October 13, 1998

The Honorable David P. Boergers
Secretary
Federal Energy Regulatory Commission
888 First Street, N. E.
Washington, DC 20426

Reference: Docket No. RM95-9-003; "Open Access Same-Time Information System and Standards of Conduct", June 18, 1998

Subjects:

1. **Transition Plan for Migrating from OASIS Phase 1 to Phase 1-A**
2. **OASIS Phase 1-A Audit Reporting Experiment**
3. **Status of Plans for OASIS Phase 2**

Dear Mr. Boegers:

The OASIS How Working Group respectfully submits to the Federal Energy Regulatory Commission the two documents provided herein as attachments. These documents, "Transition Plan for Migrating from OASIS Phase 1 to Phase 1-A " and "OASIS Phase 1-A Audit Reporting Experiment", are intended to facilitate the further development of the Open Access Same-time Information System (OASIS).

The How Working Group requests that the Commission provide an expedited review and approval of these two documents is requested, because of the material impact on the implementation of OASIS Phase 1-A on March 1, 1999.

Transition Plan

Appendix 1, "Transition Plan for Migrating from OASIS Phase 1 to Phase 1-A ". This plan recommends a sequence of steps to promote an orderly transition that meets the following objectives:

- OASIS nodes are adequately tested by users
- Transmission Customers have sufficient opportunity for training
- Reservation records are properly transferred to the new system
- Impacts to commercial business are minimized

Audit Reporting Experiment

Appendix 2, "OASIS Phase 1-A Audit Reporting Experiment", is a proposed experiment to develop significantly advanced audit capabilities for OASIS. The audit capability in the current Phase 1-A design is known by the How Working Group to be an inefficient means to obtain useful historical information. The present abilities to search and report specific historical information are limited and place most of the burden on the user. This capability has been limited because most of the effort in OASIS design has focused on primary functions such as transactions for transmission and ancillary services.

The enclosed Audit Reporting Experiment (Attachment 2) is a recommendation from the How Working Group that Transmission Providers be allowed to voluntarily develop advanced audit capabilities by March 1, 1999, in lieu of the audit capabilities defined in the present Standards and Communication Protocols document.

The attached document provides a description and structure for the proposed advanced audit capabilities. However, this description is not as restrictive as the OASIS Standards and Communication Protocols (S&CP) in order to allow Transmission Providers to explore ways to improve the audit capability.

Any jurisdictional Transmission Provider who chooses not to participate in the experiment will be required to comply with the audit capabilities defined in the current OASIS S&CP. Those who do participate will develop audit capabilities as described in the attached document. A list of Transmission Providers who have by this date indicated a willingness to participate in the Experiment is provided in Appendix A of Attachment 2. Waiver from present OASIS Standards and Communication Protocols requirements for the audit capabilities should also be extended to other Transmission Providers who subsequently wish to participate in the Experiment.

By September 1, 1999, the How Working Group will conclude the evaluation of the advanced audit capabilities and provide a report to the Commission recommending a detailed specification for audit capabilities to be added to the S&CP document. Transmission Customers are expected to benefit substantially from the enhanced audit capabilities, even during the interim test period.

The Commission is requested to perform an expedited review of this proposal to rapidly advance the audit capabilities of OASIS, in order to allow Transmission Providers to meet the March 1, 1999 Phase 1-A deadline. It is not practical in terms of cost or remaining time for Transmission Providers to implement both the Phase 1-A S&CP audit capabilities and the advanced audit functions. Therefore, the principal benefit of this experiment comes in having sufficient time to include the advanced audit functions in the Phase 1-A implementation.

OASIS Phase 2 Specifications

In a Report on the " Future of OASIS", filed with the Commission on November 3, 1997, the OASIS How Working Group committed to developing an OASIS Phase 2 specification by November 30, 1998. That deadline is not practical at this time due to the following factors:

1. Phase 1-A implementation has been delayed from an originally anticipated date of May 1998 until March 1999. Over the next five months primary focus will be on development, testing, and training for OASIS Phase 1-A.

2. There are several key policy issues from the Future of OASIS Report that remain unanswered. Resolution of these policy issues is essential to understanding the scope and functionality of OASIS Phase 2. For example, one issue is the extent to which OASIS can provide a universal system for energy transaction scheduling when FERC-approved regional tariffs and ISOs use a variety of reservation and scheduling processes.

3. Transaction Management System (TMS) concepts being developed by the North American Electric Reliability Council are in a high state of transition over the next few months. Many aspects of TMS address transaction scheduling processes and constraint management, which are critical elements of OASIS Phase 2. A number of complex issues need to be resolved regarding TMS and Phase 2 OASIS.

The OASIS How Working Group proposes to file with the Commission by January 31, 1999 a white paper defining the scope of OASIS Phase 2 and the interrelationship of various functions associated with TMS or OASIS Phase 2. This white paper will propose a schedule for development of the OASIS Phase 2 S&CP specifications.

Yours truly,

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North American Electric Reliability Council

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EPRI

cc: P. Robb, M. Rosenberg, OASIS How Working Group, Interim Market Interface Committee, posted to: www.tsin.com and tsin email exploder

Attachment 1
Transition Plan for Migrating from OASIS Phase 1 to OASIS Phase 1-A

1. Introduction

The differences between OASIS Phase 1 and Phase 1-A consist of significant changes to some templates, restructuring of various data types and the addition of several new functions. Since these changes impact OASIS Customer procedures, Provider procedures, and node software, a migration plan has been developed for the transition from OASIS Phase 1 to OASIS Phase 1-A. This migration plan comprises the following steps. Steps 1-3,5 are shown with tentative timeframes for information purposes only. Steps 4 (Customer Training during the month prior to the Cut-Over date) is approved by FERC. Step 6 (Final Start-up of Phase 1-A) will take place on the Cut-Over date, March 1, 1999, as required by FERC:

	Migration Steps	Timeframes, Relative to Cut-Over Date March 1, 1999 of OASIS Phase 1-A
1	Completion of the development of OASIS registration facilities at www.tsin.com. Registration process begins for Provider and Customer registration and registration of transmission and ancillary services product names and attributes	By November 1, 1998
2	OASIS Phase 1-A system completed and become available for preliminary testing by Transmission Customers	January 1-31, 1999
3	Registration completed for all entities, product attribute values, and POR/POD	January 31, 1999
4	OASIS Phase 1-A systems are available for hands-on training by Transmission Customers. Transmission Providers provide training on their systems.	February 1-28, 1999
5	Public training workshop on Phase 1-A OASIS	February 4-5 (Houston) and 11-12 (Las Vegas)
6	Final data transfer, start up of OASIS Phase 1-A, and shut down of OASIS Phase 1.	Transfer and testing of final data will take up to 24 hours on March 1, 1999

2. Registration Process

All entities or persons using OASIS shall register the identity of their organization or person at the OASIS Home Page at www.tsin.com. Registration must be completed by January 31, 1999. Registrations will be renewed annually thereafter.

The registration requirement applies to any entity logging on to OASIS for the purpose of using or updating information, including Transmission Providers, Transmission Customers, Observers, Control Areas, Security Coordinators. An annual nominal registration fee may be applied to cover the cost of the registration process and maintenance of the OASIS Home Page. A detailed explanation and justification for this registration process are provided in the Phase 1-A business practices report filed by the Commercial Practices Working Group.

In addition, Transmission Providers will register their points of receipt and points of delivery in a consistent manner. Prior to offering transmission and ancillary services products that do not fit the standard attribute value definitions, Transmission Providers will register the product attribute values via this web site, and will uniquely and unambiguously define their attributes.

This site will also be the primary registration site for Transmission Customers, so that names and their D-U-N-S numbers for these customers are consistent across all OASIS nodes.

3. Data Type Translations

Before Customer training or testing starts, each Provider will post on its OASIS Node how the Phase 1 CAPACITY_TYPE for existing reservations will be translated into the new Phase 1-A service attributes.

4. Training of Customers

Each node will provide a training application and / or node for conducting Customer training for Phase 1-A. This training capability will be available for Customers during the month before the OASIS Phase 1-A systems is to go on line, in order to allow adequate time for Customers to understand the new procedures. Training will also be conducted in two industry wide workshops. The training will address all the functionality that has changed between Phase 1 and Phase 1-A. A listing of the URLs for Customer training will be provided on www.tsin.com.

5. Testing of OASIS Nodes

The basic testing of each OASIS node will be handled by the Transmission Providers and their vendors. In addition, independent testing will be conducted by a group of industry participants. The testing group will conduct tests of all OASIS functions, and will provide a copy of the test results to the node administrator. All significant problems will be required to be fixed before the node is declared to be operational.

Additional unstructured testing of each of the nodes by Customers will take place

during the training period

6. Data Transfer during Cut-Over

On Cut-Over day, all critical live data, as called out below, will be transferred from the OASIS Phase 1 systems to the OASIS Phase 1-A systems during the 24-hour cut-over period on Sunday February 28, starting at 00:00:01 local time of the OASIS node. All Phase 1-A OASIS nodes will be available for business by 00:00:01 local time of the OASIS node on March 1, 1999.

OASIS Phase 1 will be off-line and unavailable to Customers during the cut-over period to allow time to convert / transfer OASIS Phase 1 data to OASIS Phase 1-A data. OASIS Phase 1-A systems may be started up any time within this cut-over period. If necessary, business during the cut-over period may be done off the OASIS; however any requests will be posted on the OASIS Phase 1-A systems within 24 hours after these systems are brought on-line.

At least the following data will be transferred:

- 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 1, with service beginning or continuing through March 1, 1999 or later, will be re-posted directly on the OASIS Phase 1-A system by the primary Transmission Provider.

7. OASIS Phase 1-A Start Up

Once the data has been transferred and check out is complete, the OASIS Phase 1-A systems will be brought on-line. The old OASIS Phase 1 systems will be taken completely off-line at the start of the cut over period and will no longer be available. Any audit data that is required from an OASIS Phase 1 system will only be available off-line. Any requests for historical ATC information, prior to the cutoff, will be handled off-line.

Attachment 2

OASIS Phase 1-A Audit Reporting Experiment

1. Introduction

The OASIS How Working Group has acknowledged the limitations in the functionality of the ***auditlog*** template as defined in both the OASIS Phase 1 and OASIS Phase 1-A Standards and Communications Protocols (S&CP) document, but has not had sufficient time to review and garner a consensus as to the best approach to improve this situation. With the inclusion under OASIS Phase 1-A of an on-line, iterative negotiation process and a standard method to view discounts extended based on those negotiations (the ***transoffering*** template), it is becoming increasingly apparent that a more functional audit reporting capability should be defined and incorporated into the OASIS Standards.

To that end, the OASIS How Working Group is endorsing the voluntary participation in an "experiment" to implement an enhanced OASIS audit reporting function as defined in this document. This experiment would begin coincident with the in-service date of OASIS Phase 1-A. Within the first six months of operation, the How Working Group shall undertake an evaluation of the experiment in terms of the new audit report's utility, problems in implementation, and customer acceptance. The OASIS How Working Group evaluation will include a recommendation to the Commission either to:

1) approve a revised OASIS S&CP incorporating a new audit reporting requirement based on input from the participants and the industry at large, or
2) terminate the experiment.

The OASIS How Working Group further recommends that participants in this experiment be waived of their requirement to support the ***auditlog*** template as defined in the OASIS Phase 1-A S&CP. It is recommended that such a waiver be in effect for the duration of the experiment and continue for a minimum of three months after such time as the Commission declares the experiment to be terminated, or a revised auditing capability is incorporated and approved in the OASIS S&CP. This additional three month period is necessary to allow the participants time to either implement the OASIS Phase 1-A ***auditlog*** template, or incorporate any revisions required to comply with the new audit requirements approved by the Commission.

2. Rationale

Audit reporting as defined by the ***auditlog*** template in the OASIS Phase 1-A Standards and Communication Protocols document is limited to reporting all changes to OASIS

data elements that occurred over a specific interval in time. Changes to the posted values for ATC, pricing of service, reservation acceptance, confirmation and negotiation, and others are all returned in one chronological audit report. Any attempt to determine the time sequence of events surrounding a particular offer of service or reservation request requires the user to sort through a tremendous volume of extraneous audit information to recover the few pieces of information of interest. An additional limitation of the current ***auditlog*** template is that the identity of the person (or at least the identification of the entity) that made the modification to the data is not available.

The proposed change to OASIS audit reporting is intended to provide an effective means to recover audit information with a minimum amount of "reconstruction" required on the part of the user to discern the time sequence of specific events. This experiment defines a set of audit templates specific for the type of information to be audited. These new audit templates are extensions of existing OASIS Phase 1-A "query/response" templates, and allow users the full range of selective query capability as defined by the query variables associated with the standard OASIS Phase 1-A templates to refine the specific information to be audited.

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.

3. Description of Changes to OASIS

The proposed audit report facility is based on the definition of a set of specific audit templates which are extensions to existing Phase 1-A templates. Each of these audit templates shall support exactly the same set of query variables as defined for the corresponding Phase 1-A 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 1-A 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 1-A 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.

3.1 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 1-A definitions of their non-audit counterpart templates as defined in the following sections.

3.2 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 1-A 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.

3.3 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.

3.3.1 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 1-A Standards and Communication Protocol (S&CP) document for a CSV formatted response. The CSV response records shall organized in sets of records containing both the latest information posted on OASIS and all changes made to that information over time.

3.3.1.1 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 **I**nsertion (posting) on OASIS

U - denotes a record of information as it appeared immediately following an **U**pdate to the posted information

D - denotes a record of any **D**eleted 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.

3.3.1.2 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 original 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.

3.3.1.3 Continuation Records

Continuation records are used in certain standard Phase 1-A 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.

3.3.2 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.

3.4 Special Template Considerations

3.4.1 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.

3.4.2 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.

3.4.3 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 elements:

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.

3.5 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.

3.5.1 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,
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Joe Smith,123-456-7893,123-456-7801,smithj@wxyz.com
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Supervisor,19980813171214ES,
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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,19980818000000ES,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.

3.5.2 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_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,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,,19980817000000ES,19980818000000ES,
102.00,85.00,85.00,$/MW-Day,N,,
SC:M;RF:M,,,,,,
CONFIRMED,,,19980815121510ES,19980815144100ES,
19980815131629ES,,,,
Jane Doe,123-456-7813,123-456-7801,doej@wxyz.com,
Alan Trader,312-678-9104,312-678-9100,a.trader@defmarketing.com,
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U,,,Y,,
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,,19980818000000ES,19980819000000ES,
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,,19980819000000ES,19980820000000ES,
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U,19980815125042ES,WXYZ,
Jane Doe,N,104392,
WXYZ,78912345,DEFPM,912876543,N,
X/WXYZ/AAA-DDD/ /,AAA,DDD,AAA,ZZZ,50,
DAILY,NON-FIRM,POINT_TO_POINT,FULL_PERIOD,FIXED,,
3,,19980817000000ES,19980818000000ES,
102.00,85.00,82.00,$/MW-Day,N,,
SC:M;RF:M,,,,,,
COUNTEROFFER,,,19980815121510ES,19980815144100ES,
19980815125042ES,,,,
Jane Doe,123-456-7813,123-456-7801,doej@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,19980815121510ES,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,
102.00,90.00,80.00,$/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,
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I,,,Y,,
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I,,,Y,,
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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.

3.6 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 Element Name	Alias	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).

Appendix A

Participating OASIS Nodes in Audit Reporting Experiment

4. American Electric Power (AEP) OASIS
5. Arizona Public Service OASIS (AZPSOASIS)
6. East Central Area Reliability Council (ECAR) OASIS
7. ENX OASIS Service
8. Florida OASIS (FLOASIS)
9. Idaho Power OASIS
10. ISO New England OASIS
11. Mid-America Interconnected Network (MAIN) OASIS
12. Mid-Continent Area Power Pool (MAPP) OASIS
13. Northwest OASIS
14. OmniPath OASIS
15. Pacificorp OASIS
16. PJM OASIS
17. Rocky Mountain Area OASIS
18. Southern Company OASIS
19. Southwest Power Pool (SPP) OASIS
20. Southwest OASIS (SWOASIS)
21. VACAR OASIS
22. Western OASIS