



RC West Settlements Working Group

Market Settlement Design and Configuration

July 24, 2019

Agenda

- Data Validation Status
- What Steps Should be Complete / In Progress
- Steps to Download Statement
- RC Informational Statement – Navigating the CSV & XML files
- RC Services MRI-S UI Enhancements
- Data Validation Calendar

Appendix

- MRI-S Access & Documents Location
- How-to Guide for Uploading NEL / NG Volumes
- Overview of Settlement Process
- RC and HANA Services Production Timelines
- Overview of Charge Codes
- Contact Information

Data Validation Status

- RC Informational Statement
 - Statement published and notice provided on 7/23
 - Statement may be downloaded from MRI-S as an XML / CSV file format
 - Additional format options addressed as enhancements
- On track for 100% participation
 - Approximately 90% of RC customers have successfully uploaded their NEL / NG data
 - Five entities are outstanding and can re-submit NEL / NG data through 7/25
 - Informational Statement was not generated for those who did not submit data
 - Submit CIDI tickets for any issues with uploading the data or downloading of the statement

What Steps Should be Complete / In Progress

- Requested and received a certificate with an RC specific role to access MRI-S
- You should be able to log in to MRI-S UI Map Stage
- Downloaded the RC Informational Statement published on 7/23
- NEL / NG volumes should all be uploaded to MRI-S UI in Map Stage
 - Validate and re-submit the NEL / NG no later than 7/25 (if necessary)
 - Who: RC entities external to CAISO BAA responsible for NEL / NG yearly volume data during Map Stage Data Validation and Production. *Internal CAISO BAA customer – no action required for data upload.*
 - Direct bill TOPs with no NEL / NG are required to enter zero(s) for their volume submission
 - If you do not have your Net Energy Zone ID (NEZ ID), submit a CIDI ticket

Steps to Download RC Informational Statement from MRI-S

Net Energy Data **RC/HANA Statements** RC/HANA Publication Status

Start Date 01/01/2020 End Date 12/31/2020 ENTITY [ALL] Net Energy Zone [ALL] Apply Reset

Upload File

Net Energy Data

Rows 25

		Current					Previous					
ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	MW Value	Submission Id	Updated By	Updated Date	MW Value	Submission Id	Updated By	Updated Date
			01/01/2020	12/31/2020	375.0000000	904		06/18/2019 10:09	500.0000000	903		06/18/2019 10:09

File Type [ALL] ENTITY [ALL] Run Type [ALL] Trade Date Post Date From: 07/16/2019 Post Date To: 07/23/2019 Apply Reset

RC/HANA Statements

SELECT XML CSV PDF ENTITY Name Trade Date Post Date Version External
No Data found

File Type: Business Associate (BA) Bill Determinant
Run Type: RC Services Informational
Post Dates: Clear out both fields

RC Services Informational Statement – How to Read the CSV

CSV File Format:

Scroll over to the right to find the NEL / NG volume under the “Data Val” column:

FA	FB	FC	FD	FE	FF	FG
IndexA 26 Ref	IndexA 27 Ref	IndexA 28 Ref	IndexA 29 Ref	IndexA 30 Ref	Data Int	Data Val
					2020-01-01T00:00:00-08:00	12345.678
					2020-01-01T00:00:00-08:00	12345.678
					2020-01-01T00:00:00-08:00	12345.678

RC Services Informational Statement – How to Read the XML

XML File Format: Open in Notepad and identify the field with your submitted NEL / NG value per below:

```
File Edit Format View Help
<?xml version="1.0" encoding="UTF-8"?>
<BillDeterminantData xmlns="http://www.caiso.com/soa/2007-03-12/BillDeterminantData.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
<MessageHeader>
<TimeDate>2019-07-19T16:18:33-07:00</TimeDate><Source>XXXX_BA-DETERMINANTS-2019071911-RC_SVCS_INFO-5-APPROVED-20200101.xml</Source>
</MessageHeader>
<MessagePayload>
<BillDeterminant name="BA_ANN_RC_SVCS_TOTAL_SUBMITD_NET@QUANTITY" mrid="1454771378" dataType="INTERMEDIATE" lastModified="2019-07-19T16:02:14-0
<Attribute seq="1" name="BA_ID" val="####"/>
<Attribute seq="2" name="RSRC_ID" val="XXXX_NEZ"/>
<Attribute seq="3" name="BAL AUTHORITY AREA" val="XXXX"/>
<Data int="2020-01-01T00:00:00-08:00" val="12345.678"/>
</BillDeterminant>
<BillDeterminant name="BA_ANN_RC_SVCS_SUBMITD_NE@QUANTITY" mrid="1454771427" dataType="INTERMEDIATE" lastModified="2019-07-19T16:02:14-07:00" s
<Attribute seq="1" name="BA_ID" val="####"/>
<Attribute seq="2" name="RSRC_ID" val="XXXX_NEZ"/>
<Attribute seq="3" name="BAL AUTHORITY AREA" val="XXXX"/>
<Data int="2020-01-01T00:00:00-08:00" val="12345.678"/>
</BillDeterminant>
<BillDeterminant name="BA_ANN_RC_SVCS_SUBMITD_NE_QTY" mrid="1409850333" dataType="PRIMARY" lastModified="2019-07-19T16:01:49-07:00" settlementV
<Attribute seq="1" name="BA_ID" val="####"/>
<Attribute seq="2" name="RSRC_ID" val="XXXX_NEZ"/>
<Attribute seq="3" name="BAL AUTHORITY AREA" val="XXXX"/>
<Data int="2020-01-01T00:00:00-08:00" val="12345.678"/>
</BillDeterminant>
</MessagePayload>
</BillDeterminantData>
```

RC Services MRI-S UI Enhancements

- Replacement of the manual XML file upload for NEL / NG volumes
 - Approved and development is in progress
 - Development completion targeted for August
- PDF option available for statements and invoices starting with the 7/25 publication of the HANA Statement & Invoice and the 7/30 publication of the RC Initial Statement & Invoice
- Additional format options for the RC Informational Statement are in progress

MRI-S Export Function for NEL / NG Values (Enhancement)

California ISO Market Results Interface - Settlements

Net Energy Data RC/HANA Statements RC/HANA Publication Status

Start Date 01/01/2020 End Date 12/31/2020 ENTITY [ALL] Net Energy Zone [ALL] Apply Reset

Net Energy Data Rows 25

ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	Current		Previous	
					MW Value	Submission Id	MW Value	Submission Id
			01/01/2020	12/31/2020		162		
			01/01/2020	12/31/2020		187		186
			01/01/2020	12/31/2020		147		
			01/01/2020	12/31/2020		202		175
			01/01/2020	12/31/2020		167		
			01/01/2020	12/31/2020		176		
			01/01/2020	12/31/2020		194		193
			01/01/2020	12/31/2020		122		
			01/01/2020	12/31/2020		165		103
			01/01/2020	12/31/2020		227		226
			01/01/2020	12/31/2020		164		163

Net Energy Data Rows 25

Export All Export Page Export Wizard

ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	Current		Previous	
					MW Value	Submission Id	MW Value	Submission Id
			01/01/2020	12/31/2020		162		

	A	B	C	D	E	F	G	H	I
1						Current		Previous	
2	ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	MW Value	Submission Id	MW Value	Submission Id
3	XXXX	BA	XXXX NEZ	01/01/2020	12/31/2020	1,234,567.8900000	162		
4	XXXX	TOP	XXXX NEZ	01/01/2020	12/31/2020	9,876,543.2100000	187	9,876,543.2100000	186

Data Validation Execution Details (7/9/19-8/7/19)

Monday	Tuesday	Wednesday	Thursday	Friday
8	9 Map Stage Environment Opens	10 ISO: Publish sample RC Info Stmt to test connectivity	11 RC Customers: Start MRI-S uploads	12
15	16 RC Customers: MRI-S upload Deadline	17	18	19
22	23 ISO: RC Info Stmt Publication	24 RC Customers: Review RC Info Stmt	25 RC Customers: Review Info Stmt & re-submit deadline ISO: Publish HANA Stmt and Invoice	26 RC Customers: HANA Stmt & Invoice Validation Start - Submit questions by 8/14
29	30 ISO: Publish RC Initial Stmt and Invoice	31 RC Customers: RC Initial Stmt & Invoice Validation Start - Submit questions by 8/14	1 ISO: Publish additional HANA scenario Stmt & Invoice	2 RC Customers: HANA additional scenario Stmt & Invoice Validation Start - Submit questions by 8/14
5	6 ISO: Publish RC Recalc Stmt & Invoice for LPP	7 RC Customers: RC Recalc Stmt & Invoice Validation Start - Submit questions by 8/14	8	9

Key Dates

- RC Customers ACTION
- ISO ACTION
- HANA scenario
- RC scenario

Questions



Appendix

Portal access to MRI-S User Interface

Direct URL to MRI-S -

<https://portalmap.caiso.com/settlements/logon.do>

- CAISO portal URL
 - https://portalmap.caiso.com/MP_P_files/MPPApps.html
 - Internal ISO customers should see a new RC tab in MRI-S
 - If you do not see it you need to add this role to your access.
- RC West Portal URL
 - <https://rc.caiso.com/>
 - External to CAISO BAA customers navigate to: Apps > Map Stage > Market Results Interface – Settlements (MRI-S)
 - If you can not access this link or do not see it you need to add this role to your access.



California ISO



RC West

Apps ▾

Working Groups ▾

Libraries ▾

Contact List

Training

Calendar

Prod ▶

Stage ▶

MAP Stage ▶

System Status

This secure site
Western Electric
and RC West.

Customer Market Results Interface (CMRI)

Grid Messaging System (GMS)

Hosted Advanced Network Applications (HANA)

Market Results Interface - Settlements (MRI-S)

Outage Management System (WebOMS)

RC Base Schedule Aggregation Portal (RCBSAP)

Resource Interconnection Management System (RIMS)

Coordinator

P-003-3 for the
ision operators,



Application Access

 **AIM** Access and Identity Management

Inquiries & Disputes

 **CIDI** Customer Inquiry Dispute and Information

Market & Operations

 **CMRI** Customer Market Results Interface

 **CRR** Congestion Revenue Rights

 **SIBR** Scheduling Infrastructure & Business Rules

 **SIBR Reports** Scheduling Infrastructure & Business Rules Reports

Metering

 **OMAR** Operational Meter Analysis & Reporting

OASIS

 **OASIS** Open Access Same-Time Information System

Outage Coordination

 **WebOMS** Outage Management System

Reliability Requirements

 **CIRA** Customer Interface for Resource Adequacy

Renewables & Demand Response

 **DRS** Demand Response System

 **DRRS** Demand Response Registration System

Settlements

 **MRI-S** Market Results Interface - Settlements

Systems & Resource Modeling

 **TR** Transmission Registry

 **Master File**

 **RIMS** Resource Interconnection Management System

Meeting Notes location

- URL – Meeting Notes
 - <http://www.caiso.com/informed/Pages/MeetingsEvents/UserGroupsRecurringMeetings/Default.aspx>

- About Us
- Participate
- Stay Informed
 - Board and Committees
 - Stakeholder Processes
 - Release Planning
 - Clean, Green Grid
 - Managing Oversupply
 - Regional Collaboration
 - Energy Imbalance Market
 - RC West
 - Regional Solutions
 - Subscriptions and notifications
- Meetings and Events
 - Board of Governors and Committee Meetings
 - Customer Partnership Groups
 - Initiatives
 - Miscellaneous stakeholder meetings
 - Public Forums
 - Release Planning
 - Stakeholder Symposium
 - User Groups and Recurring Meetings**
 - Meetings and Events Archive
- Recent Documents
- Bulletins Reports and Studies
- Papers and Proposals
- Regulatory Filings and Orders
- Planning
- Market & Operations
- Rules
- ISO En Español

Home > Stay Informed > Meetings Events > User groups and recurring meetings

User groups and recurring meetings

These forums provide a mechanism for stakeholders to communicate and interact and for the California ISO to share important information.

Congestion revenue rights

Biweekly call for candidate congestion revenue rights holders to ask general questions about the CRR process.

- [Congestion Revenue Rights Conference Calls Agenda](#) 9/00/2015 15:21
- [Congestion Revenue Rights web page](#)
- [2019 conference calls](#)

Market issues and performance reports

Quarterly and annual calls to provide an overview of reports issued by the Department of Market Monitoring (DMM) on market issues and performance.

- [2019 web conferences](#)

Market performance and planning forum

Bimonthly forum that engages stakeholders in review of market performance issues and in high level dialogue on release planning, implementation and new market enhancements.

- [Market Performance and Planning Forum: 2019 Schedule](#) 1/24/2019 09:57
- [2019 meetings](#)

Market settlement user group

Biweekly discussion forum for market participants to obtain information, provide input and ask questions on current ISO initiatives and activities affecting the settlement and invoicing processes.

- [Settlements web page](#)
- [2019 web conferences](#)

Market update

Biweekly call covering updates on the weekly market performance reports, weekly price correction reports and the status of action items from previous calls.

- [2019 conference calls](#)
- [Weekly market performance reports 2019](#)

Release user group

Biweekly forum for market initiatives to discuss project milestones and deliverables. Projects are managed through the Master Stakeholder Engagement Plan and follow a standard project lifecycle. Major releases occur twice a year with monthly releases for smaller enhancements.

- [Release Schedule](#) 7/12/2019 16:03
- [Release Planning web page](#)
- [Transaction ID Illustration](#) 8/05/2014 09:15
- [2019 web conferences](#)

RC West settlements working group

- [RC West webpage](#)
- [2019 meetings](#)
- [Video - RC West Settlements Working Group - July 9, 2019](#)
- [Presentation - RC West Settlements Working Group - July 9, 2019](#) 7/10/2019 13:25
- [Video - RC West Settlements Working Group - July 3, 2019](#)
- [Presentation - RC West Settlements Working Group - July 3, 2019](#) 7/09/2019 07:44
- [Presentation - RC West Settlements Working Group - June 19, 2019](#) 7/09/2019 07:44

Release Notes and Artifacts

- URL – Release Notes
 - <http://www.caiso.com/informed/Pages/MeetingsEvents/UserGroupsRecurringMeetings/Default.aspx>
- XML Sample file URL
 - http://www.caiso.com/Documents/NEL_NEZ.xml

- About Us
- Participate
- Stay Informed
 - Board and Committees
 - Stakeholder Processes
 - Release Planning
 - Clean, Green Grid
 - Managing Oversupply
 - Regional Collaboration
 - Energy Imbalance Market
 - RC West
 - Regional Solutions
 - Subscriptions and notifications
 - Meetings and Events
 - Board of Governors and Committee Meetings
 - Customer Partnership Groups
 - Initiatives
 - Miscellaneous stakeholder meetings
 - Public Forums
 - Release Planning**
 - Stakeholder Symposium
 - User Groups and Recurring Meetings
 - Meetings and Events Archive
 - Recent Documents
 - Bulletins Reports and Studies
 - Papers and Proposals
 - Regulatory Filings and Orders
- Planning
- Market & Operations
- Rules
- ISO En Español

Home > [Stay Informed](#) > Release Planning

Release planning analyzes the impact of initiatives

The release planning process assesses market initiative implementation impacts to determine target timeframes, project milestones and other resource considerations. It is a collaborative process between the ISO and market participants to optimize the costs and benefits of the implementation approach prior to committing resources.

Plans and schedules

-  [Market Simulation Plan - Fall 2019 Release](#) 6/19/2019 08:08
-  [System Interface Change Summary](#) 3/28/2019 08:56
-  [Release Schedule](#) 7/12/2019 16:03
- ⊖ ISO program and project management processes 
 -  [Annual Functional Release Lifecycle](#) 2/08/2017 13:04
 -  [California ISO Program Lifecycle Methodology Version 1.7](#) 5/20/2016 08:40

Meetings

- [Market performance and planning forum](#)
- [Release user group web conferences](#)
- [RC West settlements working group meetings](#)

2019 releases

Starting with the fall 2019 release, all technical specifications and artifacts are available on the [ISO Developer site](#). Login permission is required to access the site.

Independent 2019

- ⊕ [Metered subsystem load-following](#) 

Fall 2019

Starting with the fall 2019 release, all technical specifications and artifacts are available on the [ISO Developer site](#). Login permission is required to access the site.

- ⊕ [Commitment costs and default energy bid enhancements - implementation](#) 
- ⊕ [Draft settlements technical documentation](#) 
- ⊕ [Energy imbalance market enhancements 2019](#) 
- ⊕ [Energy storage and distributed energy resources phase 3 - implementation](#) 
- ⊕ [Local market power mitigation enhancements - implementation](#) 
- ⊕ [Master file documents](#) 
- ⊕ [FERC order 841 - energy storage resources](#) 
- ⊕ [Real time market neutrality settlement - implementation](#) 
- ⊕ [Reliability must-run and capacity procurement mechanism enhancements - implementation](#) 

RC West release

-  [RC West settlements working group](#)
- ⊕ [Draft settlements technical documentation](#) 

Certificate request and access – slide from 7/3

- Request access to Market Results Interface – Settlements (MRI-S) Map-stage portal
- **Access to MRI-S portal**
 - When: Complete before 7/9 Settlements conference call
 - Who: All (Internal CAISO BAA and External) RC entities participating in Map-stage Data Validation and Production
 - What: Obtain **Read/Write RC Role** to access Map-stage portal
 - How: your **RC** User Access Administrator (UAA) should provide you MRI-S Map-stage environment access
 - 1) Follow instructions from your UAA to install certificate on local machine
 - 2) Verify certificate is installed correctly by navigating using your browser to:
 - <https://portalmap.caiso.com/settlements/logon.do> to verify you have access
 - If you have certificate installation issues, contact the Service Desk
 - Email: uaarequests@caiso.com
 - Phone:
 - RC Services: 916.538.5722
 - Toll Free: 833.888.9378
 - If you do not have access, please submit a CIDI ticket by navigating to:
 - <https://rc.caiso.com/> Apps > Prod > Customer Inquiry, Dispute & Information (CIDI)

- Successful log in screen:

California ISO | Market Results Interface - Settlements

Net Energy Data RC/HANA Statements RC/HANA Publication Status

Start Date 01/01/2020 End Date 12/31/2020 ENTITY [ALL] Net Energy Zone [ALL] Apply Reset

Upload File

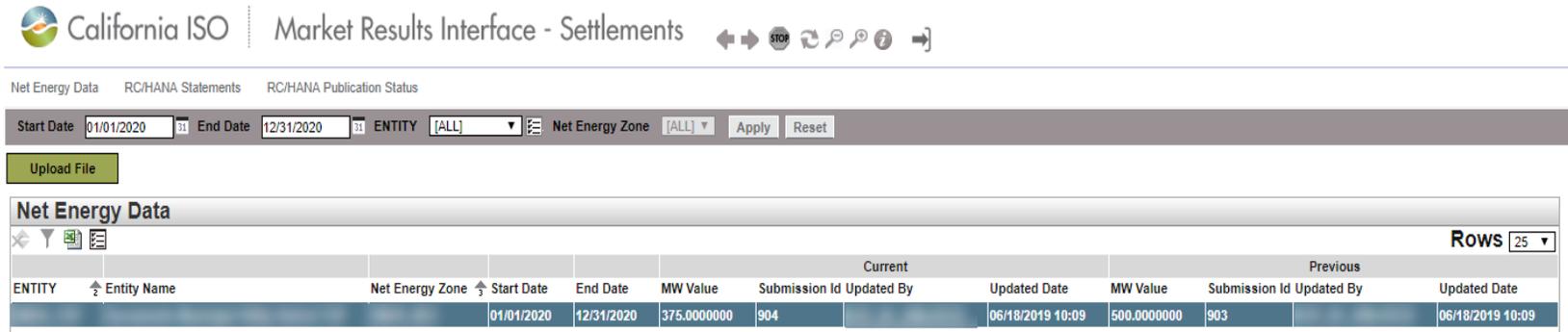
Net Energy Data

ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	MW Value	Submission Id	MW Value	Submission Id
No Data found								

Upload NEL/NG Volumes in MRI-S – slide from 7/3

1. Upload 2018 NEL/NG* volumes in MWh (in MRI-S)

- When: Due today
- Who: RC entities **external to CAISO BAA** responsible for NEL/NG* yearly volume data during Map-stage Data Validation and Production
 - Direct bill TOPs with no NEL/NG are required to enter zero(s) for their volume submission
- What: Upload 2018 NEL/NG volumes
- How: Download sample XML file from
 1. <http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>
 - RC West release > Draft settlements technical documentation > NEL_NEZ.xml 
 2. <m:mRID>NEZ</m:mRID> Replace with your Net Energy Zone name (ex. CISO_NEZ)
 - If you do not know your Net Energy Zone name, please submit a CIDI ticket
 3. <m:value>123456.7890</m:value> (granularity up to 8 decimal places; single value for entire year)
 4. Save the file on local desktop
 5. Login to <https://portalmap.caiso.com/settlements/logon.do> and follow manual upload process

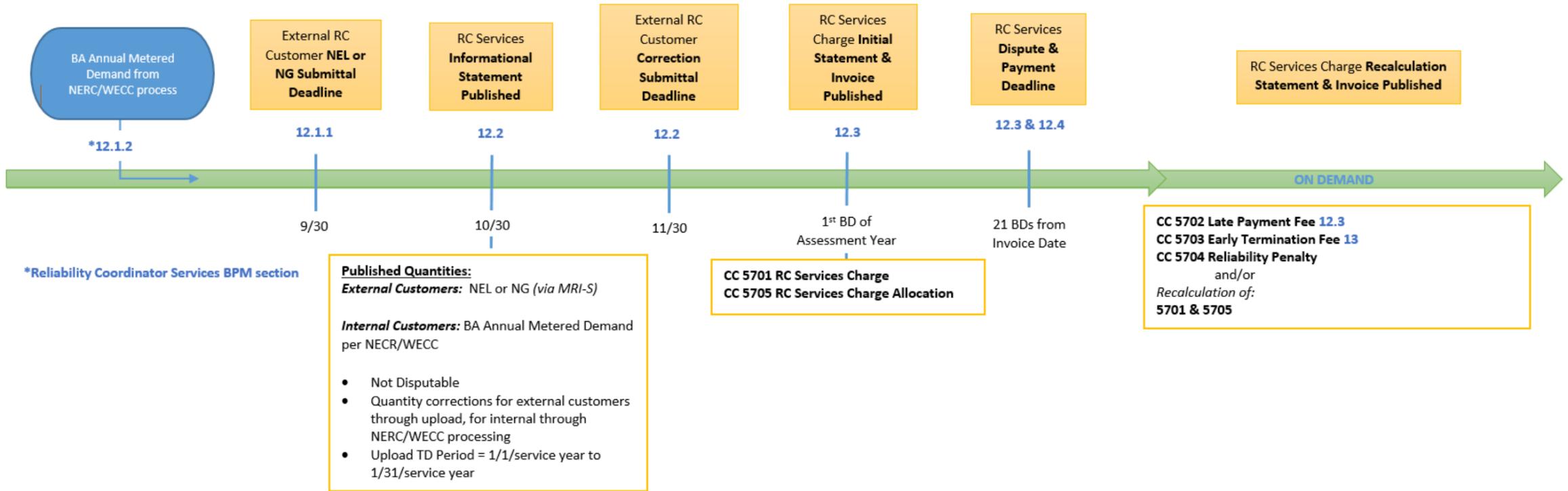


Net Energy Data												
											Rows	
											25	
			Current					Previous				
ENTITY	Entity Name	Net Energy Zone	Start Date	End Date	MW Value	Submission Id	Updated By	Updated Date	MW Value	Submission Id	Updated By	Updated Date
			01/01/2020	12/31/2020	375.0000000	904		06/18/2019 10:09	500.0000000	903		06/18/2019 10:09

*Net Energy for Load (NEL) - Net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to Balancing Authority Areas through interchange. It includes Balancing Authority Area losses but excludes energy required for storage at energy storage facilities. Net Energy for Load equals NERC/WECC Metered Demand for the CAISO Balancing Authority Area.

*Net Generation (NG) - Net power available from a Generating Facility to be fed into the power system at the high side of the Generating Facility transformer(s). Net generation is equal to gross generation minus the generator's internal power usage (station service).

RC Services Settlement Overview



Timeline Legend

YR 1 Example:
 1 time manual PTB of 2019 assessment year charges
 Submittal/Processing Deadlines = 2019
 Assessment/Service Year = 2020
 Base Data (MD, NEL, NG) = 2018

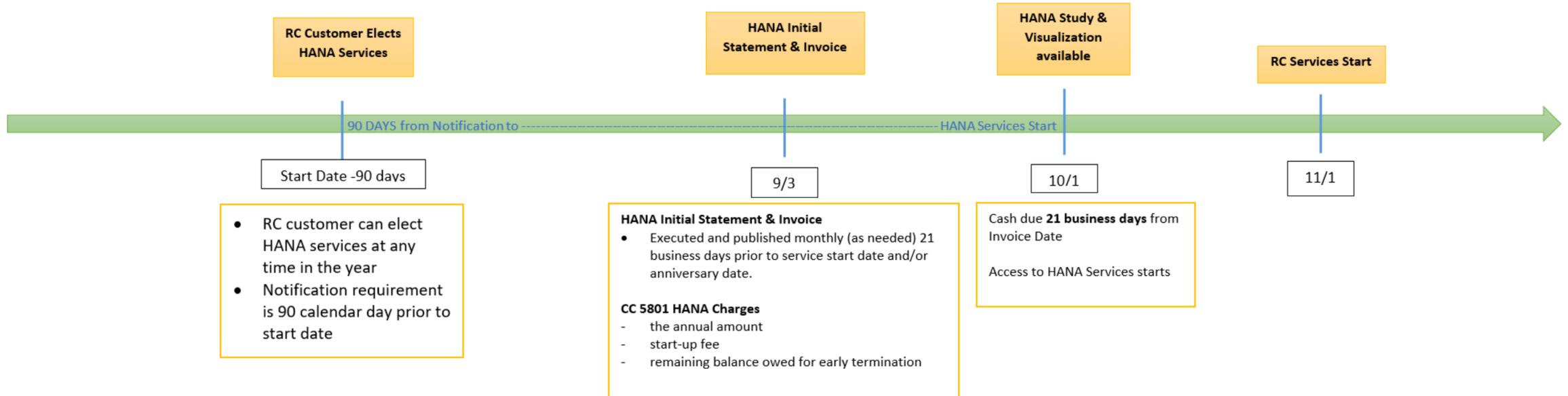
YR 2 Example:
 Submittal/Processing Deadline = 2020
 Assessment/Service Year = 2021
 Base Data (MD, NEL, NG) = 2019

RC Services Production Timeline

- 9/30/19 **RC Customer** deadline to submit 2018 NEL/NG MWh in MRI-S
- 10/30/19 **RC West** releases Information Statement which lists volumes provided in MRI-S for review prior to invoicing
- 12/2/19 **RC Customer** deadline to validate volumes on Information Statement and re-submit if necessary
- 1/2/20 **RC West** bills for 2019 and 2020 RC Charges
- » The 2019 RC charges will be prorated and based on 2017 NEL/NG MWh
 - » The 2020 RC charges will be based on 2018 NEL/NG MWh
 - » Charges will be on one invoice available in MRI-S
- 1/31/20 **RC Customer** payment due date
- » Federal entity payments are due monthly in 1/12 increments

HANA Services Invoicing Overview

- 3-year initial commitment, 12 months written notice to exit on anniversary date
- HANA is a monthly invoice that assesses annual fees
- Statement & Invoice are published the same day
- Additional Initial statements and invoices published as needed



HANA Services Production Timeline

- HANA invoices go out 21 business days prior to Customer's official HANA start date.
 - Initial HANA services being offered 10/1/19 with shadow opportunity 09/01/19 – 09/30/19 (only)
 - Annual recurring invoices will be sent out 21 business days prior to RC Customer's anniversary date
 - Invoices will be available in MRI-S
 - Payments are due 21 business days from invoice date
- Supplemental invoices will go out during the year if RC Customer elects to purchase additional subscriptions.
 - Charges will be prorated to co-term to original anniversary date.

Charge Codes Overview – 5701 & 5705

- **5701 RC Services Charge**
 - Calculates annual RC Services charge to external customers (outside CAISO footprint)
 - Charged to BAs with Load, TOPs within BAAs (with or without load), gen-only BAAs
 - $RC\ Charge = (RC\ Customer's\ submitted\ NEL\ or\ NG) * Annual\ RC\ Services\ Rate$
 - If RC Customer does not submit data, Settlements will calculate the RC charge using the customer's default NEL or Installed Capacity value per contract
- **5705 RC Services Charge Allocation (replaces Peak CC 6496)**
 - Allocates annual RC Services charge to internal customers (entities within the CAISO BAA)
 - ISO passes through its share of the RC Charges to SCs within the CAISO BAA that serve load and to TOPs within the BAA
 - TOPs that have no NERC/WECC Metered Demand will receive the minimum charge (\$5,000)
 - $RC\ Charge = (entity's\ share\ of\ the\ total\ NERC/WECC\ Metered\ Demand\ for\ CAISO\ BAA) * Annual\ RC\ Services\ Rate$
- Initial Statement & Invoice published on the first business day of each year
- Not disputable
- Payment is due within 21 business days of invoice date
- Federal entities may choose to make monthly payments of 1/12 of annual invoiced amount
- Invoice issued on 1/2/20 will include 2020 RC charges based on 2018 NEL/NG and prorated 2019 charges based on 2017 NEL/NG

Charge Codes Overview – Late Payment Penalty (5702) & Default (5701)

- **5702 Late Payment Penalty**

- Late payment penalty will be assessed if payment for RC Services invoice is not received by the due date
- One-time \$1,000 charge will appear on supplemental RC Services statement & invoice (Recalc)
- Federal entities opting for monthly payments of 1/12 of annual invoiced amount are subject to the late payment penalty for each instance of failing to pay by the due date
- Due date is 21 business days from invoice date

- **5701 Default on RC Charges**

- Unpaid amounts by defaulting customer will be re-allocated to all other customers in proportion to their original 5701 invoice amount (Recalc)
- If defaulter pays back the amount in full or partially
 - Repayment amount will be reflected on the next Initial invoice (following year)

Charge Codes Overview – 5703 & 5704

- **5703 RC Services Early Termination Fee**
 - If RC Customer terminates services before the 18-month initial enrollment period or provides less than 12-month notice in subsequent years
 - One-time charge invoiced on supplemental invoice (Recalc)
 - Due date is 21 business days from invoice date
- **5704 RC Services Reliability Penalty Allocation**
 - Calculation accounts for any reliability-related penalties assessed by FERC, NERC, WECC against the CAISO

Charge Codes Overview – 5801

- **5801 HANA Charges**

- The CAISO will offer web-based Hosted Advanced Network Applications (HANA) services to its RC Customers
- Initial 3 year commitment, after which the RC Customer may take HANA services for additional one-year terms
- The CAISO will charge RC Customers that elect HANA services
 - The annual cost for the ongoing software license fee
 - A one-time Set Up fee amortized over the initial 3-year minimum commitment period; and
 - Annual Administrative fee for CAISO support of the HANA services
- RC Customer will be invoiced for HANA services 21 business days prior to when the services commence / anniversary date
- Due date is 21 business days from invoice date
- There is no Recalc for HANA
- If RC Customer adds additional licenses mid-year, Settlements will publish supplemental statement and invoice
- Early Termination Fee will be assessed if the RC Customer terminates the agreement before the expiration date

Contact Information

- MRI-S Access Provision
 - Your User Access Administrator (UAA)
 - If you have certificate installation issues, contact the Service Desk
 - Email: uaarequests@caiso.com
 - Phone:
 - RC Services: 916.538.5722
 - Toll Free: 833.888.9378
 - If you do not have access, please submit a CIDI ticket by navigating to:
 - <https://rc.caiso.com/> Apps > Prod > Customer Inquiry, Dispute & Information (CIDI)
- Issues & Questions
 - Submit CIDI tickets online
 - <https://rc.caiso.com/> Apps > Prod > Customer Inquiry, Dispute & Information (CIDI)
 - Guidelines for CIDI ticket submission:
 - Case Record Type: Use “Reliability Coordinator Inquiry” – NOT “Inquiry Ticket”
 - SCID: Use your new RC ID (XXX_TOP_RC or XXX_BA_RC), not your other SCID(s)
 - Functional Environment: RC Integration – during integration testing and data validation (MAP Stage)
 - Description: Make it short but meaningful; for access issues include certificate information
 - Attachments: Add screen shots or other helpful information, when necessary
 - Comments: Communicate via comments as opposed to venturing out to email
- Weekly Webinar will address additional questions

Thank You
