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#### UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman;
Vicky A. Bailey, William L. Massey,
Linda Breathitt, and Curt Hébert, Jr.

Open Access Same-time Information
System (OASIS) and Standards of ) Docket No. RM95-9-003
Conduct

ORDER ON TRANSITION FROM OASIS PHASE I TO
OASIS PHASE IA AND AUTHORIZING PROPOSED PHASE IA
AUDIT REPORTING EXPERIMENT

(Issued February 10, 1999)

In this order, we address a proposed transition plan for migrating from Open Access Same-time Information System (OASIS) Phase I to OASIS Phase IA submitted by the OASIS How Working Group (How Group). 1/ We also grant a request from the How Group to allow an experiment, starting on March 1, 1999, to test their proposed procedures formulated to significantly advance audit capabilities for OASIS.

#### Background

In Order No. 889, 2/ the Commission required public utilities that own, control, or operate facilities used for the transmission of electric energy in interstate commerce to create or participate in an Internet-based information system, called

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During a technical conference held by the Commission's staff in July 1995, a consensus developed that two industry groups should be formed, one dealing with "what" information should be posted on the network and the other dealing with "how" to design the OASIS. The "what" group would be facilitated by the North American Electric Reliability Council and the "how" group would be facilitated by the Electric Power Research Institute. See Real-Time Information Networks, Notice of Timetable and Opportunity for Participation in Industry Working Groups, FERC Stats. & Regs. ¶ 35,029 (1995).

Open Access Same-Time Information System (Formerly Real-Time Information Networks) and Standards of Conduct, Order No. 889, FERC Stats. & Regs. ¶ 31,035 at 31,583 (1996), order on reh'g, Order No. 889-A, FERC Stats. & Regs. ¶ 31,049 (1997), order on reh'g, Order No. 889-B, 81 FERC ¶ 61,253 (1997).

OASIS. The rules established in Order No. 889 were for a basic (Phase I) OASIS. OASIS Phase I became operational on January 3, 1997, and a total of 22 nodes serve approximately 167 transmission providers. Order No. 889 also contemplated that an enhanced (Phase II) OASIS would be established in the future. March 1997, the Commission issued Order No. 889-A, requiring online negotiations for discounts as well as the posting of discounts on the OASIS. In a June 1998 order, 3/ we adopted a comprehensive update of the OASIS Standards and Communications Protocols Document (Phase IA S&CP) that implements on-line negotiations as well as improvements suggested by the industry for OASIS. 4/ The Phase IA rules are expected to improve the operations of the basic Phase I OASIS prior to the development of the enhanced OASIS Phase II. On January 27, 1999, the Commission issued a Notice of Proposed Rulemaking (NOPR) proposing to adopt a set of uniform business practices implementing the Commission's policies on transmission service price negotiation and improving interactions between transmission providers and customers over OASIS nodes. 5/

On October 14, 1998, the How Group filed a letter with the Commission outlining a proposed transition schedule for migrating from OASIS Phase I to OASIS Phase IA and seeking approval to conduct the above-referenced experiment on audit reporting procedures.

The How Group's proposed transition plan recommends a sequence of steps for the transition to OASIS Phase IA to allow adequate testing, training, and orderly transfer of data with a minimal disruption of business activities. The How Group recommends six migration steps in order to promote an orderly

Open Access Same-Time Information System and Standards of Conduct, 83 FERC ¶ 61,360 at 62,452 (1998) (June 18 Order).

<sup>4/</sup> OASIS "Phase IA" is a label devised by the industry to refer to revisions to the OASIS Phase I requirements that the Commission asked the industry to devise to implement the Commission's findings in the OASIS Final Rule on the on-line negotiation of discounts. See Open Access Same-Time Information System and Standards of Conduct, 83 FERC ¶ 61,360 at 62,452 (1998). OASIS Phase IA implementation was scheduled to become effective on December 1, 1998. The Commission, however, granted a three-month extension of time for implementing Phase IA to require implementation by March 1, 1999. See Open Access Same-Time Information System and Standards of Conduct, 84 FERC ¶ 61,329 (1998).

<sup>5/</sup> Open Access Same-Time Information System and Standards of Conduct, Notice of Proposed Rulemaking, FERC Stats. & Regs. (1999) (January 27 NOPR).

transition. The six steps consist of: (1) development of registration facilities; (2) testing of OASIS Phase IA; (3) complete registration of all entities; (4) industry training; (5) public training; and (6) final data transfer, start up of OASIS Phase IA and shut down of OASIS Phase I.

In its letter, the How Group notes that audit reporting as defined by the auditlog template in the OASIS Phase IA S&CP document is limited to reporting all changes to OASIS data elements that occurred over a specific interval in time. The How Group states that any attempt to determine the time sequence of events surrounding an offer for service or a reservation requires the user to sort through voluminous information in order to recover the information of interest. In addition, another limitation of the current auditlog template is that the identity of the person who made a modification to the data is not available.

The proposed experiment would allow transmission providers voluntarily to develop advanced audit capabilities. Any jurisdictional transmission provider choosing not to participate in the experiment would be required to comply with the Phase IA S&CP document. The experiment is designed to provide an efficient and effective means to recover audit data with a minimum amount of reconstruction by the user to ascertain the time sequence of specific events. The new audit templates proposed in the experiment are an extension of the existing Phase IA "query/response" templates used for service requests and allow the user to search and refine specific information through a selective query capability. We have included a copy of the proposed experiment without the How Group's introductory comments in Attachment 1. The How Group's letter explains how, under its proposal, audit requests would be processed:

The proposed audit reporting function is centered on providing a time sequence of changes made to data elements associated with those templates that provide for the insertion/posting, updating, and/or deleting of information on OASIS. The data records returned to the user basically represent a "snapshot" of the data elements associated with a particular template as they appeared immediately after being updated along with an identification of the party performing the update and the time the update was applied. [6/]

The How Group asks us to approve the implementation of its proposal for an experiment on audit reporting requirements. The How Group states that within the first six months of operation,

<sup>6/</sup> How Letter at Attachment 2.

they will undertake an evaluation of the experiment and make a recommendation to the Commission.

#### Notice and Comments

Notice of the How Group's letter was published in the Federal Register, 63 Fed. Reg. 58,031 (1998), with comments due on or before November 9, 1998. None was filed.

#### Discussion

#### A. Migration Schedule

The How Group proposes to shift from OASIS Phase I to Phase IA in a series of steps. These are discussed below.

#### Registration

The How Group recommends that all entities or persons using OASIS should be required to register the identity of their organization or person at the OASIS Home Page at www.tsin.com, and renew the registration annually. The How Group proposes that an annual nominal registration fee be charged to cover the cost of the registration process and maintenance of the OASIS Home Page. In addition, the How Group recommends that transmission providers should be required to register their points of receipt and points of delivery in a consistent manner. The How Group notes that, prior to offering transmission and ancillary services products that do not fit the standard attribute value definitions, transmission providers should be required to register the product attribute values via the OASIS Home Page, and uniquely and unambiguously define their attributes.

In the NOPR, we addressed the same registration issues that the How Group discusses in its letter. For example, in Standard 3.1, the Commission proposed to require that: "All entities or persons using OASIS shall register the identity of their organization (including DUNS number) or person at the OASIS Home Page at www.tsin.com. Registration shall be completed prior to the commencement of Phase IA and renewed annually by January 1st of each year thereafter and within 48 hours of any changes in identification." 7/

We note that, prior to taking final action on the NOPR, we are inviting comments from interested persons on all of the NOPR's proposals, including the registration procedures. Thus, we are not requiring compliance with the NOPR's registration procedures at this time. However, transmission providers may

<sup>1/</sup> January 27 NOPR, FERC Stat. & Regs. ¶ \_\_, slip op. at 40
(1999).

implement the NOPR's proposed registration procedures, including a registration fee, on an interim basis now, subject to the outcome of a final rule. All jurisdictional transmission providers will be required to comply with the final rules we adopt on these issues.

#### Training

The How Group proposes a period for hands-on training by transmission customers and transmission providers on OASIS Phase IA. The How Group also recommends that two public training workshops be conducted in order to facilitate understanding of the new procedures.

We agree with the How Group that the training of all entities and users is an important step in the transition period. To this end, we encourage the How Group to schedule and implement its training proposal.

## Final Data Transfer, Start Up of Phase IA and Shut Down of Phase I

The How Group proposes that OASIS node operators will take Phase I off-line at 00:00:01 local time on Sunday, February 28, 1999, and bring up Phase IA no later than 00:00:01 local time on Monday, March 1, 1999. The 24-hour period will be used to transfer data to Phase IA and perform testing. The How Group also proposes that business be transacted off the OASIS while the nodes are off-line and that any requests be posted on Phase IA nodes within 24 hours after the systems are brought back on-line.

The How Group also proposes that at a minimum, the following critical data be transferred to Phase IA:

- All reservations (both transmission and ancillary services)
  whose Stop\_Times are no more than 90 days old. This
  includes all future reservations. The assignment reference
  number (ASSIGNMENT\_REF) for each reservation will be
  retained.
- All schedules and curtailments that were posted for these reservations.
- All secondary market postings. The posting reference number (POSTING\_REF) for each offering will be retained.
- All transmission and ancillary services offerings on OASIS Phase I, with service beginning or continuing through March 1, 1999 or later.

We will grant the request for a 24 hour period within which to transfer the data to Phase IA. Furthermore, we will grant the How Group's request to allow transactions to occur off the OASIS during this migration period. We note, however, that all relevant information concerning the off OASIS transactions during the migration period must be posted on the Phase IA node within 24 hours of Phase IA activation and no later than 00:00:01 local time on March 2, 1999.

We agree with the How Group that the information listed above should be transferred from Phase I to Phase IA. However, we clarify that transferring reservations whose Stop\_Times are no more than 90 days old includes transferring all templates containing associated information, such as reservation requests, offers of service associated with the reservation and the status of the reservation. Likewise, all offerings and reservations from OASIS Phase I with service beginning or continuing after March 1, 1999 will be transferred to Phase IA.

Furthermore, the How Group proposes an additional procedure to facilitate the transition process:

 Any audit data that is required from an OASIS Phase I system will only be available off-line. Any requests for historical ATC information, prior to the cutoff, will be handled off-line.

We will grant the How Group's request to keep the Phase I audit log and ATC information off-line. Therefore, we will grant a waiver of our requirement to maintain audit data on the OASIS for 90 days and keep ATC/TTC postings on the OASIS for 20 days. 8/ Under our regulations, however, transmission providers are still required to maintain the audit data for three years upon request for download in the same electronic form as used when the information was originally posted on the OASIS. 9/

As for any other Phase I information not transferred to Phase IA, transmission providers are required to keep this information off-line for three years, the period required by the Commission's regulations.

#### B. Audit Experiment

The OASIS regulations provide, at 18 C.F.R. § 37.7(a) (1998), that "all OASIS database transactions, except other transmission-related communications provided for under § 37.6(g)(2), must be stored, dated and time stamped." This audit data must remain on the OASIS for downloading for 90 days, except for ATC/TTC postings that must remain on the OASIS for 20

<sup>8/</sup> See 18 C.F.R. § 37.7(b) (1998).

<sup>9/</sup> See id.

days. <u>10</u>/ After 90 days, the audit data must be available for three years upon request for download in the same electronic form as used when they originally were posted on the OASIS. <u>11</u>/

The How Group indicates that the audit capability in the current Phase IA design is an inefficient means to obtain useful and historical information. The How Group further states that the present abilities to search and report information are limited and that a significant burden is placed on the user to sort through extraneous information. To remedy this problem, the How Group proposes the audit experiment.

After a review of the How Group's request, we find that the How Group's proposal may promote efficiency and clarity in audit reporting. We agree that the current auditlog reporting requirements need refinement. The How Group's proposal is an improvement to the status quo and we appreciate the How Group's efforts in this direction. Accordingly, during the experimental period, we will allow transmission providers to use the new audit templates identified by the How Group.

In addition, the How Group requests that transmission providers who participate in the experiment be granted a waiver from the present requirement to support the auditlog template as defined in the OASIS Phase IA S&CP. We will grant this request, in part, to waive compliance with the audit capabilities defined in the OASIS Phase IA S&CP. We will, however, require transmission providers to maintain this information off-line and to make it available upon request.

#### The Commission orders:

- (A) The request of the How Group for a 24 hour migration period from Sunday February 28, 1999 at 00:00:01 until March 1, 1999 at 00:00:01 is hereby granted, as discussed in the body of this order.
- (B) The request to keep the OASIS Phase I auditlog and ATC information off-line after the start of Phase IA is hereby granted, as discussed in the body of this order.
- (C) The request of the How Group for authorization of a voluntary experiment on audit reporting procedures is hereby granted, as discussed in the body of this order. The experiment will commence on March 1, 1999, the in-service date of OASIS Phase IA.

<sup>10/</sup> See 18 C.F.R. § 37.7(b) (1998).

<sup>11/</sup> See Order No. 889-A, FERC Stats. & Regs. ¶ 31,049 at 30,573 (1996).

- (D) The request for waiver of the present requirement to support the auditlog template as defined in OASIS Phase IA S&CP is hereby granted in part, as discussed in the body of this order.
- (E) The How Group is hereby directed to file a report by September 1, 1999, assessing the new auditing procedures, comparing the procedures before and after the implementation of the audit experiment, and advising the Commission on what, if any, revisions to the OASIS S&CP or the Commission's regulations are needed to accomplish any proposed changes in procedures.

By the Commission.

(SEAL)

inwood A. Watson, Jr.,
Acting Secretary.

# Attachment 1 OASIS Phase IA Audit Reporting Experiment

#### 1. Introduction

The proposed audit reporting is based on the definition of a set of specific audit templates which are extensions to existing Phase IA templates. Each of these audit templates shall support exactly the same set of query variables as defined for the corresponding Phase IA templates, and shall return to the user a fixed set of audit specific data elements followed by the fixed set of response data elements as defined in the Phase IA templates. For the duration of the experiment, additional implementation specific audit related information may be included in the audit reports as additional columns (and identified by unique COLUMN\_HEADERS) of information following the fixed audit and template related data elements.

The contents of the response generated by an audit report template shall be based on the selection of all pertinent current information in the OASIS database as defined by the application of all user supplied query variables. This information selected is basically the same set of information that would be returned to the user if the same set of query variables were passed to the corresponding non-audit OASIS Phase IA template. For each record of information selected by the user's query variables, the audit templates would also include in the response a time stamped history of all changes made to that posted information and the identity of the person/entity that made those changes.

#### 1.1 Audit Templates

The audit report facility shall be implemented by the definition of the following new templates:

Transofferingaudit - audit counterpart to transoffering ancofferingaudit - audit counterpart to ancoffering scheduleaudit - audit counterpart to schedule curtailaudit - audit counterpart to curtail transstatusaudit - audit counterpart to transstatus ancstatusaudit - audit counterpart to ancstatus personnelaudit - audit counterpart to personnel discretionaudit - audit counterpart to discretion stdconductaudit - audit counterpart to stdconduct

Each of these audit templates is an extension to the Phase IA definitions of their non-audit counterpart templates as defined in the following sections.

#### 1.2 Query Variables

Each of the audit templates defined for the experiment shall support exactly the same set of query variables as defined for the non-audit Phase IA template counterpart. As with the standard template definitions, audit reports may be downloaded in Comma Separated Value (CSV) format by the specification of the OUTPUT\_FORMAT=DATA query variable, or may be viewed using a web browser when OUTPUT FORMAT=HTML is specified.

#### 1.3 Audit Report Response Format

Audit report information shall be returned in response to a valid query request made to any of the audit templates defined. Query variables may be specified as allowed by each individual template and shall have the effect of limiting the scope of audit data returned to that set of information selected by that combination of additional query variables.

The response to an audit query shall consist of ordered sets of information reflecting both the current information as posted on OASIS and the full history of changes made to that information. The specific audit report response format is detailed in the following sections.

#### 1.3.1 Comma Separated Value (CSV) Format

A CSV formatted audit template response shall comply with all the general provisions and specifications defined in the OASIS Phase IA S&CP document for a CSV formatted response. The CSV response records shall be organized in sets of records containing both the latest information posted on OASIS and all changes made to that information over time.

#### 1.3.1.1 Response Header Records

The following additional data element names shall be included as the first set of data elements in the COLUMN\_HEADERS record and the corresponding data element values shall be included in each subsequent data record (row) returned in the audit response:

RECORD\_TYPE '
TIME\_OF\_LAST\_UPDATE
MODIFYING\_COMPANY\_CODE
MODIFYING\_NAME

These data elements shall precede the standard data elements associated with the specific template being invoked.

The RECORD\_TYPE data element shall take on one of the following restricted values:

- I denotes a record of information as it appeared on its initial Insertion (posting) on OASIS
- U denotes a record of information as it appeared immediately following an Update to the posted information
- D denotes a record of any Deleted information as it last appeared on OASIS.

The TIME OF LAST UPDATE data element shall contain the time that the template data elements were inserted, updated or deleted to the values reported in that record (row) of the response. This data element is identical to the standard template TIME OF LAST UPDATE data element, and is included as part of the fixed audit specific data element columns to aid users in sorting the audit response records.

The MODIFYING\_COMPANY\_CODE and MODIFYING\_NAME data elements shall contain the identity of the entity (by the appropriate 4-6 character customer/provider code) and the person that inserted, updated or deleted the data elements to the values reported in that record (row) of the response. In the event the modification of posted information cannot be associated with a specific OASIS user (e.g., as a result of an automated back-end process), the MODIFYING NAME data element may be null.

Immediately following the MODIFYING\_NAME column header, each of the standard non-audit counterpart template's data elements shall be listed in the exact sequence defined for that non-audit template.

Finally, experiment participants may include additional data elements identified by unique column headers appended after the fixed audit and standard template data elements. These additional data elements may be used to convey implementation specific information maintained in the OASIS database in association with the data being audited.

#### 1.3.1.2 Data Records

In formatting an audit response, OASIS shall collect and order information into sets of data records (rows). Each set of records returned shall include a record corresponding to the information as originally inserted into the OASIS database

denoted by a RECORD\_TYPE of "I", and as many additional records with RECORD\_TYPE of "U" corresponding to each update made to that information over time. If applicable, a record may also be returned in the set with a RECORD\_TYPE of "D" if the corresponding information was effectively deleted from the database.

The number of sets of audit report records returned in response to an audit query shall be determined by the number and type of additional template query variables specified by the user.

#### 1.3.1.3 Continuation Records

Continuation records are used in certain standard Phase IA templates to report repeating data elements associated with a single OASIS transaction such as demand profiles or the reassignment of rights on the secondary market. The first (CONTINUATION\_FLAG=N) record and all associated continuation (CONTINUATION\_FLAG=Y) records shall be treated as a group when generating the response to an audit query.

To minimize the volume of information reported in an audit response, implementations may elect to suppress repeating the contents of information contained in continuation records if none of the data elements associated with those continuation records were modified. If, however, the data element(s) to be reported by an audit record are contained in one or more of the continuation records (e.g., a change was made to a transmission reservation's demand profile), the first (CONTINUATION\_FLAG=N) record followed by the entire group of continuation (CONTINUATION FLAG=Y) records shall be reported.

#### 1.3.2 HTML Output

HTML Format Specification of the query variable OUTPUT\_FORMAT=HTML shall minimally result in an audit report formatted identically to the CSV Format (OUTPUT\_FORMAT=DATA) with the exception that the response shall be returned using the HTTP header "Content-type: text/plain" specification. This will result in the CSV data records being rendered in simple text within the user's web-browser.

More sophisticated HTML formatted responses to audit queries may be provided by the participants at their discretion.

#### 1.4 Special Template Considerations

#### 1.4.1 Transoffering

The transoffering template is used to convey information on

transmission services offered for sale as well as the availability of transmission capability (TTC/ATC). The proposed audit reporting scheme may prove inadequate to generate audits of both the commercial aspects of offers posted on OASIS (i.e., price, etc.) and the reliability aspects associated with those offers (i.e., ATC) depending on how these two different types of information are represented internally by each OASIS node.

For those OASIS implementations that handle TTC/ATC information separately from the posting of commercial offers of service, audit reports generated by the transofferingaudit template may be limited to only reporting changes to the data elements associated with the commercial aspects of the offer (e.g., OFFER\_PRICE, OFFER\_START\_TIME, etc.), and may return a null value for the CAPACITY data element. These nodes shall document and supply a separate audit reporting facility that will allow for the full auditing of changes made to TTC and ATC postings as required under Federal Regulations.

#### 1.4.2 Schedule

The **schedule** template combines information from a transmission reservation with information posted on actual scheduled use of the transmission system under that reservation. Audit reports generated by the **scheduleaudit** template shall be restricted to reporting only the changes to the following data elements:

#### CAPACITY SCHEDULED

Auditing of the other data elements defined in the **schedule** template are available through the **transstatusaudit** template audit reports.

#### 1.4.3 Curtail

The curtail template combines information from a transmission reservation and associated schedule information with information posted on curtailments or interruptions of service under that reservation. Audit reports generated by the curtailaudit template shall be restricted to reporting only the changes to the following data element:

START\_TIME
STOP\_TIME
CAPACITY\_CURTAILED
CURTAILMENT\_REASON
CURTAILMENT\_PROCEDURE
CURTAILMENT\_OPTIONS

Auditing of the other data elements defined in the curtailaudit template are available through either the transstatusaudit or scheduleaudit template audit reports.

#### 1.5 Audit Report Examples

The following examples are included to show the general type of audit report responses that could be expected to be returned by implementations of the experiment's audit reporting templates as documented above.

#### 1.5.1 Offerings

The following is an example of a hypothetical audit query for daily non-firm offerings to the "DDD" point of delivery for Monday August 17, 1998 (line breaks and indentations added to improve readability):

```
REQUEST STATUS=200
ERROR MESSAGE
TIME STAMP=19980821091601ES
VERSION=1.3
TEMPLATE=transofferingaudit
OUTPUT FORMAT-DATA
PRIMARY_PROVIDER_CODE=WXYZ
PRIMARY PROVIDER DUNS=78912345
RETURN TZ=ES
DATA ROWS=14
COLUMN_HEADERS=RECORD_TYPE, TIME_OF_LAST_UPDATE, MODIFYING_COMPANY_CODE,
 MODIFYING NAME, 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,
 NERC CURTAILMENT PRIORITY, OTHER CURTAILMENT PRIORITY,
 SELLER NAME, SELLER PHONE, SELLER FAX, SELLER EMAIL, SELLER COMMENTS
U, 19980815131756ES, WXYZ,
 Jane Doe, 19980815131756ES,
 WXYZ, 78912345, X/WXYZ/AAA-DDD//, AAA, DDD, E,
 19980814000000ES,19980817000000ES,19980817000000ES,19980B18000000ES,800,
 DAILY, NON-FIRM, POINT TO POINT, FULL PERIOD, FIXED, , SC:M; RF:M, ,
 48732,102.00,85.00,$/MW-Day,,3,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com,
U,19980815124022ES,WXYZ,
 Jane Doe, 19980815124022ES,
 WXYZ,78912345,X/WXYZ/AAA-DDD//,AAA,DDD,E,
 19980814000000ES, 19980817000000ES, 19980817000000ES, 19980818000000ES, 850,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, , SC:M; RF:M, ,
 48732,102.00,85.00,$/MW-Day,,3,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com,
U, 19980814120018ES, WXYZ,
 Joe Smith, 19980814120018ES,
 WXYZ,78912345,X/WXYZ/AAA-DDD//,AAA,DDD,E,
 19980814000000ES, 19980817000000ES, 19980817000000ES, 19980818000000ES, 850,
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 Joe Smith, 123-456-7893, 123-456-7801, smith | @wxyz.com,
I,19980813171204ES,WXYZ,
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Supervisor, 19980813171204ES,
 WXYZ, 78912345, X/WXYZ/AAA-DDD//, AAA, DDD, E,
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 Jane Doe. 19980815124022ES.
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 48783,102.00,85.00,$/MW-Day,,3,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com
U, 19980814120022ES, WXYZ,
 Joe Smith, 19980814120022ES,
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Joe Smith, 123-456-7893, 123-456-7801, smithj@wxyz.com
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 Supervisor, 19980813171210ES,
 WXYZ,78912345,X/WXYZ/BBB-DDD//,BBB,DDD,E,
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 48783,102.00,95.00,$/MW-Day,,3,,
 Supervisor, 123-456-7890, 123-456-7801,
U,19980816101000ES,WXYZ,
 Supervisor, 19980816101000ES,
 WXYZ, 78912345, X/WXYZ/CCC-DDD//, CCC, DDD, E,
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 48820,102.00,102.00,$/MW-Day,,3,,
 Supervisor, 123-456-7810, 123-456-7801,
U,19980814143807ES,WXYZ,
 Supervisor, 19980814143807ES,
 WXYZ,78912345,X/WXYZ/CCC-DDD//,CCC,DDD,E,
 19980814000000ES, 19980817000000ES, 19980817000000ES, 19980818000000ES, 90,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, , SC:M;RF:M, ,
 48820,102.00,102.00,$/MW-Day,,3,,
 Supervisor, 123-456-7890, 123-456-7801,
U, 19980814120023ES, WXYZ,
 Joe Smith, 19980814120023ES,
 WXYZ, 78912345, X/WXYZ/CCC-DDD//, CCC, DDD, E,
 19980814000000ES,19980817000000ES,19980817000000ES,19980818000000ES,110,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL PERIOD, FIXED, , SC:M; RF:M, ,
 48820,102.00,90.00,$/MW-Day,,3,
 Joe Smith, 123-456-7893, 123-456-7801, smithj@wxyz.com
I,19980813171214ES,WXYZ,
 Supervisor, 19980813171214BS,
 WXYZ, 78912345, X/WXYZ/CCC-DDD//, CCC, DDD, E,
 19980814000000ES, 19980817000000ES, 19980817000000ES, 19980818000000ES, 110,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, , SC:M; RF:M, ,
 48820,102.00,95.00,$/MW-Day,,3,,
 Supervisor, 123-456-7890, 123-456-7801,
U, 19980815124023ES, WXYZ,
 Jane Doe, 19980815124023ES,
 WXYZ, 78912345, X/WXYZ/WXYZ-DDD//, WXYZ, DDD, E,
 19980814000000ES,19980817000000ES,19980817000000ES,19980818000000ES,340,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, , SC:M; RF:M, ,
 48855,102.00,85.00,$/MW-Day,,3,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com
```

U,19980814120023ES, WXYZ,
Joe Smith,19980814120023ES,
WXYZ,78912345,X/WXYZ/WXYZ-DDD//,WXYZ,DDD,E,
19980814000000ES,19980817000000ES,19980817000000ES,19980818000000ES,340,
DAILY,NON-FIRM,POINT\_TO\_POINT,FULL\_PERIOD,FIXED,,SC:M;RF:M,,
48855,102.00,90.00,\$/MW-Day,,3,,
Joe Smith,123-456-7893,123-456-7801,smithj@wxyz.com
I,19980813171222ES,WXYZ,
Supervisor,19980813171222ES,
WXYZ,78912345,X/WXYZ/WXYZ-DDD//,WXYZ,DDD,E,
19980814000000ES,19980817000000ES,19980817000000ES,1998081800000ES,340,
DAILY,NON-FIRM,POINT\_TO\_POINT,FULL\_PERIOD,FIXED,,SC:M;RF:M,,
48855,102.00,95.00,\$/MW-Day,,3,,
Supervisor,123-456-7890,123-456-7801,

From this audit report, the daily non-firm offerings on the four paths to "DDD" (AAA-DDD, BBB-DDD, CCC-DDD, and WXYZ-DDD) were all originally posted by WXYZ's "Supervisor" at approximately 17:12 on 8/13 at a price of \$95.00 /MW-Day discounted from a ceiling price of \$102.00.

At approximately 12:00 on 8/14, Joe Smith changed the offer price to \$90.00 on all four paths.

At 14:14 on 8/14, "Supervisor" adjusted the capacity available on path X/WXYZ/CCC-DDD// to 90 MW (POSTING REF = 48820) and set the offer price up to match the tariff ceiling rate (presumably due to the path now being constrained and released from the requirement to have discounted service offered at the same rate as all other unconstrained paths to DDD). Capacity on this path was last updated to a value of 85 MW at 10:10 on 8/16, which is the current information posted on OASIS for this path at the time of the query.

Jane Doe adjusted the price on the three presumably unconstrained paths to DDD at 12:40 on 8/15 to \$85.00, which may have been in response to a negotiation for service on one of these paths. No further updates have occurred to the offerings on paths BBB-DDD and WXYZ-DDD since that time.

Finally, the capacity available on path X/WXYZ/AAA-DDD// was updated by Jane Doe from 850 to 800 MW at 13:17 on 8/15, which may have corresponded with final confirmation of a reservation at a negotiated discount by the customer that initiated the price change from \$90.00 to \$85.00.

#### 1.5.2 Reservations

The following is an example of a hypothetical audit query for a specific transmission service reservation (line breaks and indentations added to improve readability):

REQUEST\_STATUS=200 ERROR\_MESSAGE= TIME\_STAMP=19980821092048ES

```
VERSION=1.3
TEMPLATE=transstatusaudit
OUTPUT FORMAT=DATA
PRIMARY_PROVIDER_CODE=WXYZ
PRIMARY PROVIDER DUNS=78912345
RETURN_TZ=ES
DATA ROWS=9
COLUMN HEADERS=RECORD TYPE, TIME_OF_LAST_UPDATE, MODIFYING_COMPANY_CODE,
 MODIFYING_NAME, CONTINUATION_FLAG, ASSIGNMENT_REF,
 SELLER CODE, SELLER DUNS, CUSTOMER CODE, CUSTOMER DUNS, AFFILIATE FLAG,
 PATH NAME, POINT OF RECEIPT, POINT OF DELIVERY, SOURCE, SINK, CAPACITY,
 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, PRICE_UNITS, PRECONFIRMED, ANC_SVC_LINK,
 ANC SVC REQ, POSTING REF, SALE REF, REQUEST REF, DEAL REF, NEGOTIATED_PRICE_FLAG,
 STATUS, STATUS NOTIFICATION, STATUS COMMENTS, TIME QUBUED, 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 REP, REASSIGNED CAPACITY, REASSIGNED START TIME, REASSIGNED STOP TIME
U, 19980815131629ES, DEFPM,
 Alan Trader, N, 104392,
 WXYZ, 78912345, DEFPM, 912876543, N,
 X/WXYZ/AAA-DDD//, AAA, DDD, AAA, ZZZ, 50,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, ,
 3,,19980817000000BS,19980818000000ES,
 102.00,85.00,85.00,$/MW-Day,N,,
 SC:M; RF:M,,,,,
 CONFIRMED, , , 19980815121510ES, 19980815144100ES,
 19980815131629ES,,,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com,
 Alan Trader, 312-678-9104, 312-678-9100, a. trader@defmarketing.com,
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 ,,,,,75,
 ,,19980818000000ES,19980819000000ES,
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 ,,19980819000000ES,19980820000000ES,
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U, 19980815125042ES, WXYZ,
 Jane Doe, N, 104392,
 WXYZ, 78912345, DEFPM, 912876543, N,
 X/WXYZ/AAA-DDD//, AAA, DDD, AAA, ZZZ, 50,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, ,
 3,,19980817000000ES,19980818000000ES,
 102.00,85.00,82.00,$/MW-Day,N,,
```

```
SC:M; RF:M,,,,,
 COUNTEROFFER, , , 19980815121510ES, 19980815144100ES,
 19980815125042ES,,,,
 Jane Doe, 123-456-7813, 123-456-7801, doe;@wxyz.com,
 Alan Trader, 312-678-9104, 312-678-9100, a.trader@defmarketing.com,
U,19980815124811ES,DEFPM,
 Alan Trader, N, 104392,
 WXYZ, 78912345, DEFPM, 912876543, N,
 X/WXYZ/AAA-DDD//, AAA, DDD, AAA, ZZZ, 50,
 DAILY, NON-FIRM, POINT TO POINT, FULL PERIOD, FIXED, ,
 3,,19980817000000ES,19980818000000ES,
 102.00,85.00,82.00,$/MW-Day,N,,
 SC:M;RF:M,,,,,
 REBID, , , 19980815121510ES, 19980815144100ES,
 19980815124811ES,,,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com,
 Alan Trader, 312-678-9104, 312-678-9100, a.trader@defmarketing.com,
U,19980815124100ES,WXYZ,
 Jane Doe, N, 104392,
 WXYZ, 78912345, DEFPM, 912876543, N,
 X/WXYZ/AAA-DDD//,AAA,DDD,AAA,ZZZ,50,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, ,
 3,,19980817000000ES,19980818000000ES,
 102.00,85.00,80.00,$/MW-Day,N,,
 SC:M;RF:M,,,,,
 COUNTEROFFER, , , 19980815121510ES, 19980815144100ES,
 19980815124100ES,,,,
 Jane Doe, 123-456-7813, 123-456-7801, doej@wxyz.com,
 Alan Trader, 312-678-9104, 312-678-9100, a. trader@defmarketing.com,
I,19980815121510BS,DBFPM,
 Alan Trader, N, 104392,
 WXYZ, 78912345, DEFPM, 912876543, N,
 X/WXYZ/AAA-DDD//, AAA, DDD, AAA, ZZZ, 50,
 DAILY, NON-FIRM, POINT_TO_POINT, FULL_PERIOD, FIXED, ,
 3,,19980817000000ES,19980818000000ES,
 102.00,90.00,80.00,$/MW-Day,N,,
 SC:M; RF:M,,,,,
 QUEUED, , , 19980815121510ES, ,
 19980815121510ES,,,
 Company Default, 123-456-7800, 123-456-7801,,
 Alan Trader, 312-678-9104, 312-678-9100, a. trader@defmarketing.com,
I,,,Y,,
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 ,,19980818000000ES,19980819000000ES,
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I,,,Y,,
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 ,,19980819000000ES,19980820000000ES.
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First, this example shows the handling of continuation records which conveyed a time varying demand of 50 MW on 8/17, 75 MW on 8/18, and 100 MW on 8/19. This demand profile was initially entered with the original reservation request (*transrequest* template) at 12:15 on 8/15 by Alan Trader. Since the data elements associated with the profile were never modified, the intervening audit response records do not repeat the data from these continuation records.

As part of the original reservation, Alan Trader attempted to negotiate a price for service of \$80.00 /MW-Day. Jane Doe responded to this request with a counter offer at the rate of \$85.00 /MW-Day at 12:41 on 8/15. Since the status of COUNTEROFFER constitutes acceptance of all terms of the reservation except price (i.e., transmission capability has been evaluated and is available), the RESPONSE TIME LIMIT data element has been updated to reflect the time by which the customer must confirm service (assuming the establishment of customer confirmation time limits is approved by FERC).

At 12:48, Alan Trader attempted to negotiate further for a rate of \$82.00 /MW-Day and the reservation status was set to REBID. Jane Doe responded at 12:50 with a second counter offer restating a rate of \$85.00, which Alan Trader finally agreed to at 13:16 on 8/15. The current posted information on OASIS shows this final CONFIRMED reservation.

#### 1.6 Data Element Dictionary

The following data elements are defined as part of the audit report experiment. Since these elements only appear in audit reports/responses and by definition the full data element names are always referenced in the COLUMN\_HEADERS record, there is no alias associated with these new data elements.

Data Dictionary Blement Name	Alia	Field Format: minimum characters {type of ASCII} maximum characters	Restricted Values	Definition of Data Element
MODIFYING_ COMPANY_CODE		1{ALPHANUMERIC}6		Contains the CUSTOMER CODE or PROVIDER CODE associated with the entity and person that performed a post or update operation on OASIS.
MODIFYING_NAME		0{ALPHANUMERIC}25		Contains the CUSTOMER_NAME or PROVIDER_NAME associated with the person that performed a post or update operation on OASIS.
RECORD_TYPE		1{ALPHA}1	Valid Types: I U D	Indicates the type of information reported in a response record generated by an audit template. "I" designates information as it was initially inserted (posted) on OASIS; "U" designates information updated (modified) on OASIS; "D" designates deleted information as it appeared on OASIS just prior to being deleted (as appropriate).