

FEDERAL ENERGY REGULATORY COMMISSION

STANDARDS

AND

COMMUNICATION PROTOCOLS

FOR

OPEN ACCESS SAME-TIME INFORMATION SYSTEM

(OASIS)

Phase IA

(with additional OASIS How Working Group additions highlighted)

Version 1.2

(August 11, 1997)

4.2.7.5 Continuation Records

Continuation records shall be used to indicate that the information in multiple rows (records) is part of one logical record. Continuation records will be indicated through the use of a column header called CONTINUATION_FLAG. This column header is either the first column (if in a response to a query) or second column (if in a response to an input) in all Templates permitting continuation records. The first record shall contain a "N" in the CONTINUATION_FLAG column and each following record which is part of a continuation record shall contain a "Y" in this column, thus associating the information in that record with the information in the previous record. An "N" shall indicate that the record is not a continuation record. Any values corresponding to COLUMN_HEADERS other than those explicitly allowed for a particular Template shall be ignored. However commas must be included to properly align the fields.

4.2.10 Transaction Process

4.2.10.1 Purchase Transactions

Customers shall purchase services from the Seller using the following steps (see Exhibit 4-1):

- a. The Templates (*transrequest* and *ancrequest*) shall be used by a Customer to enter a request for specific transmission services from a specific Seller. The Customer may enter a *BID_PRICE* which is different from the *OFFER_PRICE* in order to try to negotiate a lower price. The OASIS sets the initial *STATUS* of the request to *QUEUED*. If the Request is *PRECONFIRMED*, then the OASIS shall set the *OFFER_PRICE* in the request to match the customer's *BID_PRICE*. The Customer may set the *STATUS_NOTIFICATION* to indicate that the OASIS must notify the Customer on any change of *STATUS* of *transstatus* (see Dynamic Notification).
- b. The Templates (*transstatus* and *ancstatus*) shall be used by Customers and Sellers to monitor the status of their transactions in progress. These Templates shall also be used by any Users to review the status of any transactions. The *NEGOTIATED_PRICE_FLAG* data element is set when the Seller agrees to a *BID_PRICE* (by setting *OFFER_PRICE* equal to *BID_PRICE*) that is different from the previously posted price. It will show "higher" when *OFFER_PRICE* is higher than the posted price, and "lower" when the *OFFER_PRICE* is lower than the posted price.
- c. The Templates (*transsell* and *ancsell*) shall be used by a Seller both to set a new value into *STATUS* and to negotiate a price by entering a new *OFFER_PRICE* which is different from the *BID_PRICE* entered by the Customer in the *transrequest* Template (if it was not *PRECONFIRMED*). During these negotiations, a Reseller shall formally indicate the approval or disapproval of a transaction and indicate which rights from prior confirmed reservations are to be reassigned. A Primary Provider may, but is not required, to enter transaction approval or disapproval using this Template. The valid *STATUS* values which may be set by a Seller are: *RECEIVED*, *STUDY*, *OFFER*, *ACCEPTED*, *REFUSED*, *DISPLACED*, *ANNULLED*, or *RETRACTED*.
- d. The Customer shall use the *transstatus* and *ancstatus* Templates to view the Seller's new offer price and/or approval/disapproval decision.
- e. After receiving notification of the transaction's *STATUS* being set to "OFFER" by the Seller, the Templates (*transcust* and *anccust*) shall be used by the Customer to modify the *BID_PRICE* and set the *STATUS* to *REBID*. After negotiations are complete (*STATUS* set to "ACCEPTED" by the Seller), the Customer shall formally enter the confirmation or withdrawal of the offer to purchase services for the *OFFER_PRICE* shown in the *transstatus* Template. The valid *STATUS* values which a Customer may set are: *REBID*, *CONFIRMED*, or *WITHDRAWN*.

- f. The Seller shall use the *transstatus* (*ancstatus*) Template to view the Customer's new bid price and/or confirmation/withdrawal decision, again responding through *transsell* or *ancsell* if necessary. If the Seller offers to sell a service at an OFFER_PRICE less than that posted in the *transoffering* (*ancoffering*) Template, the *transoffering* (*ancoffering*) Template must be updated to reflect the new OFFER_PRICE according to FERC discounting policies.
- g. For deals consummated off the OASIS by a Seller, after the Customer has accepted the offering, the Templates (*transassign* and *ancassign*) may be used by the Seller to notify the Primary Provider of the transfer of rights to the Customer. Continuation records may be used to indicate the reassigning of rights for a "profile" of different assignments and different capacities over different time periods.
- h. The source of all user and seller contact information shall be the User registration process. Therefore, it shall not be input as part of uploads, but shall be provided as part of all transaction downloads.
- i. OASIS shall accept a seller initiated change in STATUS to ACCEPTED only when OFFER_PRICE matches BID_PRICE (i.e., seller must set OFFER_PRICE equal to BID_PRICE prior to or coincident with setting STATUS to accepted)
- j. OASIS shall accept a customer initiated change in STATUS to CONFIRMED only when BID_PRICE matches OFFER_PRICE (i.e., customer must set BID_PRICE equal76 OFFER_PRICE prior to or coincident with setting STATUS to confirmed)..

4.3.2.1 Transmission Capacity Offerings Available for Purchase (transoffering)

Transmission Services Offerings Available for Purchase (*transoffering*) is used to offer transmission services that are posted for sale by the Primary Provider or Resellers. At a minimum this Template must be used to post TTC and each increment and type of service required by applicable regulations and the Primary Provider's tariffs.

This Template must include, for each posted path, the Primary Provider's TTC, firm ATC and non-firm ATC, as required by FERC orders 888 and 889 (plus revisions) and/or if provided in the Primary Provider's tariff. Additional transmission services may be offered with the same Template.

The POSTING_REF is set by the TSIP when an offering is posted and can be used in *transrequests* to refer to a particular offering.

A User may query information about services available from all sellers for the time frame specified by the SERVICE_INCREMENT data element, namely, hourly, daily, weekly, monthly, or yearly.

Template: **transoffering**

1. Query

PATH_NAME*
SELLER_CODE*
SELLER_DUNS*
POINT_OF_RECEIPT*
POINT_OF_DELIVERY*
SERVICE_INCREMENT*
TS_CLASS*
TS_TYPE*
TS_PERIOD*
START_TIME (of transmission services)
STOP_TIME (of transmission services)
POSTING_REF
TIME_OF_LAST_UPDATE

2. Response

The response is one or more records showing the requested service information. Note that the Customer will receive as a series of records spanning all the SELLER_CODEs, PATH_NAMEs, PORs, PODs, TS_xxx, and the START_TIME/STOP_TIME specified in the query. The SALE_REF is a value provided by the SELLER to identify the transmission service product being sold. The ANC_SVC_REQ indicates all ancillary services required for the specified

transmission services. All Template elements are defined in the Data Element Dictionary.

TIME_OF_LAST_UPDATE
SELLER_CODE
SELLER_DUNS
PATH_NAME
POINT_OF_RECEIPT
POINT_OF_DELIVERY
INTERFACE_TYPE
OFFER_START_TIME
OFFER_STOP_TIME
START_TIME
STOP_TIME
CAPACITY
SERVICE_INCREMENT
TS_CLASS
TS_TYPE
TS_PERIOD
TS_WINDOW
TS_SUBCLASS
ANC_SVC_REQ
SALE_REF
POSTING_REF
CEILING_PRICE
OFFER_PRICE
PRICE_UNITS
SERVICE_DESCRIPTION (if null, then look at *transserv*)
NERC_CURTAILMENT_PRIORITY
OTHER_CURTAILMENT_PRIORITY
SELLER_NAME
SELLER_PHONE
SELLER_FAX
SELLER_EMAIL
SELLER_COMMENTS

4.3.3.1 Transmission Services (transserv)

Transmission Services (*transserv*) is used to provide additional information regarding the transmission services SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, TS_SUBCLASS, TS_WINDOW, **NERC_CURTAILMENT_PRIORITY**, and **OTHER_CURTAILMENT_PRIORITY** that are available for sale by a Provider in the Templates in Section 4.3.2. This Template is used to summarize Provider tariff information for the convenience of the User. The Provider also sets PRICE_UNITS with this Template.

Template: **transserv**

1. **Query**

TIME_OF_LAST_UPDATE

2. **Response**

TIME_OF_LAST_UPDATE

SERVICE_INCREMENT

TS_CLASS

TS_TYPE

TS_PERIOD

TS_WINDOW

TS_SUBCLASS

CEILING_PRICE

PRICE_UNITS

SERVICE_DESCRIPTION

NERC_CURTAILMENT_PRIORITY

OTHER_CURTAILMENT_PRIORITY

TARIFF_REFERENCE

4.3.4 Query/Response of Schedules and Curtailments

4.3.4.1 Hourly Schedule (schedule)

Hourly Schedule (*schedule*) is used to show what a Provider's scheduled transmission capacity usage actually was for specific Paths. All the information provided is derived from that in the transmission reservation (see Template *transstatus*), except CAPACITY_SCHEDULED, which is the amount of the reservation which was scheduled. Posting of the schedules is organized around the transmission reservations, not the energy schedules. This may require the Primary Provider to map schedules back to the reservation. These records would have to be created for all reservations/schedules done off the OASIS during the operations scheduling period.

Template: **schedule**

1. Query

PATH_NAME*
SELLER_CODE*
SELLER_DUNS*
CUSTOMER_CODE*
CUSTOMER_DUNS*
POINT_OF_RECEIPT*
POINT_OF_DELIVERY*
SERVICE_INCREMENT*
TS_CLASS*
TS_TYPE*
TS_PERIOD*
START_TIME
STOP_TIME
TIME_OF_LAST_UPDATE
ASSIGNMENT_REF

2. Response

TIME_OF_LAST_UPDATE
SELLER_CODE
SELLER_DUNS
PATH_NAME
POINT_OF_RECEIPT
POINT_OF_DELIVERY
CUSTOMER_CODE
CUSTOMER_DUNS
AFFILIATE_FLAG

START_TIME	(start time of schedule)
STOP_TIME	(stop time of schedule)
CAPACITY	(reserved)
CAPACITY_SCHEDULED	(total of energy scheduled for this customer for this reservation for this hour)
SERVICE_INCREMENT	
TS_CLASS	
TS_TYPE	
TS_PERIOD	
TS_WINDOW	
TS_SUBCLASS	
NERC_CURTAILMENT_PRIORITY	
OTHER_CURTAILMENT_PRIORITY	
ASSIGNMENT_REF	(Last rights holder)

4.3.4.2 Curtailment/Interruption (curtail)

Curtailment/Interruption (*curtail*) provides additional information about the actual curtailment of transmission reservations that have been scheduled for energy exchange. All fields are derived from the reservation except the CAPACITY_CURTAILED, CURTAILMENT_REASON and CURTAILMENT_OPTIONS. These fields provide information on the reasons for the curtailment, procedures to be followed and options for the Customer, if any, to relieve the curtailment.

Template: **curtail**

1. Query

PATH_NAME*
 SELLER_CODE*
 SELLER_DUNS*
 CUSTOMER_CODE*
 CUSTOMER_DUNS*
 POINT_OF_RECEIPT*
 POINT_OF_DELIVERY*
 SERVICE_INCREMENT*
 TS_CLASS*
 TS_TYPE*
 TS_PERIOD*
 START_TIME
 STOP_TIME
 TIME_OF_LAST_UPDATE
 ASSIGNMENT_REF

2. Response

TIME_OF_LAST_UPDATE
SELLER_CODE
SELLER_DUNS
PATH_NAME
POINT_OF_RECEIPT
POINT_OF_DELIVERY
CUSTOMER_CODE
CUSTOMER_DUNS
AFFILIATE_FLAG
START_TIME (Start time of curtailment)
STOP_TIME (Stop time of curtailment)
CAPACITY (Capacity reserved)
CAPACITY_SCHEDULED
CAPACITY_CURTAILED
SERVICE_INCREMENT
TS_CLASS
TS_TYPE
TS_PERIOD
TS_WINDOW
TS_SUBCLASS
NERC_CURTAILMENT_PRIORITY
OTHER_CURTAILMENT_PRIORITY
CURTAILMENT_REASON
CURTAILMENT_PROCEDURES
CURTAILMENT_OPTIONS
ASSIGNMENT_REF

4.3.5 Query/Response of Lists of Information

4.3.5.1 List (list)

List (*list*) is used to provide lists of valid names. The minimum set of lists is LIST, SELLER_CODEs, PATHs, PORs, PODs, SERVICE_INCREMENTs, TS_CLASSes, TS_TYPEs, TS_PERIODs, NERC_CURTAILMENT_PRIORITY, OTHER_CURTAILMENT_PRIORITY, ANCILLARY_SERVICE_TYPEs, CATEGORYs, and TEMPLATEs. These names may be used to query information, post or request services.

Template: **list**

1. **Query**

LIST_NAME
TIME_OF_LAST_UPDATE

2. **Response**

TIME_OF_LAST_UPDATE
LIST_NAME
LIST_ITEM
LIST_ITEM_DESCRIPTION

4.3.7.2 Status of Customer Purchase Request (transstatus)

The **Status of Customer Purchase Request** (*transstatus*) is provided upon the request of any Customer or Provider to indicate the current status of one or more reservation records. Users may also view any transaction's status. However, the SOURCE and SINK may be masked for User requests if this is in compliance with the Primary Provider tariff. No other data elements may be masked.

Only the following fields may be redefined in a continuation record for the *transstatus* response Template: PATH_NAME, CAPACITY, START_TIME, STOP_TIME, REASSIGNED_REF, REASSIGNED_CAPACITY, REASSIGNED_START_TIME, and REASSIGNED_STOP_TIME.

The AFFILIATE_FLAG will be set by the TSIP to indicate whether or not the Customer is an affiliate of the Primary Provider. The NEGOTIATED_PRICE_FLAG will be set by the TSIP to indicate whether the OFFER_PRICE is higher, lower, or the same as the BID_PRICE.

Template: **transstatus**

1. Query

SELLER_CODE*
SELLER_DUNS*
CUSTOMER_CODE*
CUSTOMER_DUNS*
PATH_NAME*
POINT_OF_RECEIPT*
POINT_OF_DELIVERY*
SERVICE_INCREMENT*
TS_CLASS*
TS_TYPE*
TS_PERIOD*
STATUS*
START_TIME (Beginning time of service)
STOP_TIME
START_TIME_QUEUED (Beginning time queue)
STOP_TIME_QUEUED
NEGOTIATED_PRICE_FLAG
ASSIGNMENT_REF
REASSIGNED_REF
SALE_REF
REQUEST_REF
DEAL_REF

TIME_OF_LAST_UPDATE

2. **Response**

CONTINUATION_FLAG

ASSIGNMENT_REF

SELLER_CODE

SELLER_DUNS

CUSTOMER_CODE

CUSTOMER_DUNS

AFFILIATE_FLAG (Set by TSIP)

PATH_NAME

POINT_OF_RECEIPT

POINT_OF_DELIVERY

SOURCE

SINK

CAPACITY (total reservation)

SERVICE_INCREMENT

TS_CLASS

TS_TYPE

TS_PERIOD

TS_WINDOW

TS_SUBCLASS

NERC_CURTAILMENT_PRIORITY

OTHER_CURTAILMENT_PRIORITY

START_TIME

STOP_TIME

CEILING_PRICE

OFFER_PRICE

BID_PRICE

PRECONFIRMED

ANC_SVC_LINK

ANC_SVC_REQ

ALTERNATE_SERVICE_FLAG

POSTING_REF

SALE_REF

REQUEST_REF

DEAL_REF

NEGOTIATED_PRICE_FLAG ("L" if Seller accepted Price is lower than OFFER_PRICE in *transoffering* Template; "H" if higher; otherwise blank)

STATUS= **RECEIVED, QUEUED, STUDY, REBID, OFFER, ACCEPTED,**

**REFUSED, CONFIRMED, WITHDRAWN, DISPLACED,
ANNULLED, RETRACTED**

STATUS_NOTIFICATION
STATUS_COMMENTS
TIME_QUEUED
RESPONSE_TIME_LIMIT
TIME_OF_LAST_UPDATE
PRIMARY_PROVIDER_COMMENTS
SELLER_COMMENTS
CUSTOMER_COMMENTS
SELLER_NAME
SELLER_PHONE
SELLER_FAX
SELLER_EMAIL
CUSTOMER_NAME
CUSTOMER_PHONE
CUSTOMER_FAX
CUSTOMER_EMAIL
REASSIGNED_REF
REASSIGNED_CAPACITY (Capacity from each previous transaction)
REASSIGNED_START_TIME
REASSIGNED_STOP_TIME

Appendix A
Data Element Dictionary

September, 1997

Version 1.2

Data Dictionary Element Name	Alias	Field Format : minimum characters {type of ASCII} maximum characters	Restricted Values	Definition of Data Element
LIST_ITEM	ITEM	1{ALPHANUMERIC}50	Free form text	Item from list, such as list of SELLERs, list of PATHs, list of PORs, list of PODs, Lists of SERVICE_INCREMENT, TS_CLASS, TS_TYPE, TS_PERIOD, NERC_CURTAILMENT_PRIORITY, OTHER_CURTAILMENT_PRIORITY, SERVICE_INCREMENT, CATEGORY List of TEMPLATES
NERC_CURTAILMENT_PRIORITY	NERCURT	1{NUMERIC}1	Integer 1-7	One of the NERC seven curtailment priorities, documented in LIST template
OTHER_CURTAILMENT_PRIORITY	OTHCUR	0{ALPHANUMERIC}8	Free form text	Other than NERC curtailment priorities, such as regional curtailment priorities. Suggested format region+number, for example MAPP4, WSCC7. Documented in LIST template.
REASSIGNED_START_TIME	RESSTIME	16ALPHANUMERIC}16	Valid date and time to seconds: yyyy+mo+dd+hh+tz	Beginning date and time of the reassigned transmission service
REASSIGNED_STOP_TIME	RESSPIME	16{ALPHANUMERIC}16	Valid date and time to hour: yyyy+mo+dd+hh+tz	Date and time of the end of the transmission service that is reassigned to another User.
STATUS_NOTIFICATION	STATNOT	1{ALPHANUMERIC} 200	http://URL:portnumber/directory/cgi script/query parameters or Mailto: <e-mail address>	The STATUS_NOTIFICATION data element shall contain the protocol field "http:", which designates the notification method/protocol to be used, followed by all resource location information required; the target domain name and port designations shall be inserted into the notification URL based on the Customer's Company registration information. The resource location information may include directory information, cgi script identifiers and URL encoded query string name/value pairs as required by the Customer's application. or mailto and email address for the status information the Customer wants to receive upon a change in STATUS of transstatus, or ancstatus

