity MIB to model the EMAN use case scenarios ?
 - Applicability statement draft has the use case scenarios.
 - Are there any more scenarios to be considered for EMAN ?

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- Use case patterns
 - Entities that consume power can perform internal power metering on its own
 - Entities that consume power but have an external power meter

 - Entities that supply power for other devices however does not perform power metering for devices
 - Entities that supply power for other devices and also perform power metering function
 - Entities supply power for other devices and also perform power metering and control for other devices

 - Entities that do not supply power but perform only metering function for other designated devices
 - Entities which do not supply power but perform both metering and control for other designated devices

 - Multiple Power Sources

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- EMAN <-> other Energy standards
 - Direct use of standards in EMAN
 - IEC - power energy measurement
 - ANSI – accuracy class
 - DMTF - power states
 - IEEE - power states
 - Informational Energy standards
 - BACNET, ASHRAE
 - ODVA
 - EnergyStar
 - SmartGrid

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■ Open Issues

■ IEC Standards

Michael Suchoff

Bruce Nordman comments

- IEC 61850 -7-4 - Communication networks and systems for power utility automation - Part 7-420: Basic communication structure -
 - MMXU – Logical Node Power Measurement
 - Accuracy class
- IEC 61000-4-30 - Testing and Measuring Techniques - Power Quality Measurement Methods
- IEC 62053-21 - Energy meters, smart PDUs
- IEC 62301 - Household electrical appliances – Measurement of standby power

- Question to WG - which IEC standards are relevant, and how will they impact EMAN ?

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- Next Steps
 - Current draft updated with scenarios and target devices

 - Converge with the other applicability statement
draft-nordman-eman-energy-perspective-01
for the next reversion

Power and Energy Monitoring MIB claipse-energy-monitoring-mib-09

- Summary
 - Updated the draft with Use cases and use case patterns based on EMAN WG meeting feedback
 - Scope of Applicability statement
 - Use of EMAN
 - Use case scenarios
 - related standards
 - WG comments, feedback