



California ISO

RC West Settlements Working Group

Market Settlement Design and Configuration

September 17, 2019

Agenda

- HANA Services Payment
- 2018 NEL / NG Data Submission
- RC Services Informational Statement
- MRI-S Data Submission
- Transition to Settlements User Group Meeting
- RC Settlements CBT
- RC Services Payment Calendar
- Additional references

Appendix

- Production Certificate Request & Access
- 2019 Prorated RC Charges
- RC Services Rate
- MRI-S Access & Documents Location
- Steps to Download Statement
- RC Informational Statement – Navigating the CSV & XML files
- RC Services MRI-S Enhancements
- Overview of Settlement Process
- Overview of Charge Codes
- Contact Information

Production Timeline

RC Services & HANA Production Timeline	
Key Dates	Action
8/30/19	RC West publishes Initial HANA Statement & Invoice ¹
10/1/2019	RC Customer payment due date for HANA services charges
9/3/19 – 9/30/19	RC Customer must submit 2018 NEL / NG MWh in MRI-S ²
10/30/19	RC West publishes RC Informational Statement which lists volumes provided in MRI-S for review prior to invoicing ³
12/2/2019	RC Customer deadline to validate volumes on RC Informational Statement and re-submit if necessary
1/2/2020	RC West publishes RC Services charges Statement & Invoice for 2019 and 2020 Charges ⁴
1/31/2020	RC Customer payment due date for RC Services charges ⁵

¹ Financially binding. HANA Customers only. CAISO BA customers must use TOP RCID (not SCID) to retrieve HANA statement & invoice.
² RC entities external to the CAISO BAA only.
³ RC Informational Statement not generated for RC customers who did not submit NEL / NG data.
⁴ Financially binding. 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. RC charges for customers who did not submit NEL / NG volumes by 12/2/19 will be calculated using the Default NEL or Installed Capacity value per their RCSA (RC Services Agreement). RC charges will be on one invoice.
⁵ Federal entity payments are due monthly in 1/12 increments.

MRI-S 2018 NEL / NG Data Submittal (Option 1 – User Interface)

Submit 2018 NEL/NG* volumes in MWh (in MRI-S Production)

- When: 9/3/19 – 9/30/19
- 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: Log in to <https://portal.caiso.com/settlements/logon.do>
 1. Choose the Net Energy Zone for your entity from the drop down menu
 2. Select the Trade Period of the bill year
 3. Type in the NEL / NG (In MWh)
 4. Click Submit

Upload File

Enter Net Energy Data

Net Energy Zone:

Trade Period


NEL/NG (In MWh): (Up to 8 digits before decimal point and up to 8 digits after decimal point)

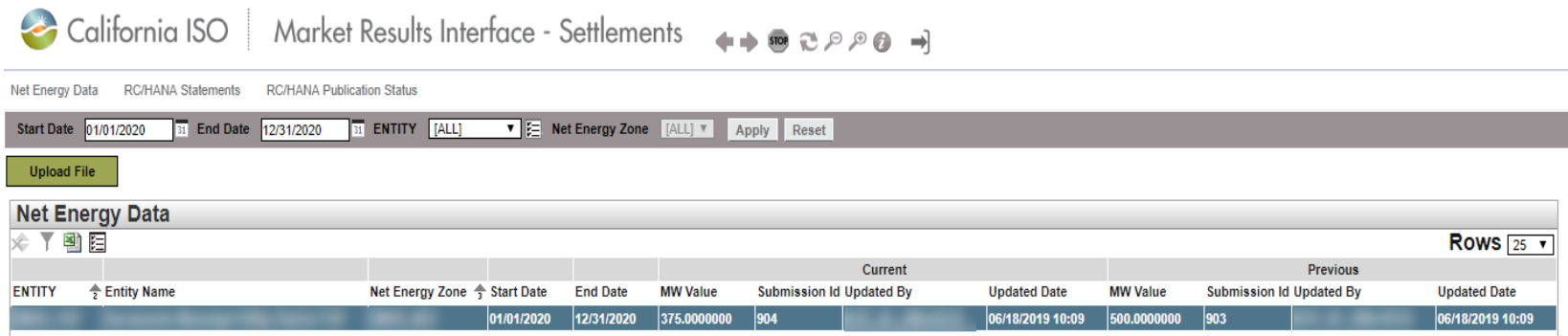
*Net Energy for Load (NEL) - Net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to Balancing Authority Areas through interchange. It includes Balancing Authority Area losses but excludes energy required for storage at energy storage 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).

MRI-S 2018 NEL / NG Data Submittal (Option 2 – XML Upload)

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

- When: 9/3/19 – 9/30/19
- 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  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://portal.caiso.com/settlements/logon.do> and follow manual upload process



Net Energy Data												
											Rows	
											25	
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).

Transition to Settlements User Group Meeting – Starting October 2019

- Move participation over to another twice-monthly recurring meeting that includes all RC customers
 - Streamline communications regarding CAISO publications
 - Meeting structure is being developed
 - Agenda to be provided in advance on caiso.com, with email notification
 - Absent RC topics, no need to join the call
 - Dedicate the beginning portion of the meeting to RC specific topics
 - RC customers can drop off before Market topics are covered
 - More details will be provided at the next webinar
 - Action Request: Please update contact list for your organization on the RC portal

RC Customer Settlements Training Module

Caiso.com

[Home](#) > [Participate](#) > [Learning Center](#) > Settlements training

Settlements and metering training

Targeted courses for the settlements and billing functions. Timelines for meter data submission and payment of invoices, as well as the process for submitting disputes.



In-person courses

ISO Settlements

[Register](#)

Dates: April 25, 2019 | August 1, 2019 | October 24, 2019

The ISO Settlements course is conducted on the third day of the ISO Markets and Settlements Workshop. This course consists of lecture and tabletop exercises that review market outcomes from the perspective of the scheduling coordinator.



Computer-based training courses

NEW! RC Customer Settlements	View
NEW! Energy Settlements Validation	View
NEW! Commitment Costs	View



Training calendar

Learning Tracks



Markets and operations



Western Energy Imbalance Market



Settlements and metering



Congestion revenue rights



Reference

Library



Computer-based training

RC Services Payment Calendar

RC West Annual Service Charge Payment Calendar has been posted online in two locations:

1. [Settlements](#) page:



⊕ PIRP protective measures 
⊖ RC West payment calendar 
 **RC West Annual Service Charge Payment Calendar** 8/14/2019 16:39

2. [RC West](#) page (right side):

RC West Services

[RC West Oversight Committee](#)

[BPM Change Management System](#)

[Operating Procedures](#)

[Western Interconnection Data Sharing Agreement](#)

[2019 EIR Transition Guide](#)

View the EIR Transition Guide for 2019 Reliability Coordinator Changes

RC West Payments Calendar

[RC West Portal](#)

Access to this secure site is limited to RC West participants with a certificate.

Service Desk for RC West participants only:

Local number: (916) 538-5722

Toll-free number: (833) 888-9378

Additional Settlements Resources

- www.caiso.com
 - MARKET & OPERATIONS
 - Settlements
 - Process and requirements > Business Practice Manual for Settlements and Billing
 - Configurations Guides
 - CG CC 5701 RC Services Charge v5.0
 - CG CC 5702 RC Services Late Payment Penalty v5.0
 - CG CC 5703 RC Services Early Termination Fee v5.0
 - CG CC 5704 RC Services Reliability Penalty Allocation v5.0
 - CG CC 5705 RC Services Charge Allocation v5.0
 - CG CC 5801 HANA Charges v5.0

Questions

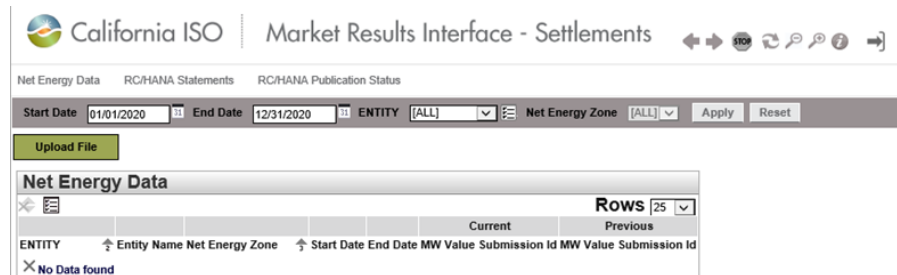


Appendix

Production Certificate Request and Access

- Request access to Market Results Interface – Settlements (MRI-S) Production Environment Portal
- **Access to MRI-S Production Environment Portal**
 - When: **Complete before 8/26**
 - Who: All (Internal CAISO BAA and External) RC entities participating in Production
 - What: Obtain **Read/Write RC Role** to access Production Portal
 - How: your **RC** User Access Administrator (UAA) should provide you MRI-S Production 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://portal.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:



RC Charges Data Validation

2019 Prorated Charges

- **Charge One**
 - Rate is \$0.0134/MWh
 - Effective for the period of 7/1/19 through 10/31/19
 - Rate applied against 1/3 (or 4 months) of default annual MWh volume submitted on RCSA*
 - Minimum Charge is 1/3 of \$5K (or \$1,667)
- **Charge Two**
 - Rate is \$0.0273/MWh
 - Effective for the period of 11/1/19 through 12/31/19
 - Rate applied against 1/6 (or 2 months) of default annual MWh volume submitted on RCSA*
 - Minimum Charge is 1/6 of \$5K (or \$833)

2020 Charges

- Rate is \$0.0300/MWh
- Effective for the period of 1/1/20 through 12/31/20
- Rate applied against MWh billing volumes submitted by customers
 - Volumes provided on information statement
- Minimum Charge is \$5K

RC Services Rate Effective 7/1/19 – 10/31/19

- Navigate to www.caiso.com
 - MARKET & OPERATIONS
 - Settlements
 - Grid management charge
 - » Open PDF “Grid Management Charge Rates for 2014-2019 Effective July 1, 2019”

2019 GMC Rates and Administrative Fees

Charge Code	Charge/ Fee Name	Rate effective 1/1/19	Rate effective 5/1/19	Rate effective 7/1/19	Billing Units
GMC Rates and Administrative Fees					
4560	Market Services Charge	\$ 0.1065	\$ 0.1065	\$ 0.1065	MWh
4561	System Operations Charge	\$ 0.2797	\$ 0.2797	\$ 0.2797	MWh
4562	CRR Services Charge	\$ 0.0050	\$ 0.0100	\$ 0.0100	MWh
4515	Bid Segment Fee	\$ 0.0050	\$ 0.0050	\$ 0.0050	per bid segment
4512	Inter SC Trade Fee	\$ 1.0000	\$ 1.0000	\$ 1.0000	per Inter SC Trade
4575	SCID Monthly Fee	\$ 1,000	\$ 1,000	\$ 1,000	per month
4563	TOR Charge	\$ 0.2400	\$ 0.2400	\$ 0.2400	minimum of supply or demand TOR MWh
4516	CRR Bid Fee	\$ 1.0000	\$ 1.0000	\$ 1.0000	number of nominations and bids
Other Rates and Fees					
4564	EIM Market Services Charge	\$ 0.0841	\$ 0.0841	\$ 0.0841	MWh
4564	EIM System Operations Charge	\$ 0.1091	\$ 0.1091	\$ 0.1091	MWh
701	EIR Forecast Fee	\$ 0.1000	\$ 0.1000	\$ 0.1000	MWh
5701	RC Service Charge*	\$ -	\$ -	\$ 0.0134	MWh

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

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

- [Congestion Revenue Rights Conference Calls Agenda](#) 9/30/2015 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

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

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

Market update

Biveekly 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

Biveekly 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](#) 

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

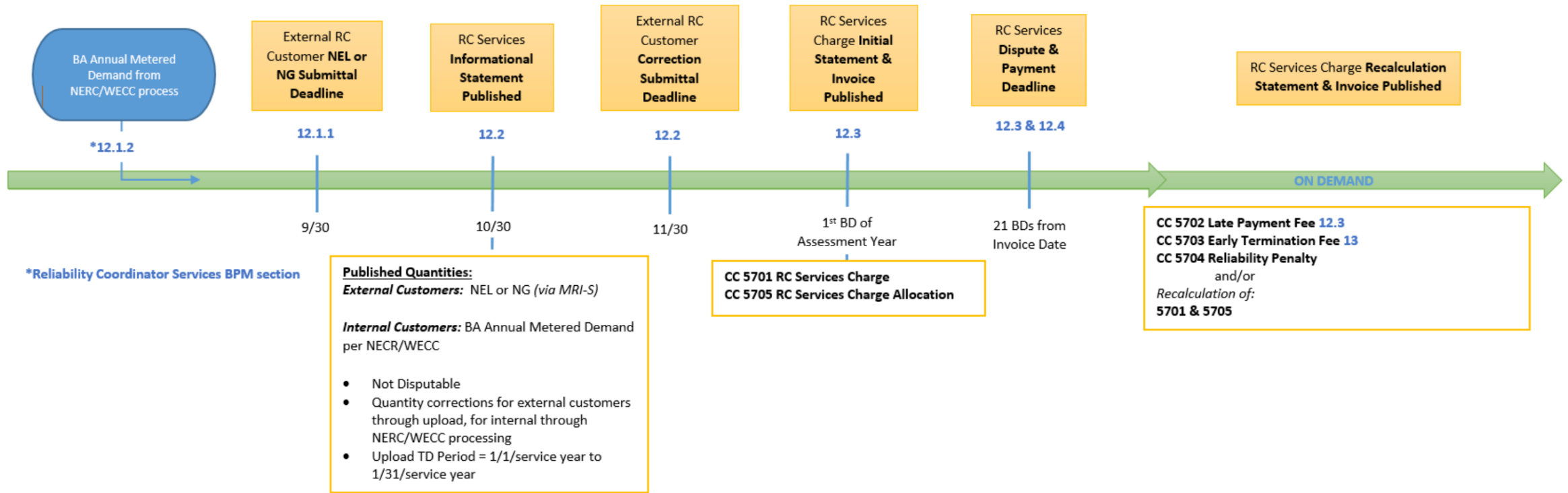
XML File Format: Open in Notepad and identify the field with your submitted NEL / NG value per below:

```
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 Enhancements

- Bill Period Start and End dates reflecting service period are available on the RC recalc statement and invoice published on 8/6
- New UI for submission of NEL / NG volumes open for testing in Map Stage
- 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
- RC Informational Settlement PDF file format option targeted for production environment (10/30 publication)

RC Services Settlement Overview



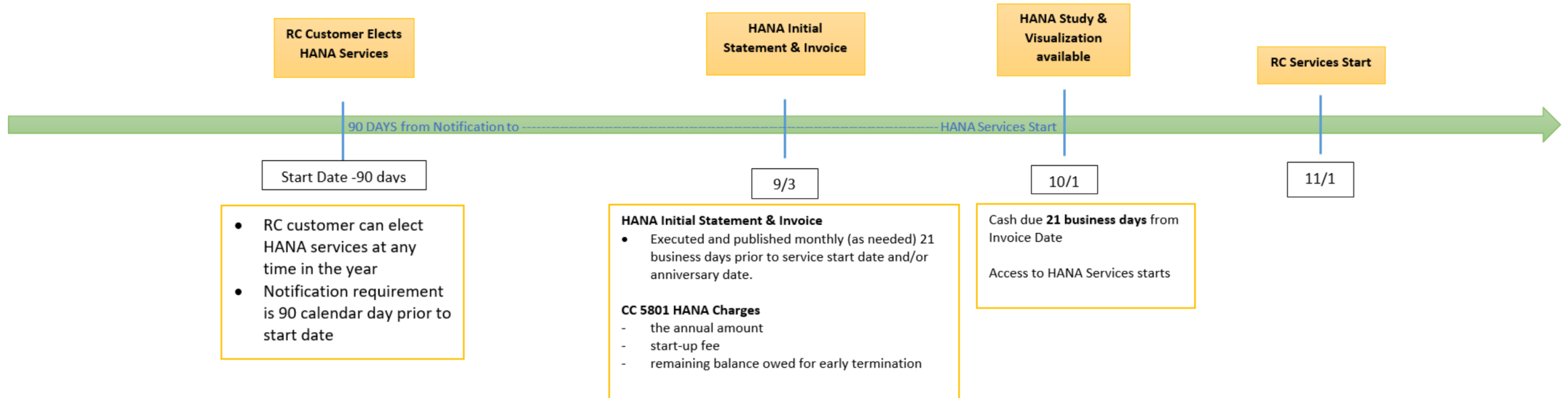
Timeline Legend

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

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 Charge Code 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 and annual recurring invoices will be sent 21 business days prior to the anniversary date
 - Due date is 21 business days from invoice date
 - There is no Recalc for HANA
 - CAISO will publish supplemental statements and invoices during the year if the RC Customer elects to purchase additional subscriptions
 - Charges will be prorated to co-term to original anniversary date
 - Early Termination Fee will be assessed if the RC Customer terminates the agreement before the expiration 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

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: Production**
 - 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

Thank You
