NAESB Wholesale Electric Quadrant
Electronic Scheduling Subcommittee
OASIS II Scoping Task Force

OASIS II Vision

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OASIS II Vision

OASIS II is envisioned to provide electronic communication standards to facilitate the procurement and scheduling of energy and related services among market participants and operating entities. OASIS II should provide a seamless method for procuring and scheduling of transmission, ancillary services, and energy, regardless of region or operating entity using the standardized electronic communications. OASIS II will also facilitate standard communications between operating entities to assist in coordinating market operations (Market Redispatch, Line Loading Relief, etc.) and the exchange of operational reliability information. OASIS II will be implemented through the development of Industry Standards addressing both the technical Standards and Communications Protocols and the procedural Business Practice Standards required to achieve this vision. OASIS II will encompass but may not be limited by the implementation of the NERC Functional Model, corresponding NERC Standards and corresponding NAESB Standards.

Realizing that there is diversity in market operations and regional practices, ~~and that~~ not all features would apply to every market and/or region.~~,~~ In order for this OASIS II Vision to be achieved, the FERC Staff and Commission must fully understand the ramifications of granting exceptions and waivers to the technical and procedural Standards relevant to OASIS II. ~~t~~The following are the key objectives of the vision for OASIS II.

- Facilitate Procurement of Energy and Ancillary Services
- Facilitate Procurement of both Physical and Financial Transmission Rights
- Facilitate Electronic Scheduling of Interchange Transactions
- Accommodate Financial Only Contracts
- Accommodate Market Settlements
- Accommodate Regional Diversity
- Ensure Reliable System Operations
- Accommodate Market Operations for Centralized Markets
- Accommodate Data Publishing to Industry
- Support Market Monitoring
- Provide Standards for Electronic Data Communication
- Function Consistently and Reliably
- Implement in a Cost-Effective Manner

Facilitate Procurement of Energy and Ancillary Services

OASIS II will provide standardized mechanisms for the procurement of energy and ancillary services to both centralized market structures (e.g. typical ISO/RTO two-settlement markets) and non-centralized market structures (e.g. power exchanges, automated bilateral matching systems, etc). In a centralized market, this procurement will likely be achieved through the submittal of price-sensitive or price-taking energy

offers and bids into the Day Ahead and Real Time markets. The energy products in a centralized market may include both energy and certain ancillary services (e.g. operating reserves and regulation). In a non-centralized market structure the required procurement of Transmission Services either separately or in coordination with Energy and/or Ancillary service procurement will need to be accommodated~~addressed.~~

Facilitate Procurement of Both Physical and Financial Transmission Rights

OASIS II will accommodate the procurement of both financial and physical transmission rights and facilitating secondary markets for trading those rights. There will also be a mechanism for tracking transmission rights that have been obtained outside of OASIS II.

Facilitate Electronic Scheduling of Interchange Transactions

OASIS II will facilitate the scheduling of energy against transmission and energy rights to occur in a timely manner. OASIS II will also facilitate tracking of both energy and transmission rights. The facilitation needed between the procurement of transmission, energy and ancillary services may vary between centralized and non-centralized markets. OASIS II shall ~~will also consider the need for~~ coordinat~~e~~ion between all parties within and between regions for these transactions, as required by the NERC functional model and NAESB Coordinated Interchange Business Practices Standard. All OASIS II systems will support real-time status updates regarding current schedules/transactions, as well as historical audit and analysis of past transactions.

Accommodate Financial Only Contracts

OASIS II will accommodate the submittal of bilateral (i.e financial only) contracts. These contracts may be for energy or ancillary commitments but do not impact the real-time operation of the bulk power system. OASIS II will provide participants a means to electronically submit these contracts for market settlement processes.

Accommodate Regional Diversity

OASIS II should implement common business models when appropriate, but allow for both regional and market diversity and innovation. Various time frames, congestion management schemes, ramping rules, ancillary services, and uses of resources must be allowed. OASIS II should also support various market models for the trading of transmission and energy, but in a manner that allows for exchange of common data to eliminate input redundancy. ~~This means that same data field such as capacity may mean contract path capacity in a contract path model but may mean bid capacity in a financial model.~~ [This seems too specific at this point in the 'vision' stage.]

Ensure Reliable System Operations

OASIS II will support submittal of outage and load forecast data by participants. While objectives of OASIS II are the submittal of information by the participants to reliability

entities, additional communications may be defined to support data exchange between reliability entities. OASIS II will ensure data is collected to support timely reliability analysis and operational management of the electric grid. As such, the data needs of reliability entities as defined in the NERC Functional Model will be considered in OASIS II.

Accommodate Market Operations for Centralized Markets

OASIS II will provide adequate information to support a variety of market operations for centralized markets. While the actual market operation functions are not part of the OASIS II scope, OASIS II must include provisions for automated data exchange to allow the market operation to perform functions such as analyze offers and bids, clear the markets and calculate LMP or other market calculations.

Accommodate Data Publishing to Industry

OASIS II will provide adequate information to support a variety of market analysis by participants. This includes provision of automated data exchange to analyze market conditions, review current operation statuses (i.e. ATC, outages), informal and/or formal bulletin boards to match buyers and suppliers etc. [The heading of this section does not seem to match the content of the paragraph.]

Support Market Monitoring

OASIS II will provide the capability for access to and viewing of data by market monitors. Market Monitors may also require access to data that will not be provided by OASIS II, such as proprietary transaction information, or may require immediate access to data that may not immediately be available to all market participants on OASIS II. [It would seem that the Market Monitor would have to at least know about bilateral transactions so that he could 'see' the entire market place. Therefore, there would need to be a way he sees this information while others would not.]

Provide Standards for Electronic Data Communication

OASIS II systems will be developed with consistent electronic interfaces (e.g., common nomenclatures, common data models, etc…). The consistent electronic interfaces will facilitate a market participant's ability to implement transactions through a single portal. OASIS II will also define user interface standards such as common navigational paradigms for each user class (e.g. marketer, transmission provider, etc…). [Does single portal mean just 1 port of entry for the data? If so, there would need to be a back-up entry system to prevent single mode failure that shuts down the market.]

Function Consistently and Reliably

OASIS II systems will be reliable. Hardware and software systems should exist to ensure that the OASIS II system is consistently available. Systems will be compliant with Industry Standards, tested, and correctly implemented prior to being allowed to participate as an OASIS II system. Systems will also provide for secure communications to ensure both the integrity of data exchange and protection of confidentiality of all information. OASIS II systems will also meet performance requirements for the exchange of data and completion of all related processes. [What organization would enforce compliance with the OASIS II standards? A standard 'test suite' needs to be developed.]

Implement in a Cost-Effective Manner

Finally, implementation of OASIS II systems will be managed in a cost effective manner. Technical standards will be developed in light of current industry trends and widely available software tools that will reduce the cost of implementation. The architecture willt be both hardware and software platform independent. Selection of technologies that have already achieved a wide degree of standardization and adoption through other standards bodies (e.g., W3C, OASIS, ebXML etc.) should be evaluated for applicability to OASIS II. To promote a cost effective transition from existing system implementations (e.g., OASIS 1A, e-Tagging, etc.), the leveraging of concepts and components from these existing systems should be evaluated wherever practical.