Technical User Group (TUG)

May 26, 2020

10:00 – 11:00 AM Pacific

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TUG Agenda

Web Conference Information		Conference Call Information	
URL	https://caiso.webex.com/meet/CAISO-TUG	*Domestic Call-In*	(866) 528-2256
Meeting Number	966 010 353	*International Call-In*	(216) 706-7052
Access Code	389 588 9	*Access Code*	389 588 9

Topic	Facilitator
Agenda and Roll Call	Indu Nambiar
TUG Agenda Posting Update	Indu Nambiar
System Interface Changes	Trang Vo
ADS – Updated Tech Spec	Arul Jayaraman
OMS Updates	Sandhya Balasubramanian
CAISO's B2B Integration Improvements	Ajay Mannepalli
Ongoing Initiatives	Indu Nambiar

TUG Agenda Posting Update

- As recommended by our Information Security department, we are moving our more technical information behind a password protected site to protect against nefarious actors.
- Over time, all technical information will be posted to the developer site rather on the public site.
- Going forward, only the agenda will be published on caiso.com with a link to the full presentation
- The full presentation will be available on the Developer site
- Video recording will also be made available only on the Developer site
- Existing agenda and recordings on caiso.com will not be impacted
- Rollout : June 09, 2020 (Tentative)

Fall 2020 Release - System Interface Changes - CCDEBE1

SIBR

Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications
CCDEBE1	Modify	RetrieveCleanBidSet_SIBRv5_AP RetrieveCleanBidSet_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2
CCDEBE1	Modify	RetrieveCurrentBidResults_SIBRv5_AP RetrieveCurrentBidResults_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2
CCDEBE1	Modify	SubmitRawBidSet_SIBRv5_AP SubmitRawBidSet_SIBRv5_DocAttach_AP	✓ 10/16/19	✓ Deploy 3/26/20 Activation 10/1/20	13.2

CMRI

Project	Change Type	UI	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications
LMPME CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Energy Bid Curves	RetrieveDefaultBidCurves_CMRIv2_AP RetrieveDefaultBidCurves_CMRIv2_DocAttach_AP	LMPME ✓ 9/12/19 CCDEBE1 ✓ 11/6/19	LMPME ✓ 11/13/19 CCDEBE1 ✓ Deploy 3/26/20 Activation 10/1/20	3.9.4 Release Notes 1.2
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1_AP RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach_AP	✓ 11/11/19	✓ Deploy 3/26/20 Activation 10/1/20	3.9.4 Release Notes 1.2

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Fall 2020 Release - System Interface Changes

ADS					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
ADS Replacement DOTTC	New	APIWebService v8 APIResponseWebService v8	✓ 5/21/20, v8.0.0	7/27/20	10/1/20

DRRS					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
ESDER3B	Modify	RequestDRRegistrationData.xsd DRRegistrationData.xsd	✓ 5/1/20, v3.2	7/27/20	Deploy 9/14/20
ESDER3B	New	Alternate API to only retrieve incremental data changes (Locations, Registrations)	✓ 5/1/20, v3.2	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of the complete location approval process workflow details (LSE & UDC)	✓ 5/1/20, v3.2	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of location records that are under the defense process	✓ 5/1/20, v3.2	7/27/20	Deploy 9/14/20
ESDER3B		Retrieval of the location defense process workflow details (Incumbent & Prospective DRPs)	✓ 5/1/20, v3.2	7/27/20	Deploy 9/14/20

MRI-S					
Project	**Change Type**	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
EBTMP	Modify	For: - MRIS Meter: Submit Meter & - MRIS Meter: Retrieve Meter additionally include EBtMP measurement type values (as negative load) both Gross Load and EBtMP meter data would associate with same Load Resource ID	5/29/20	7/27/20	Activation 1/1/21

Fall 2020 Release - System Interface Changes

Master File				
Project	Summary	Technical Specifications	MAP Stage	Production
ESDER3B	Add enumeration to GRDT: DR_TYPE of PDR_LSR	5/29/20	7/27/20	10/1/20
FERC841 RA	New GRDT attribute: Apply Wholesale Charge	5/29/20	7/27/20	10/1/20
EIM2020	New GRDT attribute: Meter Data Interval	5/29/20	7/27/20	10/1/20
Other	Remove from GRDT: MIN_DISP_LEVEL	5/29/20	7/27/20	10/1/20
CCE Tariff	New GRDT attribute: Run of River	5/29/20	7/27/20	10/1/20
Slow DR	New GRDT attribute: Slow DR	5/29/20	7/27/20	10/1/20

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Fall 2020 Release - System Interface Changes

CMRI				
Project	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
N/A	Decommission of deprecated versions	5/29/20	7/27/20	9/1/20
EIM2020	Available Balance Capacity Infeasibility Report Load Bias Report	5/29/20	7/27/20	10/1/20

OASIS				
Project	**Summary**	**Technical Specifications**	**MAP Stage**	**Production**
N/A	Decommission of deprecated versions	5/29/20	7/27/20	9/1/20
EBTMP	New OASIS EBtMP Performance Report	5/29/20	7/27/20	Activation 1/1/21

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ADS – Updated Technical Specification

- New Tech Spec has been standardized across all CAISO apps
- New Tech Spec is more concise, easy to use and locate information
- New Tech Spec should be used along with XSD for Element description
- Service examples have been removed and uploaded to CAISO Developer site
- Most recent changes are at the top of every section impacted
- Updated Tech Spec Version 8.0.0 can be found at:

  Clean – https://developer.caiso.com/Artifacts/ADS/TechSpecs/ADS%20Interface%20Specification%20v8%200%200.pdf

  Redline – https://developer.caiso.com/Artifacts/ADS/TechSpecs/ADS%20Interface%20Specification%20v8%200%200%20REDLINE.pdf

- With the Fall 2020 release, v7 & v8 API services will be supported

ADS – Overview of Changes

- Four new batch types
  - 10 = 5 minute Flex Ramp Award
  - 11 = 15 minute Energy Award
  - 12 = Unannounced AS Test
  - 13 = Operational Instructions
- New elements added to xsd
  - prodType
  - oprInsReasonCode
  - followDotFlag
  - resourceBidOption
- Update to AS Awards batch type (batch type = 3)
  - As Awards batch type will include FRU and FRD awards
- Backward compatibility of v7

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TransmissionOutageResults_v3 Service

- Fix to include all pending requests is ready

- XSD version not incremented but new XSD has to be consumed by participants

- Developer.caiso.com –

https://developer.caiso.com/pages/application.aspx?app=OMS

- XSD is modified to allow including multiple pending requests in the response.

- Change will be deployed to Map_Stage on 06/01/2020

- Change will be deployed to production tentatively on 07/15/20

Aggregate Resource Outage Submission

- Submit de-rate for parent resource (required) and only the impacted child resources

- Retrieve results will not be include (for both v2 and v3 services) child resources that have no curtailment

- Parent resource availability points need not match with child resources' but will remain within the overall outage start and end date span

- Child resource outages can be added to existing outage if the outage has not commenced

- UI display and retrieve results for historical outages will be modified to support this model

- Changes are being done to enhance webOMS performance

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Remedial Action Scheme (RAS) Changes

Modeling for 4 RAS Flags will be modified from check-boxes to drop-down boxes in the UI : (Y)es, (N)o and N/A (Undefined or Null)

- RAS/SPS Out of Service
- RAS/SPS Reduced Redundancy
- Protection Zone
- EMS/ICCP Outage

RAS/SPS Out of Service		RAS/SPS Reduced Redundancy	
Protection Zone		EMS/ICCP Outage	

- API validation changes are to require the submission of these flags for Nature of Work 'COMMUNICATION' or 'RELAY WORK'.
  - API submission will continue to take in a 'Y' or 'N' for these flags.
  - Changes will be made to validate to only v3 services (submit and retrieves)
  - No changes to v2 services
- No Changes to historical outages

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Few other changes expected in July 2020

RC Priority Date Logic

- RC Priority date will not reset or re-calculate when you check/ uncheck BA/TOP confirmed flag

Nature of Work (NOW) = COMMUNICATION or PATH LIMITATION

- webOMS will not check pending requests on overlapping outages for COMMUNICATION & PATH LIMITATION NOW
- To allow participant to submit multiple changes on the same communication equipment

Retrieve Change Request Services

- Implementing 50 outages limit for change request services

Developer.CAISO.com

For various API services, watch for:

- Guidance on usage patterns

- Sample XMLs

- XSDs

- End-points

- Common errors & warnings

- Active versus retired services

Discovery Date Changes – moved to Q3-Q4

- Per tariff section 9.3.10.3(a &b), in anticipation of a forced outage, the CAISO control center must be notified as soon as feasible if:
  - Generating Unit or Resource specific system resource has a reduction of current availability >10MW
  - Eligible intermittent resource of Pmax >10MW has reduction in current availability>1MW
- If prior notice is not possible,
  - Transmission facilities must notify the ISO through OMS within 30 minutes of the outage occurring.
  - Generating units and resource specific system resources and Eligible intermittent resources with Pmax>10MW must notify through OMS within 60minutes of discovery of outage with the discovery time of the issue.
- WebOMS system will not default the discovery date
- Refer section 7.2.1 of the Outage Management (OM) BPM

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CAISO B2B Improvements

- **Goals**
    - Enhance the developer experience working with CAISO Web API's
    - Provide API's in REST/JSON using OpenAPI 3.0 specification
    - Provide examples, mock services and tooling to generate client/server stubs and SDK
    - Provide tests for the API's using Postman collections and/or SOAPUI projects
    - Collaboration using Git and forums on developer.caiso.com
    - Simplify authentication using X.509 certificates and API keys

- **Update**
    - POC updates and webinar notes are posted on developer forum at https://developer.caiso.com/forum/topics.aspx?ForumID=4. Next webinar will be on 6/2/2020.
    - The CMRI SchedulePrices OpenAPI spec file has been updated to be compatible with code generation
    - Successful generation of client code in Java and .NET was completed and demonstrated in last meeting.
    - API pagination and rate limiting proposal was discussed. More implementation details to follow in upcoming meeting
    - API versioning will be discussed in next webinar
    - Focus items for team before next meeting
        - Server side implementation for SchedulePrices API
        - Route mock and actual calls for SchedulePrices through the API gateway with rate limiting
        - More details on the pagination design
        - OpenAPI specification for DRLocations_v1

Ongoing Initiatives

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Version Management for OASIS & CMRI

- The Plan ahead

  - Version Management

    - Enforce the policy to support only two versions of services

    - Technical Specification will indicate supported and deprecated versions

    - Revised Technical Specification will be available on **5/29/2020**

    - Deprecated versions will be decommissioned on **9/1/2020**

  - Identifying patterns to embed information related to events resulting in failed market intervals within API and UI

Next TUG: June 09, 2020

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