

# 15-day Public Review for Energy Market Information Exchange (EMIX) Version 1.0

Submitted by cesign on Tue, 2011-10-04 16:43

**Type:**

15-day Public Review

The OASIS Energy Market Information Exchange (eMIX) TC [1] members have produced an updated Committee Specification Draft (CSD) and submitted this specification for 15-day public review:

Energy Market Information Exchange (EMIX) Version 1.0  
Committee Specification Draft 04 / Public Review 04  
08 September 2011

**Specification Overview:**

This specification defines an information model and XML vocabulary for the interoperable and standard exchange of prices and product definitions in transactive energy markets:

- \* Price information
- \* Bid information
- \* Time for use or availability
- \* Units and quantity to be traded
- \* Characteristics of what is traded

This specification is one of three related OASIS technical works in progress. For a graphical view of the relationships, see <http://collaborate.nist.gov/twikisgrid/bin/view/SmartGridEMIXissuesPage> [1] on the NIST Smart Grid collaborative site.

(a) Web Services Calendar 1.0 (WS-Calendar Technical Committee page is <http://www.oasis-open.org/committees/ws-calendar> [2]) is the common XML vocabulary for expressing schedules. EMIX uses this vocabulary to express energy schedules and prices; implementers and other standards are also using the WS-Calendar Committee Specification 1.0.

(b) Energy Market Information Exchange 1.0 (EMIX Technical Committee page is <http://www.oasis-open.org/committees/emix> [3]) is the TC that has approved this public review. EMIX is the common XML vocabulary for expressing market information including tenders, market transactions, prices and product definitions for implementers and other standards. EMIX uses the WS-Calendar vocabulary to express schedule information, and the EMIX vocabulary is used by Energy Interoperation and other standards and implementations.

(c) Energy Interoperation 1.0 (Energy Interoperation Technical Committee page is <http://www.oasis-open.org/committees/energyinterop>

[4]) is the common XML vocabulary for expressing curtailment events, price communication, as well as Web services definitions for interactions using the information payloads. The Energy Interoperation TC is planning its third Public Review in September 2011.

Please refer to line numbers in the PDF version of the specification when providing comments.

#### TC Description:

The OASIS Energy Market Information Exchange (eMIX) TC was chartered to define standards for exchanging energy characteristics, availability, and schedules to support the free and effective exchange of information. Better communication of actionable energy prices will help enable and expand efficient markets that satisfy the growing demand for lower-carbon, lower-energy buildings, net zero-energy systems, and supply-demand integration that take advantage of dynamic pricing. The TC has addressed requirements consolidated by NAESB and the Smart Grid Interoperability Panel's Priority Action Plan 03 Working Group.

Direct participants have included representatives of Southern California Edison, the ISO-RTO Council, California ISO, Midwest ISO, New York ISO, Lawrence Berkeley National Laboratory, Enernex, UISOL, members of the UCAIug OpenADR Task Force, the OpenADR Alliance, and representatives of the National Institute of Science and Technology, Schneider Electric, Siemens AG, EPRI, OATi, The Open Geospatial Consortium, LonMark International, Lockheed Martin, EnerNOC, Trane, CPower, Microsoft, JPMorganChase, TIBCO, University of North Carolina, Alstom Power, and experts in energy markets and in cross-domain integration and information modeling.

This work is closely related to OASIS WS-Calendar 1.0 and OASIS Energy Interoperation 1.0.

#### Public Review Period:

The public review starts 4 October 2011 and ends 19 October 2011. The specification was previously submitted for a 15-day public review on 8 July 2011 [2]. This 15-day review is limited in scope to changes made from the previous review.

Changes are highlighted in the diff-marked PDF file [3]. A summary of changes to the specification and to schemas is provided below [4].

This is an open invitation to comment. OASIS solicits feedback from potential users, developers and others, whether OASIS members or not, for the sake of improving the interoperability and quality of its technical work.

#### URIs:

The prose specification document and related files are available here:

#### PDF (Authoritative):

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.pdf> [5]

#### HTML:

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.html> [6]

#### Editable source:

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.doc> [7]

#### XML Schemas:

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/xsd/> [8]

#### ZIP distribution files (complete):

For your convenience, OASIS provides a complete package of the prose specification and related files in a ZIP distribution file. You can download the ZIP file here:

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.zip> [9]

Additional information about the specification and the OASIS Energy Market Information Exchange (eMIX) TC may be found at the TC's public home page located at:

<http://www.oasis-open.org/committees/emix/> [10]

Comments may be submitted to the TC by any person through the use of the OASIS TC Comment Facility which can be accessed via the button labeled "Send A Comment" at the top of the TC public home page, or directly at:

[http://www.oasis-open.org/committees/comments/form.php?wg\\_abbrev=emix](http://www.oasis-open.org/committees/comments/form.php?wg_abbrev=emix) [11]

Feedback submitted by TC non-members for this work and for other work of this TC is publicly archived and can be viewed at:

<http://lists.oasis-open.org/archives/emix-comment/> [12]

All comments submitted to OASIS are subject to the OASIS Feedback License, which ensures that the feedback you provide carries the same obligations at least as the obligations of the TC members. In connection with this public review of 'Energy Market Information Exchange (EMIX) Version 1.0 Committee Specification Public Review Draft 04', we call your attention to the OASIS IPR Policy [5] applicable especially [6] to the work of this technical committee. All members of the TC should be familiar with this document, which may create obligations regarding the disclosure and availability of a member's patent, copyright, trademark and license rights that read on an approved OASIS specification. OASIS invites any persons who know of any such claims to disclose these if they may be essential to the implementation of the above specification, so that notice of them may be posted to the notice page for this TC's work.

===== Additional references:

[1] OASIS Energy Market Information Exchange (eMIX) TC

<http://www.oasis-open.org/committees/emix/> [10]

[2] Previous public review announcement:

08 July 2011: <http://lists.oasis-open.org/archives/tc-announce/201107/msg00002.html> [13]

11 May 2011: <http://lists.oasis-open.org/archives/tc-announce/201105/msg00000.html> [14]

17 November 2010: <http://lists.oasis-open.org/archives/members/201011/msg00005.html> [15]

[3] Diff file

<http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04-diff...> [16]

[4] Summary of changes to Specification from Public Review 03 of EMIX

(ignoring all metadata such as versions, dates, etc.)

1) Normative reference to WS-Calendar updated to reference CS01

2) First half of section 2.2 (Approach) completely re-written to remove references to TEMIX

3) Table 10-2, Power Contract Types revised and extended

4) Section 12 renamed to "Profile for Transactive Energy EMIX"

5) Spelling Errors corrected in Table 13-4

6) Section 14, "Ancillary Services Products" re-written in entirety to use IRC-requested Ancillary Service type.

7) Section 15, EMIX Warrants, entirely re-written

8) Table 16-1, "Elements of Power Quality Warrant" description of Schedule and Side changed, Quality Measure added

9) Table 16-2, references to Quality Protocols updated

10) Table 16-3, "Power Quality Indicators", definitions of Flicker (ST and LT) corrected.

11) All UML illustrations in document re-generated

Summary of changes to Schemas

(ignoring all metadata such as versions, dates, external references, etc.)

EMIX.XSD

1) Updated GML Profile 0 as modified by OGC 2011/05

2) EmixProduct: changed cardinality of currency, terms to allow minOccurs=0

3) EmixOption: changed cardinality of currency, terms to allow minOccurs=0

4) UidType: Corrected to use UpperCamelCase convention used for all Type names.

EMIX-TERMS.XSD

5) Updated Definition of TERMS

6) Added MarketContextName to StandardTermsType to meet IRC requirement.

7) New top-level definition for MarketContextNameType

## EMIX-WARRANTS.XSD

- 8) Eliminated Content and Controllability Warrant Types
- 9) Modified Documentation of all Warrant Types
- 10) Modified all Warrant Types to extend emixBase rather than emixProduct

## POWER.XSD

- 11) No changes

## POWER-PRODUCTS.XSD

- 12) PowerProductDescription: unitEnergyPrice, powerItem, changes now optional (minOccurs=0)
- 13) Added AncillaryServicesType to satisfy IRC requests with associated Ancillary Services Names
- 14) FullRequirementsPowerType: price, maximum power, minimum power now optional (minOccurs=0)

## POWER-QUALITY.XSD

- 15) Re-wrote documentation of Power Quality Warrant to make use clearer.
- 16) Added optional QualityMeasure to top level of Power Quality Warrant Type
- 17) Expanded description of Quality Measure Type
- 18) Corrected definitions of Flicker and changed internal element from Int to Float

## RESOURCE.XSD

- 19) Eliminated redefinition of mrid and referenced POWER.XSD defined type throughout schema

## RESOURCE.XSD

- 20) Corrected definitions of Flicker and changed internal element from Int to Float

## SISCALE.XSD

- 21) No changes

[5] <http://www.oasis-open.org/who/intellectualproperty.php> [17]

[6] <http://www.oasis-open.org/committees/emix/ipr.php> [18]

<http://www.oasis-open.org/who/intellectualproperty.php#s10.2.3> [19]

RF on Limited Terms

**Associated TC:**

Energy Market Information Exchange (eMIX)

**Associated MS:**

blue-ms

**Deadline:**

Tue, 2011-10-04 - Wed, 2011-10-19

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**Links:**

[1] <http://collaborate.nist.gov/twikisgrid/bin/view/SmartGridEMIXissuesPage>

[2] <http://www.oasis-open.org/committees/ws-calendar>

[3] <http://www.oasis-open.org/committees/emix>

[4] <http://www.oasis-open.org/committees/energyinterop>

[5] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.pdf>

[6] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.html>

[7] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.doc>

[8] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/xsd/>

[9] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04.zip>

[10] <http://www.oasis-open.org/committees/emix/>

[11] [http://www.oasis-open.org/committees/comments/form.php?wg\\_abbrev=emix](http://www.oasis-open.org/committees/comments/form.php?wg_abbrev=emix)

[12] <http://lists.oasis-open.org/archives/emix-comment/>

[13] <http://lists.oasis-open.org/archives/tc-announce/201107/msg00002.html>

[14] <http://lists.oasis-open.org/archives/tc-announce/201105/msg00000.html>

[15] <http://lists.oasis-open.org/archives/members/201011/msg00005.html>

[16] <http://docs.oasis-open.org/emix/emix/v1.0/csprd04/emix-v1.0-csprd04-diff.pdf>

[17] <http://www.oasis-open.org/who/intellectualproperty.php>

[18] <http://www.oasis-open.org/committees/emix/ipr.php>

[19] <http://www.oasis-open.org/who/intellectualproperty.php#s10.2.3>