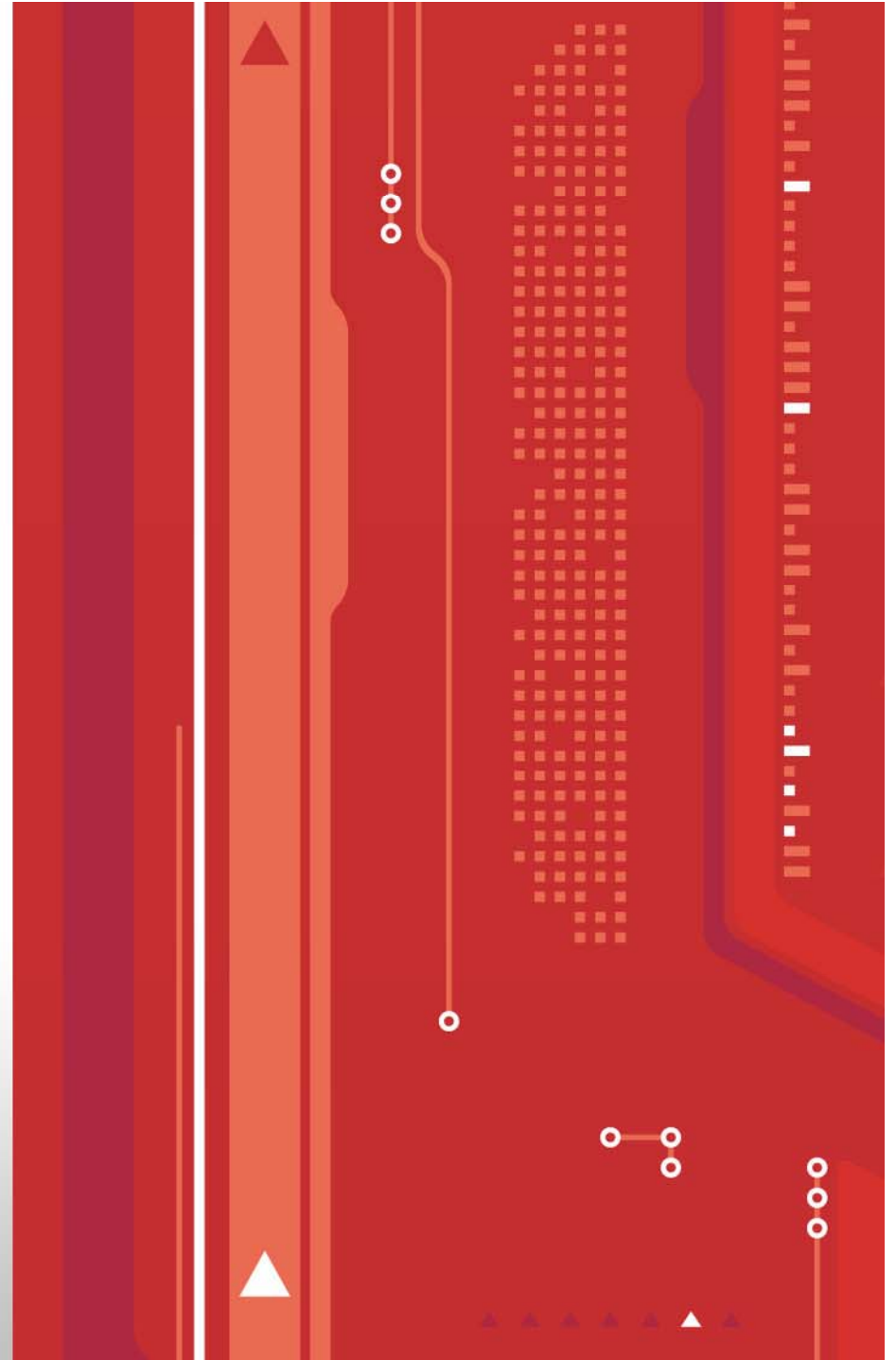


# Integrated Marketplace Settlements API Technical Specifications

May 21, 2012



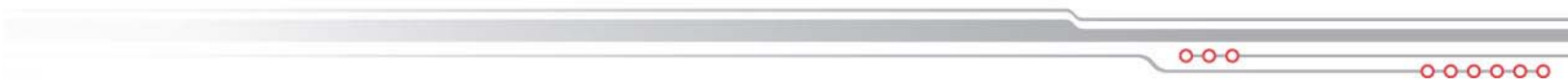


## Outline

- **General Comments**
- **Marketplace Settlements vs. EIS Settlements**
- **Meter Data**
- **Bilateral Settlement Schedules**
- **Settlement Reports**
- **Settlement Notifications**



# GENERAL COMMENTS

- 
- **This does not impact Transmission XML**
  - **Equivalent UI function for all exposed APIs**
  - **Top-down development approach**
    - **Allows user feedback early on for API specs/expectations**
    - **Potential for changes as actual implementation occurs**
      - **Changes shouldn't impact functionality**
      - **Rollout of any changes to be managed as components are completed to minimize the number of iterations being published**



# MARKETPLACE SETTLEMENTS VS. EIS SETTLEMENTS



## Similarities

- **XML-based interface**
  - Programmatic API
  - Browser based User Interface (UI)
- **Available via Internet**
- **Certificates used for authentication and authorization**
  - LSA assigns roles for each user/certificate



## Differences

- **One certificate per user, regardless of role(s) needed**
  - **\*Onus is still on the Participants to manage any separation of duties**
- **Bilateral Settlement Schedules**
- **Simplification of Meter Data format and allowing 5-minute intervals in submission file**
- **Near real-time meter data reports**
- **Input determinants will be available**
- **Invoice Details API**
- **Notification service**
- **Interval Timestamp – ISO 8601 with GMT offset**



# METER DATA





## Meter Data Submissions

- **Meter Agent access only**
- **Cleaned up the format**
- **File can contain only one OD**
- **5-min or hourly interval submissions**
  - **Resource and Load**
  - **Interchange is still hourly**
- **Can do both in the same file\***
- **Action**
  - **PostMeterData**



## Meter Data Reports

- **Meter Agent access only**
- **Near real-time**
- **Meter Report Card**
  - **GetMeterReportCard**
- **Calibration Report**
  - **GetCalibrationReport**
- **Interchange Report**
  - **GetInterchangeReport**



# BILATERAL SETTLEMENT SCHEDULES



## Contract Header

- **MP access only**
- **Outlines the terms of the contract**
  - **Contract Name**
  - **Buyer/Seller AOs**
  - **Max MW**
  - **Product type and Settlement Location or Reserve Zone Name**
  - **Auto-approval**
  - **Length of contract**
- **Must be approved/confirmed by both parties**
- **Can not be changed once confirmed and a profile has been submitted against it**



## Contract Header cont.

- **Actions**
  - **CreateHeader**
  - **UpdateHeader**
  - **ApproveHeader**
  - **SearchContracts**
  - **EndContract**
    - Sets end date of contract to the current calendar day
    - Sets any submitted profiles that are after this date into a Terminated status.



## Contract Profile

- MP and AO access
- Allows users to take advantage of the contract
- Submit intervals similar to meter data for a single OD
- All profiles in a submission request must refer to the same contract header
- Cannot exceed max MW in an interval as approved in the contract header
- Must be for the same settlement location or reserve zone as approved in the contract header
- Must be approved/confirmed by both parties
  - Auto approval
  - Any update requires manual re-approval
- Pending/Approved/Processed



## Contract Profile cont.

- **Actions**
  - **CreateProfile**
  - **ApproveProfile**
  - **UpdateProfile**
  - **SearchContracts**



# SETTLEMENT REPORTS





## Invoice Data

- **MP Access only**
- **XML format containing the invoice details for an invoice period summed by AO and settlement run**
- **PDF version available on the Portal**
- **Action**
  - **GetInvoice**



## Settlement Data – Determinant Reports

- **MP and AO access**
- **5-min report**
  - Returns all the 5-min input determinants and 5-min charge types for a given OD, settlement type, and AO
- **Hourly/Daily**
  - Returns all of the non 5-min input determinants and charge types for a given OD, settlement type, and AO
- **Returns nets**
- **Action**
  - **GetDeterminantReport**



## Settlement Data – Statement

- **MP access only**
- **Contains all of the settlement charge types for a given settlement date**
  - **Broken down by AO**
  - **Current, previous, and net summed for each charge type**
- **Similar to today's Summary file**
- **Action**
  - **GetStatement**
  - **GetSettlementData**
    - **Returns the statement and all the associated determinant reports for a given MP and settlement date**



## Settlement Data – EQR Report

- MP and AO access
- Returns the data needed to assist in filing the FERC Electric Quarterly Report.
- Data only, MP is responsible for rendering into the proper FERC format.
- Returned for a given OD or range of dates and AO
- MPs can specify ALL AOs be returned in a single call
- Action
  - GetEQRData



# SETTLEMENT NOTIFICATIONS



## Settlement Notifications

- **Beginnings of an enterprise notification system**
- **Single point for all notifications (non-market)**
- **Register URL of listener in Portal UI**
- **Utilizing polymorphism to keep interface simple and unchanged**
- **Only events that require some sort of action on the part of the receiving party**
- **Event will include everything needed for subsequent calls back to the settlement APIs**
- **Action**
  - **NotifyEvent**

## Settlement Notifications cont.

- **Event types**
  - **TestNotification**
  - **InvoiceNotification**
  - **StatementNotification**
  - **BilateralHeaderPendingApprovalNotificationType**
  - **BilateralHeaderStatusChangeNotificationType**
  - **BilateralProfilePendingApprovalNotificationType**
  - **BilateralProfileStatusChangeNotificationType**
  - **BilateralProfileAutoApprovedNotificationType**
  - **BilateralHeaderEndContractNotificationType**
  - **CalendarNotificationType**



## Settlement Notifications cont.

- **Resynchronization process**
- **Allows for any user to request any notifications they may have missed for any reason**
- **Request triggers notification system to resend any event that didn't receive a confirmation response**
- **Action**
  - **NotificationSync**