

Systems Access Information for Market Participants

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Summary

The Systems Access Information for Market Participants document provides the necessary information to Market Participants to access the ISO systems. The information is only provided for the systems that are expected to be accessed from outside the ISO network.

The IP addresses within are only provided in case they are needed for network and firewall adjustments; these are not intended to be used for direct access to applications. Using IP addresses does not guarantee that the desired applications will be launched, since some of the addresses may not be active at all times. For accessing the applications listed in the document, Market Participants should use the corresponding URLs.



Environments Purpose and Availability

Production Environment

The Production environment hosts Production data and must meet Production service levels. For this reason, Production systems cannot be used for testing.

The standard maintenance windows for the Production environment are managed through the ISO Configuration, Change, and Release Management Process.

The Production environment is supported 24x7. Production system availability is the highest priority when support priorities compete for resources.





Production ECN Environment

The Production ECN environment is the AT&T data infrastructure that supports the ISO entities that conduct business with the ISO, and Western Electric Coordinating Council (WECC) participants that require connectivity to the WECC Operations Network (WON).

Please refer to the document at http://www.caiso.com/Documents/ISOConnectedEntityServiceGuide.pdf for information for obtaining an ECN connection.



MAP Stage Environment

The MAP Stage environment is used for Market and Performance (MAP) initiatives and other long-running projects that require market simulation. External access is provided during the market simulation cycles for participants to test the MAP releases prior to deployment to the Production environment. Systems will be available to participants in accordance with the market initiatives release plan posted on the ISO website at http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx.

The daily maintenance windows for MAP Stage are 4:00 PM to 9:00 AM Pacific and the weekly maintenance windows are Monday 7:00 AM to Tuesday 9:00 AM. On occasion, deviations from this schedule may be necessary to support market simulation stability or testing scenarios. The necessary information will be communicated via the MAP Stage Market Participant Portal if an impact is anticipated.

MAP Stage is supported during business hours: Monday thru Friday from 9:00 AM to 6:00 PM Pacific. The ISO may escalate the support requirement for the MAP Stage environment to a Production level depending on the need.

Structured and unstructured testing will be supported in MAP Stage depending on the need for the testing exercise. The intent is to provide as Production-like behavior as possible with the healthy exercise of new functionality. The use of current trade date Production data will be preferred unless a specific scenario requires an older trade date. The data approach will be discussed in the TUG and communicated with each market simulation cycle and according to the needs of the projects.



Applications

ADS (Automated Dispatch System)

Summary

ADS is the primary communication to scheduling coordinators (SCs) in real-time. If an SC is planning to participate in the real-time market (RTM), ADS is required to receive instructions for the ISO. Ability to view all generation and all tie instructions dispatched by ADS (accepted/declined).

This requirement applies only to those SC applicants representing generation and imports.

SC applicants representing any generation or participating loads within the ISO control area or planning to import generation at the ISO control area interties must utilize ADS. ADS is a messaging system that allows for clear and unambiguous dispatch instructions to be sent from the ISO to SCs. ADS is implemented via the public internet.

References

Automated Dispatch System (ADS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



User Interfaces (ADS Client)

Production	Production ECN	MAP Stage
http://www.caiso.com/Documents/Instructio	http://www.caiso.com/Documents/Instructio	http://www.caiso.com/Documents/Instructio
ns_InstallingADSSoftware.pdf	ns_InstallingADSSoftware.pdf	ns_InstallingADSSoftware.pdf
https://mpp.caiso.com/ads_install	https://mpp.caiso.com/ads_install	https://mppmap.caiso.com/ads_install
https://adssta.caiso.com:447	https://adssta.ecn.wepex.net:447	https://adsmap.caiso.com:447

Secondary Connection Information (ADS Client)

This information is not for direct connection, and is only necessary for users with restricted access to DNS or users behind firewalls using only DNS names.

Production	MAP Stage
https://ads1.caiso.com:447	https://adsmap1.caiso.com:447
https://ads2.caiso.com:447	
https://ads3.caiso.com:447	
https://ads4.caiso.com:447	

IP Addresses

Production	Production ECN	MAP Stage
12.200.60.98	10.112.0.122	12.200.60.164
12.200.60.99	10.112.0.123	
12.231.58.98	10.114.0.122	
12.231.58.99	10.114.0.123	

Web Services

Production	Production ECN	MAP Stage
https://adssta.caiso.com:447/ADS/< <i>Specific</i>	https://adssta.ecn.wepex.net:447/ADS/< <i>Specific</i>	https://adsmap.caiso.com:447/ <specific< th=""></specific<>
Web Services URL>	Web Services URL>	Web Services URL>



Service Services	Release
APIWebService	
<web services="" url="">APIWebService/v6</web>	Spring 2014
Retrieve/Request	
getDispatchBatchesSinceUID	
getBatchStatus	
getDispatchBatch	
isNewTrajData	
getTrajectoryData	
submitMSSLFRequest	
validateDispatchBatch	
<web services="" url="">APIWebService/v7</web>	Fall 2014
Det de la	
Retrieve/Request	
getDispatchBatchesSinceUID	
getBatchStatus	
getBatchHeader getDispatchBatch	
isNewTrajData	
getTrajectoryData	
submitMSSLFRequest	
validateDispatchBatch	
APIResponseWebService	
<web services="" url="">APIWebService/v6</web>	Spring 2014
Response	
acceptInstruction	
declineInstruction	
partialAcceptInstruction	



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Service	Release
<web services="" url="">APIWebService/v7</web>	Fall 2014
Response	
acceptInstruction	
declineInstruction	
partialAcceptInstruction	



AIM (Access and Identity Management)

Summary

The Access and Identity Management (AIM) application has been developed to improve the process for requesting, obtaining, updating and maintaining user access to ISO applications.

The following applications can be auto-provisioned from within AIM: SIBR, CMRI, MRI-S, MFRD, RAAM, CIDI, MPP, CRTMGT, and RIMS GEN.

References

Access and Identity Management (AIM) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Produc	Lion	
https:/	/portal.caiso.com	/air

IP Addresses

Production			
12.200.60.98			
12.200.60.99			
12.231.58.98			
12.231.58.99			



ALFS (Automated Load Forecast System)

Summary

ALFS is used to calculate short-term demand forecasts for ISO balancing authority area operations. ALFS utilizes a neural-network methodology that uses forecasted weather and conditions such as type of day to determine the ISO forecast of ISO demand.

Connectivity Information

Web Services

Production	Production ECN	MAP Stage
https://wsstas.caiso.com:4445/sst/runtime.a	https://wsstas.ecn.wepex.net:4445/sst/runtime.	https://wsmap.caiso.com/sst/runtime.as
svc/ <specific services="" url="" web=""></specific>	asvc/ <specific services="" url="" web=""></specific>	vc/ <specific services="" url="" web=""></specific>

Service	Release
Submit5MinFSPVERForecast	
<pre><web services="" url="">Submit5MinFSPVERForecast_ALFSv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">Submit5MinFSPVERForecast_ALFSv1_DocAttach_AP</web></pre>	
SubmitDailyFSPVERForecast	
<pre><web services="" url="">SubmitDailyFSPVERForecast_ALFSv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">SubmitDailyFSPVERForecast_ALFSv1_DocAttach_AP</web></pre>	
SubmitExternalEntityLoadForecast	
<pre><web services="" url="">SubmitExternalEntityLoadForecast_ALFSv1_AP</web></pre>	2017
<pre><web services="" url="">SubmitExternalEntityLoadForecast_ALFSv1_DocAttach_AP</web></pre>	





BAAOP (Balancing Authority Area Operations Portal)

Summary

BAAOP is a market user interface that sends the following information to EIM entities

- Load forecast bias graphical user interface (GUI)
- Dispatch instruction approve/decline GUI
- Dynamic limits: interties application programming interface (API)
- Intertie changes API



User Interfaces

Production	MAP Stage
https://portaleim.caiso.com/baaop	https://portaleimmap.caiso.com/baaop

IP Addresses

Production	MAP Stage
12.200.60.130	12.200.60.212
12.200.60.131	
12.231.58.130	
12.231.58.131	

Web Services

Production	MAP Stage
https://ws.caiso.com/sst/baaop/ <specific services="" url="" web=""></specific>	https://wsmap.caiso.com/sst/baaop/ <specific services="" url="" web=""></specific>

Service	Release
SubmitEIMDynamicLimitData	
<pre><web services="" url="">SubmitEIMDynamicLimitData_RTMv2_AP</web></pre>	Fall 2015
<pre><web services="" url="">SubmitEIMDynamicLimitData_RTMv2_DocAttach_AP</web></pre>	
SubmitEIMRTInterchangeScheduleData	
<web services="" url="">SubmitEIMRTInterchangeScheduleData_RTMv2_AP</web>	Fall 2014
<web services="" url="">SubmitEIMRTInterchangeScheduleData_RTMv2_DocAttach_AP</web>	



BSAP (Base Schedule Aggregation Portal)

Summary

BSAP is used for the Energy Imbalance Market (EIM) to submit Base Schedules for both Participating and Non-Participating resources outside the CAISO Control Area with a neighboring Balancing Authority Area (BAA).

References

http://www.caiso.com/Documents/BaseScheduleAggregationPortalUserGuide.pdf

http://www.caiso.com/Documents/SIBR BSAP SC UserGuide.pdf

http://www.caiso.com/Documents/BaseScheduleAggregationPortalUserInterfaceWebSoftwareDevelopmentKitQuickReference.pdf

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



User Interfaces

Production	MAP Stage	Sandbox
https://portaleim.caiso.com/bsap	https://portaleimmap.caiso.com/bsap	https://sandbox.caiso.com/bsap

IP Addresses

Production	MAP Stage	Sandbox
12.200.60.130	12.200.60.212	12.200.60.162
12.200.60.131		
12.231.58.130		
12.231.58.131		

Web Services

Production	MAP Stage	Sandbox
https://ws.caiso.com/sst/bsap/< <i>Specifi</i>	https://wsmap.caiso.com/sst/bsap/< <i>Specifi</i>	https://wssandbox.caiso.com:4445/sst/bsap/< <i>Specifi</i>
c Web Services URL>	c Web Services URL>	c Web Services URL>

Service	Release	
RetrieveBalancingTestResults		
<pre><web services="" url="">RetrieveBalancingTestResults_BSAPv1_AP</web></pre>	Fall 2014	
<pre><web services="" url="">RetrieveBalancingTestResults_BSAPv1_DocAttach_AP</web></pre>		
RetrieveBaseScheduleResults		
<pre><web services="" url="">RetrieveBaseScheduleResults_BSAPv1_AP</web></pre>	Fall 2014	
<pre><web services="" url="">RetrieveBaseScheduleResults_BSAPv1_DocAttach_AP</web></pre>		
SubmitBaseSchedule		
<pre><web services="" url="">SubmitBaseSchedule_BSAPv1_AP</web></pre>	Fall 2014	
<pre><web services="" url="">SubmitBaseSchedule_BSAPv1_DocAttach_AP</web></pre>		



CIRA (Customer Interface for Resource Adequacy)

Summary

The CIRA system is used to manage the ISO's Reliability Requirements program.

References

Customer Interface for Resource Adequacy (CIRA) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Production	Production ECN	MAP Stage
https://portal.caiso.com/cira	https://portal.ecn.wepex.net/cira	https://portalmap.caiso.com/cira

IP Addresses

Production	Production ECN	MAP Stage
12.200.60.98	10.112.0.122	12.200.60.164
12.200.60.99	10.112.0.123	
12.231.58.98	10.114.0.122	
12.231.58.99	10.114.0.123	

Web Services

Production	MAP Stage
https://ws.caiso.com/sst/cira/ <specific services="" url="" web=""></specific>	https://wsmap.caiso.com/sst/cira/ <specific services="" url="" web=""></specific>



Service	Release
SubmitCSPOffers	
<pre><web services="" url="">SubmitCSPOffers_CIRAv1_AP</web></pre>	RSI/CPM
<pre><web services="" url="">SubmitCSPOffers_CIRAv1_DocAttach_AP</web></pre>	
RetrieveCSPOffers	
<pre><web services="" url="">RetrieveCSPOffers_CIRAv1_AP</web></pre>	RSI/CPM
<pre><web services="" url="">RetrieveCSPOffers_CIRAv1_DocAttach_AP</web></pre>	
RetrieveResourceAdequacyCapacityData	
<web services="" url="">RetrieveResourceAdequacyCapacityData_CIRAv1_AP</web>	2016
<pre><web services="" url="">RetrieveResourceAdequacyCapacityData_CIRAv1_DocAttach_AP</web></pre>	
WithdrawCSPOffers	
<web services="" url="">WithdrawCSPOffers_CIRAv1_AP</web>	RSI/CPM
<pre><web services="" url="">WithdrawCSPOffers_CIRAv1_DocAttach_AP</web></pre>	



CMRI (Customer Market Results Interface)

Summary

CMRI is a reporting interface that contains private market information resulting from the ISO and EIM market processes: MPM, IFM, RUC, HASP, and Real-Time. This includes schedules and awards, resource-specific prices, default and mitigated bids, unit commitments, instructions, EIM base schedules, and EIM test results.

References

Customer Market Results Interface (CMRI) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location: http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



User Interfaces

Production	Production ECN	MAP Stage
https://portal.caiso.com/cmri	https://portal.ecn.wepex.net/cmri	https://portalmap.caiso.com/cmri

IP Addresses

Production	Production ECN	MAP Stage
12.200.60.98	10.112.0.122	12.200.60.164
12.200.60.99	10.112.0.123	
12.231.58.98	10.114.0.122	
12.231.58.99	10.114.0.123	

Web Services

Production	Production ECN	MAP Stage
https://ws.caiso.com/sst/cmri/< <i>Specific Web</i>	https://ws.ecn.wepex.net/sst/cmri/	https://wsmap.caiso.com/sst/cmri/ <specific th="" web<=""></specific>
Services URL>	<specific services="" url="" web=""></specific>	Services URL>



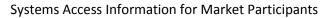
Service	Release
RetrieveActualLimitationValues	
<web services="" url="">RetrieveActualLimitationValues_CMRIv1_AP</web>	Spring
<web services="" url="">RetrieveActualLimitationValues_CMRIv1_DocAttach_AP</web>	2018
RetrieveCMRIInterTieResourceTransactionID	
<web services="" url="">RetrieveCMRIInterTieResourceTransactionID_CMRIv1_AP</web>	Fall 2014
<web services="" url="">RetrieveCMRIInterTieResourceTransactionID_CMRIv1_DocAttach_AP</web>	
RetrieveConformedDispatchNotice	
<web services="" url="">RetrieveConformedDispatchNotice_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveConformedDispatchNotice_CMRIv1_DocAttach_AP</web>	GMT
RetrieveContractUsage	
<web services="" url="">RetrieveContractUsage_CMRIv2_AP</web>	Fall 2013
<web services="" url="">RetrieveContractUsage_CMRIv2_DocAttach_AP</web>	GMT
RetrieveConvergenceBidAwards	
<web services="" url="">RetrieveConvergenceBidAwards_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveConvergenceBidAwards_CMRIv1_DocAttach_AP</web>	GMT
<web services="" url="">RetrieveConvergenceBidAwards_CMRIv2_AP</web>	Fall 2014
<web services="" url="">RetrieveConvergenceBidAwards_CMRIv2_DocAttach_AP</web>	
RetrieveCRRAdjustmentConstraints	
<web services="" url="">RetrieveCRRAdjustmentConstraints_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveCRRAdjustmentConstraints_CMRIv1_DocAttach_AP</web>	GMT
RetrieveCRRAdjustmentFlowImpact	
<web services="" url="">RetrieveCRRAdjustmentFlowImpact_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveCRRAdjustmentFlowImpact_CMRIv1_DocAttach_AP</web>	GMT
RetrieveCRRAdjustmentPrices	
<web services="" url="">RetrieveCRRAdjustmentPrices_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveCRRAdjustmentPrices_CMRIv1_DocAttach_AP</web>	GMT
RetrieveDailyElectricityPriceIndex	
<web services="" url="">RetrieveDailyElectricityPriceIndex_CMRIv1_AP</web>	Fall 2017 -
<web services="" url="">RetrieveDailyElectricityPriceIndex_CMRIv1_DocAttach_AP</web>	BREB



Service	Release
RetrieveDefaultBidCurves	
<web services="" url="">RetrieveDefaultBidCurves_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveDefaultBidCurves_CMRIv1_DocAttach_AP</web>	GMT
RetrieveDefaultRMRCosts	
<web services="" url="">RetrieveDefaultRMRCosts_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveDefaultRMRCosts_CMRIv1_DocAttach_AP</web>	GMT
RetrieveEIMBidCapacityPercentage	
Web Services URL>RetrieveEIMBidCapacityPercentage_CMRIv1_AP	Fall 2015
<web services="" url="">RetrieveEIMBidCapacityPercentage_CMRIv1_DocAttach_AP</web>	
RetrieveEIMEntityCMRIInterTieResourceTransactionID	
<web services="" url="">RetrieveEIMEntityCMRIInterTieResourceTransactionID_CMRIv1_AP</web>	Fall 2014
Web Services URL>RetrieveEIMEntityCMRIInterTieResourceTransactionID_CMRIv1_DocAttach_AP	
RetrieveEIMEntityMarketBaseSchedules	
Web Services URL>RetrieveEIMEntityMarketBaseSchedules_CMRIv1_AP	Fall 2015
<web services="" url="">RetrieveEIMEntityMarketBaseSchedules_CMRIv1_DocAttach_AP</web>	
RetrieveEIMEntityTransferLimit	
<web services="" url="">RetrieveEIMEntityTransferLimit_CMRIv1_AP</web>	Fall 2015
<web services="" url="">RetrieveEIMEntityTransferLimit_CMRIv1_DocAttach_AP</web>	
RetrieveEIMInterchangeScheduleData	
<web services="" url="">RetrieveEIMInterchangeScheduleData_CMRIv1_AP</web>	Fall 2016
<web services="" url="">RetrieveEIMInterchangeScheduleData_CMRIv1_DocAttach_AP</web>	
RetrieveEIMTestResults	
<web services="" url="">RetrieveEIMTestResults_CMRIv1_AP</web>	Fall 2014
Web Services URL>RetrieveEIMTestResults_CMRIv1_DocAttach_AP	
Web Services URL>RetrieveEIMTestResults_CMRIv2_AP	Fall 2015
Web Services URL>RetrieveEIMTestResults_CMRIv2_DocAttach_AP	
RetrieveEIMTransfer	
< Web Services URL>RetrieveEIMTransfer_CMRIv1_AP	Fall 2014
<web services="" url="">RetrieveEIMTransfer_CMRIv1_DocAttach_AP</web>	



Service	Release
RetrieveEIMTransferLimit	
<pre><web services="" url="">RetrieveEIMTransferLimit_CMRIv1_AP</web></pre>	Fall 2015
<pre><web services="" url="">RetrieveEIMTransferLimit_CMRIv1_DocAttach_AP</web></pre>	
RetrieveEIRForecast	
<pre><web services="" url="">RetrieveEIRForecast_CMRIv1_AP</web></pre>	2016
<pre><web services="" url="">RetrieveEIRForecast_CMRIv1_DocAttach_AP</web></pre>	
RetrieveElectricityPriceIndex	·
<web services="" url="">RetrieveElectricityPriceIndex_CMRIv1_AP</web>	Fall 2016
<web services="" url="">RetrieveElectricityPriceIndex_CMRIv1_DocAttach_AP</web>	
RetrieveExpectedEnergy	
<web services="" url="">RetrieveExpectedEnergy_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveExpectedEnergy_CMRIv1_DocAttach_AP</web>	GMT
< Web Services URL>RetrieveExpectedEnergy_CMRIv2_AP	Spring
<web services="" url="">RetrieveExpectedEnergy_CMRIv2_DocAttach_AP</web>	2014
RetrieveExpectedEnergyAllocationDetails	
<web services="" url="">RetrieveExpectedEnergyAllocationDetails_CMRIv2_AP</web>	Spring
<web services="" url="">RetrieveExpectedEnergyAllocationDetails_CMRIv2_DocAttach_AP</web>	2014
<web services="" url="">RetrieveExpectedEnergyAllocationDetails_CMRIv3_AP</web>	Spring
<web services="" url="">RetrieveExpectedEnergyAllocationDetails_CMRIv3_DocAttach_AP</web>	2016
RetrieveExternalDefaultCommitmentCost	
<web services="" url="">RetrieveExternalDefaultCommitmentCost_CMRIv1_AP</web>	2017 - EIM
<web services="" url="">RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach_AP</web>	2017
RetrieveFinallyQualifiedLoadFollowingCapacity	
<web services="" url="">RetrieveFinallyQualifiedLoadFollowingCapacity_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveFinallyQualifiedLoadFollowingCapacity_CMRIv1_DocAttach_AP</web>	GMT
RetrieveFlexRampCapacity	·
<web services="" url="">RetrieveFlexRampCapacity_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveFlexRampCapacity_CMRIv1_DocAttach_AP</web>	GMT
RetrieveGasBurnResourceData	
<web services="" url="">RetrieveGasBurnResourceData_CMRIv1_AP</web>	2017 - Gas
<pre><web services="" url="">RetrieveGasBurnResourceData_CMRIv1_DocAttach_AP</web></pre>	Burn





Service	Release
RetrieveGasBurnSummaryData	
< Web Services URL>RetrieveGasBurnSummaryData_CMRIv1_AP	2017 - Gas
<web services="" url="">RetrieveGasBurnSummaryData_CMRIv1_DocAttach_AP</web>	Burn
RetrieveGreenHouseGasCapData	
< Web Services URL>RetrieveGreenHouseGasCapData_CMRIv1_AP	Fall 2016
<web services="" url="">RetrieveGreenHouseGasCapData_CMRIv1_DocAttach_AP</web>	
RetrievelSOCommitmentCostDetails	
<web services="" url="">RetrievelSOCommitmentCostDetails_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrievelSOCommitmentCostDetails_CMRIv1_DocAttach_AP</web>	GMT
<web services="" url="">RetrievelSOCommitmentCostDetails_CMRIv2_AP</web>	Spring
<web services="" url="">RetrievelSOCommitmentCostDetails_CMRIv2_DocAttach_AP</web>	2014
RetrieveLoadBaseSchedules	
<web services="" url="">RetrieveLoadBaseSchedules_CMRIv1_AP</web>	Fall 2014
<web services="" url="">RetrieveLoadBaseSchedules_CMRIv1_DocAttach_AP</web>	
RetrieveMarketAwards	
<web services="" url="">RetrieveMarketAwards_CMRIv3_AP</web>	Fall 2014
<web services="" url="">RetrieveMarketAwards_CMRIv3_DocAttach_AP</web>	
<web services="" url="">RetrieveMarketAwards_CMRIv4_AP</web>	Fall 2016
<web services="" url="">RetrieveMarketAwards_CMRIv4_DocAttach_AP</web>	
RetrieveMarketBaseSchedules	
<web services="" url="">RetrieveMarketBaseSchedules_CMRIv1_AP</web>	Fall 2014
< Web Services URL > Retrieve Market Base Schedules CMRIv1 Doc Attach AP	
RetrieveMarketForecast	
<web services="" url="">RetrieveMarketForecast_CMRIv1_AP</web>	Spring
<web services="" url="">RetrieveMarketForecast_CMRIv1_DocAttach_AP</web>	2014
RetrieveMarketSchedules	
<web services="" url="">RetrieveMarketSchedules_CMRIv2_AP</web>	Fall 2014
<web services="" url="">RetrieveMarketSchedules_CMRIv2_DocAttach_AP</web>	
< Web Services URL>RetrieveMarketSchedules_CMRIv3_AP	Fall 2016
<web services="" url="">RetrieveMarketSchedules_CMRIv3_DocAttach_AP</web>	



Service	Release
RetrieveMPMResults	
<web services="" url="">RetrieveMPMResults_CMRIv2_AP</web>	Fall 2013
<pre><web services="" url="">RetrieveMPMResults_CMRIv2_DocAttach_AP</web></pre>	GMT
<web services="" url="">RetrieveMPMResults_CMRIv3_AP</web>	Fall 2016
<web services="" url="">RetrieveMPMResults_CMRIv3_DocAttach_AP</web>	
RetrieveNonDispatchableTimeRanges	
<web services="" url="">RetrieveNonDispatchableTimeRanges_CMRIv1_AP</web>	Spring
<web services="" url="">RetrieveNonDispatchableTimeRanges_CMRIv1_DocAttach_AP</web>	2013
RetrieveResourceLevelMovement	
<web services="" url="">RetrieveResourceLevelMovement_CMRIv1_AP</web>	Fall 2016
<web services="" url="">RetrieveResourceLevelMovement_CMRIv1_DocAttach_AP</web>	
RetrieveResourceMovementPoint	
<web services="" url="">RetrieveResourceMovementPoint_CMRIv1_AP</web>	Fall 2016
<web services="" url="">RetrieveResourceMovementPoint_CMRIv1_DocAttach_AP</web>	
RetrieveResourceOpportunityCost	
<web services="" url="">RetrieveResourceOpportunityCost_CMRIv1_AP</web>	Spring
<web services="" url="">RetrieveResourceOpportunityCost_CMRIv1_DocAttach_AP</web>	2018
RetrieveRMRDispatches	
<web services="" url="">RetrieveRMRDispatches_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveRMRDispatches_CMRIv1_DocAttach_AP</web>	GMT
RetrieveSchedulePrices	
<web services="" url="">RetrieveSchedulePrices_CMRIv3_AP</web>	Fall 2014
<web services="" url="">RetrieveSchedulePrices_CMRIv3_DocAttach_AP</web>	
<web services="" url="">RetrieveSchedulePrices_CMRIv4_AP</web>	Fall 2016
<web services="" url="">RetrieveSchedulePrices_CMRIv4_DocAttach_AP</web>	
RetrieveStartUpShutDownInstructions	
Web Services URL>RetrieveStartUpShutDownInstructions_CMRIv1_AP	Fall 2013
<web services="" url="">RetrieveStartUpShutDownInstructions_CMRIv1_DocAttach_AP</web>	GMT
RetrieveTwoDayMSSALoadForecast	·
<web services="" url="">RetrieveTwoDayMSSALoadForecast_CMRIv1_AP</web>	Fall 2013
<web services="" url="">RetrieveTwoDayMSSALoadForecast_CMRIv1_DocAttach_AP</web>	GMT



Systems Access Information for Market Participants

Service	Release
RetrieveUnitCommitments	
<pre><web services="" url="">RetrieveUnitCommitments_CMRIv1_AP</web></pre>	Fall 2013
<pre><web services="" url="">RetrieveUnitCommitments_CMRIv1_DocAttach_AP</web></pre>	GMT



CRR (Congestion Revenue Rights)

Summary

In order to allow Market Participants (MPs) to obtain Congestion Revenue Rights (CRR), there are necessary activities/tasks that must be completed in a timely manner for participation in these CRR related processes (allocations and auctions). The completion of these activities/tasks by all MPs is a necessary step for the successful kick-off of the first CRR production allocation and auction processes.

-CRR Registration, including submitted of application and forms (CRR Entity Agreement, Affiliate Form, Application Access Request Form and Training Waiver Form).

-Data Template Submittal (including Source/Sink verification, MSS selection and other data items), and

Historical Load data submittal for allocation participation.

This is the application used for the CRR auctions

References

Congestion Revenue Rights (CRR) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

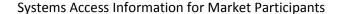


User Interfaces

Production	MAP Stage
https://portal.caiso.com/crr	https://portalmap.caiso.com/crr

IP Addresses

Production	MAP Stage
12.200.60.98	12.200.60.164
12.200.60.99	
12.231.58.98	
12.231.58.99	





DRRS (Demand Response Registration System)

Summary

DRRS allows users to create large volumes of locations and aggregate locations for participation in the ISO's demand response program.

References

Demand Response System (DRS) and Demand Response Registration System (DRRS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



User Interfaces

Production	MAP Stage
https://portal.caiso.com/drrs	https://portalmap.caiso.com/drrs

IP Addresses

Production	MAP Stage
12.200.60.98	12.200.60.164
12.200.60.99	
12.231.58.98	
12.231.58.99	

Web Services

Production	MAP Stage
https://ws.caiso.com/sst/drrs/ <specific services="" url="" web=""></specific>	https://wsmap.caiso.com/sst/drrs/ <specific services="" url="" web=""></specific>



Service	Release
RetrieveBatchValidationStatus	
<pre><web services="" url="">RetrieveBatchValidationStatus_DRRSv1_AP</web></pre>	DRRE 2016
<pre><web services="" url="">RetrieveBatchValidationStatus_DRRSv1_DocAttach_AP</web></pre>	
RetrieveDRLocations	
<pre><web services="" url="">RetrieveDRLocations_DRRSv1_AP</web></pre>	DRRE 2016
<pre><web services="" url="">RetrieveDRLocations_DRRSv1_DocAttach_AP</web></pre>	
RetrieveDRRegistrations	
<pre><web services="" url="">RetrieveDRRegistrations_DRRSv1_AP</web></pre>	DRRE 2016
<pre><web services="" url="">RetrieveDRRegistrations_DRRSv1_DocAttach_AP</web></pre>	
SubmitDRLocations	
<pre><web services="" url="">SubmitDRLocations_DRRSv1_AP</web></pre>	DRRE 2016
<pre><web services="" url="">SubmitDRLocations_DRRSv1_DocAttach_AP</web></pre>	
SubmitDRRegistrations	·
<pre><web services="" url="">SubmitDRRegistrations_DRRSv1_AP</web></pre>	DRRE 2016
<pre><web services="" url="">SubmitDRRegistrations_DRRSv1_DocAttach_AP</web></pre>	



DRS (Demand Response System)

Summary

Collect, approve and report on information and measurement data for Proxy Demand Resources (PDR) & Reliability Demand Response Resources (RDRR).

References

Demand Response System (DRS) and Demand Response Registration System (DRRS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location: http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



User Interfaces

Production	MAP Stage
https://portal.caiso.com/sbm	https://portalmap.caiso.com/sbm

IP Addresses

Production	MAP Stage
12.200.60.98	12.200.60.164
12.200.60.99	
12.231.58.98	
12.231.58.99	

Web Services

Production	MAP Stage
https://wsstas.caiso.com:4445/sst/runtime.asvc/< <i>Specific Web</i>	https://wsmap.caiso.com/sst/runtime.asvc/ <specific services="" url="" web=""></specific>
Services URL>	



Service	Release
RetrievePDRAggregatedData	
<web services="" url="">RetrievePDRAggregatedData_DRSv20100301_AP</web>	DRS R2
<web services="" url="">RetrievePDRAggregatedData_DRSv20100301_DocAttach_AP</web>	
RetrievePDRMeterData	
<pre><web services="" url="">RetrievePDRMeterData_DRS_AP</web></pre>	DRS R1
<pre><web services="" url="">RetrievePDRMeterData_DRS_DocAttach_AP</web></pre>	
<pre><web services="" url="">RetrievePDRMeterData_DRSv20100301_AP</web></pre>	DRS R2
<pre><web services="" url="">RetrievePDRMeterData_DRSv20100301_DocAttach_AP</web></pre>	
SubmitPDRLoadMeterData	
<pre><web services="" url="">SubmitPDRLoadMeterData_DRS_AP</web></pre>	DRS R1
<pre><web services="" url="">SubmitPDRLoadMeterData_DRS_DocAttach_AP</web></pre>	
<pre><web services="" url="">SubmitPDRLoadMeterData_DRSv20100301_AP</web></pre>	DRS R2
<pre><web services="" url="">SubmitPDRLoadMeterData_DRSv20100301_DocAttach_AP</web></pre>	
SubmitPDRMeterData	
<web services="" url="">SubmitPDRMeterData_DRSv20111001_AP</web>	DRS R3
< Web Services URL > SubmitPDRMeterData_DRSv20111001_DocAttach_AP	



Master File

Summary

Master File database contains static data that reflects the operating characteristics of resources that participate in California ISO Markets. Periodically, Scheduling Coordinators may need to make changes to specific operating parameters and may do so by submitting their data changes via Generator. Resource Data Template (GRDT or RDT) or Intertie Resource Data Template (IRDT or RDT). This user guide explains how to use the Master File User Interface for submitting these data changes, viewing and downloading approved RDT data for selected effective trade date, and viewing/downloading a list of resources with upcoming approved changes for specified date range. The purpose of the Master File is to hold static reference data that is used by many key market applications that operate at the ISO

References

Master File at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



Connectivity Information

User Interfaces

Production	Production ECN	MAP Stage
https://portal.caiso.com/mf	https://portal.ecn.wepex.net/mf	https://portalmap.caiso.com/mf

IP Addresses

Production	Production ECN	MAP Stage
12.200.60.98	10.112.0.122	12.200.60.164
12.200.60.99	10.112.0.123	
12.231.58.98	10.114.0.122	
12.231.58.99	10.114.0.123	

Web Services

Production	Production ECN	MAP Stage
https://wsstas.caiso.com:4445/sst/runtime.a	https://wsstas.ecn.wepex.net:4445/sst/runtime.	https://wsmap.caiso.com/sst/runtime.as
svc/ <specific services="" url="" web=""></specific>	asvc/ <specific services="" url="" web=""></specific>	vc/ <specific services="" url="" web=""></specific>



Service	Minor Version	RDT	Release
RetrieveApprovedResourceChanges			
<pre><web services="" url="">RetrieveApprovedResourceChanges_MFRD_AP</web></pre>			Go Live
RetrieveGeneratorRDT			
<web services="" url="">RetrieveGeneratorRDT_MFRDv3_AP</web>	20151001	GRDT	Fall 2015
<pre><web services="" url="">RetrieveGeneratorRDT_MFRDv3_DocAttach_AP</web></pre>		10.0	
<pre><web services="" url="">RetrieveGeneratorRDT_MFRDv4_AP</web></pre>	20161001	GRDT	Fall 2016
<pre><web services="" url="">RetrieveGeneratorRDT_MFRDv4_DocAttach_AP</web></pre>		11.0	
<pre><web services="" url="">RetrieveGeneratorRDT_MFRDv4_AP</web></pre>	20180201	GRDT	Winter
<pre><web services="" url="">RetrieveGeneratorRDT_MFRDv4_DocAttach_AP</web></pre>		11.0	2017
<web services="" url="">RetrieveGeneratorRDT_MFRDvX_AP</web>	20180501	GRDT	Spring
< web Services URL > Retrieve Generator RDT MFRD vX Doc Attach AP		12.0	2018
RetrieveIntertieRDT			
<web services="" url="">RetrieveIntertieRDT_MFRDv20121001_AP</web>		IRDT	Fall 2012
<web services="" url="">RetrieveIntertieRDT_MFRDv20121001_DocAttach_AP</web>		4.0	
<web services="" url="">RetrieveIntertieRDT_MFRDv1_AP</web>		IRDT	Spring
<web services="" url="">RetrieveIntertieRDT_MFRDv1_DocAttach_AP</web>		5.1.0	2014
RetrieveRDTSubmissionStatus			
<web services="" url="">RetrieveRDTSubmissionStatus_MFRD_AP</web>			Go Live
SubmitGeneratorRDT			
< Web Services URL > SubmitGenerator RDT_MFRDv3_AP	20151001	GRDT	Fall 2015
<web services="" url="">SubmitGeneratorRDT_MFRDv3_DocAttach_AP</web>		10.0	
< Web Services URL > SubmitGenerator RDT_MFRDv4_AP	20161001	GRDT	Fall 2016
<web services="" url="">SubmitGeneratorRDT_MFRDv4_DocAttach_AP</web>		11.0	
< Web Services URL > SubmitGenerator RDT_MFRDv4_AP	20180201	GRDT	Winter
<web services="" url="">SubmitGeneratorRDT_MFRDv4_DocAttach_AP</web>		11.0	2017
< Web Services URL > SubmitGenerator RDT MFRD v X AP	20180501	GRDT	Spring
<web services="" url="">SubmitGeneratorRDT_MFRDvX_DocAttach_AP</web>		12.0	2018



Systems Access Information for Market Participants

Service	Minor Version	RDT	Release
SubmitIntertieRDT			
<pre><web services="" url="">SubmitIntertieRDT_MFRDv20121001_AP</web></pre>		IRDT	Fall 2012
<pre><web services="" url="">SubmitIntertieRDT_MFRDv20121001_DocAttach_AP</web></pre>		4.0	
<pre><web services="" url="">SubmitIntertieRDT_MFRDv1_AP</web></pre>		IRDT	Spring
<pre><web services="" url="">SubmitIntertieRDT_MFRDv1_DocAttach_AP</web></pre>		5.1.0	2014



MPP

Summary

The California ISO Market Participant Portal is the centralized access point for secure applications and business critical information.

References

Market Participant Portal (MPP) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Production	MAP Stage
https://mpp.caiso.com	https://mppmap.caiso.com

Production	MAP Stage
12.200.60.114	12.200.60.164
12.200.60.115	
12.231.58.114	
12.231.58.115	



OASIS (Open Access Same-Time Information System)

Summary

On OASIS you will find real-time data related to the ISO transmission system and its Market, such as system demand forecasts, transmission outage and capacity status, market prices and market result data.

References

Open Access Same-Time Information System (OASIS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

The latest Interface Specification information is at http://www.caiso.com/Documents/Interface%20Specification

There may be later application information, including project-rleated report URL releases, at the Release Planning location: http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



Connectivity Information

User Interfaces

Production	MAP Stage
http://oasis.caiso.com	http://oasismap.caiso.com

IP Addresses

Production	MAP Stage
12.200.60.66	12.200.60.164
12.200.60.67	
12.231.58.66	
12.231.58.67	

Web Services

Production	MAP Stage
http://oasis.caiso.com/oasisapi/ <specific services="" url="" web=""></specific>	http://oasismap.caiso.com/oasisapi/ <specific services="" url="" web=""></specific>



Service	Release
SingleZip	
<pre><web services="" url="">SingleZip (version=1)</web></pre>	Fall
	2013
	GMT
<web services="" url="">SingleZip (version=2)</web>	Fall
	2014
GroupZip	
<pre><web services="" url="">GroupZip (version=1)</web></pre>	Spring
	2014
<web services="" url="">GroupZip (version=2)</web>	Fall
	2014
<web services="" url="">GroupZip (version=3)</web>	January
	2015



OMS (Outage Management System)

Summary

Report and manage generation and transmission outages through this web based system, which replaced SLIC effective February 27, 2015.

References

Outage Management System (OMS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



Connectivity Information

User Interfaces

Production	Production ECN	MAP Stage
https://idp.caiso.com/weboms	https://idp.ecn.wepex.net/weboms	https://idpmap.caiso.com:4443/weboms

IP Addresses

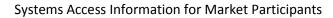
Production	Production ECN	MAP Stage
12.200.60.52	10.112.0.92	12.200.60.221
12.200.60.53	10.112.0.93	
12.231.58.52	10.114.0.92	
12.231.58.53	10.114.0.93	

Web Services

Product	tion	Production ECN	MAP Stage
https://	ws.caiso.com/sst/weboms/< <i>Specifi</i>	https://ws.ecn.wepex.net/sst/weboms/ <specif< th=""><th>https://wsmap.caiso.com/sst/weboms/<<i>Specif</i></th></specif<>	https://wsmap.caiso.com/sst/weboms/< <i>Specif</i>
c Web S	Services URL>	ic Web Services URL>	ic Web Services URL>



Service	Release
AcknowledgeOutageWarning	
<pre><web services="" url="">AcknowledgeOutageWarning_OMSv1_AP</web></pre>	Fall 2014
RetrieveAvailability	
<pre><web services="" url="">RetrieveAvailability_OMSv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveAvailability_OMSv1_DocAttach_AP</web></pre>	
RetrieveFacilityOutageDefinition	
<web services="" url="">RetrieveFacilityOutageDefinition_OMSv1_AP</web>	Fall 2014
<pre><web services="" url="">RetrieveFacilityOutageDefinition_OMSv1_DocAttach_AP</web></pre>	
RetrieveResourceOutage	
<pre><web services="" url="">RetrieveResourceOutage_OMSv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveResourceOutage_OMSv1_DocAttach_AP</web></pre>	
<pre><web services="" url="">RetrieveResourceOutage_OMSv2_AP</web></pre>	Early
<pre><web services="" url="">RetrieveResourceOutage_OMSv2_DocAttach_AP</web></pre>	2016
RetrieveResourceOutageChangeRequest	
<web services="" url="">RetrieveResourceOutageChangeRequest_OMSv1_AP</web>	Fall 2014
<pre><web services="" url="">RetrieveResourceOutageChangeRequest_OMSv1_DocAttach_AP</web></pre>	
<web services="" url="">RetrieveResourceOutageChangeRequest_OMSv2_AP</web>	Early
<web services="" url="">RetrieveResourceOutageChangeRequest_OMSv2_DocAttach_AP</web>	2016
RetrieveTransmissionOutage	
<pre><web services="" url="">RetrieveTransmissionOutage_OMSv1_AP</web></pre>	Fall 2014
<web services="" url="">RetrieveTransmissionOutage_OMSv1_DocAttach_AP</web>	
<pre><web services="" url="">RetrieveTransmissionOutage_OMSv2_AP</web></pre>	Fall 2016
<pre><web services="" url="">RetrieveTransmissionOutage_OMSv2_DocAttach_AP</web></pre>	
RetrieveTransmissionOutageChangeRequest	
<web services="" url="">RetrieveTransmissionOutageChangeRequest_OMSv1_AP</web>	Fall 2014
<web services="" url="">RetrieveTransmissionOutageChangeRequest_OMSv1_DocAttach_AP</web>	
<web services="" url="">RetrieveTransmissionOutageChangeRequest_OMSv2_AP</web>	Fall 2016
<web services="" url="">RetrieveTransmissionOutageChangeRequest_OMSv2_DocAttach_AP</web>	





Service	Release
SubmitResourceOutage	
< Web Services URL > SubmitResourceOutage_OMSv1_AP	Fall 2014
<web services="" url="">SubmitResourceOutage_OMSv1_DocAttach_AP</web>	
<web services="" url="">SubmitResourceOutage_OMSv2_AP</web>	Early
<web services="" url="">SubmitResourceOutage_OMSv2_DocAttach_AP</web>	2016
SubmitResourceOutageChangeRequest	·
<web services="" url="">SubmitResourceOutageChangeRequest_OMSv1_AP</web>	Fall 2014
<web services="" url="">SubmitResourceOutageChangeRequest_OMSv1_DocAttach_AP</web>	
<web services="" url="">SubmitResourceOutageChangeRequest_OMSv2_AP</web>	Early
Web Services URL>SubmitResourceOutageChangeRequest_OMSv2_DocAttach_AP	2016
SubmitTransmissionOutage	·
<web services="" url="">SubmitTransmissionOutage_OMSv1_AP</web>	Fall 2014
<web services="" url="">SubmitTransmissionOutage_OMSv1_DocAttach_AP</web>	
Web Services URL>SubmitTransmissionOutage_OMSv2_AP	Spring
<web services="" url="">SubmitTransmissionOutage_OMSv2_DocAttach_AP</web>	2017
SubmitTransmissionOutageChangeRequest	
Web Services URL>SubmitTransmissionOutageChangeRequest_OMSv1_AP	Fall 2014
<web services="" url="">SubmitTransmissionOutageChangeRequest_OMSv1_DocAttach_AP</web>	
Web Services URL>SubmitTransmissionOutageChangeRequest_OMSv2_AP	Spring
Web Services URL>SubmitTransmissionOutageChangeRequest_OMSv2_DocAttach_AP	2017
WithdrawOutageChangeRequest	
<web services="" url="">WithdrawOutageChangeRequest OMSv1 AP</web>	Fall 2014



RIMS (Resource Interconnection Management System)

Summary

RIMS allows ICs (along with the appropriate PTO and ISO) to track their project's process through the study and LGIA processes.

References

Resource Interconnection Management System (RIMS) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Production	Production ECN
https://portal.caiso.com/rims	https://portal.ecn.wepex.net/rims

Production	Production ECN
12.200.60.98	10.112.0.122
12.200.60.99	10.112.0.123
12.231.58.98	10.114.0.122
12.231.58.99	10.114.0.123



Settlements

Summary

Settlements interfaces provide Scheduling Coordinators the ability to download Settlement statements, invoices, CAISO Bill determinant files and SaMC Configuration Output files.

References

Market Results Interface - Settlements (MRI-S) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Production	Production ECN	MAP Stage
https://portal.caiso.com/settlements	https://portal.ecn.wepex.net/settlements	https://portalmap.caiso.com/settlements

Production	Production ECN	MAP Stage	
12.200.60.98	10.112.0.122	12.200.60.164	
12.200.60.99	10.112.0.123		
12.231.58.98	10.114.0.122		
12.231.58.99	10.114.0.123		



Web Services

Production	MAP Stage
https://ws.caiso.com/sst/stlmt/ <specific services="" url="" web=""></specific>	https://wsmap.caiso.com/sst/stlmt/ <specific services="" url="" web=""></specific>

Service	Release
RetrieveBatchValidationStatus	
<web services="" url="">RetrieveBatchValidationStatus_STLMTv1_AP</web>	Fall 2016
<pre><web services="" url="">RetrieveBatchValidationStatus_STLMTv1_DocAttach_AP</web></pre>	
RetrieveMeterData	
<pre><web services="" url="">RetrieveMeterData_STLMTv1_AP</web></pre>	Fall 2016
<pre><web services="" url="">RetrieveMeterData_STLMTv1_DocAttach_AP</web></pre>	
SubmitMeterData	
<pre><web services="" url="">SubmitMeterData_STLMTv1_AP</web></pre>	Fall 2016
<pre><web services="" url="">SubmitMeterData_STLMTv1_DocAttach_AP</web></pre>	



SIBR (Scheduling Infrastructure Business Rules)

Summary

The SIBR application (1) Accepts bids and trades for energy and energy related commodities from SCs that are certified to interact with ISO, (2) Ensures that those bids and trades are valid and modifies bids for correctness when necessary, (3) Enters those bids and trades into a database for processing by other components of the ISO's management systems, and (4) Provides required feedback to SCs concerning bids and trades that have been submitted.

References

Scheduling Infrastructure Business Rules (SIBR) at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx



Connectivity Information

User Interfaces

Production	Production ECN	MAP Stage	Sandbox
https://portal.caiso.com/sibr	https://portal.ecn.wepex.net/sibr	https://portalmap.caiso.com/sibr	https://sandbox.caiso.com/sibr

IP Addresses

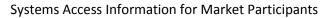
Production	Production ECN	MAP Stage	Sandbox
12.200.60.98	10.112.0.122	12.200.60.164	12.200.60.162
12.200.60.99	10.112.0.123		
12.231.58.98	10.114.0.122		
12.231.58.99	10.114.0.123		

Web Services

Production	Production ECN	MAP Stage	Sandbox
https://ws.caiso.com/sst/sibr/ <s< th=""><th>https://ws.ecn.wepex.net/sst/sib</th><th>https://wsmap.caiso.com/sst/sib</th><th>https://wssandbox.caiso.com:44</th></s<>	https://ws.ecn.wepex.net/sst/sib	https://wsmap.caiso.com/sst/sib	https://wssandbox.caiso.com:44
pecific Web Services URL>	r/ <specific services="" url="" web=""></specific>	r/ <specific services="" url="" web=""></specific>	45/sst/sibr/ Web Services URL>



Service	Release
RetrieveCBCleanBidSet	
<web services="" url="">RetrieveCBCleanBidSet_SIBRv20100301_AP</web>	СВ
<web services="" url="">RetrieveCBCleanBidSet_SIBRv20100301_DocAttach_AP</web>	
<pre><web services="" url="">RetrieveCBCleanBidSet_SIBRv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveCBCleanBidSet_SIBRv1_DocAttach_AP</web></pre>	
RetrieveCBCurrentBidResults	
<web services="" url="">RetrieveCBCurrentBidResults_SIBRv20100301_AP</web>	СВ
<web services="" url="">RetrieveCBCurrentBidResults_SIBRv20100301_DocAttach_AP</web>	
<pre><web services="" url="">RetrieveCBCurrentBidResults_SIBRv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveCBCurrentBidResults_SIBRv1_DocAttach_AP</web></pre>	
RetrieveCleanBidSet	
<pre><web services="" url="">RetrieveCleanBidSet_SIBRv3_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveCleanBidSet_SIBRv3_DocAttach_AP</web></pre>	
<pre><web services="" url="">RetrieveCleanBidSet_SIBRv4_AP</web></pre>	Fall 2015
<pre><web services="" url="">RetrieveCleanBidSet_SIBRv4_DocAttach_AP</web></pre>	
RetrieveCurrentBidResults	
<pre><web services="" url="">RetrieveCurrentBidResults_SIBRv3_AP</web></pre>	Fall 2014
<pre><web services="" url="">RetrieveCurrentBidResults_SIBRv3_DocAttach_AP</web></pre>	
<web services="" url="">RetrieveCurrentBidResults_SIBRv4_AP</web>	Fall 2015
<pre><web services="" url="">RetrieveCurrentBidResults_SIBRv4_DocAttach_AP</web></pre>	
RetrieveFinalTradeSet	
<pre><web services="" url="">RetrieveFinalTradeSet_SIBR_AP</web></pre>	Go Live
<pre><web services="" url="">RetrieveFinalTradeSet_SIBR_DocAttach_AP</web></pre>	
RetrieveSCVERForecast	
<pre><web services="" url="">RetrieveSCVERForecast_SIBRv1_AP</web></pre>	Spring 2014
<pre><web services="" url="">RetrieveSCVERForecast_SIBRv1_DocAttach_AP</web></pre>	
RetrieveSelfScheduleContracts	
<web services="" url="">RetrieveSelfScheduleContracts SIBRv20090801 AP</web>	SCP





Service	Release
RetrieveTradeResults	
<pre><web services="" url="">RetrieveTradeResults_SIBR_AP</web></pre>	Go Live
<pre><web services="" url="">RetrieveTradeResults_SIBR_DocAttach_AP</web></pre>	
SubmitBidAction	·
<pre><web services="" url="">SubmitBidAction_SIBR_AP</web></pre>	Go Live
SubmitCBBidAction	·
<pre><web services="" url="">SubmitCBBidAction_SIBRv20100301_AP</web></pre>	СВ
SubmitCBRawBidSet	·
<pre><web services="" url="">SubmitCBRawBidSet_SIBRv20100301_AP</web></pre>	СВ
<pre><web services="" url="">SubmitCBRawBidSet_SIBRv20100301_DocAttach_AP</web></pre>	
<pre><web services="" url="">SubmitCBRawBidSet_SIBRv1_AP</web></pre>	Fall 2014
<pre><web services="" url="">SubmitCBRawBidSet_SIBRv1_DocAttach_AP</web></pre>	
SubmitRawBidSet	
<pre><web services="" url="">SubmitRawBidSet_SIBRv3_AP</web></pre>	Fall 2014
<pre><web services="" url="">SubmitRawBidSet_SIBRv3_DocAttach_AP</web></pre>	
<pre><web services="" url="">SubmitRawBidSet_SIBRv4_AP</web></pre>	Fall 2015
<pre><web services="" url="">SubmitRawBidSet_SIBRv4_DocAttach_AP</web></pre>	
SubmitRawTradeSet	
<pre><web services="" url="">SubmitRawTradeSet_SIBR_AP</web></pre>	Go Live
<pre><web services="" url="">SubmitRawTradeSet_SIBR_DocAttach_AP</web></pre>	
SubmitSCVERForecast	
<pre><web services="" url="">SubmitSCVERForecast_SIBRv1_AP</web></pre>	Spring 2014
<pre><web services="" url="">SubmitSCVERForecast_SIBRv1_DocAttach_AP</web></pre>	
SubmitTradeAction	
<pre><web services="" url="">SubmitTradeAction_SIBR_AP</web></pre>	Go Live



TR (Transmission Register)

Summary

Database for all transmission facilities under ISO Operational Control

References

Transmission Register at http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx under California ISO applications

There may be later application information at the Release Planning location:

http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Connectivity Information

User Interfaces

Production	Production ECN		
https://portal.caiso.com/tr	https://portal.ecn.wepex.net/tr		

Production	Production ECN
12.200.60.98	10.112.0.122
12.200.60.99	10.112.0.123
12.231.58.98	10.114.0.122
12.231.58.99	10.114.0.123



Web Services

Summary

ISO web services allow for integration of applications.

Connectivity Information

User Interfaces

Production	Production	Production ECN	Production ECN	MAP Stage	Sandbox
https://wsstas.caiso.c	https://ws.caiso.com	https://wsstas.ecn.w	https://ws.ecn.wepe	https://wsmap.caiso.	https://wssandbox.ca
<u>om:4445</u>		<u>epex.net:4445</u>	<u>x.net</u>	<u>com</u>	<u>iso.com:4445</u>

Production	Production	Production ECN	Production ECN	MAP Stage	Sandbox
12.200.60.98	12.200.60.50	10.112.0.122	10.112.0.90	12.200.60.218	12.200.60.162
12.200.60.99	12.200.60.51	10.112.0.123	10.112.0.91		
12.231.58.98	12.231.58.50	10.114.0.122	10.114.0.90		
12.231.58.99	12.231.58.51	10.114.0.123	10.114.0.91		



Access Requests

Requests should be submitted per the *How to Submit ISO Application Access Requests* document under the "ISO system access" section on the following page: http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx. This document provides an overview of the ISO application access request submission instructions. Available methods are

- External User Application Access Request Form (AARF)
- Integration Application Access Request Form (AARF)
- For revoking users, use AIM
- CIDI for Application Access Request Case (AARC) AND Revoke Access Request Case (RARC)

ISO Help Desk

To report issues with the systems, please contact the ISO Help Desk and specify the environment in which the issue exists.

• Voice: (916) 351-2309 or (888) 889-0450

• Fax: (916)351-4487

• E-mail: ISOHelpDesk@caiso.com

Questions

For questions about this document, please contact ISO Change Management at changemanagement@caiso.com.



Acronyms

Acronym	Description
AARF	Application Access Request Form
ADS	Automated Dispatch System
AIM	Access and Identity Management
API	Application Programming Interface
BPM	Business Practice Manuals
ВААОР	Balancing Authority Area Operations Portal
BSAP	Base Schedule Aggregation Portal
СВ	Convergence Bidding
СС	Commitment Costs
CIDI	Customer Inquiry Dispute and Information
CIRA	Customer Interface for Resource Adequacy
CMRI	Customer Market Results Interface
CRN	Contract Reference Number
CRR	Congestion Revenue Rights
DRS	Demand Response System
ECN	Energy Communication Network
EIM	Energy Imbalance Market
FLEX	Flexible Ramping
Go Live	The Market Redesign Technology Upgrade (MRTU) WENT LIVE April 1, 2009
IP	Internet Protocol
MAP	Market and Performance (New Release)
MDS	Market Definition Service
MFRD	Master File Redesign
MNS	Market Notification Service
MPP	Market Participant Portal
MRI-S	Market Results Interface Settlements
MSG	Multi-Stage Generation
OASIS	Open Access Same-Time Information System



Systems Access Information for Market Participants

Acronym	Description
OMAR	Operational Meter Analysis and Reporting
OMS	Outage Management System
ОТСС	Open Tie Commitment Cost
OTSL	Open Tie Stranded Load
PIRP	Participating Intermittent Resource Program
RAAM	Resource Adequacy Availability Management
RARF	Revoke Access Request Form
RIMS	Resource Interconnection Management System
SCP	Standard Capacity Product
SDS	Settlements Dispute System
SFTP	Secure File Transfer Protocol
SIBR	Scheduling Infrastructure Business Rules
SIUG	Systems Interface User Group
SLIC	Scheduling and Logging for ISO of California
TOR	Transmission Outage Report
TR	Transmission Register
TUG	Technical User Group
URL	Universal Resource Locator



Revisions

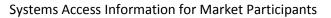
Version	Date	Description	
1.0	02/02/10	Initial draft distributed to Market Participants for review and feedback	
1.1	02/12/10	Revised version with Market Participants' feedback and additional application information included	
1.2	02/19/10	Finalized version after testing and addition of DRS	
1.3	04/07/10	Added DRS and SLIC API URLs	
1.4	05/19/10	Added Stage DRS API URLs	
1.5	07/02/10	Updated links	
1.6	07/10/10	Added MAP Stage links for ADS, CMRI, Masterfile, SIBR and SIBR Lite for Multi-Stage Generation (MSG)	
1.7	08/10/10	Added Production DRS link and URLs for Proxy Demand Response (PDR)	
1.8	09/17/10	Updated document to simplify content and structure. Introduced The Sandbox environment. Moved SIBR Lite URLs	
		into the Sandbox. Added the SIBR Lite URLs (virtual) links in The Sandbox for Convergence Bidding (CB).	
1.9	10/25/10	Added Stage and MAP Stage DRS links for Proxy Demand Response (PDR) and added links for Multi-Stage Generation	
		(MSG)	
2.0	11/10/10	Added MAP Stage SIBR links for Convergence Bidding (CB)	
2.1	11/16/10	Added MAP Stage CMRI links for Convergence Bidding (CB)	
2.2	01/12/11	Added Stage SIBR links for Convergence Bidding (CB)	
2.3	01/25/11	Added Production SIBR and CMRI links for Convergence Bidding (CB)	
2.4	04/21/11	Added MAP Stage, Stage and Production PIRP Web Services URLs	
2.5	05/17/11	Added MAP Stage, Stage and Production MasterFile links for Commitment Costs (CC)	
2.6	08/08/11	Removed Stage Environment links, Updated public website IP's and added MAP Stage SIBR links for Open Tie Stranded	
		Load (OTSL)	
2.7	10/13/11	Updated Production SIBR URLs for Open Tie Commitment Costs (OTCC)	
2.8	11/10/11	Updated MAP Stage CMRI URLs for Flex Ramping (FLEX) and IRR URLs	
2.9	12/14/11	Updated MAP Stage and Production Masterfile URLs for Flex Ramping (FLEX)	
3.0	02/08/12	Modified MAP Stage maintenance windows and updated MAP Stage SIBR URLs for Non-Generator Resources –	
		Regulation Energy Management (NGR-REM / REM)	
3.1	03/28/12	Added Production and Sandbox SIBR URLs for Non-Generator Resources – Regulation Energy Management (NGR-REM /	
		REM), Added Production ECN IRR URL, Added Location of OASIS Interface Specifications	
3.2	04/05/12	Modified OASIS information, Removed Old DRS URLs and Added New DRS URLs	
3.3	06/12/12	Modified MF URLs, added SIBR URLs	



Version	Date	Description	
4.0	09/05/12	Updated MAP Stage ADS URLs for Contingency Dispatch Enhancements (CDE) and MAP Stage MasterFile URLs for	
		multiple projects in Fall 2012 Release	
4.1	12/04/12	Included Production and MAP Stage information for MRI (Market Results Interface) Settlements and removing MAP	
		Stage and Production information for BAPI, modified Production information for ADS	
4.2	02/14/13	Removal SIBR Lite & Sandbox per decommission and Spring Release updates; MAPStage Standalone SIBR URLs	
4.3	03/13/13	Corrected typos in MAPStage CRMI URLs	
4.4	05/01/13	URLs for multiple projects in Spring 2013 Release. Effective dates on applications will be as described in the Deployment	
		Plan disseminated on 4/18/2013	
4.5	05/31/13	Corrected URL for SLIC soaprpcrouter	
4.6	08/08/13	Removed BAPI references	
		Removed interim PROD references	
		Added Sandbox / SIBR_Lite information	
4.7	08/13/13	Added CIRA information for MAP Stage	
4.8	09/23/13	Added CMRI: RetrieveContractUsage for Fall 2013 Release; updated MNS references and application access request	
		information	
4.9	11/22/13	Added ECN reference information	
		Added GMT URLs for MAP Stage CMRI	
4.10	12/04/13	Added GMT URLs for PROD CMRI	
4.11	01/08/14	Added SIBR Spring 2014 URLs to SIBR_Lite section	
4.12	01/17/14	Added CMRI URLs for Spring 2014 to MAPStage section	
4.13	02/07/14	Added ADS URLs for Spring 2014 to MAPStage section, removed MSG entry in ADS MAPStage and updated SIBR URLs for	
		Spring 2014 in MAPStage section	
4.14	02/10/14	Added AIM URLs for Production and Acronyms sections	
4.15	03/20/14	Added OMAR FTP for MAP Stage, updated MasterFile URLs for MAP Stage	
4.16	04/03/14	Remove URLs in MAPStage and SIBR_Lite that were previously deprecated, but not removed from documentation.	
		(REM: 4/1/12)	
4.17	04/15/14	Added Spring 2014 URLs for Production	
5.0	06/10/14	Added Fall 2014 URLs for Sandbox (BSAP, OMS Lite, SIBR Lite); modified MAP Stage and Sandbox maintenance windows	
5.1	06/16/14	Modified OMS Lite URLs for Sandbox, added note that OMS Lite URLs for Sandbox will be available 6/24/14	
5.2	07/07/14	Modified OMS Lite release to Fall 2014, modified OMS Lite URL availability dates	
5.3	07/08/14	Added Fall 2014 URLs for MAP Stage (ADS, BSAP, CMRI, MF, OMS, SIBR)	



Version	Date	Description
5.4	07/16/14	Updated MAP Stage BSAP UI URL
5.5	08/05/14	Added MAP Stage and Sandbox URLs for OMS and BSAP; modified MPP URLs; modified MAP Stage BSAP IP; removed
		MAP Stage SLIC
5.6	08/18/14	Added and modified CMRI URLs for MAP Stage; modified WebOMS information for MAP Stage and Sandbox
5.7	08/21/14	Updated Production URLs for Fall 2014 release, including Fall 2014 release SIBR
5.8	09/04/14	Added Production URLs for Fall 2014 release
5.9	09/08/14	Added new Sandbox SIBR URLs for Fall 2014 release
6.0	09/25/14	Added new MAP Stage SIBR URLs, removed obsolete SIBR Lite URLs, minor corrections
6.1	10/03/14	Removed new Production URL formats for CMRI, DRS, and MF
6.2	10/06/14	Restored non-GMT CMRI & OASIS URLs for Production, added Stage OASIS URLs
6.3	10/07/14	Minor corrections
6.4	10/10/14	Removed services moved to 2015 spring release: RetrieveCBCleanBidSet_SIBRv1 and
		RetrieveCBCurrentBidResults_SIBRv1; Added SubmitCBRawBidSet_SIBRv1
6.5	10/28/14	Removed referenced URLs for Old SIBR Vs. SIBR Fall 2014
6.6	11/17/14	Updated URL reference for SIBR in MAPStage to https://wsmap.caiso.com:4445/
6.7	01/26/15	Removed URL references for decommissioned CMRI – PTR entries.
6.8	02/03/15	Added DRRS URLs for MAPStage
6.9	02/12/15	Removed decommissioned mrtu-oasis Single and Group Zip URLs (effective 2/2/2015)
		Added DRRS URLs for Production
6.10	02/19/15	Added IPs for DRRS
6.11	03/24/15	Changed CIRA name to be Customer from CAISO
6.12	04/08/15	Added SubmitCBRawBidSet_SIBRv1 URLs for MAP stage and production
6.13	04/14/15	Added RetrieveCBCleanBidSet_SIBR_v1 URLs for MAP stage and production
6.14	04/20/15	Added RetrieveCBCurrentBidResults_SIBR_v1 URLs for MAP stage and production
7.0	06/11/15	Added Fall 2015 Release URLs for MAP stage
7.1	06/24/15	Updated MAP stage web service URLs to remove :4445
8.0	08/10/15	Added Fall 2015 Release URLs for Production
8.1	09/01/15	Updated IPs for Production MPP, updated MPP Production ECN URL
9.0	01/01/16	Modified document format; added CMRI RetrieveEIMEntityTransferLimit services, added Early 2016 Release services
9.1	01/11/16	Added additional Early 2016 Release services for OMS
9.2	05/23/16	Added Settlement services for OMAR Replacement, Added DRRS services for Demand Response Registration Enh





Version	Date	Description
9.3	06/17/16	Added Fall 2016 Release services
9.4	09/19/16	Added ALFS, added clarification for CIRA services, added more CMRI Fall 2016 Release services, added clarification for
		CMRI web services URL (includes sunset of old URL)
9.5	10/26/16	Modified new CMRI web service URL (standardization)
9.6	03/10/16	Added ADS secondary connection names
10.0	06/01/17	Added latest URLs, including Fall 2017 Release
10.1	10.01/17	Minor modifications, removal of decommissioned systems