

# Power and Energy Monitoring MIB

draft-ietf-eman-energy-monitoring-mib-02

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- What is new in version 01 ?
  - entPhysicalIndex as the index for the eoPowerTable
    - aligned to ENERGY-AWARE-MIB index
  - new design for the eoEnergyTable - index eoEnergyParametersIndex
    - simultaneous collection of Energy measurements using multiple windowing schemes
    - based on feedback from Minoru Teraoka, Hideo Kodaka, and Hiroto Ogaki
  - IANA considerations section updated – deprecation of power states
  - Terminology from draft-parelo-eman-definitions-04
  - Update to MIB Conformance section marks optional MIB objects
  - Editorial: several nits
    - thanks to feedback from Minoru Teraoka, Hideo Kodaka, and Hiroto Ogaki
  - Open Issues – WG feedback

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```
eoEnergyParametersEntry OBJECT-TYPE
    SYNTAX      EoEnergyParametersEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "An entry controls an energy measurement in  eoEnergyTable."
    INDEX { eoEnergyParametersIndex }
    ::= { eoEnergyParametersTable 1 }
```

```
EoEnergyParametersEntry ::= SEQUENCE {
    eoEnergyObjectIndex      PhysicalIndex,
    eoEnergyParametersIndex  Integer32,
    eoEnergyParametersIntervalLength  TimeInterval,
    eoEnergyParametersIntervalNumber  Integer32,
    eoEnergyParametersIntervalMode    Integer32,
    eoEnergyParametersIntervalWindow  TimeInterval,
    eoEnergyParametersSampleRate      Integer32,
    eoEnergyParametersStatus          RowStatus
}
```

- With this design, it is possible to have simultaneous measurement of energy using multiple windowing schemes – using eoEnergyParametersIndex for the same Energy Object -entPhysicalIndex

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- IANA – process for deprecation of power states
- Sec 12.3. Updating the Registration of Existing Power State Sets
  - Proposed process
    - an Internet-draft or an individual submission with the clear specification on deprecation of Power State Sets or Power States registered with IANA.
    - Expert review designated by an IETF Area Director, as in [RFC5226]
    - The process should also allow for a mechanism for cases where others have significant objections to claims on deprecation of a registration.

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- Open Issue 1 – relevance of IEC references
  - IEC 61850-7-4 - information model
  - IEC 61000-4-30 - Testing and measurement techniques
  - IEC 62053-21 - metering and demand measurement
- IEC references discussed in the Applicability Statement draft
- Proposal - close this open issue

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- Open Issue 2 – Light weight identification of an Energy Object
  - EMAN-MON-MIB aligned to the Identification of Energy Object based on ENERGY-AWARE-MIB
  - Proposal – Use the identification as in ENERGY-AWARE-MIB

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- Open Issue 3 – Demand Computation method
  - computation method based on IEC 62053-21
  - this standard is used for revenue meter calculations
- Proposal – close this open issue

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- Open Issue 4 - IEEE-ISTO PWG in the IANA list of Power State Set ?
- Proposal - Procedure is in place for the Printer Power Series addition if needed.



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- Open Issue 7 – Device capabilities
  - A capabilities discovery mechanism in the to determine what a Energy Object is capable of reporting/metering
  - Similar to RMON–MIB

probeCapabilities OBJECT-TYPE

SYNTAX BITS {

etherStats(0),

historyControl(1),

etherHistory(2),

probeConfig(26)

}

MAX-ACCESS read-only

DESCRIPTION

"An indication of the RMON MIB groups supported on by this probe."

::= { probeConfig 1 }

- Proposal – Device capability should be part of EMAN requirements

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- Open Issue 9 - How to monitor remote objects, for which there is no entPhysicalIndex: with a proxyTable or indexed by the UUID?“
- Proposal – MIB design proposed in EMAN-AWARE-MIB. That should solve this.

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- Summary
  - Revised the MIB module based on feedback from the mailing list
  - Closed many open issues
  - Seeking feedback from the WG and MIB experts