Northern Natural Gas®

Throughput Management System (TMS) User Manual

Northern Natural Gas

Throughput Management System (TMS) User Manual

Overview 4
Quick Tips 5
Main Menu 7
Dashboard 7
Cycle Process Status 8
EDI Processing 10
EDI Processing - Summaries 11
EDI Processing - Nomination Contracts 13
EDI Processing - Confirmation Locations 14
Nominations Menu 15
Nomination Maintenance 15
Nomination Copy 27
Nomination Quantities by Cycle 28
Nomination Reconciliation 28
Final A.M. Nomination List 29
Zone Percentages 30
Nomination Quantities by Cycle Report 31
Confirmations Menu 32
Confirmation Maintenance 32
Confirmation Summary 34
Location Reconciliation 34
Late Nomination Notification 35
Scheduled Quantity Menu 36
Scheduled Quantities 36
Scheduled Quantities Month to Date 38
Scheduled Quantities By Service Requester 38
Scheduled Quantities By Operator 39
Scheduled Quantities Report (for Svc. Req, Operator or Meter Bounce Activity) 40
Service Requester Scheduled Quantity Report 40
Requesting Adjustments to Scheduled Volumes 41

Storage Menu 42
Storage Contract Balance 42
Storage Netting Activity 42
Storage Netting Maintenance 43
Storage Information 45
Contract Storage Balance by Day Report 45
Imbalance To Storage Monthly Control Report 46
Storage Balances By Day Report 46

Northern Natural Gas

Overview

Northern Natural Gas Company (Northern) has updated the Throughput Management System (TMS) from a Smalltalk application to a Java (web-based) application. TMS is the main application customers use to nominate, confirm, and schedule quantities on Northern's pipeline. The basic functionality and makeup is similar to the previous TMS version in order to remain consistent when conducting business on Northern; however, new features and enhancements have been included.

A summary of new features and enhancements are listed below.

New features

- Predictive Select functionality is offered for location, service requester/operator and contract fields. The previous five selected values will automatically be displayed.
- Redesigned grouping, sorting, and column filtering feature
- Redesigned nomination copy feature with the ability to copy all nominations or select specific nominations
- Newly added or edited nominations will appear in **blue** text, then change to **black** when submitted
- New function for Nomination Reconciliation that provides the user the ability to access Nomination Maintenance to add, change or delete a nomination
- New hyperlink feature within the Cycle Process Status screen to allow the user to quickly view the capacity constraint notice(s) for the selected Gas Day/cycle
- Ability to select **All (view only)** to view all the nominations at once when the user enters an aggregated pooling contract

Enhancements

- User can view preliminary scheduled quantities during each cycle process: balancing, allocations and confirmations
- Enhanced Reduction Reason Detail screen that will allow a user to view reductions on its contracts after each process: balancing, allocations, and confirmations
- Two storage netting screens: one to setup storage netting and one to view storage netting activity
- Redesigned view for EDI processing
- Single screen to view storage contract balances
- New inbox feature to view current TMS notification(s)
- New Dashboard screen that includes several helpful hyperlinks to external webpages
- Eighteen months of history will be viewable (previously twelve months)

Additional detailed descriptions of the new features and enhancements can be reviewed below in Quick Tips.

Northern Natural Gas

Quick Tips

- To open more than one session of TMS:
  - Click on the **Menu** item
  - Right click on the desired destination
  - Click "**Open in New Tab**"
- TMS will automatically logout inactive users after two hours; to prevent this, a user can open a tab for **Cycle Process Status,** which automatically refreshes every 30 seconds resulting in your session remaining active
- All fields with a **red** asterisk "*****" are required fields
- New nomination paths are **blue** in color; nomination paths will change to **black** once submitted
- When entering a Svc Req K, TMS displays the previous five contracts that have been used
- If a user wants to have two different contracts open at the same time
  - Select Nominations, Nomination Maintenance, right click and select **Open in New Tab**
- In the **Cycle Process Status** screen, a **blue** hyperlink indicates either Throughput or Storage was allocated. Select the hyperlink to access the non-critical notice for the selected cycle allocation.

- **Envelope** button in the upper right portion of each screen displays the number of active messages (e.g. timeline extension) that Northern has distributed. The number in **red** reflects the number of unread messages.
- **Reset** button, which appears on each screen, allows a user to revert visual changes made to a screen (e.g., grouping, sorting, width of a column) back to the original state.
- **Export** button, which appears on each screen, allows a user to export the data on the screen as a CSV or Excel file.
- **SBS** button: Select to see the storage balancing contract and the associated transport contract. If a user does not have SBS, this button will not appear.
- **Ellipsis option,** located to the right of the **Retrieve** button, allows a user to open related screens associated to the underlying screen.
- Using on the Nomination Maintenance screen, allows a user to select:
  - **Open New** to open nomination maintenance
  - **Open NomQ** to open nominated quantities by cycle screen
  - **Open SchQ** to open scheduled quantities screen
  - **Open NomR** to open the nomination reconciliation screen
- **Collapse** button collapses a portion of the screen

- **Expand** button expands the previously collapsed portion of a screen
- **Information** button select to open the location detail information
- Select to open the corresponding upstream or downstream contract
- Hover over any column heading to display the **Column Header Menu**. This provides the user with several options:
    - Select to pin (move) or auto size a column(s)
    - Select to choose filtering options
    - Select to choose what column(s) appear. To filter out unwanted columns uncheck the box.

- To group data within a grid, user can simply grab and drag a column header to the row above the header where **[Drag here to set row groups]** is displayed.

- When grouping:
    - Select to the left of group to see records for just that group
    - Hover over the column heading, select and select **Expand All** to see all records

- Upon selecting a grid row for a contract there are additional buttons within the grid entry (**PRIMARY REC LOCS, PRIMARY DEL LOCS, EPSQ, RATES, R/D TOTALS** and **MDQ USAGE**). Once selected a new screen will launch with additional information.

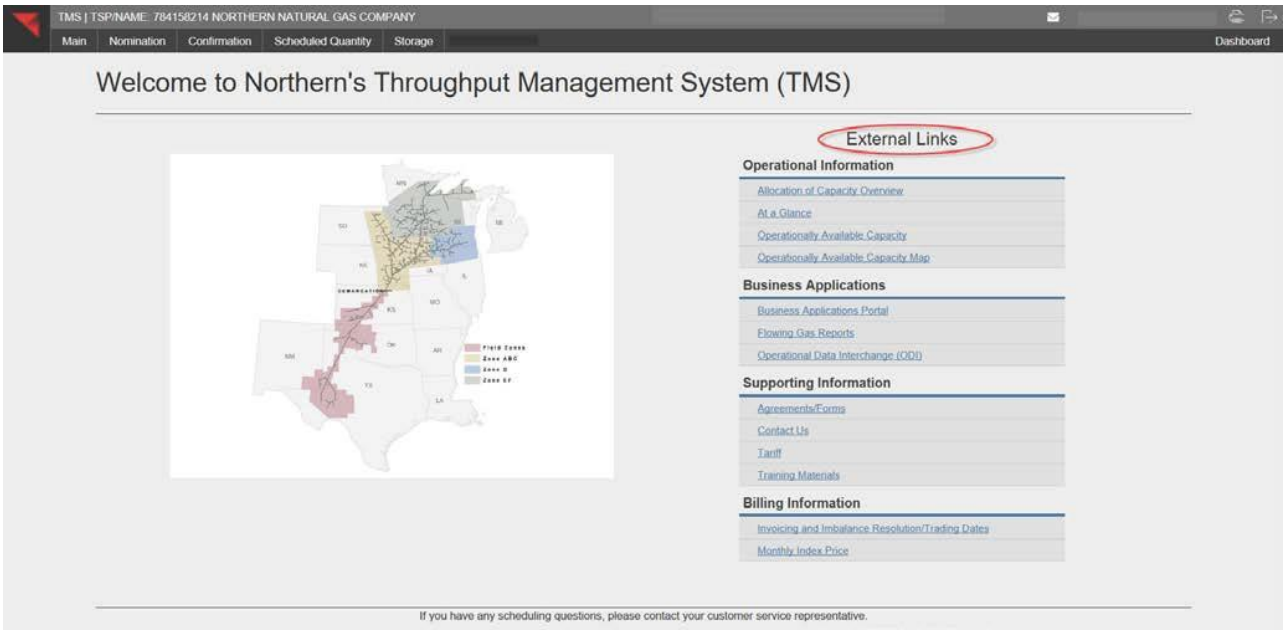
- **Grid Entry Form** button: Users may choose information to be displayed in the grid entry form by selecting this button. Click on the button to disable the grid entry form. Click again and the form will open.
    - Use the "Tab" key to navigate through the value fields within the grid entry form.

Main Menu

Dashboard

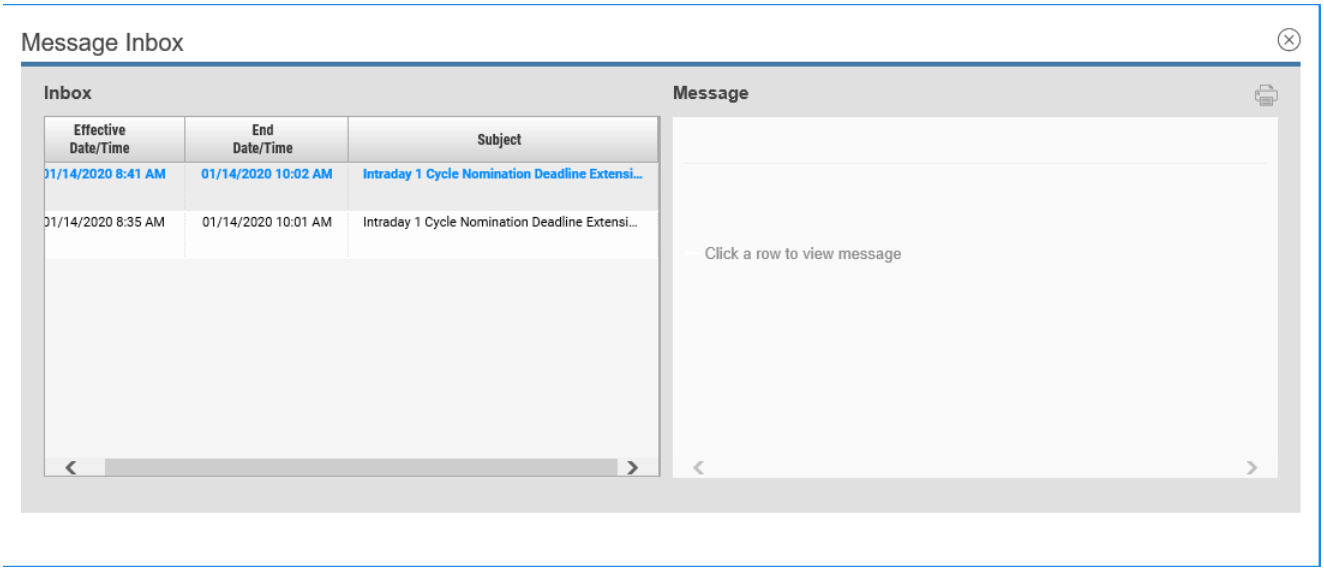
- This is the Throughput Management System (TMS) home page.
- To return to this screen from another location within TMS, select **Main** and then **Dashboard**.

- **Dashboard** contains multiple external links. Each external link will open a new browser window and includes the following links:
  - Operational Information
    - Allocation of Capacity Overview, At a Glance, Operationally Available Capacity and Operationally Available Capacity Map
  - Business Applications
    - Business Application Portal, Flow Gas Reports and Operational Data Interchange (ODI)
  - Supporting Information
    - Agreements/Forms, Contact Us, Tariff and Training Materials
  - Billing Information
    - Invoicing and Imbalance Resolution/Trading Dates and Monthly Index Prices



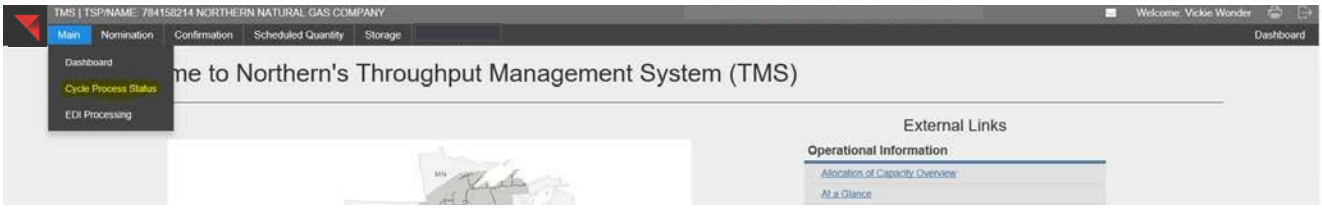
The envelope in the upper right portion of the screen (message icon) shows all active messages (e.g., timeline extension) that Northern sends out. The number in **red** reflects the number of unread messages. The message icon will appear on each screen in TMS.

- Once the user clicks on the new message(s), the number in **red** on the message icon disappears.

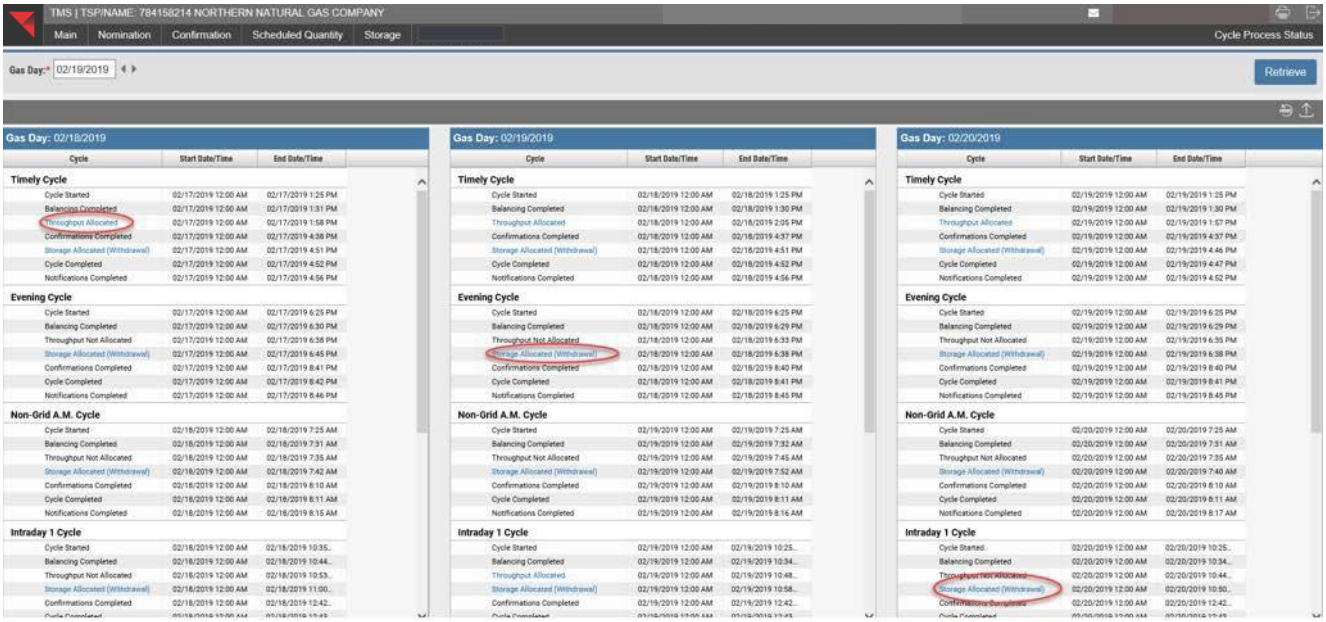


Cycle Process Status

- This screen provides the user a view of the processed cycles for a given gas day and replaces the Batch Schedule Status. Three successive gas days (prior, current, and next day) will be displayed. The cycles identify which process has completed or is currently processing.
- To view this screen, select **Main** and then **Cycle Process Status**.



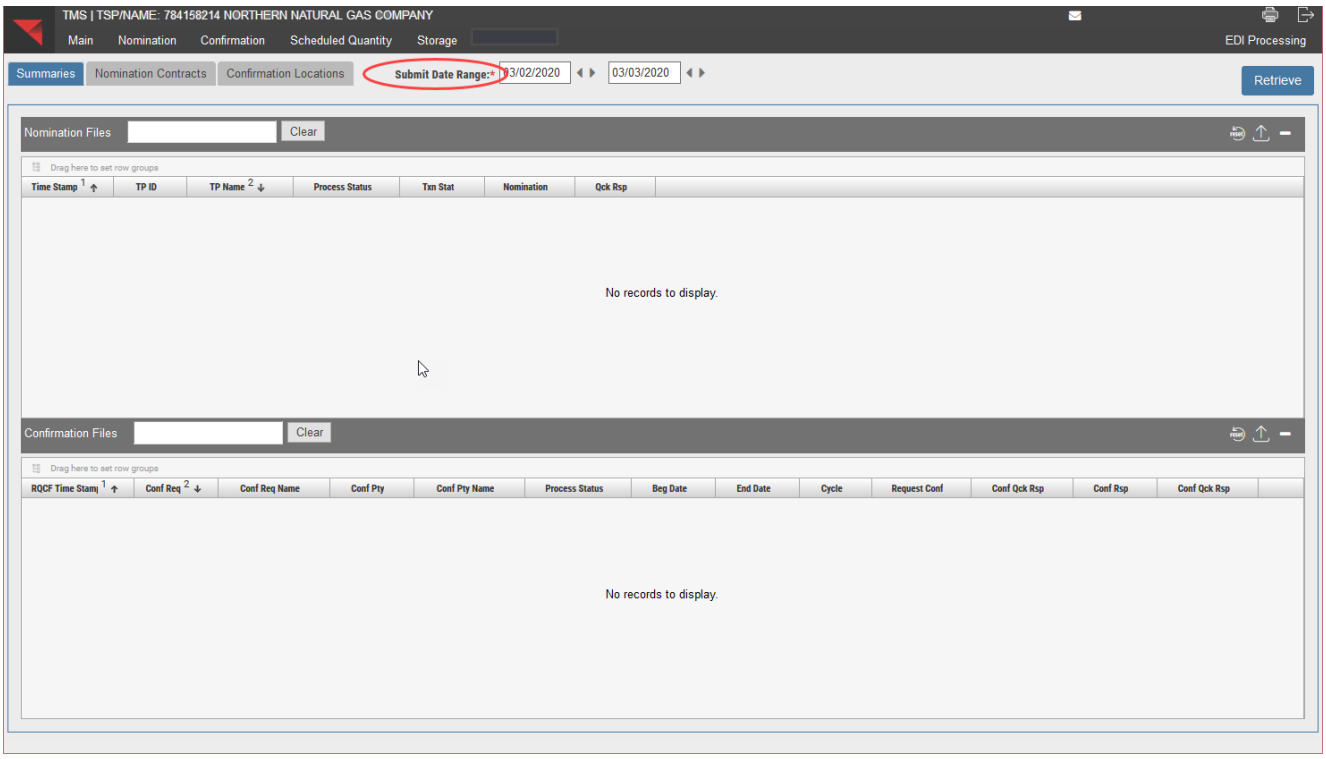
- When Throughput or Storage is allocated, the user can select the hyperlink in **blue** located within each cycle that will take you to the non-critical notice for that cycle to see the point(s) or group(s) that were allocated.
- This screen will automatically refresh every 30 seconds.



EDI Processing

- This screen allows the user to view summary and detail information for EDI files within a date range.
- To view this screen, select **Main** and then **EDI Processing**.

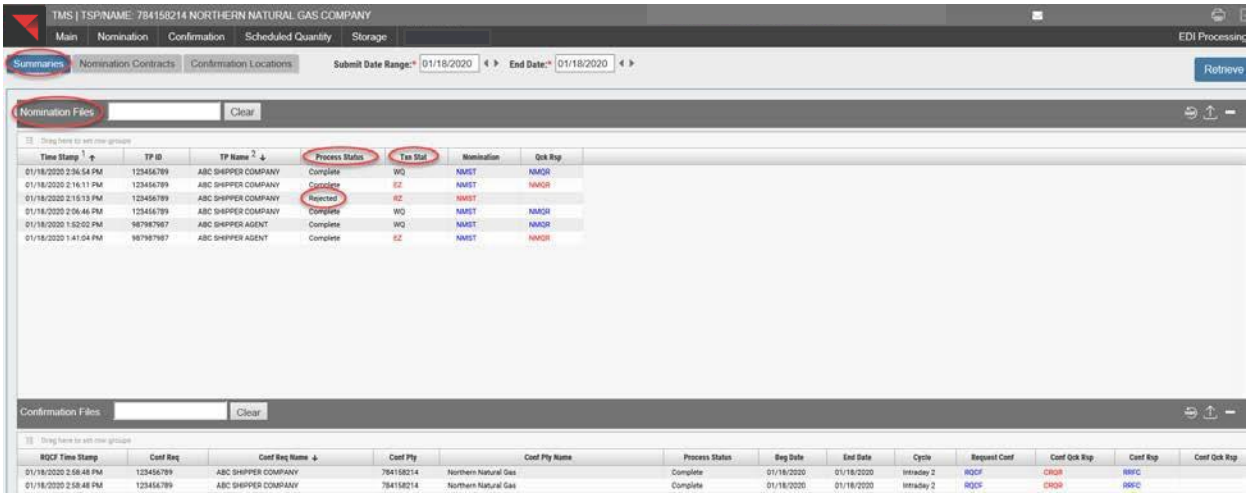
- There are three sections to view: **Summaries, Nomination Contracts and Confirmation Locations**.
- Files with time stamps within the **Submit Date Range** will be displayed in the results, irrespective of the gas day; up to one month of data can be viewed at a time.
- Retrieve **Retrieve button** updates all three sections.
- Collapse a section by selecting ; expand by selecting



EDI Processing – Summaries

Nomination-related files are displayed on the upper half of the screen; confirmation-related files are displayed on the lower half of the screen.

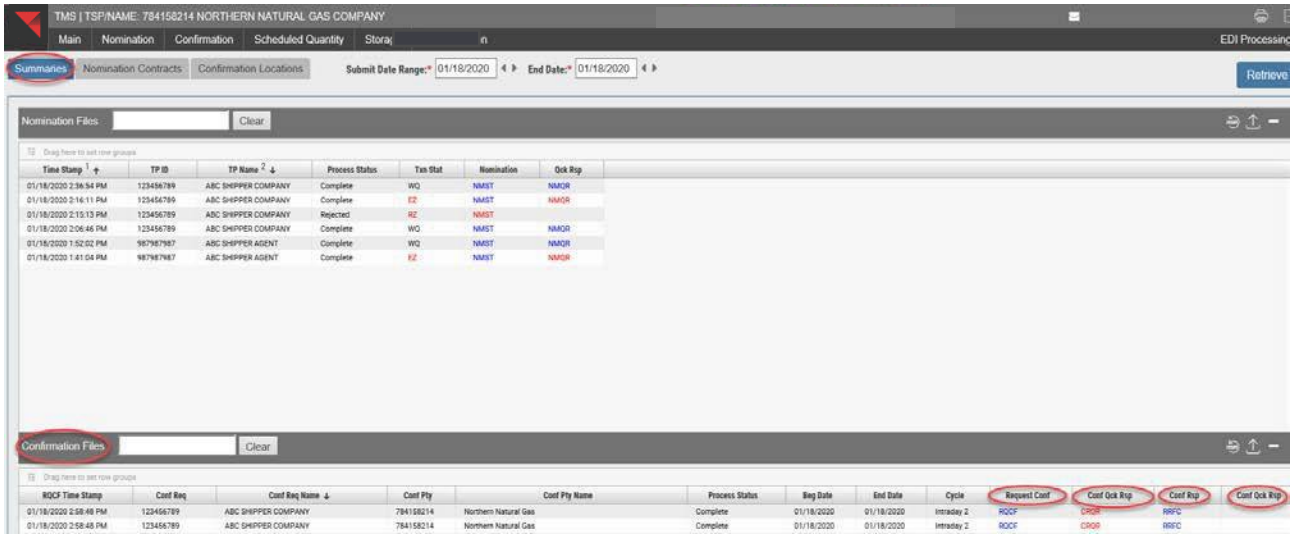
Nomination Files:



**Each header-level reference number within a file is a separate "transaction"*

Field	Usage
Quick Filter	Enter text or numbers to filter the displayed results
Time Stamp	The value assigned at the time the file was delivered to the Northern EDI hub
TP ID	Trading Partner DUNS for the sender of the file
TP Name	Trading Partner Name
Process Status	Processing Complete Rejected
Txn Stat	Transaction Status* WQ = the entire transaction was accepted EZ = errors and/or warnings occurred in the transaction RZ = the entire transaction was rejected due to header level errors
Nomination (hyperlink)	Shown in **red** if the entire file rejected (the most common cause is structural problems) Clicking the hyperlink will display the file data in a separate browser tab
Qck Rsp (hyperlink)	Shown in **red** if the response contains any error codes Clicking the hyperlink will display the file data in a separate browser tab

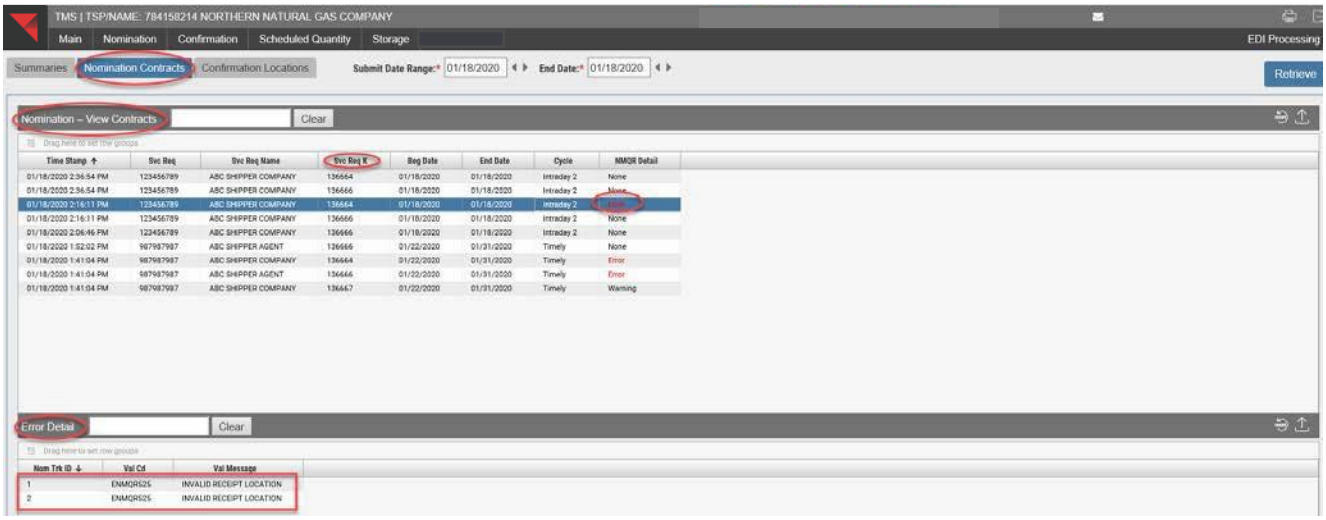
Confirmation Files:



Field	Usage
Quick Filter	Enter text or numbers to filter the displayed results
RQCF Time Stamp	The value assigned at the time the file was delivered to the Northern EDI hub
Conf Req	Confirmation Requester: Trading Partner DUNS for the sender of the file
Conf Req Name	Confirmation Requester Name
Conf Pty	Confirming Party
Conf Pty Name	Confirming Party Name
Process Status	Processing Complete Rejected
Beg Date	Beginning Gas Day
End Date	Ending Gas Day
Cycle	The first-available scheduling cycle for the Gas Day
Request Conf (hyperlink)	Request for Confirmation: Shown in **red** if the entire file rejected (the most common cause is structural problems) Clicking the hyperlink will display the file data in a separate browser tab
Conf Qck Rsp (hyperlink)	Confirmation Quick Response: Contains errors or warnings for the Request for Confirmation. Shown in **red** if the response contains any error codes Clicking the hyperlink will display the file data in a separate browser tab
Conf Rsp (hyperlink)	Confirmation Reponse: contains confirmation quantities and any associated reduction reason codes
Conf Qck Rsp	Confirmation Response Quick Response: contains any errors or warnings for the Confirmation Response

EDI Processing – Nomination Contracts

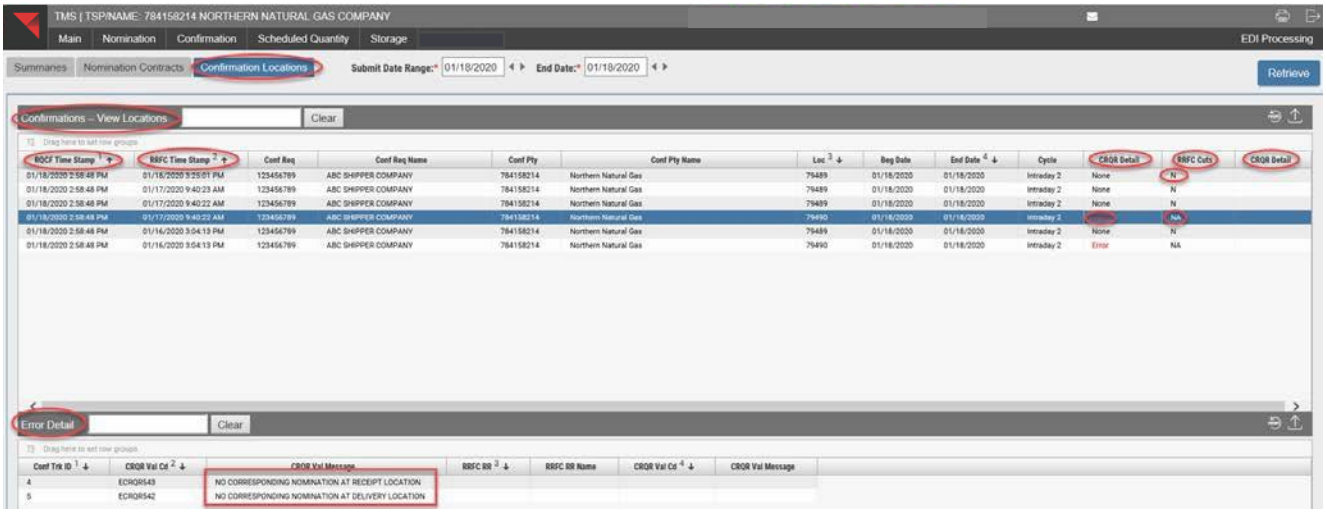
Each contract within each nomination file is displayed in the **View Contracts** section.



- **Time Stamp** shows the file time stamp, which corresponds to the same value from the Summaries area.
- **Svc Req** shows the Contract's Service Requester DUNS.
- **NMQR Detail** column shows error/warning status for each contract. Values include 'None', 'Warning', or 'Error'.
- Selecting a row whose NMQR Detail is 'Warning' or 'Error' will display corresponding code and message in the Error Detail section.
    - If Nom Trk ID is blank, the detail shown is contract-level.
    - When Nom Trk ID exists, the detail shown pertains to a specific line item
        - A line item may have more than one row of detail.

EDI Processing – Confirmation Locations

Each location within each confirmation file is displayed in the **View Locations** section.



- **RQCF Time Stamp** shows the file time stamp, which corresponds to the same value from the Summaries area.
- **RRFC Time Stamp** shows the time Northern generated the confirmation response file.
- The first instance of the column **CRQR Detail** shows error/warning status for each location in the request for confirmation. Values include 'None', 'Warning', or 'Error'.
- **RRFC Cuts:**
  - Displays 'Y' if the confirmation response contains reduction reason codes
  - 'N' if there are no reduction reason codes
  - 'NA' if no confirmation response was generated due to errors for all confirmation line items for the location (or location-level error).
- The right-most instance of **CRQR Detail** shows any errors or warning messages that correspond to the confirmation response. Values include 'None', 'Warning', 'Error', or blank. *Not all trading partners send this file.*
- Selecting a row will display all applicable error/warning or reduction reason detail in the **Error Detail** section.
  - If Conf Trk ID is blank, the detail shown is location-level.
  - When Conf Trk ID exists, the detail shown pertains to a specific line item
    - A line item may have more than one row of detail.

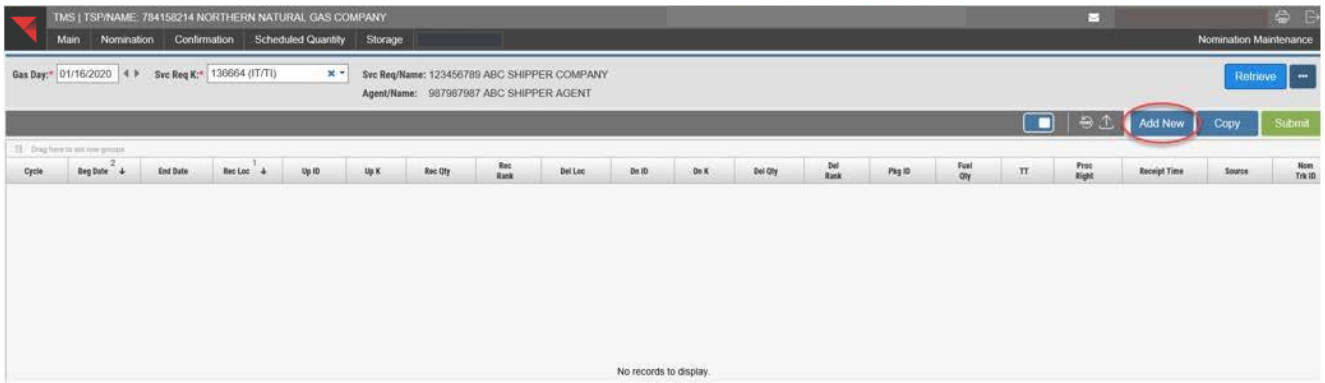
Nominations Menu

Nomination Maintenance

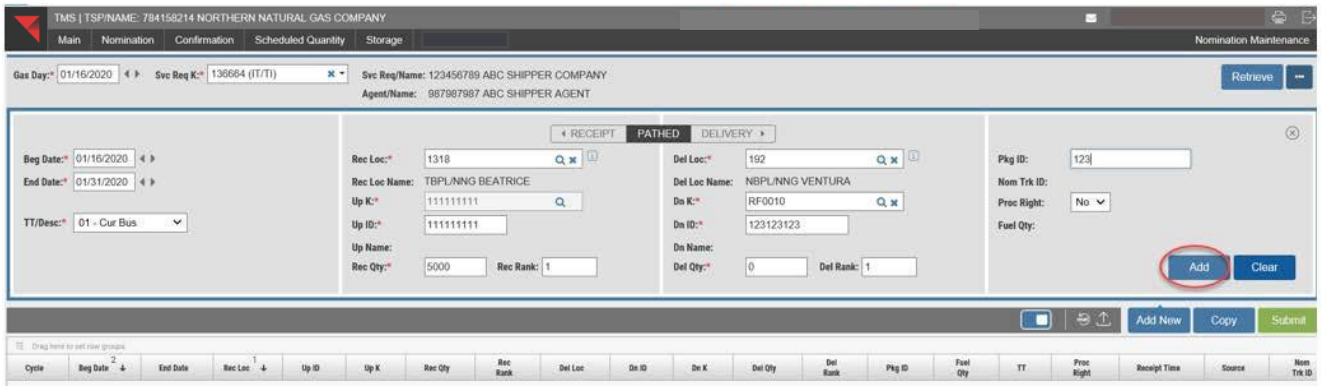
- This screen allows a user to enter a nomination that identifies the amount of gas a service requester expects to transport on the pipeline, subject to the terms and conditions of the contract under which the service is being requested.
  To enter a nomination, select **Nominations** from the **Main** menu or **Dashboard** and then **Nomination Maintenance**.
- Enter a **Gas Day**. Click in the field to access the calendar or use the two arrows to select previous gas day or next gas day. TMS defaults to the current gas day.

- Enter a **Svc Req K**. TMS displays the previous five contracts the user has retrieved.
- User can also do an **Advanced Search**.
- Select Retrieve.

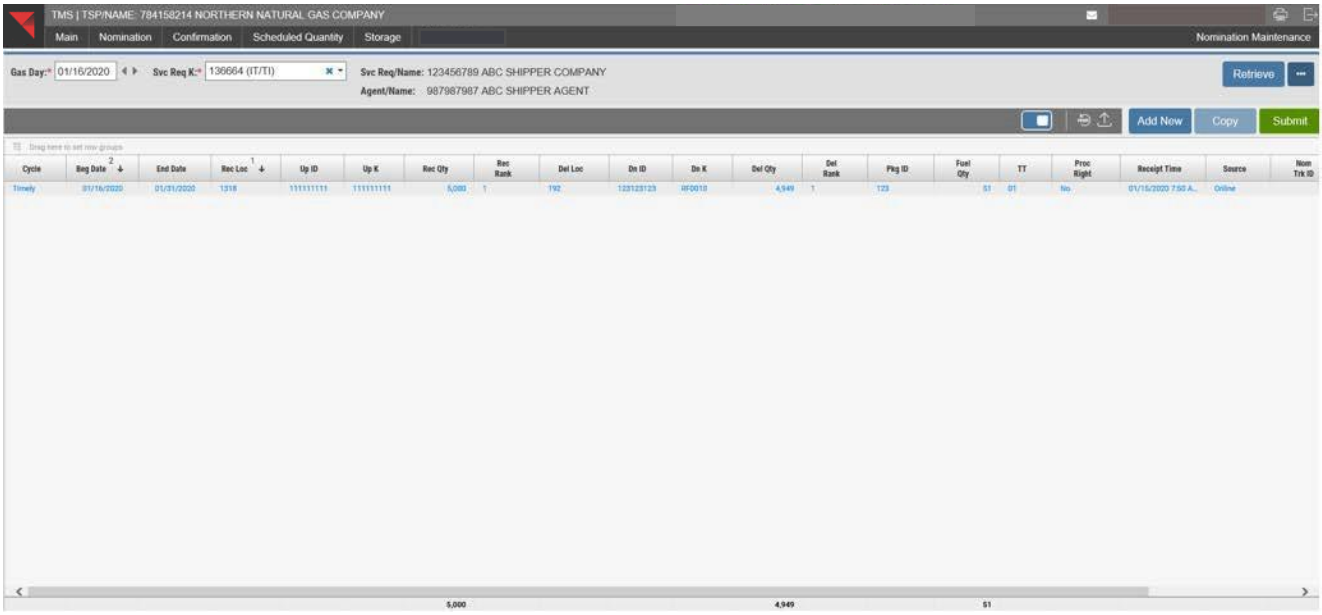
- The **Nomination Maintenance** screen appears to input the nomination.
- Select **Add New** to input a new record.



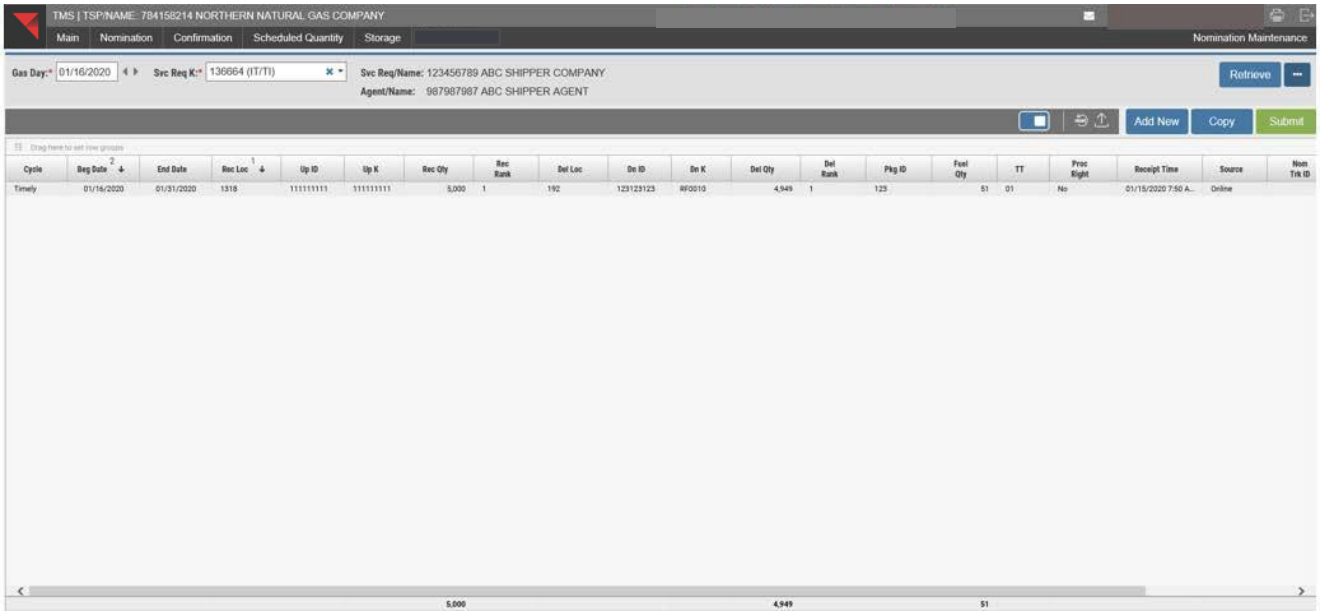
- When the grid entry form opens enter the data and select **Add**.



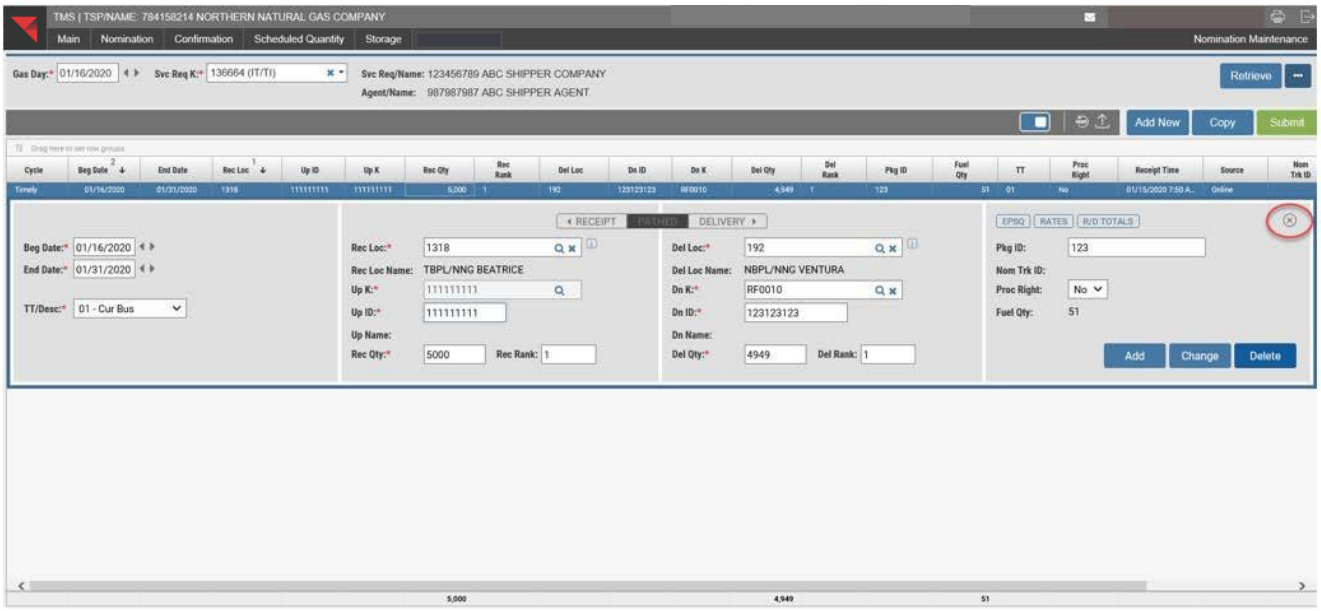
- The new record will be **blue** in color.



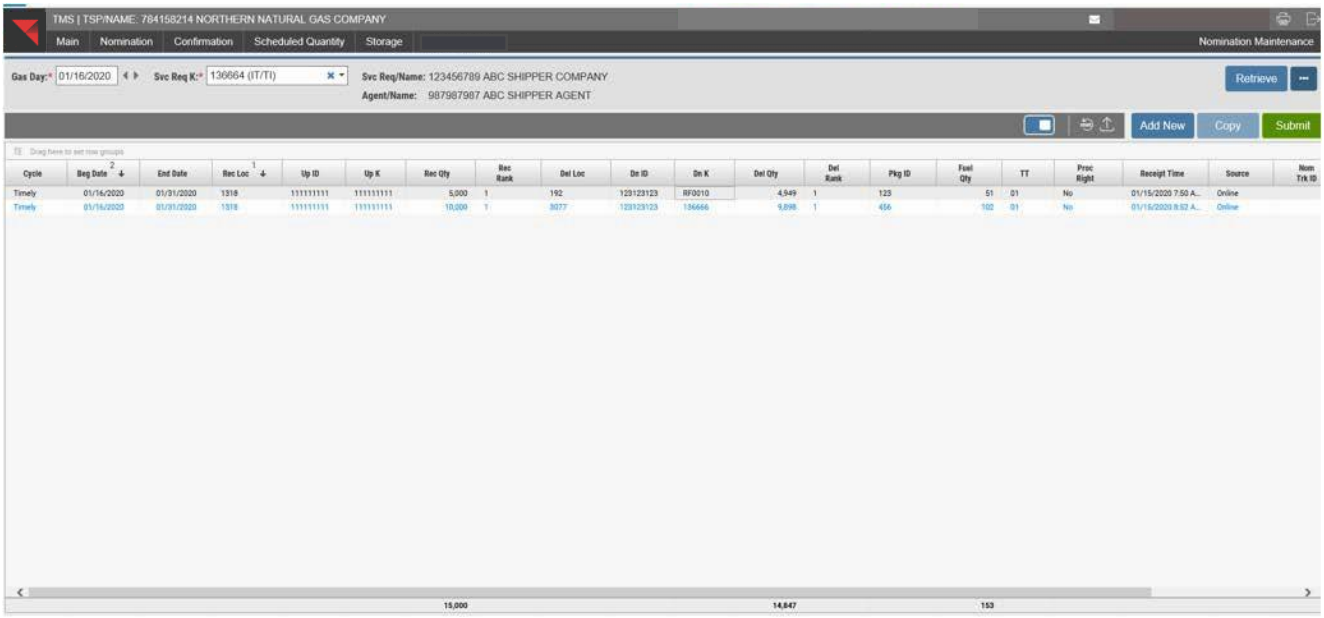
- When user selects **Submit,** the new record in **blue** changes to **black**. The record has now been saved.



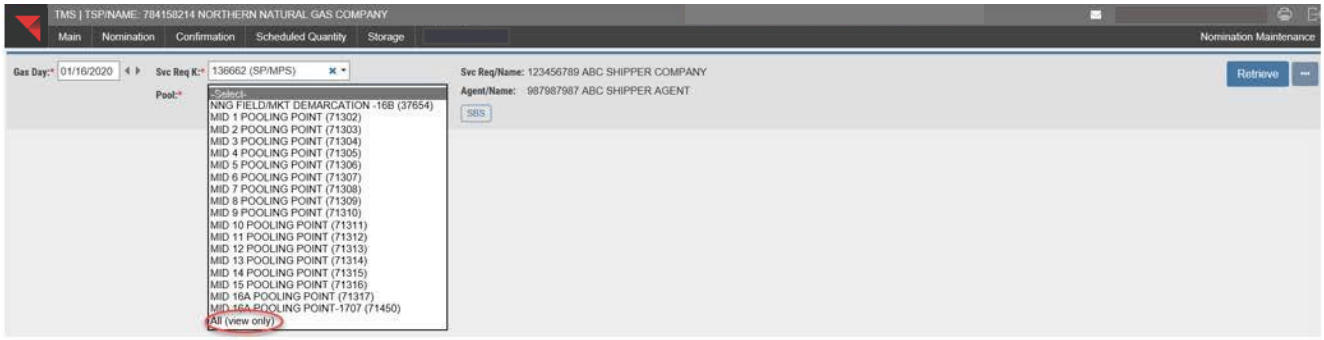
- To add or change a record, highlight the record, the grid entry form opens so the user can make changes and select **Add** or **Change**.
- If Add is selected and then a user decides not to add the record, the user may select the circled **x** on the right-hand side, which will close the grid entry form and take the user back to the nomination.
- To delete a record, highlight the record. When the grid entry form opens, select **Delete**.



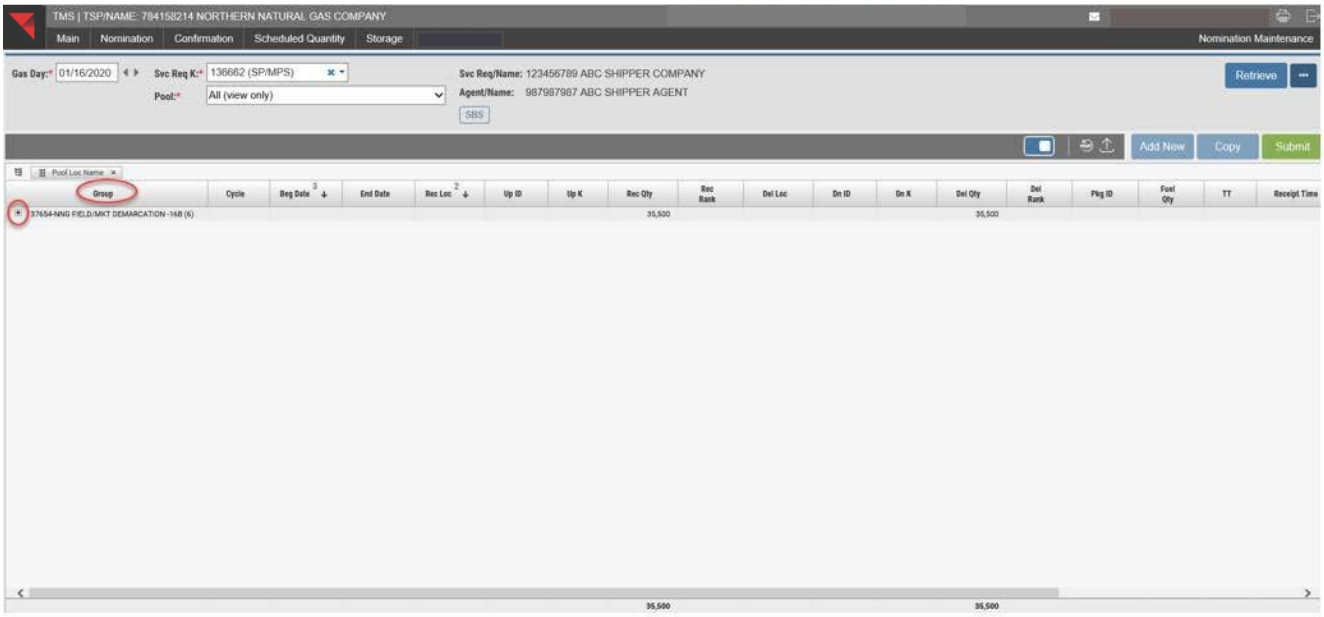
- The new record added or changed is in **blue** and then changes to **black** once user selects **Submit**.



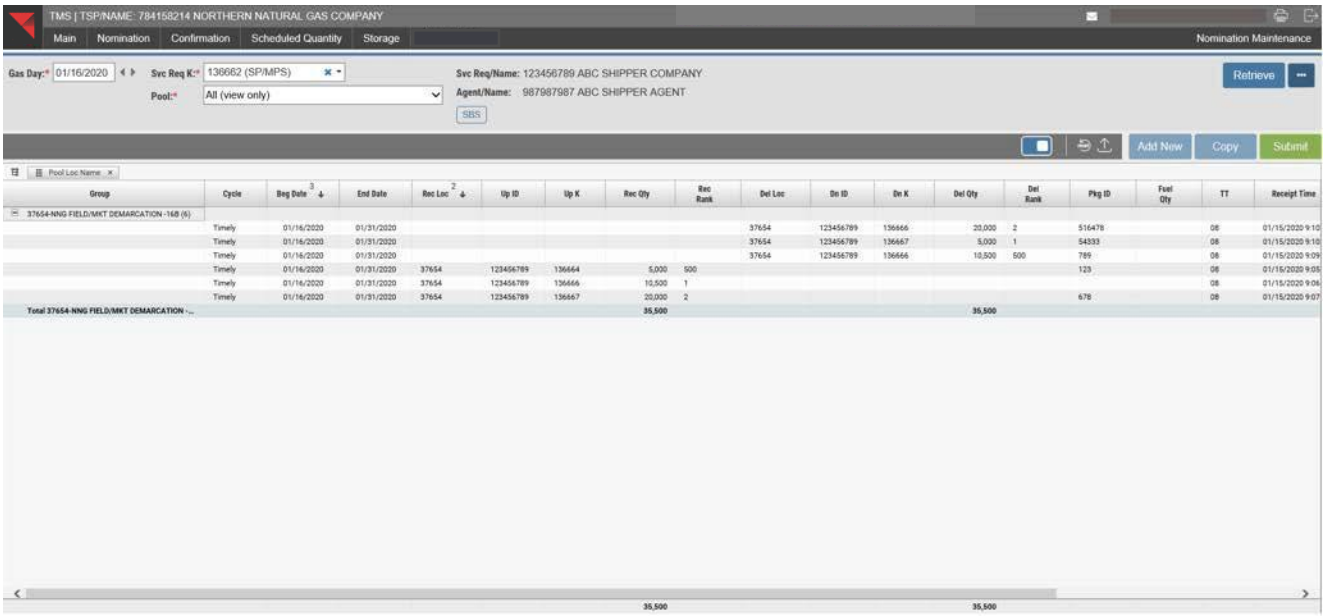
- If a pooling contract (MPS) with multiple locations is enter, user can select **All (view only)** from the **Pool** field.
- Select **Retrieve**.



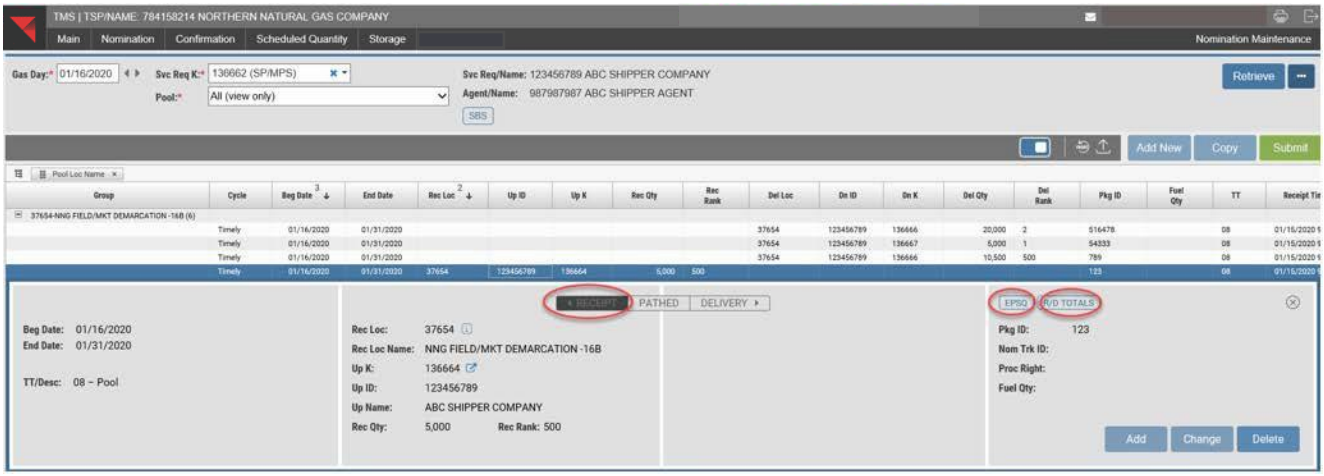
- The screen populates with the nominated records.
- The **Group** column shows **37654-NNG FIELD/MKT DEMARCATION-16B (6)** and reflects there are six records at location 37654.
- Select the plus sign to the left of **37654** to see the six records.



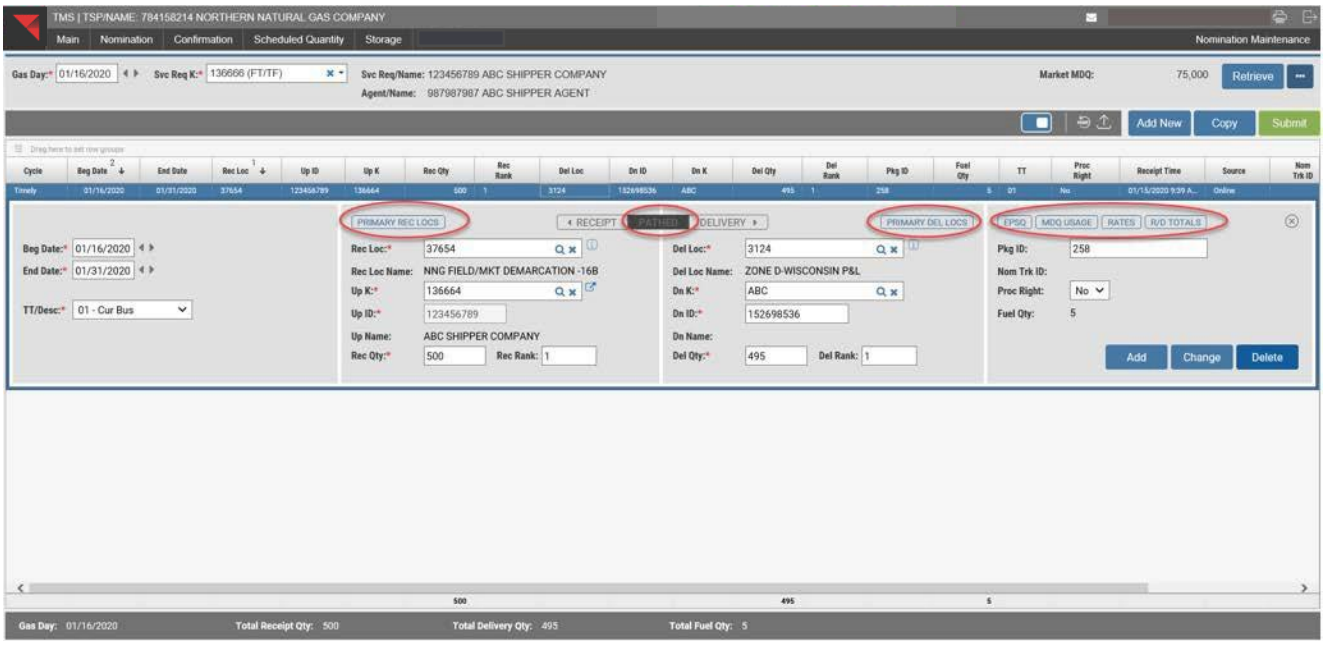
- Six records are displayed.



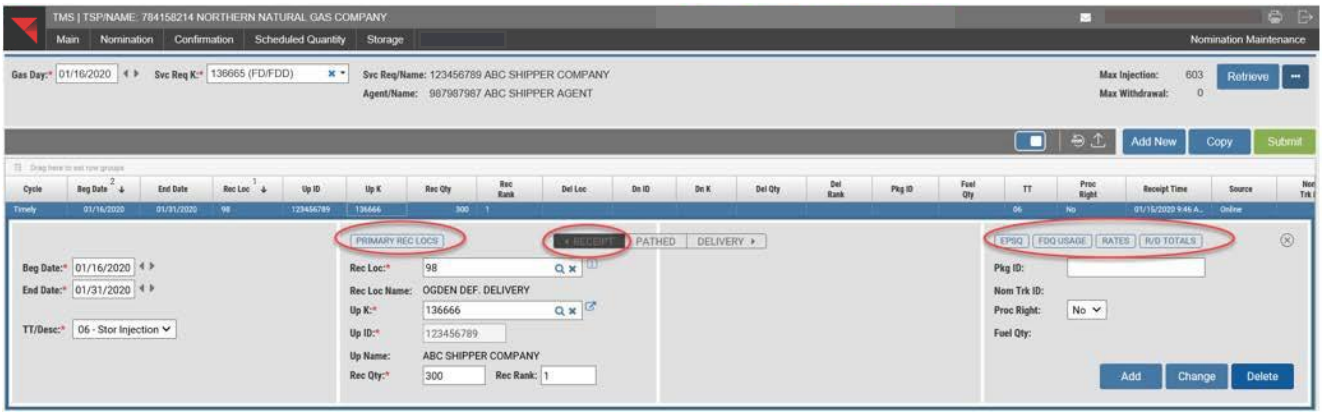
- If a receipt record on the pooling contract is highlighted, the grid entry form opens, and the **RECEIPT** field is highlighted. If a delivery record on the pooling contract is highlighted, the **DELIVERY** field is highlighted.
- When the **EPSQ** and **R/D TOTALS** buttons are selected, a modal window will be launched showing additional information.



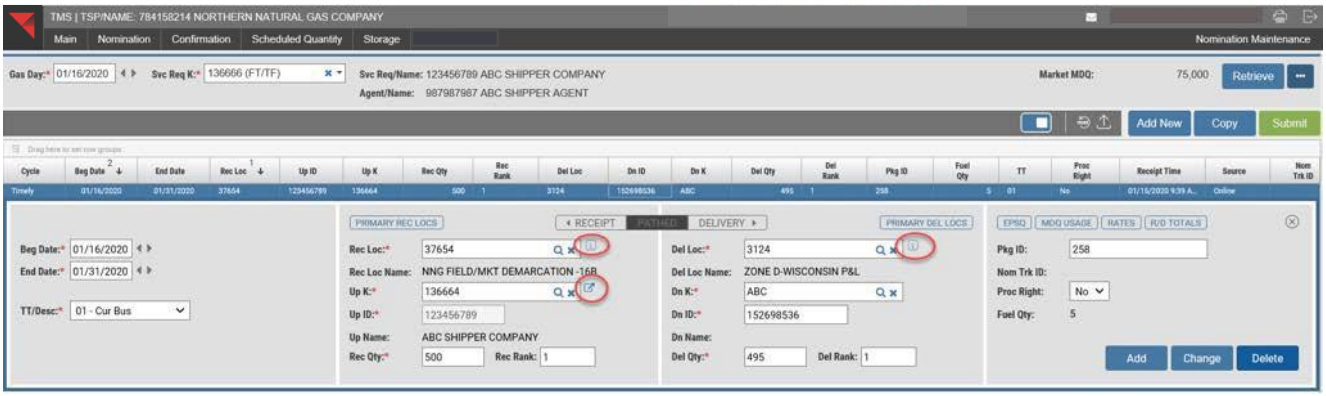
- If a transportation contract is entered and a record highlighted, the grid entry form opens, and the **PATHED** field is highlighted.
- When the **PRIMARY REC LOCS, PRIMARY DEL LOCS, EPSQ, RATES, R/D TOTALS** and **MDQ USAGES** buttons are selected, a modal window will be launched, and additional information displayed.
- **MDQ USAGES** will only appear on firm transportation contracts.



- If a storage contract is entered and a receipt record highlighted, the grid entry form opens, and the **RECEIPT** field is highlighted. If a delivery record is highlighted, the **DELIVERY** field is highlighted.
- The **PRIMARY REC LOCS, PRIMARY DEL LOCS, EPSQ, RATES, R/D TOTALS** and **FDQ USAGES** buttons when selected will launch a new window with additional information.



- Select the button to the right of the **Rec Loc** and **Del Loc** fields to open the location detail information.
- Select the button to the right of the **Up K** or **Dn K** fields to open the upstream or downstream contract.



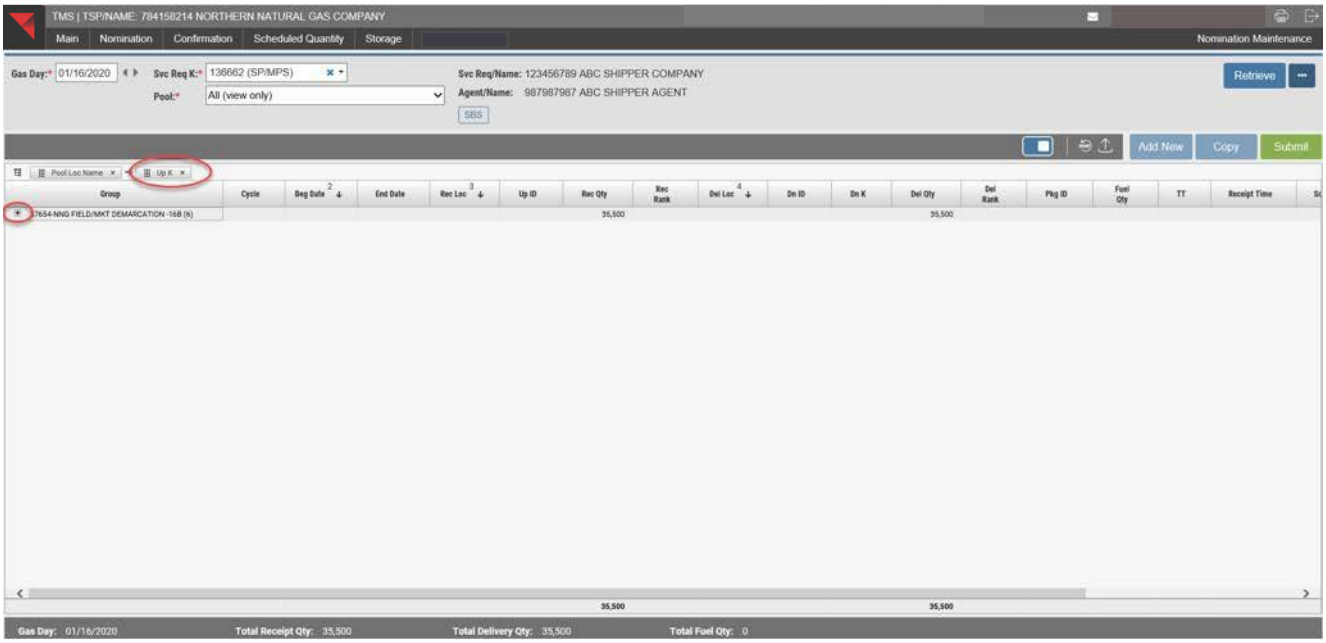
- When a record is highlighted, the grid entry form opens, which allows the user to add, change or delete a record. If user wants to highlight a record without the grid entry form opening, click on . Click on this button again and the grid entry form will open.
- Each column heading has a column menu option which appears when a user hovers its mouse in the column heading. Options to filter the grid data include:
  - Select to move or auto size the column or auto size all columns.

- Select to filter the grid data.
- Select to hide or show columns. To hide a column, uncheck the box.

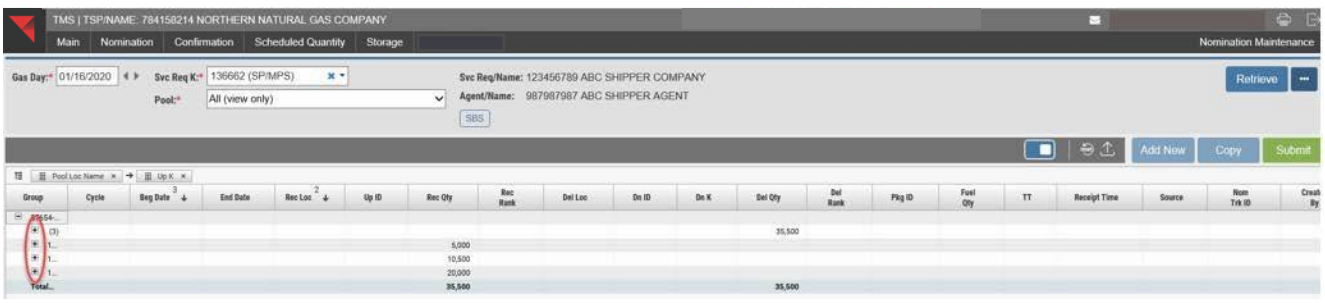
- To group, left click and hold on to the column heading you want to group by and then drag the mouse upwards to the grid grouping row. An example is grouping by **Up K -** hover your mouse over the **Up K column**, left click and hold, then drag the mouse upwards. Above the column headings to the left of the screen the grouping selection will be shown -

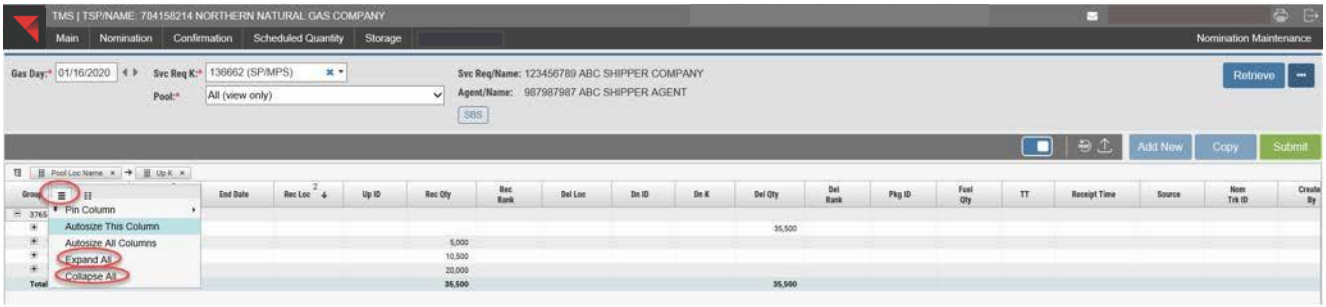
. In this example, the six records have been grouped by **Up K**.

- Select the **'+'** or plus sign to the left of **37654-NNG FIELD/MKT DEMARCATION-16B (6)** to see the record grouping.

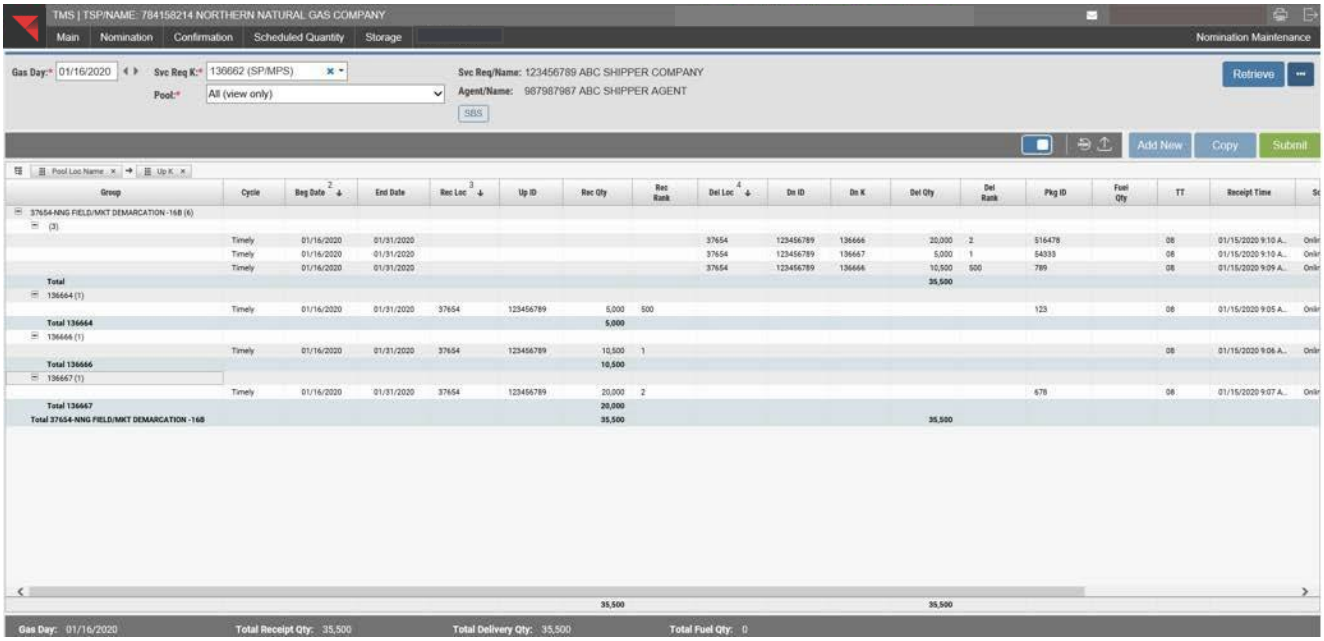


- Here is the record grouping by **Up K**.
- To view all the grouped records, select each individual plus sign.
- All the grouped records can be viewed by clicking on the in the **Group** column heading and selecting **Expand All**. Select **Collapse All** to collapse the records.

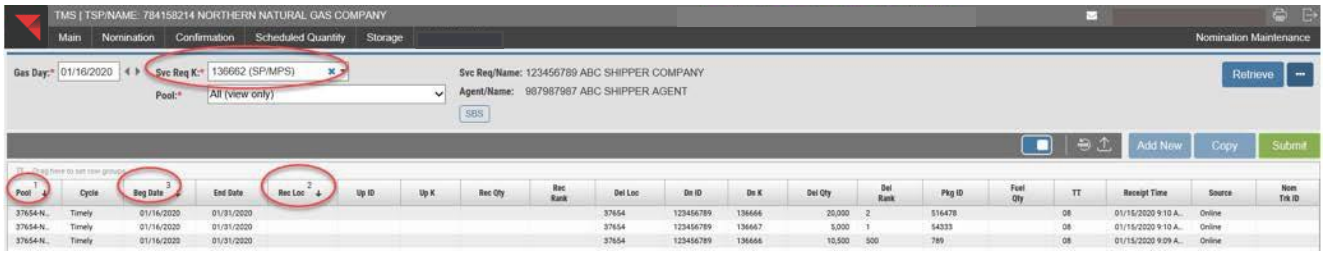




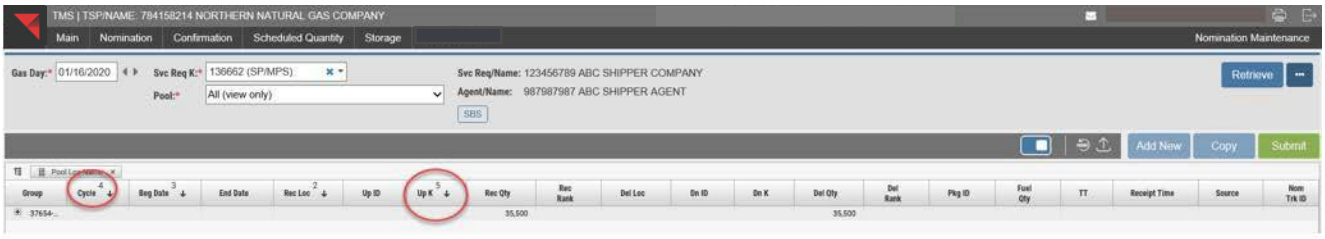
- Now all the grouped records can be viewed.



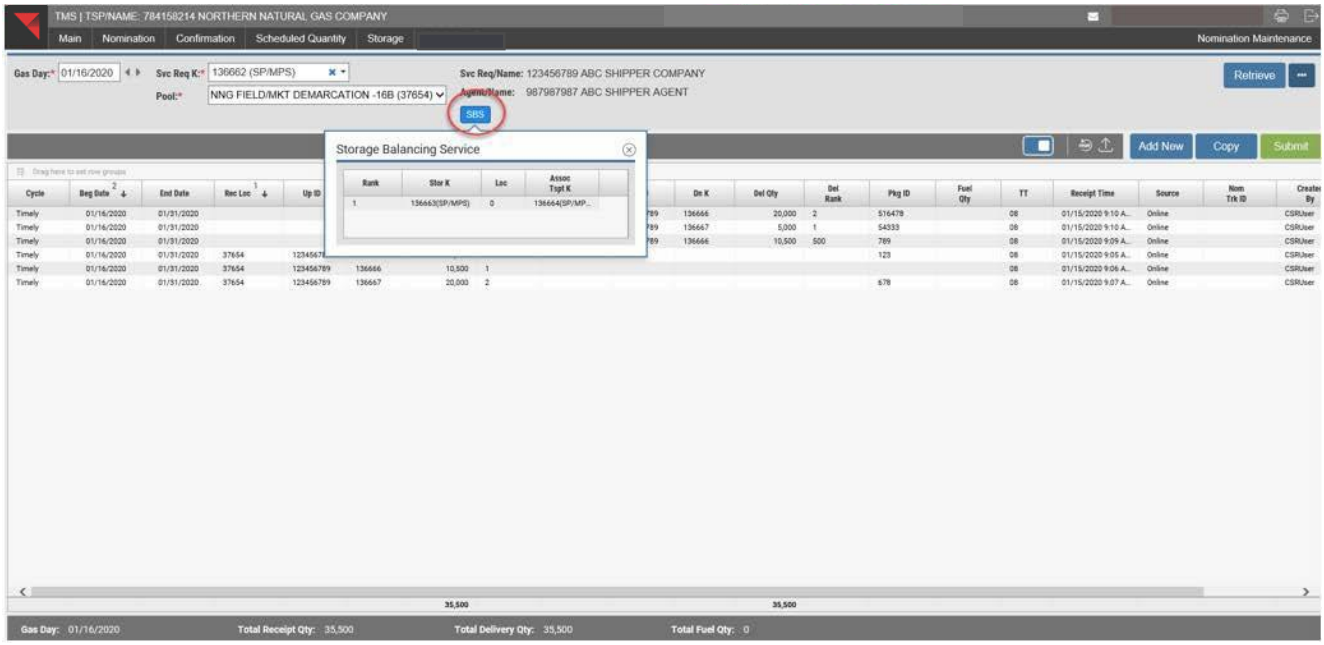
- Every column in the grid can be sorted by clicking in the column heading. The **Nomination Maintenance** screen has a default sort. For transportation and storage contracts, the default sort is the **Rec Loc** column first **(1)** and the **Beg Date** column second **(2)**. For pooling contracts, the default sort is the **Pool** column first **(1)**, the **Rec Loc** column second **(2)** and the **Beg Date** third **(3)**.



- To sort on multiple columns, hold the **Ctrl** button down on the keyboard and proceed to click in each column heading to include in the sort.
- A number will appear in each column heading to indicate the order of your multi-column sort. For example, if you wanted to add the **Cycle** column as the fourth **(4)** sort and the **Up K** as the fifth **(5)** sort, hold the **Ctrl** button down and click in the **Cycle** column and then click in the **Up K** column.



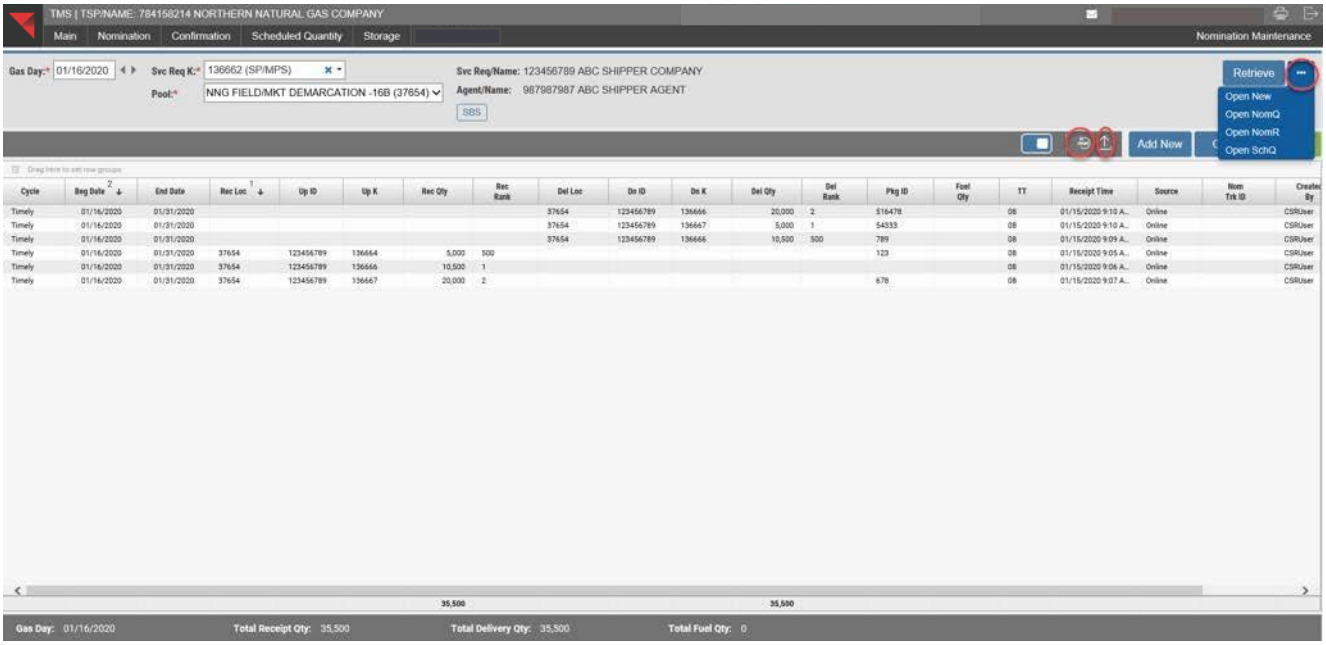
- Select the **SBS** button to see the storage contract and the associated transportation contract. If a user does not have SBS, this button will not appear.



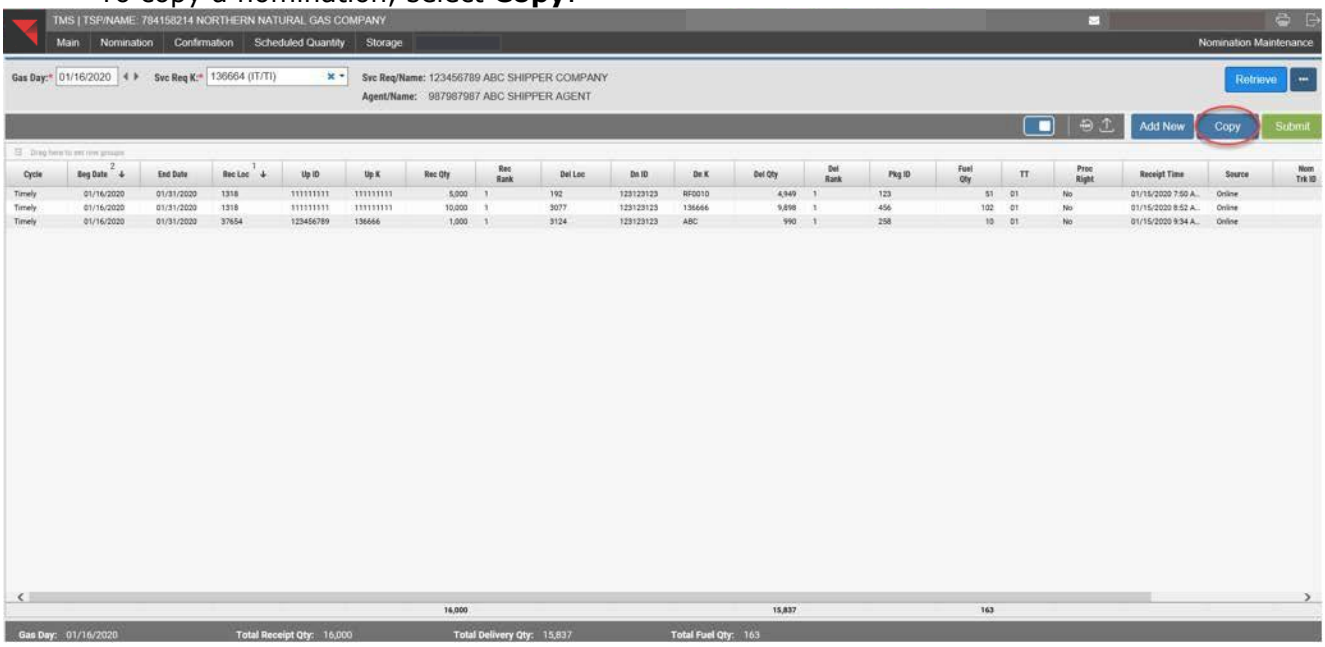
- If the **Ellipsis** button, (three dots to the right of **Retrieve),** is selected, the user will be able to select:
  - **Open New** to open nomination maintenance.
  - **Open NomQ** to open nominated quantities by cycle screen.
  - **Open NomR** to open the nomination reconciliation screen.
  - **Open SchQ** to open scheduled quantities screen.

- If the width of a column is changed or a column is moved to another location, the user can select the **Reset** button to put the columns back to their original state. The **Reset** button will appear on each screen.

- If the **Export** button is selected, the data on the screen will be exported as a CSV or Excel file. The **Export** button will appear on each screen.

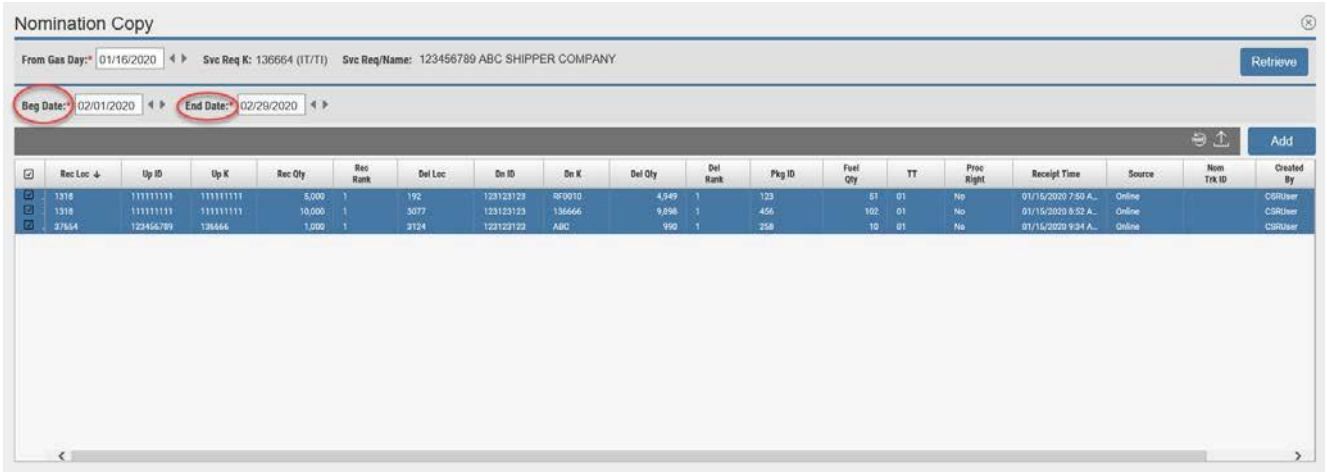


- To copy a nomination, select **Copy**.

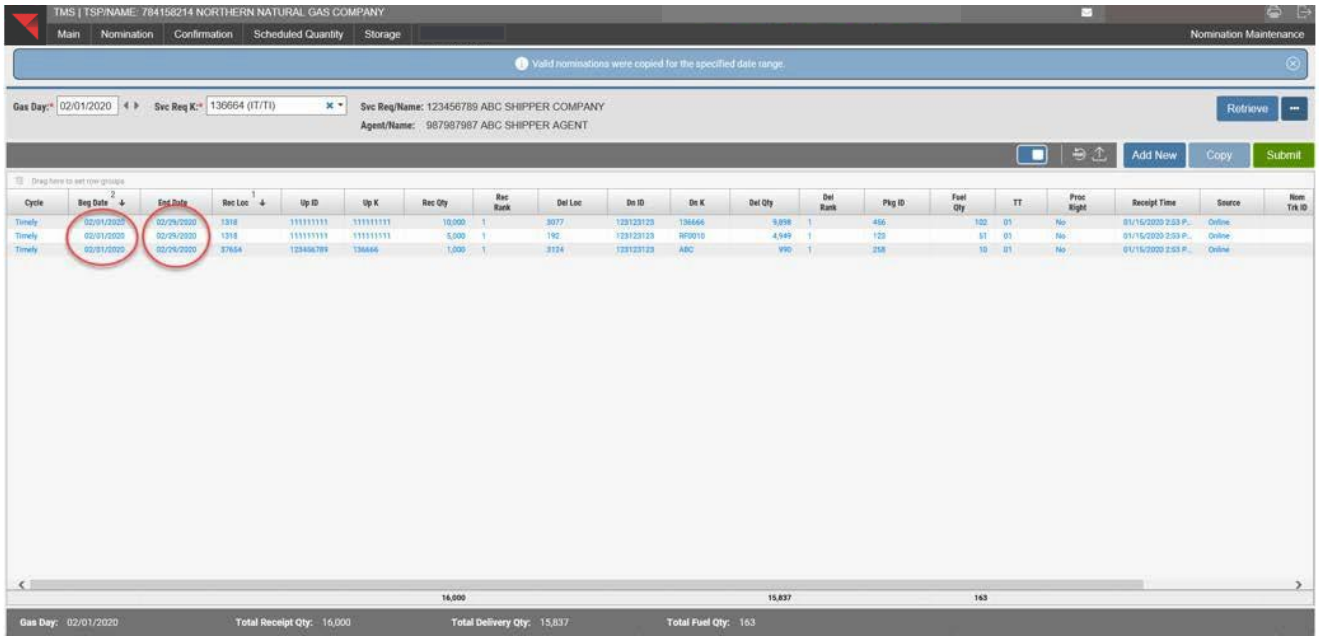


- Enter the desired gas day to copy in the **From Gas Day** field and select **Retrieve**.

- Enter the **Beg Date** and **End Date** to copy and select **Add**.



- The copied nomination (e.g., February 1 – 29, 2020) will appear. User can now make changes to the records and then select **Submit** to save the changes.
- Note: The **blue** records are considered new records until user selects **Submit**. The records change to **black** after they have been saved.

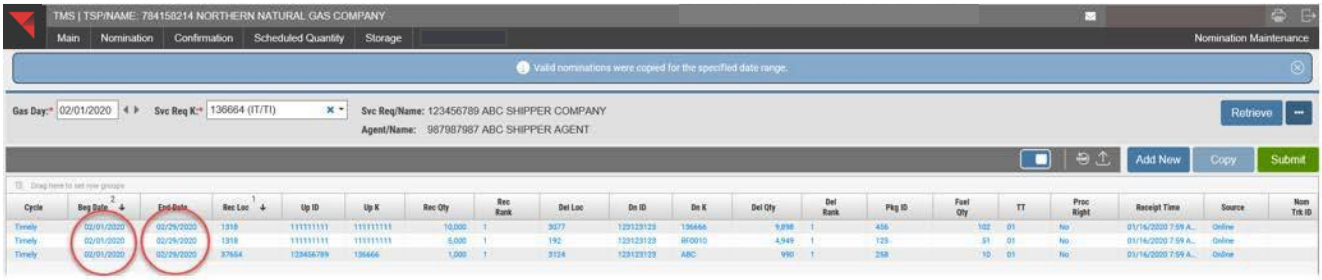


Nomination Copy

- This screen allows a user to copy a contract's nominations from a specified date to a specified date range. The process will only copy paths with valid upstream and downstream contract numbers for the dates selected.
- To copy a nomination, select **Nominations** and then **Nomination Copy**.
- User will have the option to select one individual record or multiple records to copy.
- Enter the gas day to copy from the **From Gas Day** field and enter the **Svc Req K**. Select **Retrieve**.

- Enter the **Beg Date** and **End Date** you want to copy to and select **Add**.

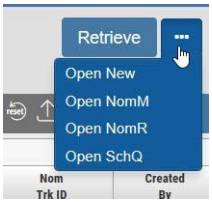
- The copied nominations (e.g., February 1 – 29, 2020) will appear. User can now make changes to the records and then select **Submit** to save the changes.
- Note: The **blue** records are considered new records and have not been saved until user selects **Submit**. The saved records will then change to **black**.



Nomination Quantities by Cycle

- This report provides nomination data for one or more contracts by gas day and cycle with the ability to export as a PDF file.

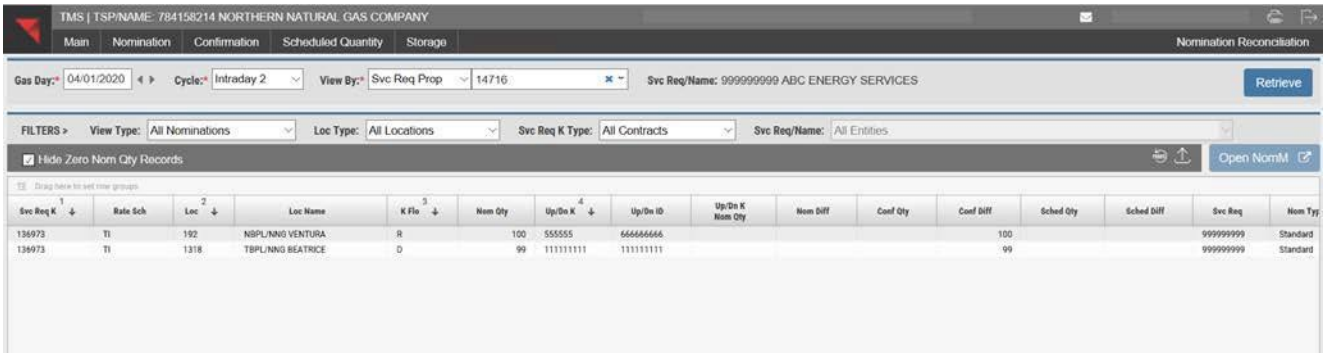
- A user can access the **Nomination Maintenance** screen in order to add, change or delete a nomination.
- Select the to view options.



- 1. Select **Open New** to open a separate tab.
- 2. Select **Open NomM** to open nomination maintenance for the selected contract.
- 3. Select **Open NomR** to view the nomination reconciliation screen.
- 4. Select **Open SchQ** to view the scheduled quantity screen.

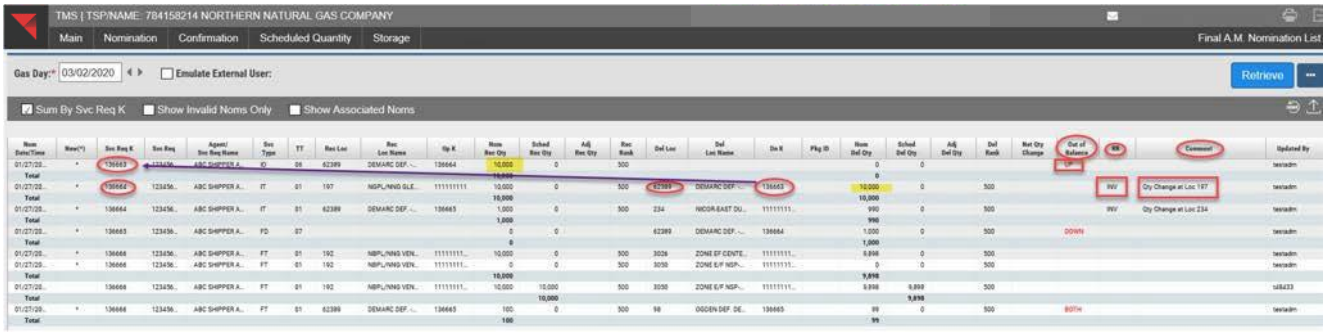
Nomination Reconciliation

- This screen allows the user to view and filter nomination mismatches, scheduling mismatches and confirmation mismatches.
- To view the Nomination Reconciliation screen, select **Nominations** and then **Nomination Reconciliation**.

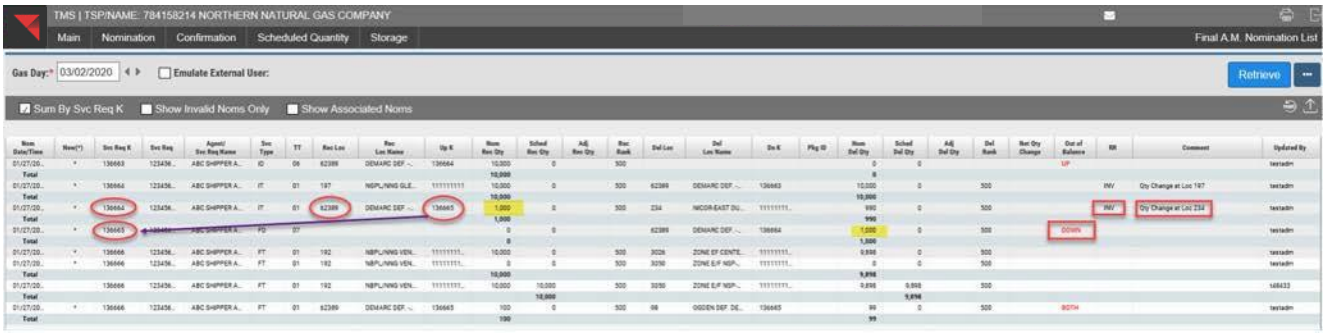


Final A.M. Nomination List

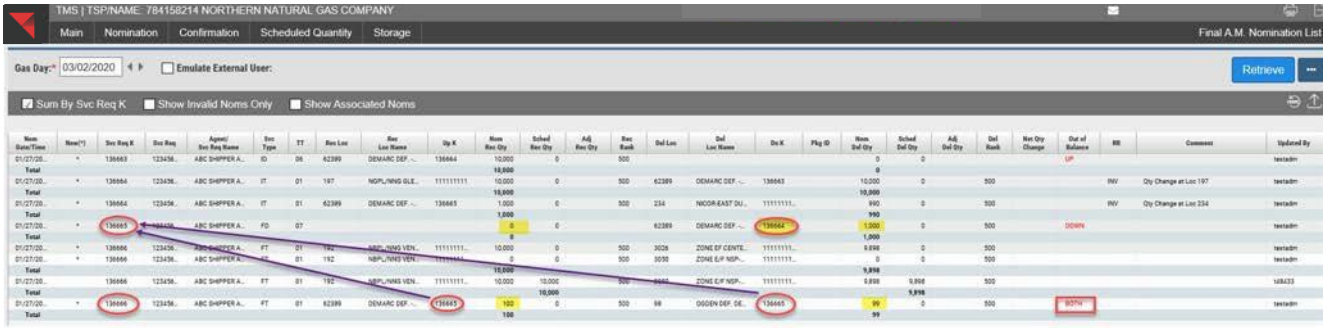
- The Final 8:00 A.M. process is designed for users to true up actual usage using storage service or to redirect quantities from one delivery location to another. The **Final A.M. Nomination List** screen displays the user's contract changes and enables the user to view and verify nomination changes and check for any INV (invalid) Reason Codes and/or Up, Down or Both codes in the Out of Balance column that need to be corrected.
- To view this screen, select **Nominations** and then **Final A.M. Nomination List**.
- The default sort is **Sum By Svc Req K**.
- If a record has an **RR** code **INV,** it will also have a **Comment** associated with the **INV**. In the **Out of Balance** column, the system will show associated nominations and display in **red UP** (upstream) or **DOWN** (downstream) or **BOTH** (upstream and downstream).
- In the screen print below, the transportation contract No. 136664 has an **RR** code **INV** and the **Comment** is Qty Change at Loc 197. This is an invalid nomination due to a nomination change at an interconnect location. The associated contract is storage contract No. 136663, which displays **UP** in the **Out of Balance** column. This indicates which lines to reference for the invalid nomination when **UP** is displayed.



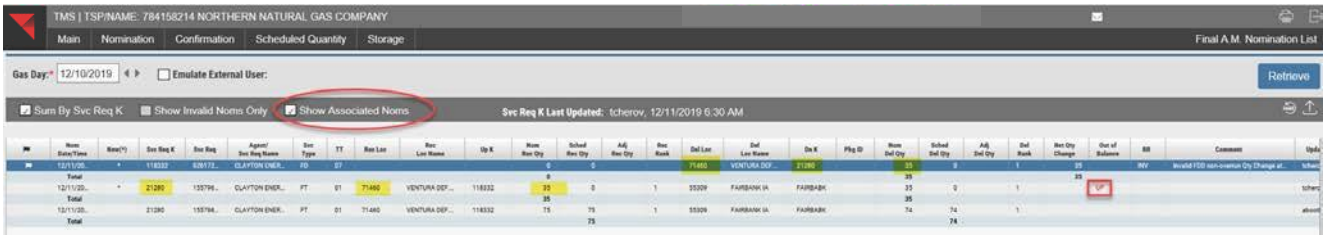
- In the screen print below, the transportation contract No. 136664 has an **RR** code **INV** and the **Comment** is Qty Change at Loc 234. The receipt point is POI 62389 (Demarc Deferred Delivery) referencing contract No. 136665. The associated contract is storage contract No. 136665 which displays **DOWN** in the **Out of Balance** column.



- In the screen print below, the transportation contract No. 136666 displays **BOTH** in the **Out of Balance** column. This is due to no injection of 100 Dth on storage nomination No. 136665 and no withdrawal of 99 Dth on storage nomination No. 136665. There is no **RR** code **INV** because this is a valid record. The user just needs to nominate on its storage contract.

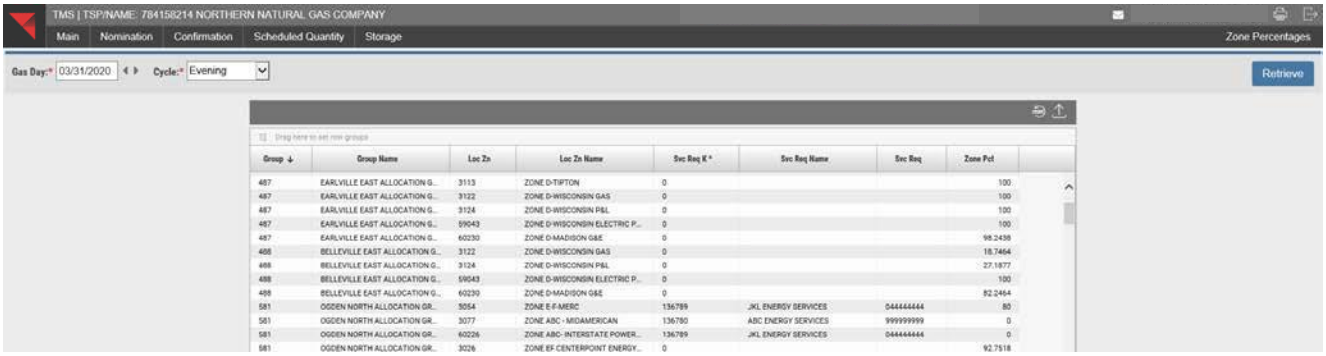


- To display only records associated with the **INV** records:
  - Highlight the **INV** record
  - Select **Show Associated Noms**
  - The record that displays **UP** is the record that is associated with the **INV** record.



Zone Percentages

- This screen shows the percentage rights a contract has at an allocated group(s) for each zone(s) within the group.
- For users to view the Zone Percentages screen, select **Nominations** and then **Zone Percentages.**



Nomination Quantities by Cycle Report

- This report retrieves data for one or more contract(s), or type of contract, for a gas day and cycle.
- To view the Nomination Quantities by Cycle Report, select **Nominations, Reports** and then **Nomination Quantities by Cycle**.
- Enter **Gas Day**, **Cycle**, **Contract/Type** and select what format (**PDF** or **Excel**) to view the file. Select **Retrieve**.

- The data is populated in PDF format.

Nomination Quantities By Cycle

For Transportation Service

TSP/TSP Name: 784158214 NORTHERN NATURAL GAS COMPANY **Stmt D/T:** 01/16/2020 8:56 am

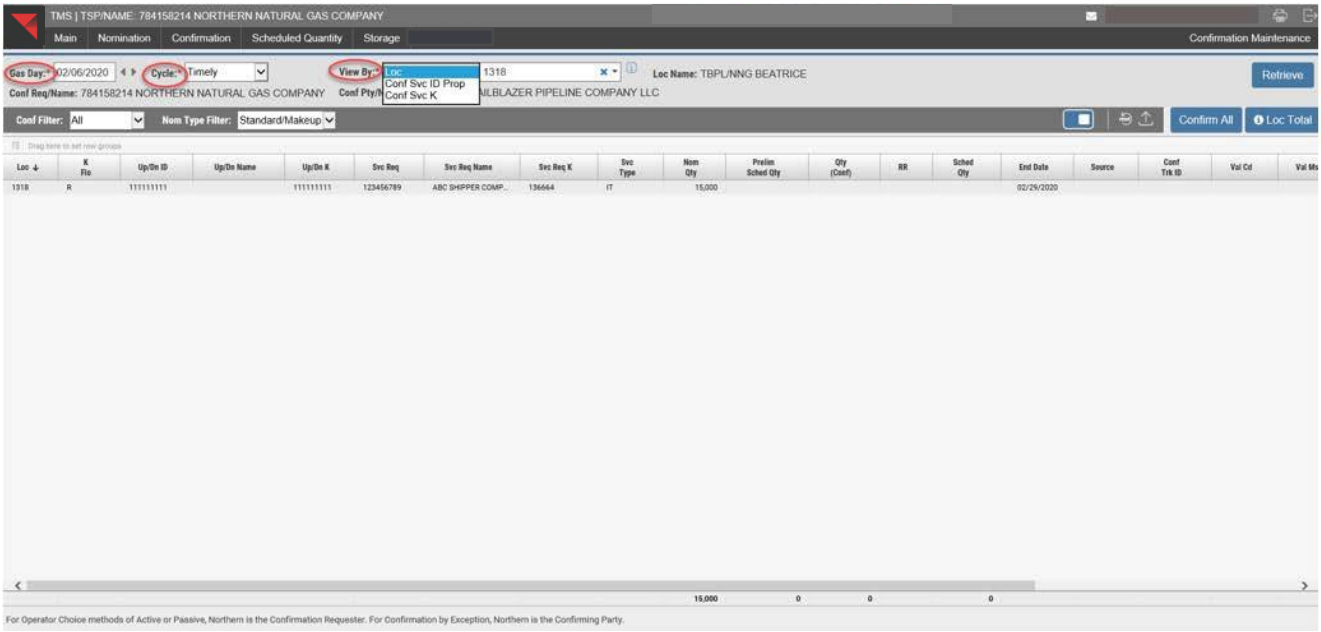
Gas Day: 01/16/2020 **Svc Req K:** 136664 (IT/TI)
Cycle: Intraday 1 **Svc Req/Name:** 123456789 ABC SHIPPER COMPANY **Agent/Name:** 987987987 ABC SHIPPER AGENT

Nom Chng	Rec Loc	Up ID	Up K	Rec Qty	Rec Rank	Del Loc	Dn ID	Dn K	Del Qty	Del Rank	Pkg ID	Fuel Qty	TT	Receipt Time	Source ID	Nom Trk	Created By	Update By
	1318	111111111	111111111	5,000	1	192	123123123	RF0010	4,949	1	123	51	01	01/15/2020 7:50 am	Online		CSRUser	CSRUser
		Subtotal:		**5,000**					**4,949**			**51**						
	1318	111111111	111111111	10,000	1	3077	123123123	136666	9,898	1	456	102	01	01/15/2020 8:52 am	Online		CSRUser	CSRUser
		Subtotal:		**10,000**					**9,898**			**102**						
	37654	123456789	136666	1,000	1	3124	123123123	ABC	990	1	258	10	01	01/15/2020 9:34 am	Online		CSRUser	CSRUser
		Subtotal:		**1,000**					**990**			**10**						
		Total:		**16,000**					**15,837**									

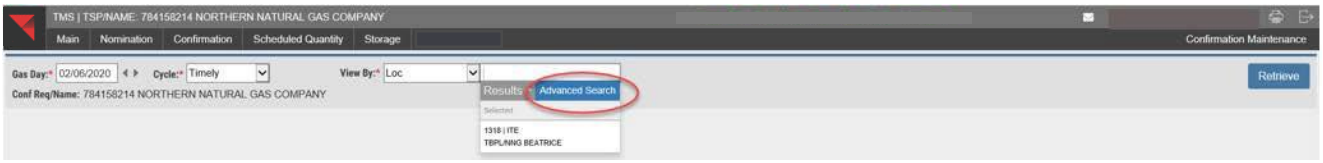
Confirmations Menu

Confirmation Maintenance

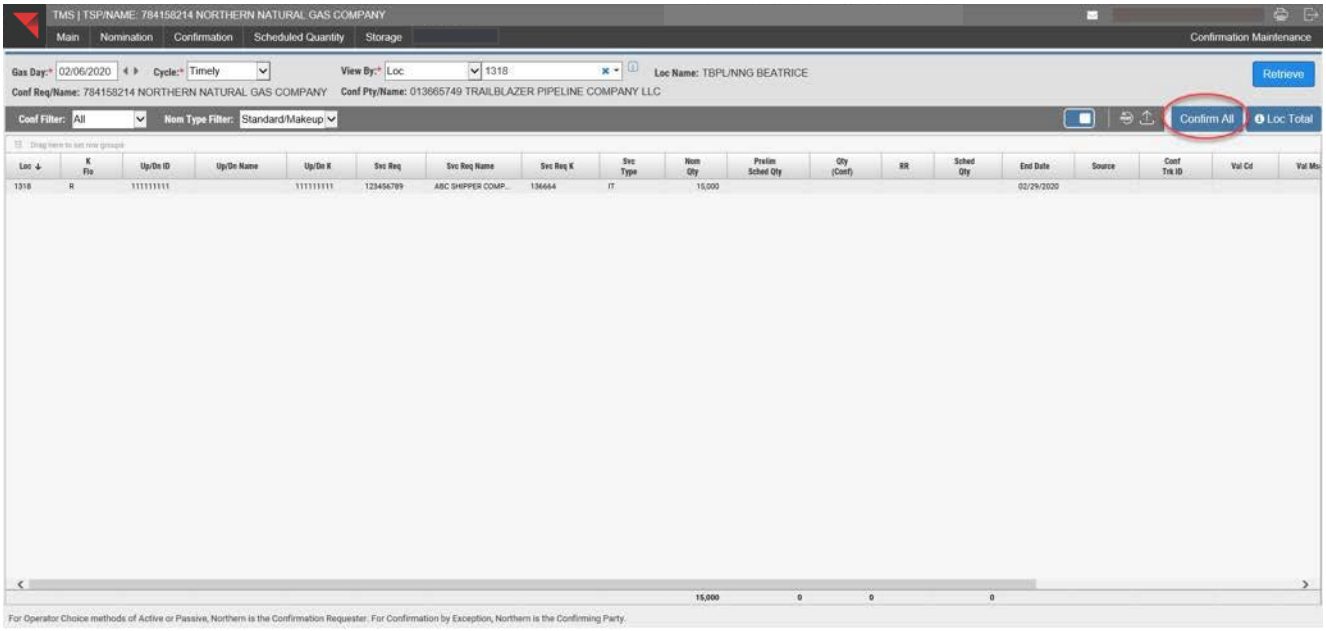
- This screen allows the user to view, edit, add, and delete confirmations.
- To view the Confirmation Maintenance screen, select **Confirmations** and then **Confirmation Maintenance**.
- The Confirmation Maintenance screen opens.
- Select a **Gas Day**
- Select a **Cycle**
- User can view this screen with multiple options:
  - Select **Loc**. Enter a location.
  - Select **Conf Svc ID Prop** (legal entity). Enter an ID Prop.
  - Select **Conf Svc K**. Enter a contract.
- Select Retrieve.



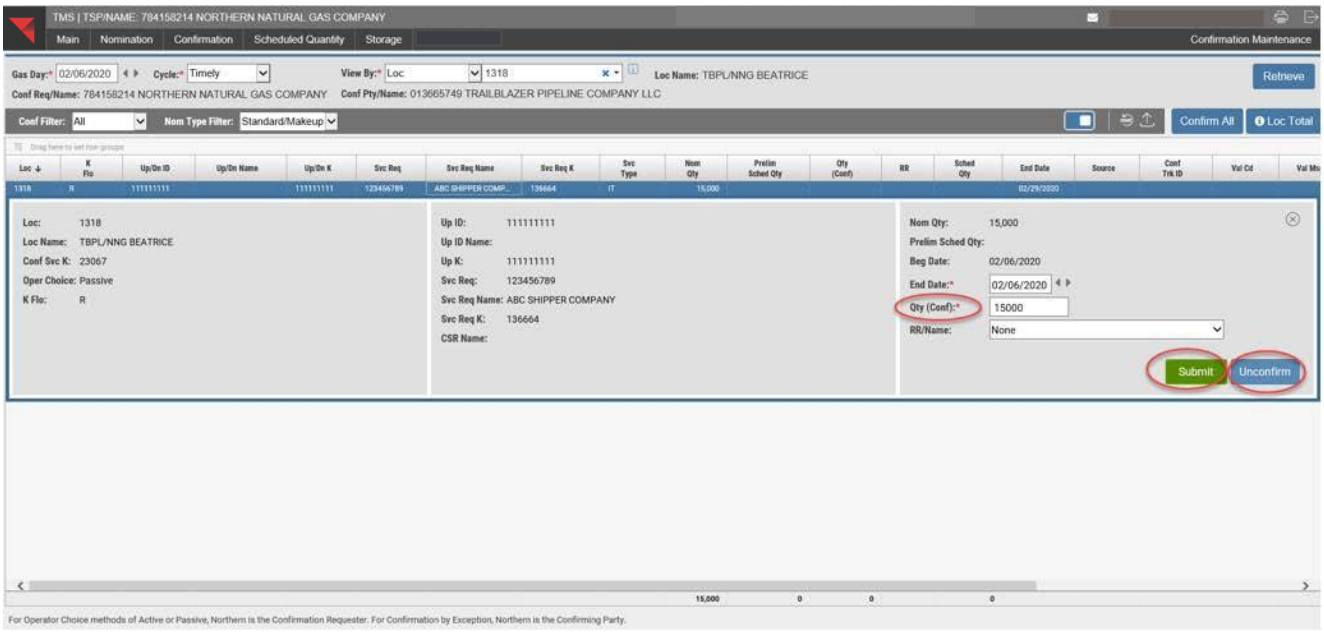
- There is an advanced search for all three options.
- Select **Retrieve**.



- The screen populates with the selected criteria.
- Select **Confirm All** to confirm all records.

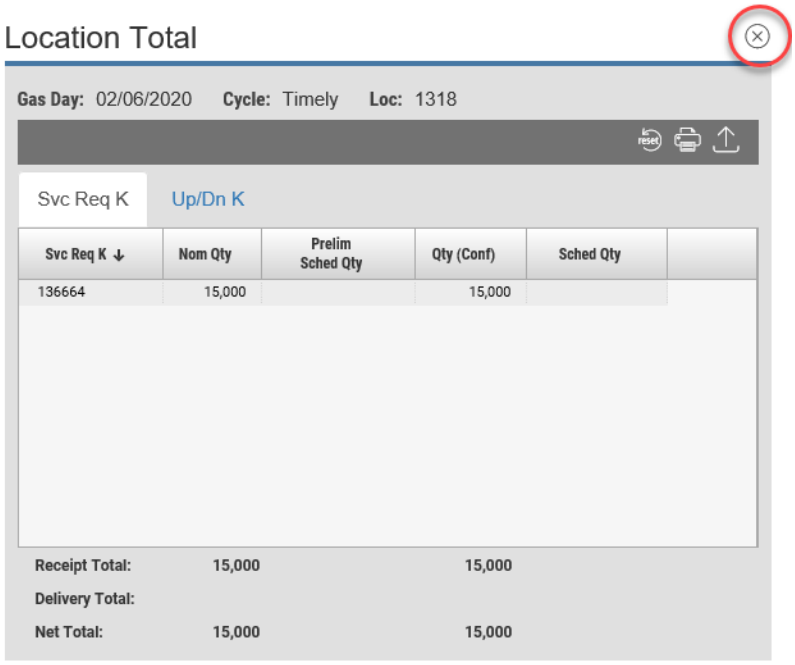


- To confirm a record, highlight the record to be confirmed. When the grid entry form opens, select **Submit**.
- To unconfirm a record, highlight the record to be unconfirmed and select **Unconfirm**.
- If user wants to confirm a volume up or down, highlight the record user wants to confirm, change the **Qty (Conf)** and select **Submit**.



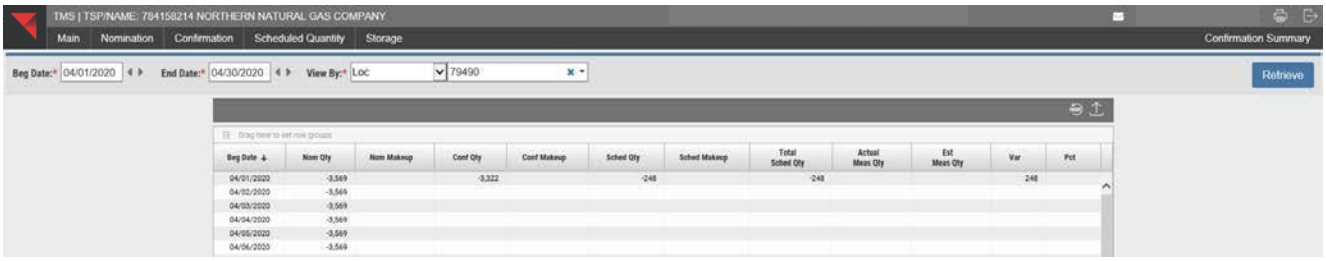
- Select **Loc Total** to open the **Location Total** screen.

- To close the screen, select the in the upper right-hand corner.



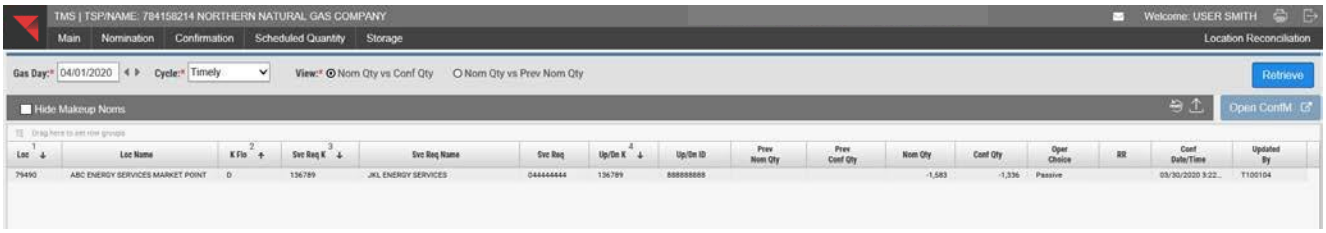
Confirmation Summary

- This screen provides user a view of its daily and monthly scheduled quantities, nominations, confirmations and actual measured quantities at its locations for a specified daterange.
- To view the Confirmation Summary screen, select **Confirmations** and then **Confirmation Summary**.



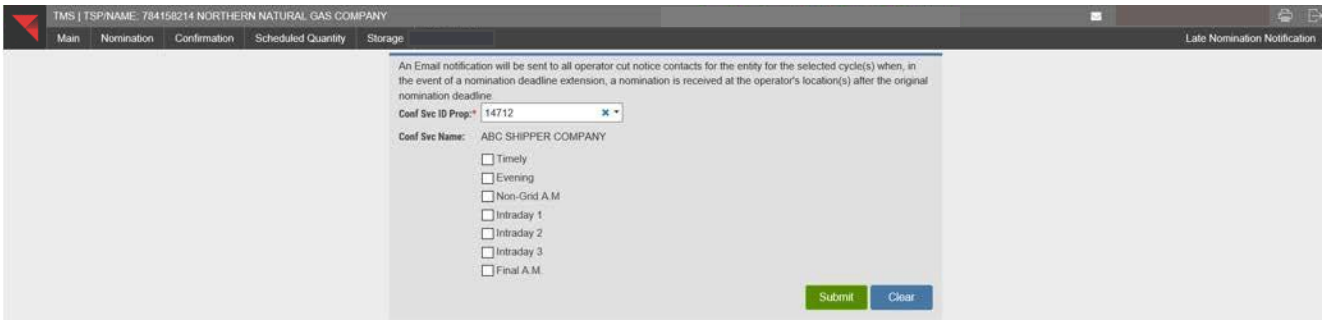
Location Reconciliation

- This screen allows a user to view, filter and compare nomination quantities to confirmation quantities between the current and previous cycle for a specified gas day.
- To view this screen, select **Confirmations** and then **Location Reconciliation**.



Late Nomination Notification

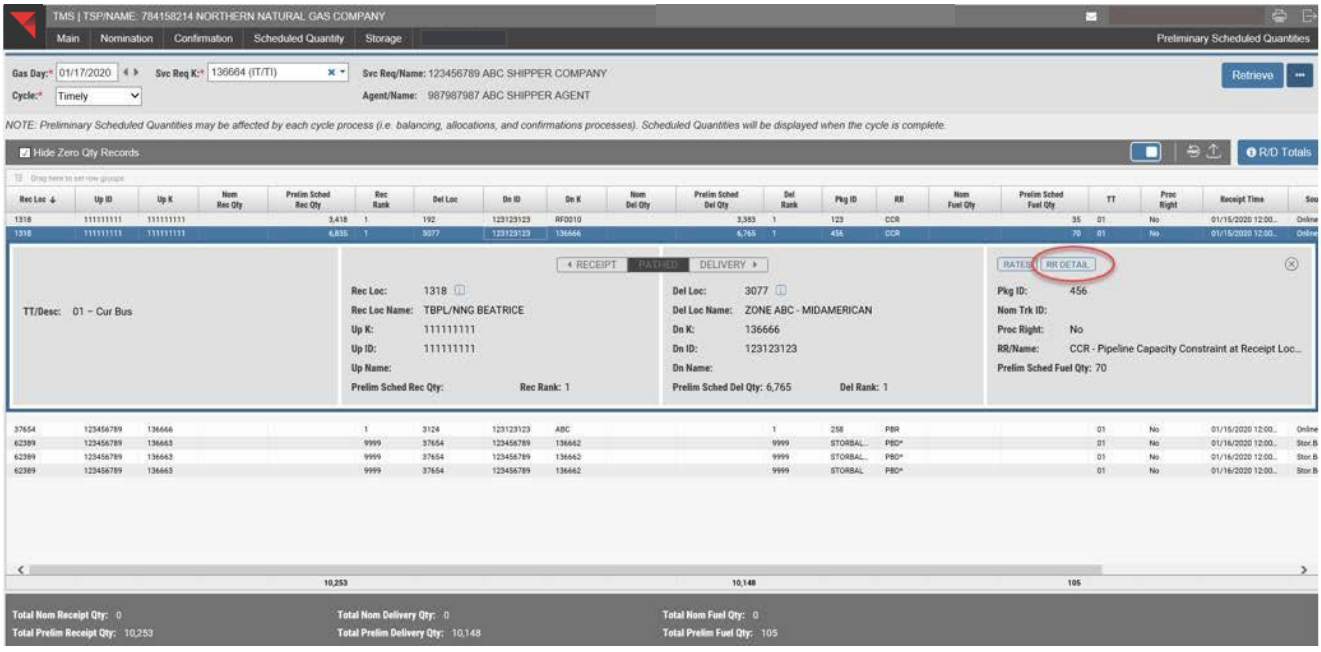
- This screen allows a user to select the individual cycles for which to receive a notification if a nomination is received at its location(s) between the original nomination cycle deadline and the extended cycle deadline.
- To view the Late Nomination Notification screen, select **Confirmations** and then **Late Nomination Notification**.



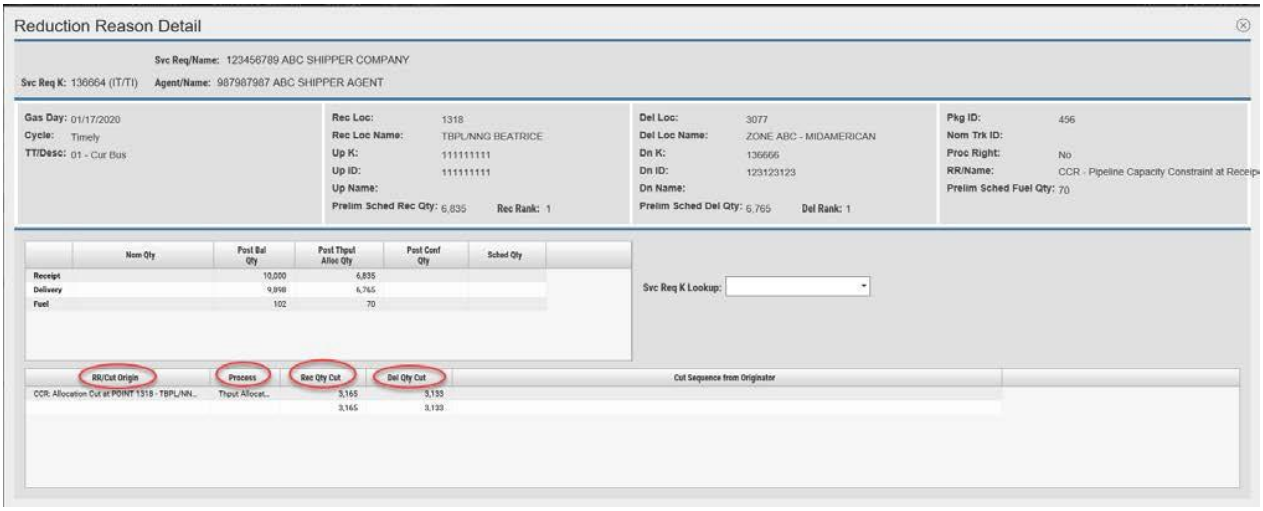
Scheduled Quantity Menu

Scheduled Quantities

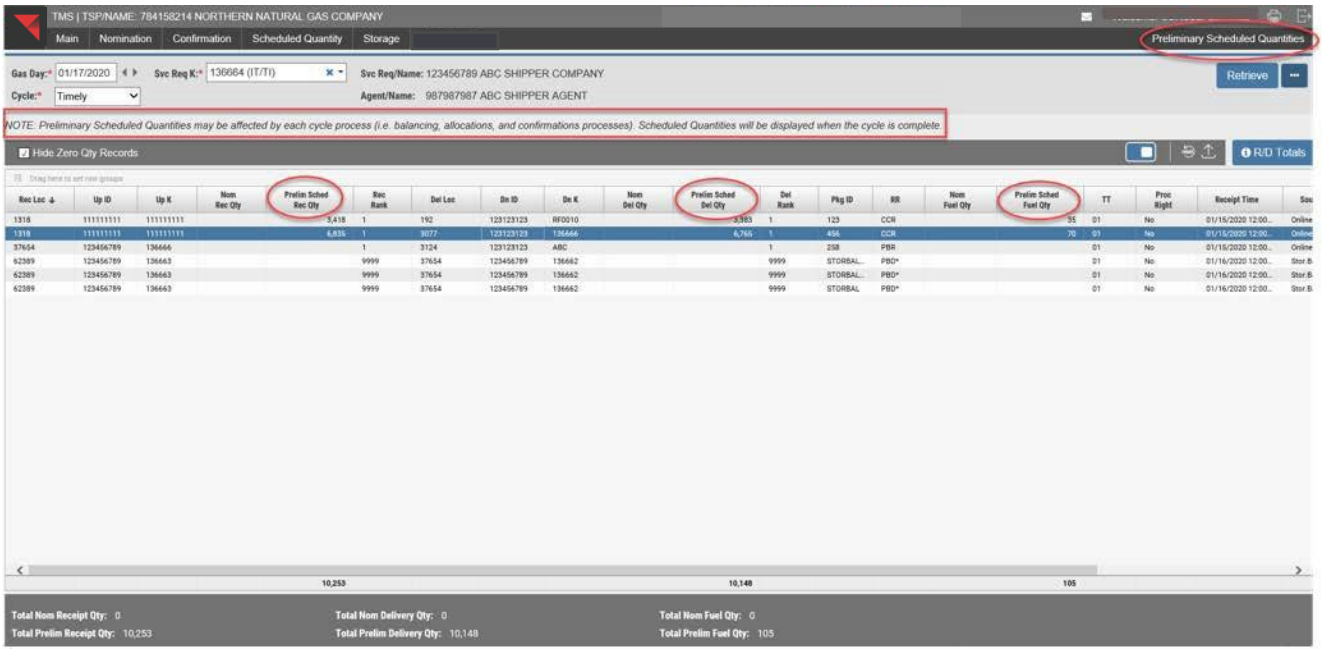
- This screen allows the user to view nominated and scheduled quantities by cycle for a specified gas day.
- To view the Scheduled Quantities screen, select **Scheduled Quantity** and then **Scheduled Quantities**.
- To detect a record that is getting cut, highlight the record with an **RR** code. Select the **RR Detail** button. If a record without an **RR** code is selected, the **RR Detail** button is inactive.



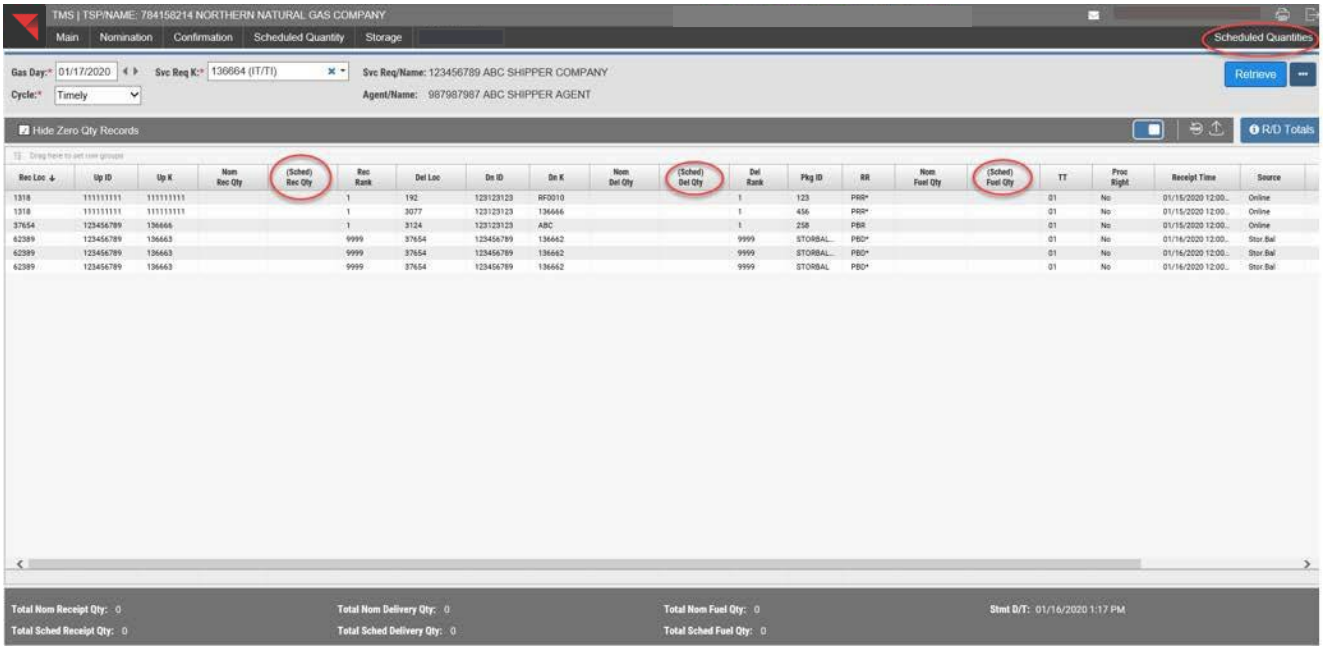
- The **Reduction Reason Detail** screen opens which shows the reason the record was cut.



- After **Balancing Completed** during a process, the user can view Preliminary Scheduled Quantities.

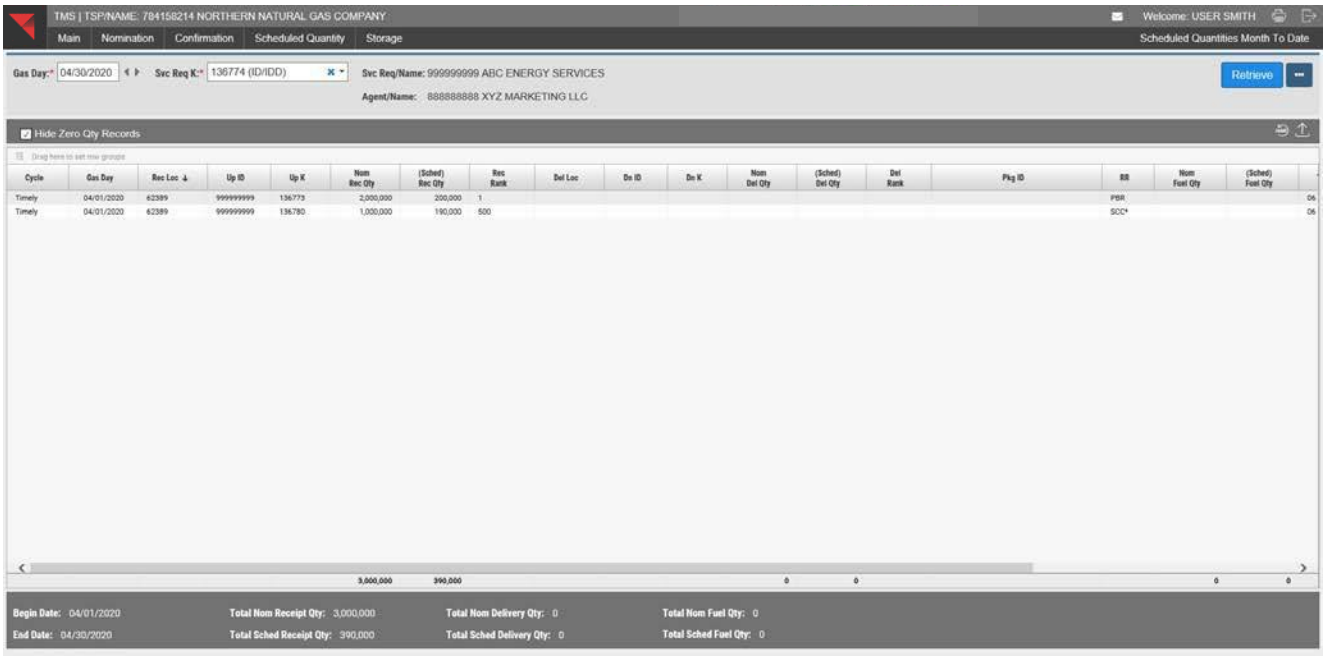


- When the Cycle Process Status screen shows **Cycle Completed**, the user can view Scheduled Quantities.



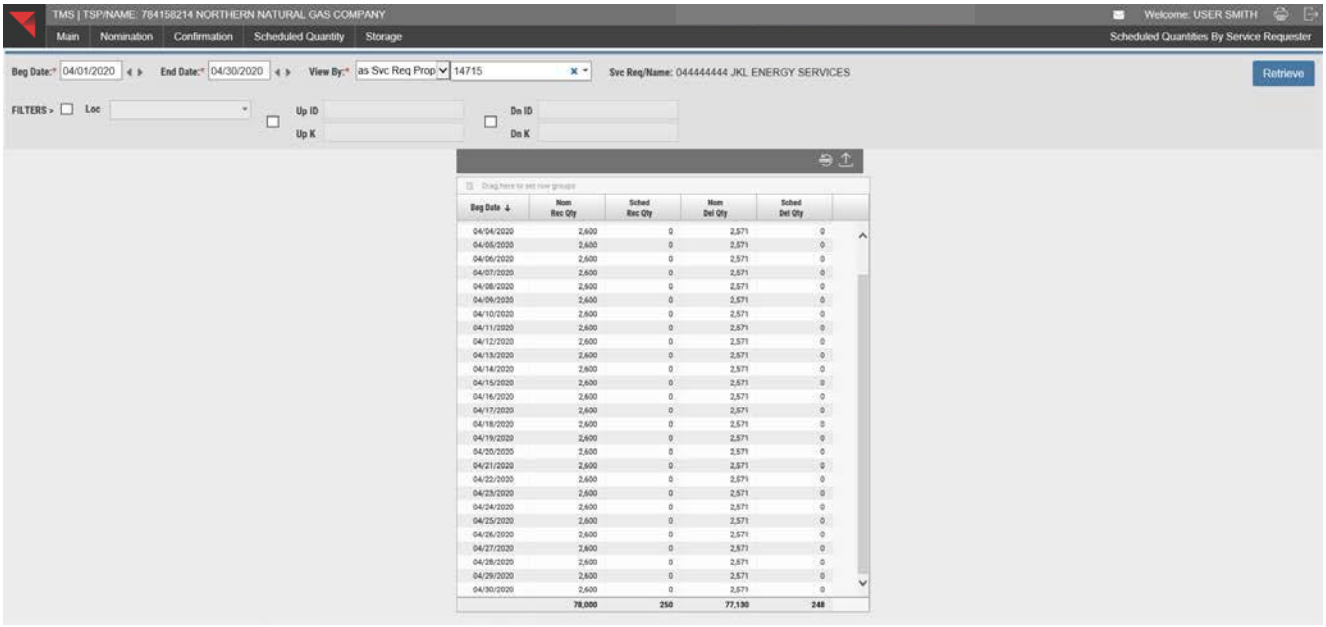
Scheduled Quantities Month to Date

- This screen allows the user to view nominated and scheduled quantities for a contract for a specified date range.
- To view this screen, select **Scheduled Quantity** and then **Scheduled Quantities Month to Date.**



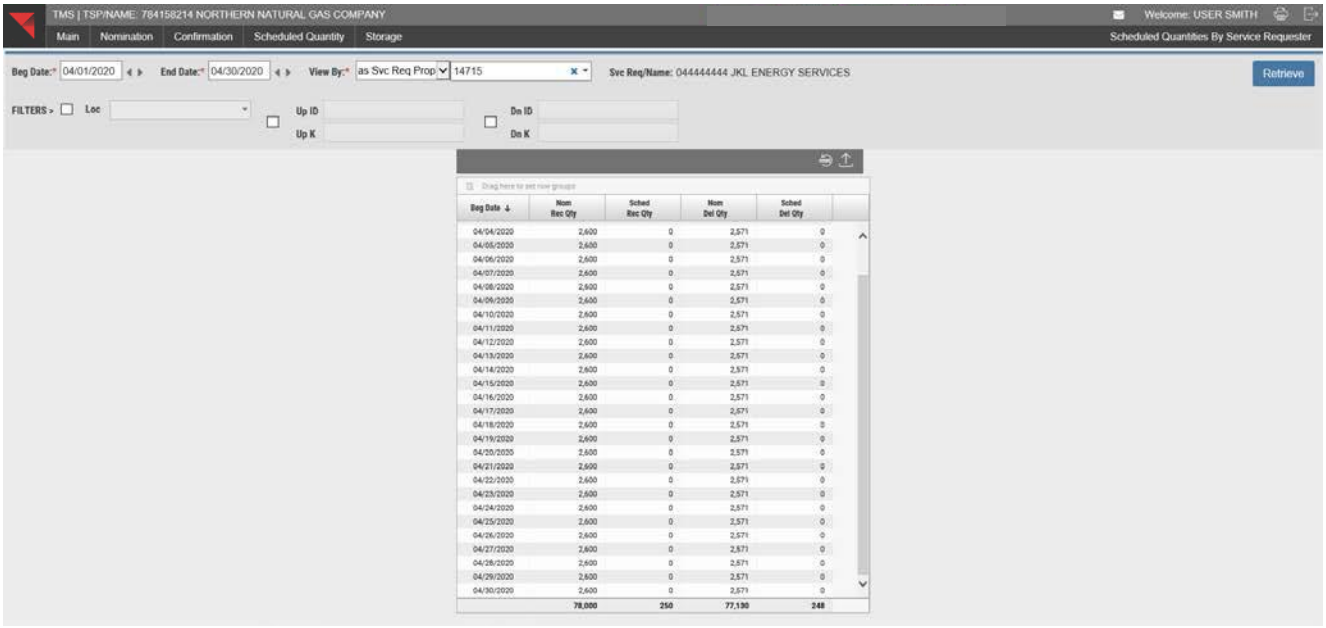
Scheduled Quantities By Service Requester

- This screen allows a user to view nominated and scheduled quantities for a specified date range by **Svc Req K**, **as Svc Req Prop** or **as Agent Prop**.
- To view this screen, select **Scheduled Quantity**, **Scheduled Quantities By** and then **Service Requester**.



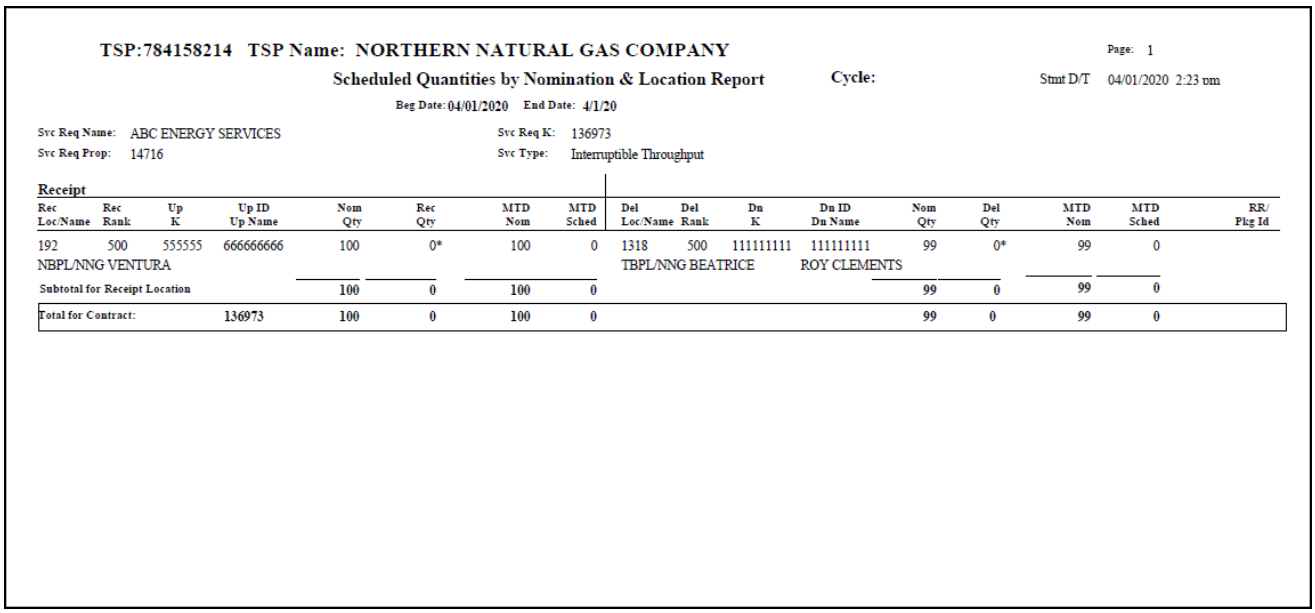
Scheduled Quantities By Operator

- This screen allows a user to view nominated and scheduled quantities for a specified date range by **Loc**, **as Conf Req Prop** or **as Agent Prop**.
- To view this screen, select **Scheduled Quantity, Scheduled Quantities By** and then **Operator**.



Scheduled Quantities Report (for Svc. Req, Operator or Meter Bounce Activity)

- This screen allows a user or operator to view nominated and scheduled quantities for a specified day or date range by **Svc Req K** or **Svc Req Prop**.
- User will need to select what format (**PDF or Excel**) to view the file.
- To view this screen, select **Scheduled Quantity, Reports** and then **Scheduled Quantities.**



TSP:784158214 TSP Name: NORTHERN NATURAL GAS COMPANY

Page: 1

Scheduled Quantities by Nomination & Location Report Cycle: Stmt D/T 04/01/2020 2:23 pm

Beg Date: 04/01/2020 End Date: 4/1/20

Svc Req Name: ABC ENERGY SERVICES Svc Req K: 136973

Svc Req Prop: 14716 Svc Type: Interruptible Throughput

Receipt

Rec Loc/Name	Rec Rank	Up K	Up ID Up Name	Nom Qty	Rec Qty	MTD Nom	MTD Sched	Del Loc/Name	Del Rank	Dn K	Dn ID Dn Name	Nom Qty	Del Qty	MTD Nom	MTD Sched	RR/ Pkg Id
192 NBPL/NNG VENTURA	500	555555	666666666	100	0*	100	0	1318 TBPL/NNG BEATRICE	500	111111111	111111111 ROY CLEMENTS	99	0*	99	0	
Subtotal for Receipt Location				100	0	100	0					99	0	99	0	
Total for Contract:			136973	100	0	100	0					99	0	99	0	

Service Requester Scheduled Quantity Report

- This screen allows a user to view nominated and scheduled quantities for a specified day or date range by cycle by **Svc Req K**, **as Svc Req Prop** or **as Agent Prop**.
- User will need to select what format (**PDF or Excel**) to view the file.
- To view this screen, select **Scheduled Quantity, Reports** and then **Service Requester Scheduled Quantities.**

- Enter requirements, select report format (PDF or Excel) and **Retrieve**. Report will generate, example below.

TSP: 784158214 TSP Name: Northern Natural Gas Company
Shipper Nominations/Scheduled Quantities Report - Daily

Beg Date: 04/01/2020 **Cycle:** Timely **Subtotals By:** Delivery Location **Statement Date/Time:** 03/31/202 10:27 am

Service Requester/Name: 44444444 JKL ENERGY SERVICES **Svc Req K:** 136789 **Svc Type:** Firm Throughput
Agent/Name: 44444444 JKL ENERGY SERVICES

Receipt **Delivery**

Rec Loc	Zone/ Area	Rec Loc Name	Up ID	Up Name	Up K	Nom Rec Qty	Rec Qty	Rec Rank	Del Loc	Zone/ Area	Del Loc Name	Dn ID	Dn Name	Dn K	Nom Del Qty	Del Qty	Del Rank	Cap Type	RR	TT	Package ID	Nom Fuel	Fuel Qty
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	1,000	0	1	78623	MID 17	VENTURA POOL	999999999	ABC ENERGY SERVI	136777	-988	0	500	SS	FPC	01		-12	0
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	0	0	1	78623	MID 17	VENTURA POOL	999999999	ABC ENERGY SERVI	136777	0	0	500	SP	FPC	01		0	0
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	0	0	1	78623	MID 17	VENTURA POOL	999999999	ABC ENERGY SERVI	136777	0	0	500	PP	FPC	01		0	0
Delivery Location Totals:						**1,000**	**0**								**-988**	**0**						**-12**	**0**
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	0	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	0	0	500	PP	FPC	01		0	0
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	250	250	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	-247	-248	500	SS	FPC	01		-3	-2
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	250	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	-247	0	500	SS		01	2	-3	0
192	MID 17	NBPL/NNG VENTURA	999999999	ABC ENERGY SERVICI	999999999	0	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	0	0	500	SP	FPC	01		0	0
37654	MID 16 B	NNG FIELD/MKT DEM	999999999	ABC ENERGY SERVICI	136775	500	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	-495	0	500	PS	FPC	01		-5	0
37654	MID 16 B	NNG FIELD/MKT DEM	999999999	ABC ENERGY SERVICI	136775	0	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	0	0	500	PP	FPC	01		0	0
78623	MID 17	VENTURA POOLING P	999999999	ABC ENERGY SERVICI	136777	600	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	-594	0	1	SS	FPC	01		-6	0
78623	MID 17	VENTURA POOLING P	999999999	ABC ENERGY SERVICI	136777	0	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	0	0	1	SP	FPC	01		0	0
78623	MID 17	VENTURA POOLING P	999999999	ABC ENERGY SERVICI	136777	0	0	1	79490	MID 17	ABC ENERGY SE	888888888	XYZ MARKETING LI	136789	0	0	1	PP	FPC	01		0	0
Delivery Location Totals:						**1,600**	**250**								**-1,583**	**-248**						**-17**	**-2**
Contract Totals:						**2,600**	**250**								**-2,571**	**-248**						**-29**	**-2**

Requesting Adjustments to Scheduled Volumes

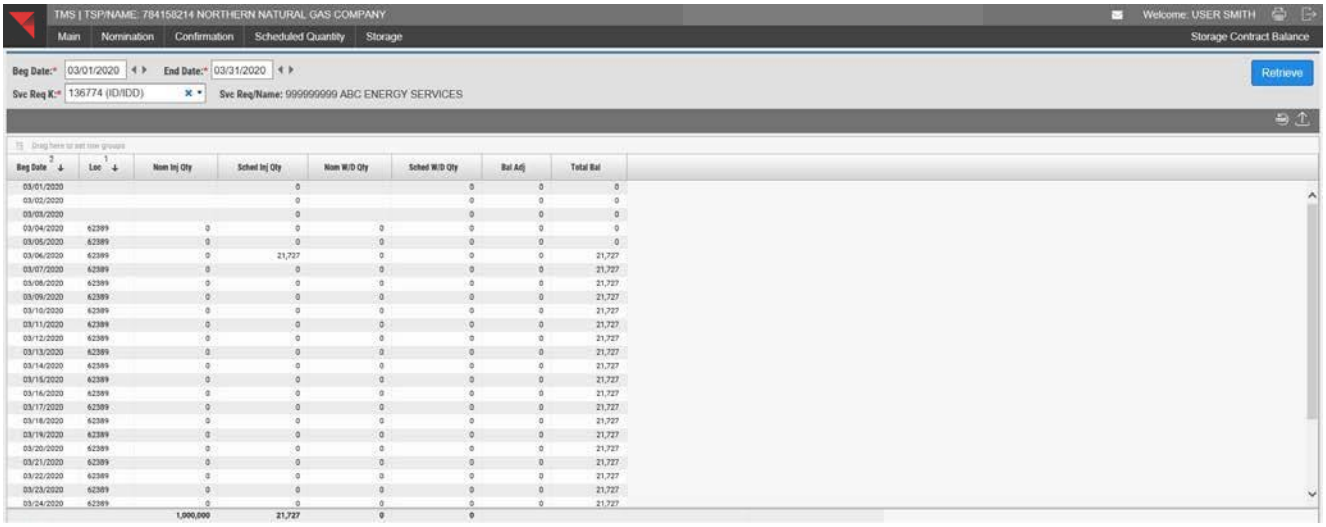
In the event a service requester would like to adjust scheduled volumes after a gas day has completed, a written request will need to be submitted to Northern's customer service department for review. The five criteria outlined below must be met before scheduled volumes can be adjusted.

1) The change must be made prior to billing.
2) The change does not affect the scheduled volume at allocated groups or points.
3) All parties impacted have agreed in writing to the change.
4) Only a single MPS agreement can be affected for adjustments involving a pooling point.
5) The change may affect a transfer of account balances between IDD and PDD consistent with Tariff Sheet No. 145.

Storage Menu

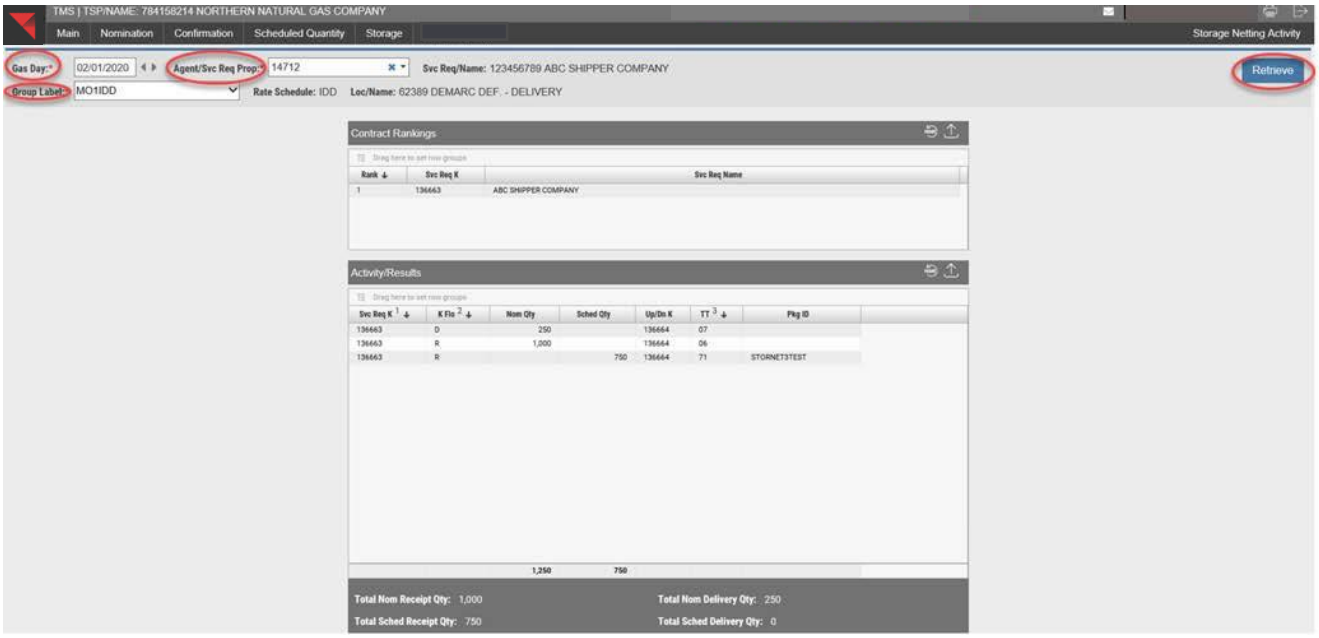
Storage Contract Balance

- This screen displays nomination and scheduling activity for a selected contract.
- To view this screen, select **Storage** and then **Storage Contract Balance**.



Storage Netting Activity

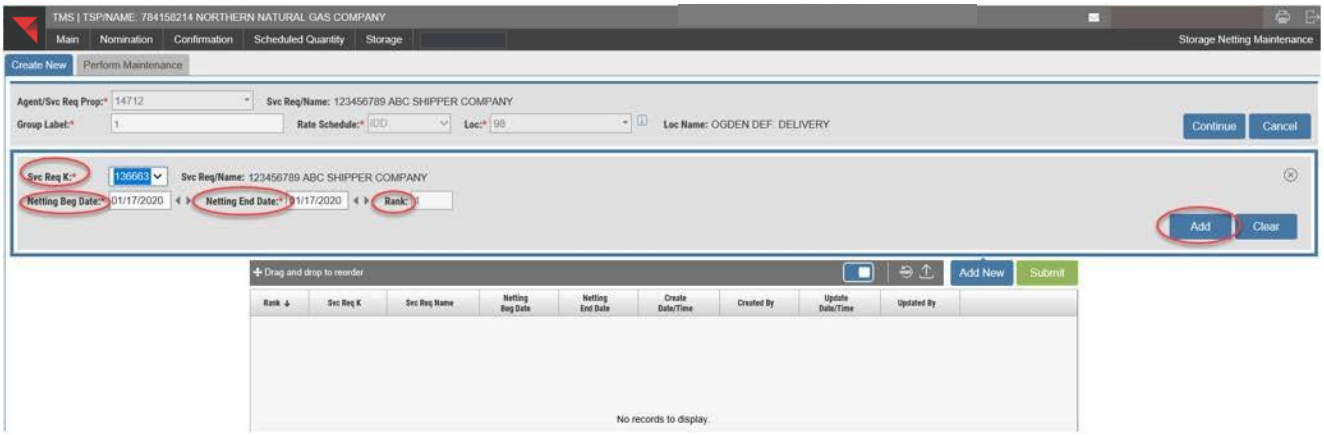
- This screen allows the user to view storage netting transaction detail for a particular entity and group based on user's input criteria.
- To access this screen, select **Storage** and then **Storage NettingActivity**.
- Enter **Gas Day, Agent/Svc Req Prop** and **Group Label**. Select **Retrieve**.



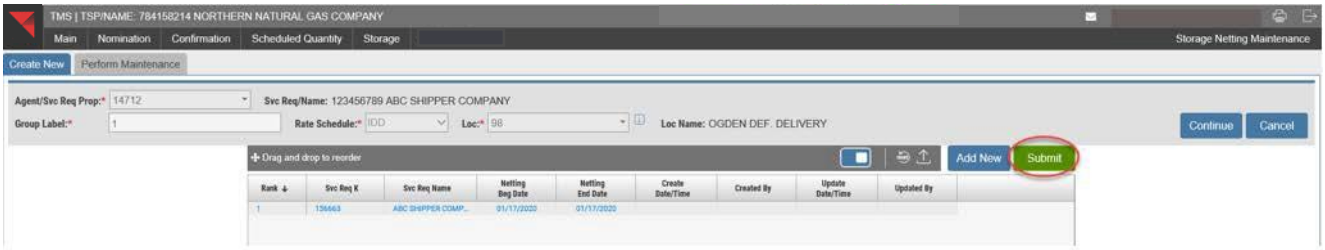
Storage Netting Maintenance

- This screen allows users to "net" storage injection and withdrawal activity at a storage location each gas day. A user can add, change, or delete records within an existing storage netting group.
- To view this screen, select **Storage** and then **Storage Netting Maintenance**.
- System defaults to **Create New** (create a new record).
- Enter **Agent/Svc Req Prop** (legal entity), **Group Label,** which is the user-defined group name (indicates the contracts that will be netted together), **Rate Schedule** and **Loc**. Select **Continue**.

- Enter **Svc Req K, Netting Beg Date, Netting End Date** and **Rank**. Select **Add**.



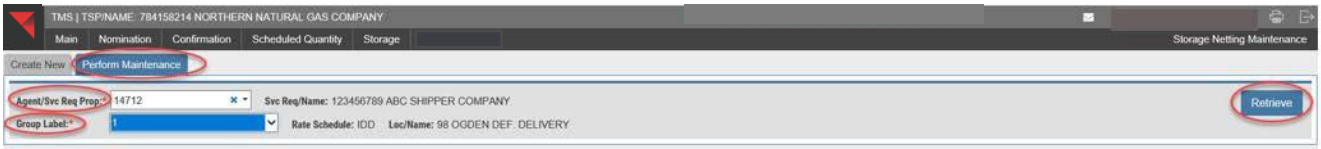
- The new record is created. To save the record, select **Submit**.



Group Label applies to the storage contracts that a user wants to be netted or grouped together. The requirements for each group include only one storage location (e.g. 98) and only one service type per group (e.g. FDD). The same group number cannot be used if a contract is FDD and another contract is IDD. An example is provided below to show two different service types that require different group labels.

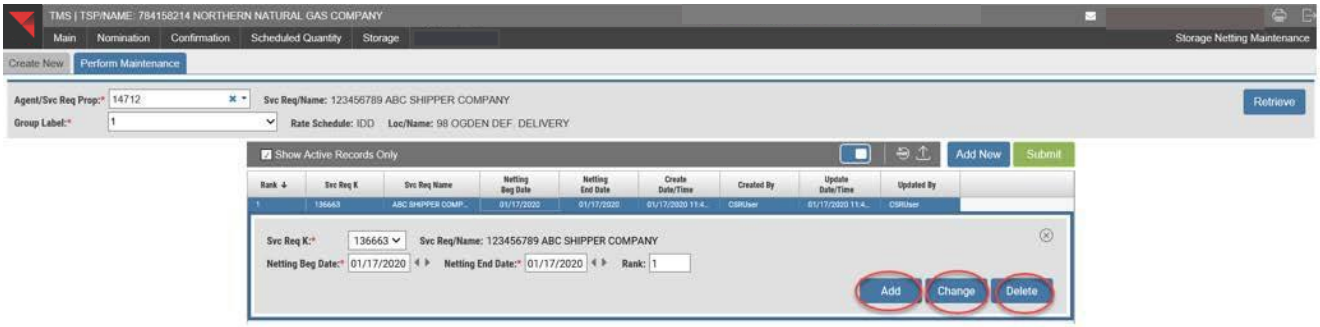
- **Group 1** nets two IDD storage contracts at Ogden Deferred Delivery
- **Group 2** nets two FDD storage contracts at Ogden Deferred Delivery

- To change a record select **Perform Maintenance**.
- Enter **Agent/Svc Req Prop** (legal entity) and select a **Group Label** from the drop-down box.
- Select **Retrieve**.



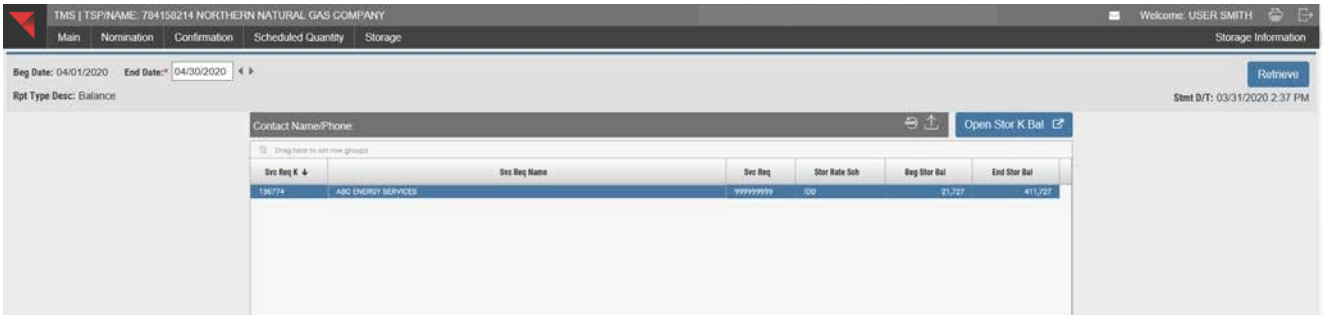
- The current record appears.

- To delete a record, highlight the record and the grid entry form appears which allows a user to **Add**, **Change** or **Delete**.



Storage Information

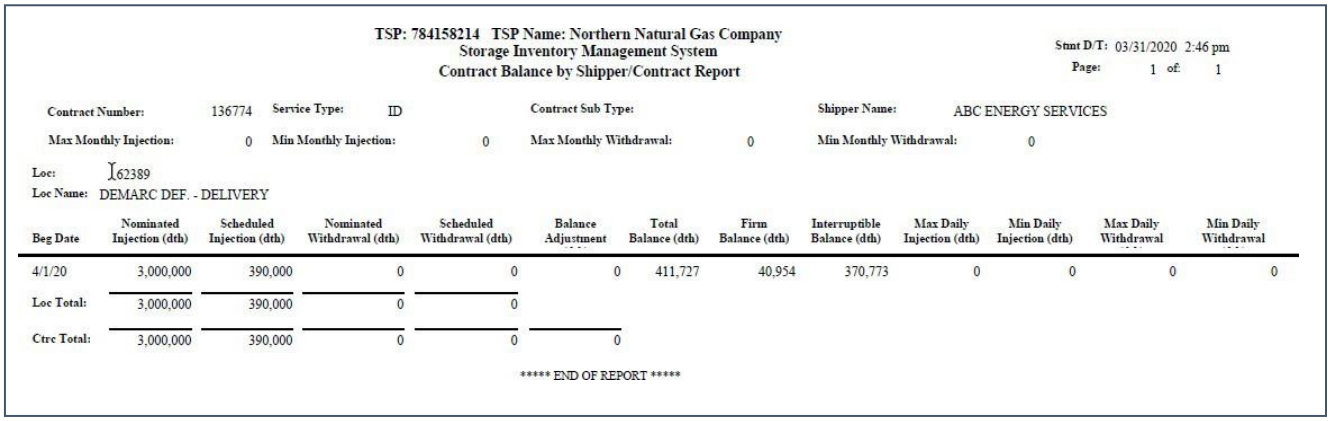
- This screen allows the user to see all its storage balances by contract for a specified date range.
- To view this screen, select **Storage** and then **Storage Information**.



Contract Storage Balance by Day Report

- This report displays nomination and scheduling activity for a storage contract by gas day or month-to-date totals.
- To view this screen, select **Storage, Reports** and then **Contract Storage Balance By Day**.
- Select the format (i.e., **PDF** or **Excel**) to view the data.

- Example of a PDF report generated.



TSP: 784158214 TSP Name: Northern Natural Gas Company
Storage Inventory Management System
Contract Balance by Shipper/Contract Report

Stmt D/T: 03/31/2020 2:46 pm
Page: 1 of: 1

Contract Number: 136774 Service Type: ID Contract Sub Type: Shipper Name: ABC ENERGY SERVICES
Max Monthly Injection: 0 Min Monthly Injection: 0 Max Monthly Withdrawal: 0 Min Monthly Withdrawal: 0
Loc: 62389
Loc Name: DEMARC DEF. - DELIVERY

Beg Date	Nominated Injection (dth)	Scheduled Injection (dth)	Nominated Withdrawal (dth)	Scheduled Withdrawal (dth)	Balance Adjustment	Total Balance (dth)	Firm Balance (dth)	Interruptible Balance (dth)	Max Daily Injection (dth)	Min Daily Injection (dth)	Max Daily Withdrawal	Min Daily Withdrawal
4/1/20	3,000,000	390,000	0	0	0	411,727	40,954	370,773	0	0	0	0
Loc Total:	3,000,000	390,000	0	0								
Ctrc Total:	3,000,000	390,000	0	0	0							

***** END OF REPORT *****

Imbalance To Storage Monthly Control Report

- This report displays data for an imbalance month by legal entity.
- To view this screen, select **Storage, Reports** and then **Imbalance To Storage Monthly Control.**

Storage Balances By Day Report

- This report displays nomination and scheduling activity for a particular service type (i.e. **FD, ID**) for a gas day or date range.
- To view this screen, select **Storage**, **Reports** and then **Storage Balances By Day**.
- Select the format (i.e., **PDF** or **Excel**) to view the data.