



# Imbalance Resolution Election System (IRES) **User Manual**

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## Table of Contents

<b>Imbalance Resolution Overview .....</b>	<b>3</b>
<b>Posted Imbalances .....</b>	<b>4</b>
<b>Access to the Imbalance Resolution Election System (IRES) .....</b>	<b>5</b>
<b>Home Screen .....</b>	<b>6</b>
<b>Update Information.....</b>	<b>8</b>
Temporary Contact.....	8
Permanent Contact .....	10
Authorization to Post Imbalances .....	12
Trade Status .....	14
<b>Imbalance Resolution.....</b>	<b>17</b>
Imbalance to Storage Overview .....	18
Imbalance to Storage Election.....	19
Imbalance to Storage across Legal Entities Election.....	21
In-Kind Payback Overview .....	25
In-Kind Payback Election .....	27
<b>Imbalance Trade .....</b>	<b>29</b>
Imbalance Trade Only.....	34
Accept/Reject Imbalance Trade .....	36
Withdraw Imbalance Trade .....	39
Historical Imbalance Election .....	40
Historical Imbalance Trade Request.....	41
Posted Imbalances.....	42
<b>Imbalance to Storage with Multiple Points .....</b>	<b>43</b>
<b>Customer Imbalance Tiering.....</b>	<b>44</b>

## Imbalance Resolution Overview

The Imbalance Resolution Election System (IRES) allows Northern’s customers to resolve monthly transportation imbalances by using any combination of the four imbalance resolution methods:

- Imbalance Trading
- Imbalance to Storage
- In-Kind Payback
- Cash In/Out

Final transportation imbalance information is posted to Flowing Gas by 9:00 a.m. on the 9th business day of each month. Imbalance elections can be entered from the 9th – 12th business day for the current production month.

Imbalance trading continues through the 17th business day of the month. Imbalance trades must be within the same operational impact area (OIA), i.e. market to market or field to field.

Any residual imbalance volume remaining after Trading, Imbalance to Storage or In-Kind resolution methods will be automatically cashed out.

The following table summarizes the imbalance resolution process timeline.

Northern Natural Gas Company									
Imbalance Resolution Process									
	Calendar Month								
	May	June			July	August			
<b>Imbalance</b>	Imbalance created	May imbalance posted to web	9th Business Day						
<b>Imbalance to Storage</b>			Election deadline	12th Business Day	May imbalance to storage reflected on invoices	9th Business Day			
<b>Trading</b>				Election deadline	17th Business Day	May imbalance trade reflected on invoices	9th Business Day		
<b>In-Kind Resolution (payback)</b>			Election deadline	12th Business Day	Payback is scheduled by customers	May In-Kind payback reflected on invoices	9th Business Day		
<b>Cash Out (Default)</b>									

Access to the election screen is based on the customers’ proprietary Flowing Gas security.

## Posted Imbalances

Final production month transportation imbalance information is posted to Flowing Gas for customers by 9:00 a.m. on the 9th business day each month. The posted imbalance information is available on the website through the 17th business day each month until 10 p.m., referred to as the open election period.

Below is the Flowing Gas link:

<http://www.northernnaturalgas.com/INFOPOSTINGS/Pages/postedImbalances.aspx>

Select the Informational Postings drop down, then Posted Imbalances.

The screenshot shows the Northern Natural Gas website. At the top, there is a navigation bar with links for Pipeline Emergency (888-367-6671) and General Information (877-654-0646, 402-398-7200). Below this is a main navigation menu with 'Informational Postings' highlighted. A dropdown menu is open under 'Informational Postings', listing various categories: Capacity, Gas Quality, Index of Customers, Locations, Notices, **Posted Imbalances** (highlighted with a mouse cursor), Regulatory, Standards Of Conduct, and Tariff. The background of the page features a large banner with the text 'Welcome to Northern Natural Gas' and 'A Berkshire Hathaway Energy Company'. Below the banner, a message states: 'Northern is committed to proactively working with its customers to discuss business just deliver natural gas --- we deliver solutions, tools and resources that im'.

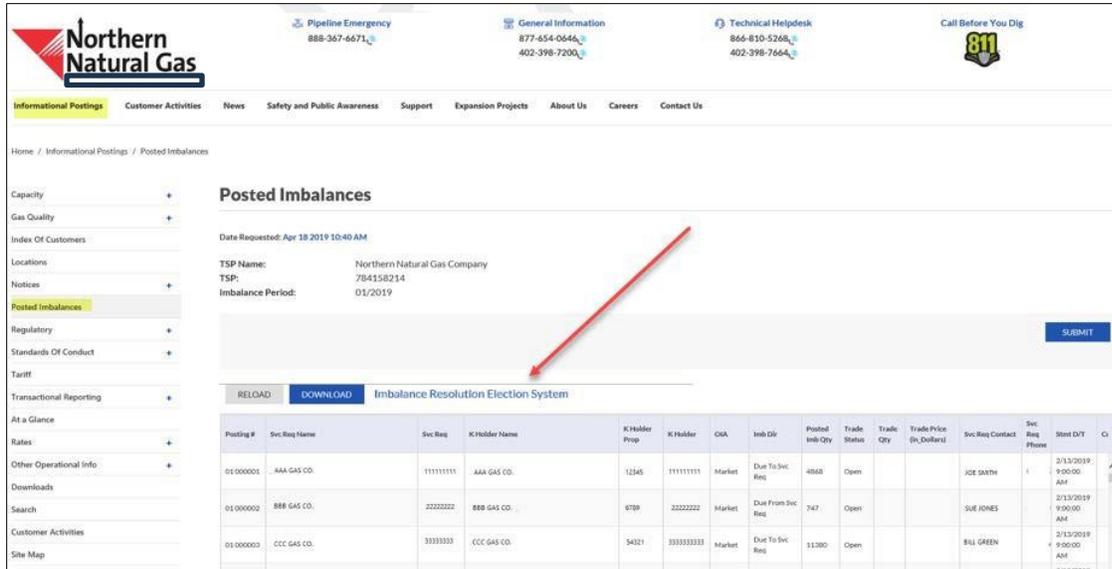
The Posted Imbalance screen is only displayed during the open election period.

The screenshot displays the 'Posted Imbalances' screen on the Northern Natural Gas website. The page includes a navigation bar with links for Pipeline Emergency (888-367-6671), General Information (877-654-0646, 402-398-7200), Technical Helpdesk (866-810-5268, 402-398-7664), and a 'Call Before You Dig' button with the number 811. The main content area shows the 'Posted Imbalances' section with a 'Date Requested: Apr 18 2019 10:40 AM'. Below this, there is a 'SUBMIT' button and a 'RELOAD' button. A table titled 'Imbalance Resolution Election System' is displayed, showing the following data:

Posting #	Svc-Req Name	Svc-Req	K-Holder Name	K-Holder Prop	K-Holder	CIA	Imb Dir	Posted Imb Qty	Trade Status	Trade Qty	Trade Price (\$/Dollar)	Svc-Req Contact	Svc-Req Phone	Short D/T	C
01.000001	AAA GAS CO.	11111111	AAA GAS CO.	12345	111111111	Market	Due To Svc-Req	4865	Open			JOE SMITH		2/13/2019 9:00:00 AM	
01.000002	BBB GAS CO.	22222222	BBB GAS CO.	6789	22222222	Market	Due From Svc-Req	747	Open			SUE JONES		2/13/2019 9:00:00 AM	
01.000003	CCC GAS CO.	33333333	CCC GAS CO.	34521	333333333	Market	Due To Svc-Req	11380	Open			BILL GREEN		2/13/2019 9:00:00 AM	

## Access to the Imbalance Resolution Election System (IRES)

From the Posted Imbalance screen, click the [Imbalance Resolution Election System](#) link to log in.



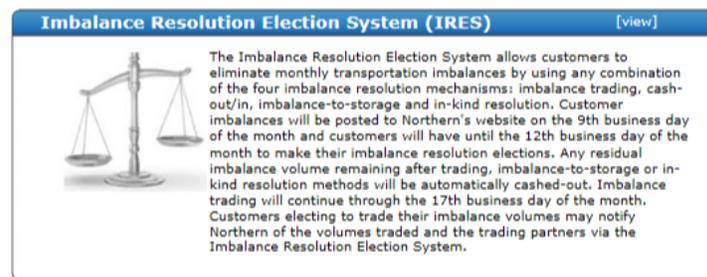
The screenshot shows the Northern Natural Gas website interface. At the top, there are navigation links for Pipeline Emergency, General Information, Technical Helpdesk, and Call Before You Dig. Below this is a menu with categories like Informational Postings, Customer Activities, News, Safety and Public Awareness, Support, Expansion Projects, About Us, Careers, and Contact Us. The main content area is titled 'Posted Imbalances' and includes a date requested (Apr 19 2019 10:40 AM), TSP Name (Northern Natural Gas Company), TSP (784158214), and Imbalance Period (01/2019). A 'SUBMIT' button is visible. Below this, there are 'RELOAD' and 'DOWNLOAD' buttons, with the 'Imbalance Resolution Election System' link highlighted under the 'DOWNLOAD' button. A red arrow points to this link. Below the buttons is a table with columns for Posting #, Svc Req Name, Svc Req, K Holder Name, K Holder Prop, K Holder, OIA, Imb Dir, Posted Imb Qty, Trade Status, Trade Qty, Trade Price (\$/Dollar), Svc Req Contact, Svc Req Phone, and Svc Req D/T. The table contains three rows of data for different gas companies (AAA, BBB, CCC).

Log in with User Name and Password, then click **LOGIN**.



The screenshot shows the Northern Natural Gas login page. The header is dark blue with the company name 'Northern Natural Gas'. Below the header is a white box with the text 'Please login.' and two input fields for 'User Name:' and 'Password:'. There is a 'clear' button and a 'LOGIN' button. A checkbox is present with the text 'Warn me before logging me into other sites.' and a link to 'Privacy'.

After logging in, click the Imbalance Resolution Election System (IRES) application which will take you to the IRES Home screen:



The screenshot shows the Imbalance Resolution Election System (IRES) Home screen. The header is blue with the title 'Imbalance Resolution Election System (IRES)' and a '[view]' link. Below the header is a white box with a scale of justice icon and a paragraph of text explaining the IRES system.

**Imbalance Resolution Election System (IRES)** [view]

The Imbalance Resolution Election System allows customers to eliminate monthly transportation imbalances by using any combination of the four imbalance resolution mechanisms: imbalance trading, cash-out/in, imbalance-to-storage and in-kind resolution. Customer imbalances will be posted to Northern's website on the 9th business day of the month and customers will have until the 12th business day of the month to make their imbalance resolution elections. Any residual imbalance volume remaining after trading, imbalance-to-storage or in-kind resolution methods will be automatically cashed-out. Imbalance trading will continue through the 17th business day of the month. Customers electing to trade their imbalance volumes may notify Northern of the volumes traded and the trading partners via the Imbalance Resolution Election System.

*Note: Other application options may be shown based on your user security.*

## Home Screen

The Home screen (Dashboard) will display the following information:

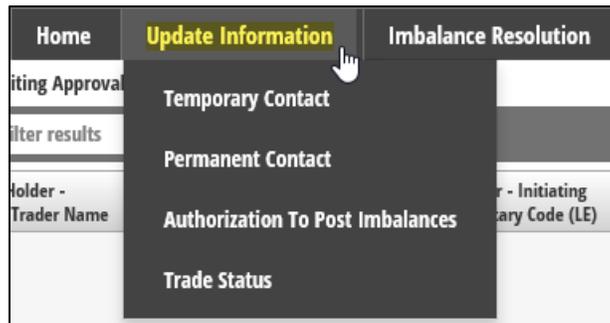
The screenshot shows the Home Screen (Dashboard) with the following sections and annotations:

- Trades Awaiting Approval:** A section for trades awaiting approval. A red box highlights the text: "Trades Awaiting Approval section: If you are the confirming party, trades awaiting acceptance will appear in this section." A red arrow points to the "Filter: Filter results" field. A red arrow points to the "Status" column header in the table below.
- All Trades:** A section for all trades. A red box highlights the text: "All Trades section: All accepted, pending, rejected or withdrawn trades will appear in this section. You can view or sort Status column to the far right of the screen." A red arrow points to the "Filter: Filter results" field. A red arrow points to the "Status" column header in the table below. A red circle highlights the "Status" column header. A red arrow points to the "Export options" button. A red arrow points to the "Refresh" button.
- Posted Imbalances:** A section for posted imbalances. A red box highlights the text: "Posted Imbalance section: Displays imbalance information. An agent will be able to view all their shipper imbalances." A red arrow points to the "Filter: Filter results" field.

On the Home page the following menu choices are available.



The following menu options are available under the Update Information drop down.



Update Information Menu Name	Function
Temporary Contact	Change contact information for one imbalance period.
Permanent Contact	Change contact information for an indefinite period.
Authorization to Post Imbalances	Choose whether to display or not display imbalances on website.
Trade Status	Display customer imbalance as Open or Closed to resolving their imbalance with other customers.

Print, Logout, Reset and Export icons are on the Home page.



Print icon

Logout icon

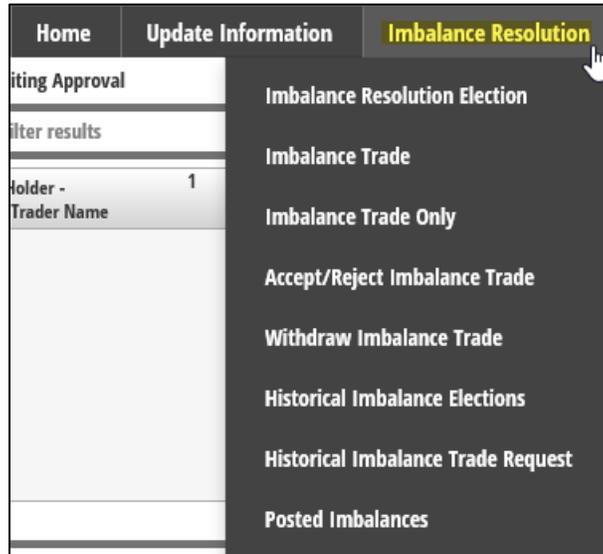


Reset icon

Export icon

There are several screens available to print or export data. The print function generates the grid information as a PDF format. The grid can also be exported and saved in an alternate format.

The following menu options are available under the Imbalance Resolution option.

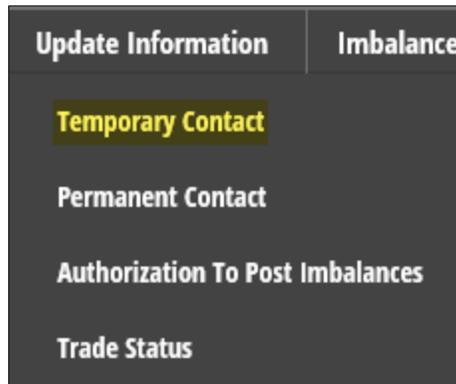


<b>Imbalance Resolution Menu Name</b>	<b>Function</b>
Imbalance Resolution Election	Election screen to resolve imbalance by imbalance to storage or In-Kind Payback resolution.
Imbalance Trade	Election screen to resolve imbalance by imbalance trade.
Imbalance Trade Only	Election screen for agents only to resolve imbalance for their customers by imbalance trade.
Accept/Reject Imbalance Trade	Screen to accept or reject imbalance trade requests from other customers.
Withdraw Imbalance Trade	Withdraw imbalance trade request prior to the confirming party accepting.
Permanent Election Resolution	Election to automatically resolve imbalance either by imbalance to storage or In-Kind Payback method.
Historical Imbalance Elections	View historical elections.
Historical Imbalance Trade Request	View historical trade requests.
Posted Imbalances	View all imbalances posted on Northern's website.

## Update Information

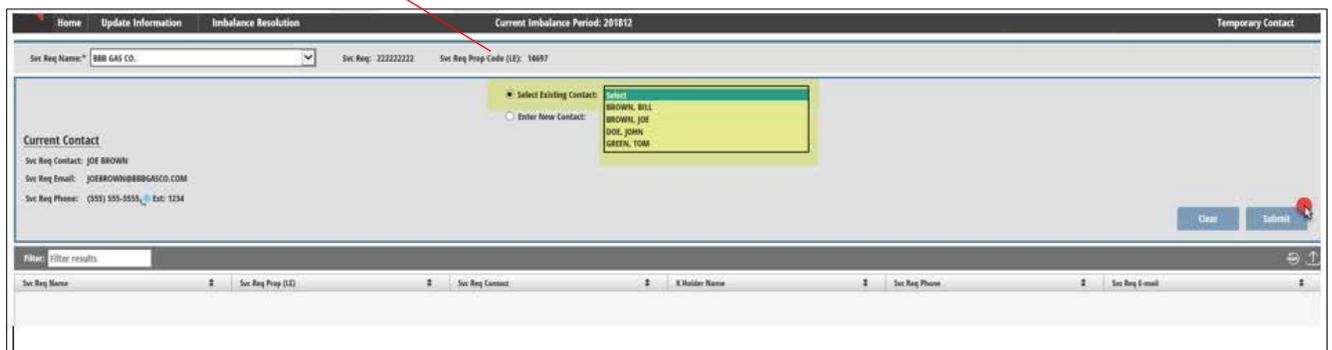
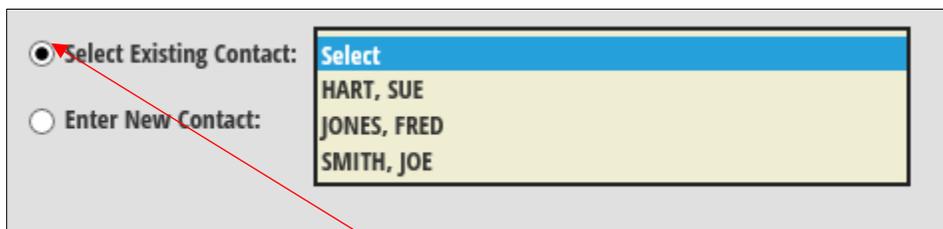
### Temporary Contact

To change contact information for a limited time only, select Temporary Contact from the Update Information drop down. The temporary contact will be in effect for the current imbalance period or if the period is currently closed, it will appear for the next imbalance period only. If you are an agent, the temporary contract will be applied to the agent and the customers they represent.



From the **Svc Req Name** drop down, choose the company if there is more than one company represented.

Choose from **Select Existing Contact** names in the drop down menu.



Click **Submit**.

A new contact can be created by selecting **Enter New Contact** and enter the following information into the required fields:

- \*Svc Req Contact Name: First Name, Last Name
- \*Svc Req Email
- \*Svc Req Phone

The image shows a close-up of the 'Enter New Contact' form. It includes a radio button for 'Enter New Contact' which is selected. Below it are three input fields: 'Svc Req Contact\*' with sub-fields for 'First Name' and 'Last Name', 'Svc Req Email\*', and 'Svc Req Phone\*' with a format of '(###) ###-#### Ext: #####'. A red arrow points from the 'Enter New Contact' radio button to the 'Submit' button in the screenshot below.

The screenshot shows the 'Update Information' page for 'Imbalance Resolution'. The 'Current Imbalance Period' is 201812. The 'Svc Req Name' is 'BBB GAS CO.', 'Svc Req' is '22222222', and 'Svc Req Prop Code (LE)' is '14097'. The 'Current Contact' information is: Svc Req Contact: JOE BROWN, Svc Req Email: JOEBROWN@BBBGASCO.COM, Svc Req Phone: (353) 555-5555 Ext: 1234. The 'Updated Contact' form is visible on the right. Below the form is a table with columns: Svc Req Name, Svc Req Prop (LE), Svc Req Contact, K Holder Name, Svc Req Phone, and Svc Req E-mail. A red arrow points from the 'Submit' button to the 'Svc Req Contact' column in the table below.

Click **Submit**.

The new temporary contact name appears in the lower portion of the screen. If you are agent for multiple customers, their temporary contact information will also appear.

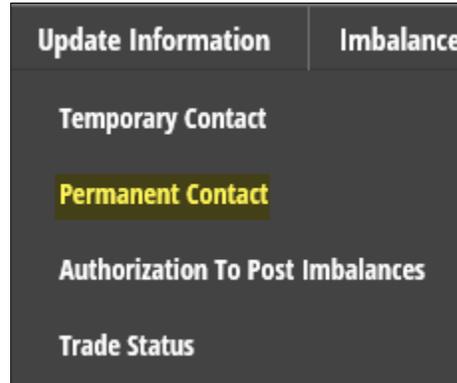
The screenshot shows the same page after submission. The 'Current Contact' information remains the same. The 'Updated Contact' form is now disabled. The table below has a new row: Svc Req Name: BBB GAS CO., Svc Req Prop (LE): 14097, Svc Req Contact: JANE DOE, K Holder Name: BBB GAS CO., Svc Req Phone: (353) 555-5555 Ext: 1234, Svc Req E-mail: JANEDOE@PIPELINE.COM. A red arrow points from the 'Submit' button in the previous screenshot to the 'Svc Req Contact' column in this table. A red text box says: 'Current Contact Name will remain as the permanent contact name. The below grid displays the temporary contact name under the Svc Req Contact column.'

The new temporary contact name will display on the Posted Imbalance screen on Northern's website, for the current imbalance period only. If the current period is closed, then the temporary contact name will be used for the next imbalance resolution period only.

## Permanent Contact

Permanent Contact allows the customer to change contact information for an indefinite period of time.

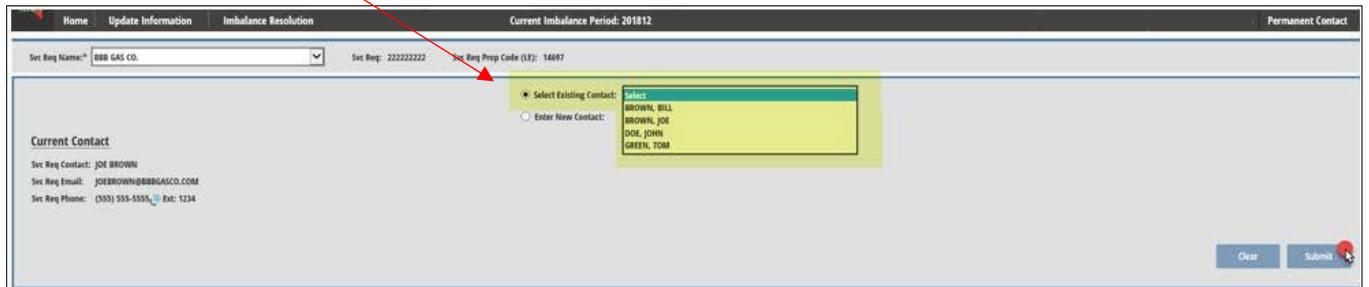
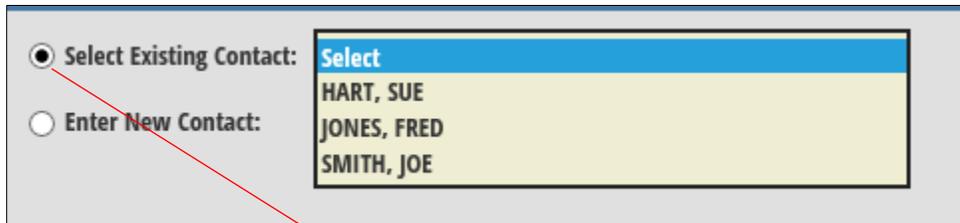
Click the Update Information drop down, then Permanent Contact.



From the **Svc Req Name** drop down, choose the company, if there is more than one associated company.

Choose from **Select Existing Contact** names.

*If an agent, the name change will apply to the agent and each party they represent.*



Click **Submit**.

Click **Enter New Contact** and enter information into the required fields:

- \*Svc Req Contact Name: First Name, Last Name
- \*Svc Req Email
- \*Svc Req Phone
- \*Svc Req Address (choose one from the drop down menu)

The screenshot shows a form titled "Updated Contact" with two radio buttons at the top: "Select Existing Contact:" (unselected) and "Enter New Contact:" (selected). Below the radio buttons are four input fields: "Svc Req Contact:\*" with sub-fields for "First Name" and "Last Name"; "Svc Req Email:\*"; "Svc Req Phone:\*" with sub-fields for "(###) ###-####" and "Ext: ####"; and "Svc Req Address:\*" with a dropdown menu currently showing "Select". A red arrow points from the "Enter New Contact:" radio button to the "Submit" button in the next screenshot.

Click **Submit**.

The screenshot shows the "Permanent Contact" screen. At the top, there are navigation tabs: "Home", "Update Information", "Imbalance Resolution", and "Permanent Contact". Below the tabs, there are three dropdown menus for "Svc Req Name:\*", "Svc Req:", and "Svc Req Prop Code (LE):". The main content area is divided into two sections: "Current Contact" on the left and "Updated Contact" on the right. The "Updated Contact" section contains the same form fields as the previous screenshot, but with the "Enter New Contact:" radio button selected. The "Submit" button is highlighted with a red mouse cursor. A red arrow points from the "Submit" button in the previous screenshot to the "Submit" button here.

The new permanent contact name will appear as the **Current Contact**.

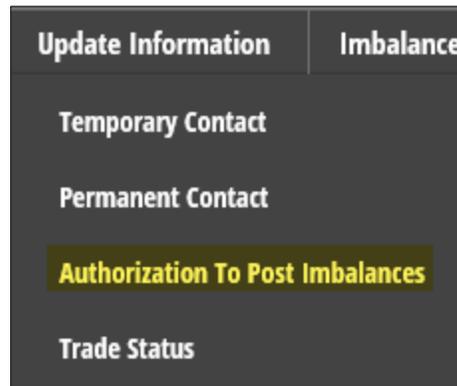
The screenshot shows the "Permanent Contact" screen. At the top, there are navigation tabs: "Home", "Update Information", "Imbalance Resolution", and "Permanent Contact". Below the tabs, there are three dropdown menus for "Svc Req Name:\*", "Svc Req:", and "Svc Req Prop Code (LE):". The main content area is divided into two sections: "Current Contact" on the left and "Updated Contact" on the right. The "Current Contact" section is highlighted in green and contains the contact information for "JANE DOE". The "Updated Contact" section is now empty, with the "Select Existing Contact:" radio button selected and a dropdown menu showing "Select". A red arrow points from the "Current Contact" section to the "Submit" button in the previous screenshot.

The new permanent contact name will display on the Posted Imbalance screen on Northern's website each month. If the permanent contact name is changed during the imbalance resolution period, the name change will be updated on the website at the time of the request.

## Authorization to Post Imbalances

Authorization to Post Imbalances allows the customer to decide whether or not to display their imbalance information to Northern's website on the Posted Imbalance screen.

Under the Update Information drop down, click Authorization to Post Imbalances.

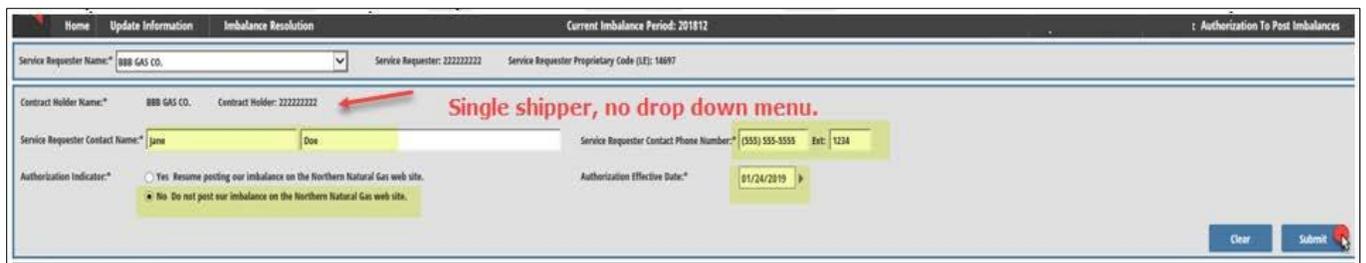


If you only have association with one company, there will be no drop down menu.

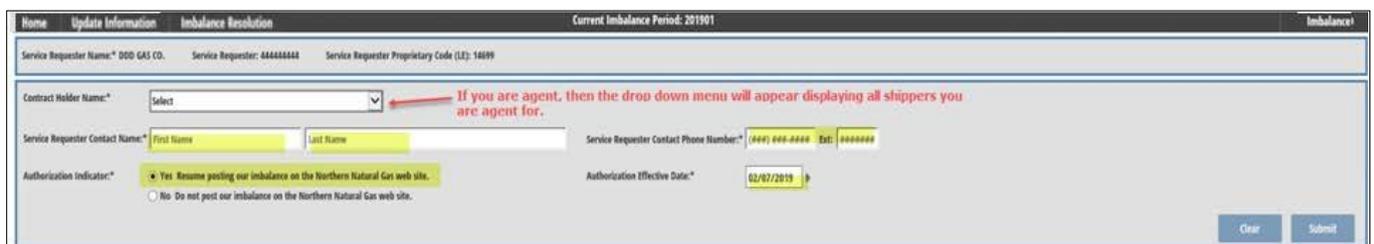
Using the drop down menu, select the **Service Requester Name**, if your User Name is associated with more than one company.



**Example:** There is one service requester name for contract holder.

A screenshot of the 'Authorization To Post Imbalances' form. The 'Service Requester Name' dropdown is set to 'BBB GAS CO.'. The 'Contract Holder Name' is 'BBB GAS CO.' and the 'Contract Holder' is '22222222'. A red arrow points to the 'Contract Holder' field with the text 'Single shipper, no drop down menu.' The 'Service Requester Contact Name' is 'Jane Doe' and the 'Service Requester Contact Phone Number' is '(555) 555-5555 Ext: 1234'. The 'Authorization Indicator' is 'No Do not post our imbalance on the Northern Natural Gas web site.' and the 'Authorization Effective Date' is '01/24/2019'. There are 'Clear' and 'Submit' buttons at the bottom right.

**Example:** If you are an agent, the dropdown menu will appear to allow you to choose contract holder name.

A screenshot of the 'Authorization To Post Imbalances' form. The 'Service Requester Name' dropdown is set to 'DDD GAS CO.'. The 'Contract Holder Name' dropdown is set to 'Select'. A red arrow points to the 'Contract Holder Name' dropdown with the text 'If you are agent, then the drop down menu will appear displaying all shippers you are agent for.' The 'Service Requester Contact Name' is 'First Name Last Name' and the 'Service Requester Contact Phone Number' is '(888) 888-8888 Ext: 888888'. The 'Authorization Indicator' is 'Yes Resume posting our imbalance on the Northern Natural Gas web site.' and the 'Authorization Effective Date' is '02/07/2019'. There are 'Clear' and 'Submit' buttons at the bottom right.

After choosing the **Contract Holder Name** from the drop down menu, enter the following information into the required fields:

- \*Svc Req Contact Name, First Name, Last Name
- \*Svc Req Phone
- \*Authorization Effective Date (*defaults to current date but can be changed to a future date*)

A screenshot of a web form for authorization. It includes a dropdown menu for 'Contract Holder Name' with 'Select' as the current value. Below it are input fields for 'Service Requester Contact Name' (split into 'First Name' and 'Last Name') and 'Service Requester Contact Phone Number' (with a format '(###) ###-####' and an 'Ext:' field). There are two radio buttons for 'Authorization Indicator': 'Yes Resume posting our imbalance on the Northern Natural Gas web site.' (selected) and 'No Do not post our imbalance on the Northern Natural Gas web site.'. A date picker for 'Authorization Effective Date' shows '03/04/2019'.

Choose the Authorization Indicator:

A close-up of the 'Authorization Indicator' section. It shows two radio buttons: 'Yes Resume posting our imbalance on the Northern Natural Gas web site.' (unselected) and 'No Do not post our imbalance on the Northern Natural Gas web site.' (selected). A red arrow points from the 'No' option in this image to the 'No' option in the screenshot above.

**Yes** – Imbalances are automatically posted to Northern’s website.

**No** – Imbalances will not post to Northern’s website.

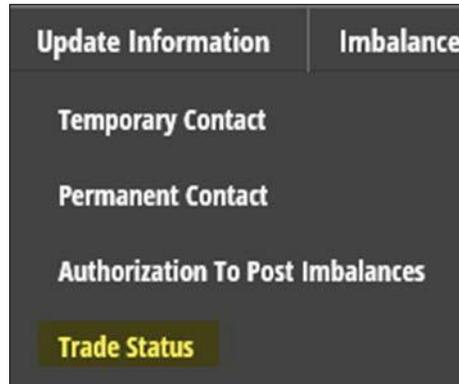
Click **Submit**.

After clicking **Submit**, the grid will appear below the Authorization to Post Imbalances section, displaying the request to stop displaying or begin displaying the imbalances on Northern’s website.

A screenshot of the application interface. At the top, there are navigation tabs: 'Home', 'Update Information', and 'Imbalance Resolution'. The current page is 'Authorization To Post Imbalances'. Below the navigation, there is a header with 'Service Requester Name: DOD GAS CO.', 'Service Requester: 48444444', and 'Service Requester Proprietary Code (LE): 14699'. The main form area is identical to the one in the previous screenshot, but with 'CITY OF BBB' selected in the 'Contract Holder Name' dropdown and '02/07/2019' in the 'Authorization Effective Date' field. A red arrow points from the 'Submit' button in this form to the grid below. The grid has columns for 'Authorization Indicator', 'Authorization Effective Date', 'Service Requester Contact Name', 'Service Requester Contact Phone Number', and 'User Id'. A single row is visible with values: 'No', '02/07/2019', 'BOB BROWN', '(555) 555-5555, Ext: 9039', and 'Mary Fox'. Below the grid, there is a detailed view of the 'Authorization Indicator' and 'Authorization Effective Date' fields, showing 'No' and '02/07/2019' respectively. Red arrows point from the 'No' and '02/07/2019' cells in the grid to these detailed views.

## Trade Status

To change the status, choose the Update Information drop down and click Trade Status.



On the posted imbalance screen on Northern's website there is a field to display the trade status as either **Open** or **Closed**.

The default displays **Open**, which means the customer is open to resolving their imbalance with other customers through trade or imbalance to storage across legal entities.

The **Closed** status means the customer has resolved their imbalance and it is not available to trade.

This is an optional action.

Below is an example of Northern's website, Posted Imbalances, Trade Status.

Home / Informational Postings / Posted Imbalances

Posted Imbalances

Date Requested: Apr 18 2019 10:40 AM

TSP Name: Northern Natural Gas Company  
TSP: 784158214  
Imbalance Period: 01/2019

RELOAD DOWNLOAD Imbalance Resolution Election System

Posting #	Svc Req Name	Svc Req	K Holder Name	K Holder Prop	K Holder	OIA	Imb Dir	Posted Imb Qty	Trade Status	Trade Qty	Trade Price (\$n, Dollars)	Svc Req Contact	Svc Req Phone	Start D/T	C
01 000001	AAA GAS CO.	111111111	AAA GAS CO.	12345	111111111	Market	Due To Svc Req	4868	Open			JOE SMITH		2/13/2019 9:00:00 AM	
01 000002	BBB GAS CO.	222222222	BBB GAS CO.	6789	222222222	Market	Due From Svc Req	747	Open			SUE JONES		2/13/2019 9:00:00 AM	
01 000003	CCC GAS CO.	333333333	CCC GAS CO.	54321	333333333	Market	Due To Svc Req	11380	Open			BILL GREEN		2/13/2019 9:00:00 AM	

Posting #	Sec Req Name	Sec Req	K Holder Name	K Holder Prop	K Holder	O/A	Inch Dir	Posted Inch Qty	Trade Status	Trade Qty	Trade Price	Comment	
01 00004	000 GAS CO.	00000000	000 GAS CO.	14799	00000000	Market	Due To Sec Req	50000	Open				Edit
01 00005	000 GAS CO.	00000000	CITY OF AAA	14799	55555555	Market	Due From Sec Req	100	Open				Edit
01 00006	000 GAS CO.	00000000	CITY OF BBB	14791	77777777	Market	Due To Sec Req	200	Open				Edit
01 00007	000 GAS CO.	00000000	CITY OF CCC	14792	00000000	Market	Due To Sec Req	300	Open				Edit

Click **Edit** to change trade status from Open to Closed in order to notify other customers that the imbalance is no longer available to trade.

This screen is used to advertise a Trade Quantity, Trade Price or comment. These entries are optional and will be posted to Northern's website.

**K Holder Name:** CITY OF CCC

**Trade Status:** Open Closed

**Trade Qty:**

**Trade Price (In-Dollars):**

**Comments:**

Posting #	Sec Req Name	Sec Req	K Holder Name	K Holder Prop	K Holder	O/A	Inch Dir	Posted Inch Qty	Trade Status	Trade Qty	Trade Price	Comment	
01 00004	000 GAS CO.	00000000	000 GAS CO.	14799	00000000	Market	Due To Sec Req	50000	Open				Edit
01 00005	000 GAS CO.	00000000	CITY OF AAA	14799	55555555	Market	Due From Sec Req	100	Open				Edit
01 00006	000 GAS CO.	00000000	CITY OF BBB	14791	77777777	Market	Due To Sec Req	200	Open				Edit
01 00007	000 GAS CO.	00000000	CITY OF CCC	14792	00000000	Market	Due To Sec Req	300	Open				Edit

**K Holder Name:** CITY OF CCC      **K Holder:**      **K Holder Proprietary Code (LE):** 14792

**Trade Status:** Open      **Trade Qty:**

**Trade Price (In-Dollars):**       **Comments:**

Note: Limited to 500 characters only

Click **Submit**.

The following is an example of **Closed** trade status and comments on Northern's Posted Imbalance site. Scroll to the right to view comments.

The screenshot shows the Northern Natural Gas website's 'Posted Imbalances' page. The page includes a navigation menu, a sidebar with various filters, and a main content area with a table of trade data. The table has columns for Posting #, Svc Req Name, Svc Req, K Holder Name, K Holder Prop, K Holder, DIA, Imb Dir, Position, Trade Status, Trade Qty, Trade Price (\$/Dollar), Svc Req Contact, Svc Req Phone, and Svc Req D/T. The first row shows a trade with a 'Closed' status, which is highlighted in green and circled in red. The second row shows an 'Open' trade, and the third row shows an 'Open' trade with a quantity of 1,200.

Posting #	Svc Req Name	Svc Req	K Holder Name	K Holder Prop	K Holder	DIA	Imb Dir	Position	Trade Status	Trade Qty	Trade Price (\$/Dollar)	Svc Req Contact	Svc Req Phone	Svc Req D/T
01.000001	AAA GAS CO.	111111111	AAA GAS CO.	12345	111111111	Market	Due To Svc Req	4567	Closed			JOE SMITH		2/13/2019 9:00:00 AM
01.000002	BBB GAS CO.	222222222	BBB GAS CO.	6789	222222222	Market	Due From Svc Req	742	Open			SUE JONES		3/13/2019 9:00:00 AM
01.000003	CCC GAS CO.	333333333	CCC GAS CO.	54321	333333333	Market	Due To Svc Req	1133	Open	1,200		BILL GREEN		3/13/2019 9:00:00 AM

## Imbalance Resolution

Click the Imbalance Resolution, then choose Imbalance Resolution Election from the drop down menu. This screen is used for electing to resolve imbalances with either Imbalance to Storage or In-Kind Payback.



Check  **Include Pending Trades** to display any pending imbalance trades.

To begin an imbalance election for Imbalance to Storage or In-Kind Payback, click **Edit**.

K Holder Name	K Holder Prop (LE)	Imbalance Direction	Posted Imbalance Quantity	OIA	Imbalance to Storage	In-Kind Payback	Remaining Imbalance	Trade	Cash In/Due Quantity	Cash In/Due Direction	Edit
CITY OF AAA	14708	Due From Sec Req	100	Market	0	0	100	0	100	Due From Sec Req	Edit
CITY OF BBB	14701	Due To Sec Req	200	Market	0	0	200	0	200	Due To Sec Req	Edit
CITY OF CCC	14302	Due To Sec Req	300	Market	0	0	300	50	250	Due To Sec Req	Edit
000 GAS CO.	14009	Due To Sec Req	50000	Market	0	0	50000	50	50050	Due To Sec Req	Edit

### Notes on the Edit field:

*\*If a customer with an agent accesses this screen, then it will display View instead of Edit. The agent is the only one allowed to edit the selection.*

*\*If an agent acquires imbalances from a second OIA, Market or Field, then the agent will have two lines displayed. The acquired OIA line will display View and not be editable.*

## **Imbalance to Storage Overview**

The Imbalance to Storage methodology allows a customer to resolve their monthly transportation imbalance by an injection to, or withdrawal from, the customer's deferred delivery account(s). If the customer imbalance is Due From Svc Req (due Northern, where deliveries exceeded receipts) the customer imbalance is resolved by a withdrawal from storage. If the imbalance is Due To Svc Req (due to the customer, where receipts exceeded deliveries) the customer imbalance is resolved by an injection into storage. This process provides an effective method for customers to resolve their imbalances on a volumetric basis rather than cashing out/in at the monthly index price (MIP). Only Market and Field Area imbalances may be resolved using Imbalance to Storage.

During the imbalance resolution election period, (9th-12th business day each month), a customer may elect Imbalance to Storage. The customer will select the transportation contract from a list of all its transportation contracts in effect during the imbalance month. The customer may select up to five of the contracts listed. The selected contracts, in the order selected, will be used to reflect the prior period adjustment for any transportation and/or storage charges associated with the Imbalance to Storage transaction.

Additionally, Northern will identify any unused transportation maximum daily quantity (MDQ) available during the imbalance month on the selected contracts that can be used for billing the Imbalance to Storage transaction at the firm commodity rate for the contract. If the available MDQ (unused MDQ during imbalance month) is less than the imbalance quantity, any remaining imbalance quantity will be billed at the contract overrun rate. After selecting transportation contracts, the customer will select the storage contract and storage location to be used to resolve the imbalance. Due to the fact that the Imbalance to Storage activity will be billed as a prior period adjustment in the imbalance month and the storage account will be adjusted for the imbalance quantity in the resolution month, only storage contracts in effect in both the imbalance month and the resolution month will be listed during the election process.

Similar to the transportation contract selection, up to five storage contracts can be selected for use in the imbalance resolution process. The process will use these contracts in the order selected to resolve the imbalance. Northern will identify any unused firm daily quantity (FDQ) available during the imbalance month on the selected storage contracts available for billing the Imbalance to Storage transaction at the firm rate for the contract.

Imbalance to Storage volume will be transferred to the customer's selected deferred delivery account on the 14th business day of the month imbalances are final and posted subject to any limitation of the customer's storage agreement.

Transportation and storage charges associated with Imbalance to Storage transactions will be invoiced as prior period adjustments in the next billing cycle. Any residual imbalance resulting from the customer's storage agreement limitations will be cashed in/out at the applicable MIP rate. Any transportation imbalance prior period adjustments (PPAs) will be cashed in/out at the applicable MIP rate.

Customers may also choose to resolve their transportation imbalances into the deferred delivery account of another customer, subject to receipt by Northern of an executed agreement between the transfer parties. The email, Imbalance to Storage Across Legal Entities Transfer, will populate once the 3rd Party Storage Contract is chosen and the request is submitted.

This fully executed email agreement must be accepted by a Reply All to Northern no later than 10:00 p.m. on the 12th business day to confirm the Imbalance to Storage election into the deferred delivery account of another customer.

The Imbalance to Storage quantity specified on the executed Imbalance to Storage Across Legal Entities Transfer email will be recorded into the identified customer’s storage account on the 14th business day. The imbalance party is responsible for any transportation charges associated with the transaction and the deferred delivery account party is responsible for all associated storage charges. If the executed Imbalance to Storage Across Legal Entities Transfer email is not received within the time specified and the imbalance to storage selection is not confirmed, the volume identified to be resolved by Imbalance to Storage will be cashed in/out at the applicable MIP rate.

### Imbalance to Storage Election

From the Imbalance Resolution Election screen click **Edit** and the election entry screen will appear.

The screenshot shows the 'Imbalance Resolution Election' interface. At the top, it displays 'Current Imbalance Period: 201901'. Below this is a table with columns: K Holder Name, K Holder Prop (LE), Imbalance Direction, Posted Imbalance Quantity, OIA, Imbalance to Storage, In-Kind Payback, Remaining Imbalance, Trade, Cash In/Out Quantity, and Cash In/Out Direction. The table lists three entries for 'CITY OF AAA' with various quantities and directions. Below the table, there is a summary section with the following fields: K Holder Name: CITY OF AAA, K Holder: 55555555, K Holder Prop (LE): 14700, OIA: Market, Posted Imbalance Quantity: 100, Imbalance Direction: Due From Svc Req. The 'Imbalance to Storage\*' field is highlighted in yellow and contains the value '0'. Other fields include 'In-Kind Payback:\*' (0), '3% of Scheduled Delivered Quantity is 0 or 1000 dths', 'Trade:' (0), and 'Cash In/Out:' (100 Due From Svc Req). A 'Clear' button and a 'Submit' button are at the bottom right.

Enter volume in the Imbalance to Storage field.

This is a close-up of the election entry form. It displays the following information: K Holder Name: CITY OF AAA, K Holder: 55555555, K Holder Prop (LE): 14700, OIA: Market, Posted Imbalance Quantity: 100, Imbalance Direction: Due From Svc Req. The 'Imbalance to Storage:\*' field is highlighted in yellow and contains the value '0'. Below it is the 'In-Kind Payback:\*' field with the value '0'. A note states '3% of Scheduled Delivered Quantity is 0 or 1000 dths'. The 'Trade:' field contains '0'. The 'Cash In/Out:' field contains '100 Due From Svc Req'.

When the volumes are entered for Imbalance to Storage, the data fields appear.

K Holder Name: CITY OF AAA    K Holder: 55555555    K Holder Prop (LE): 14700  
 Oik Market    Posted Imbalance Quantity: 100    Imbalance Direction: Due From Sec Req

Imbalance to Storage:   
 In-Kind Payback:   
 3% of Scheduled Delivered Quantity is 0 or 1000 dths  
 Trade: 0  
 Cash In/Out: 0

**Imbalance To Storage**  
 Show Instructions

**Transportation Contracts**

All Contracts: 170059 - FT >  
 Selected FT Contracts:   
 Transportation Overrun:   
 Selected IT Contract:

**Storage Contracts**

K Holder Storage Contract     3rd Party Storage Contract

All Contracts: 170055 - FD >  
 Selected FD Contracts:   
 Storage Overrun:   
 Storage Point:

Clear    Submit

Click **Imbalance To Storage**  
 Show Instructions for additional instructions.

Imbalance to Storage:   
 In-Kind Payback:   
 3% of Scheduled Delivered Quantity is 15  
 Trade: 0  
 Cash In/Out: 0

**Imbalance To Storage**  
 Show Instructions

**Transportation Contracts**

All Contracts: 170059 - FT >  
 Selected FT Contracts:   
 Transportation Overrun:   
 Selected IT Contract:

1. Select a transportation contract from the All Contracts list using the > to move it to the Selected Contracts list. You may select one or up to five contracts.
2. All transport contracts will be processed in order that they are selected. Interruptible contracts will always be resolved last.
3. The overrun contract defaults to the #1 contract selected. You may change it by clicking on the X, then highlight the desired contract and move to the overrun selection box by using the >.
4. You may also use the << to remove a selected contract.
5. Select a storage contract from the All Contract list using the > to move it to the Selected Contracts list. You may select one or up to five contracts.
6. All storage contracts will be processed in order that they are selected. Interruptible contracts will always be resolved last.
7. To utilize a deferred delivery account of another shipper, click the radio button to 3rd Party Storage Contract.
8. Enter the 3rd Party Storage Contract number and select a storage point in the available fields.

Choose your Transportation Contract by highlighting the contract number under the All Contracts then use the  to move contracts to the Selected FT Contracts field. The order in which the contracts are chosen will also be the order they are used during the Imbalance to Storage process, with the exception of IT or IDD always being last.

**Imbalance To Storage**

Show Instructions

**Transportation Contracts**

All Contracts   
  Selected FT Contracts   
  Transportation Overrun

170059 - FT   
  170059 - FT x

Selected IT Contract

**Storage Contracts**

K Holder Storage Contract   
  3rd Party Storage Contract

All Contracts   
  Selected FD Contracts   
  Storage Overrun

170055 - FD   
  170055 - FD x

Selected ID Contract

**Storage Point**

98 | OGDEN DEF. DELIVERY  
 62389 | DEMARC DEF. - DELIVERY

The Transportation Overrun field is auto populated based on the first FT contract selected. Click X to remove the contract from overrun field.

Repeat the process for the storage contract by using the  arrows. The  double arrow moves the contract back to the All Contracts field.

IT contract or IDD contracts, will appear in the All Contract columns and when selected, they will appear in the Selected IT or Selected ID Contract boxes toward the bottom of the screen.

Use the drop down menu to select your storage point. Storage points are filtered by OIA. If you have a market OIA, then only market points are listed along with Demarc Deferred Delivery based on valid points for the contract.

Click **Submit** to view your election on the Imbalance Resolution Election page.

Home    Update Information    Imbalance Resolution    Current Imbalance Period: 201901    Imbalance Resolution Election										
Filter: <input type="text" value="Filter results"/> <input type="checkbox"/> Include Pending Trades										
K Holder Name	K Holder Prop (LE)	Imbalance Direction	Posted Imbalance Quantity	OIA	Imbalance to Storage	In-Kind Payback	Remaining Imbalance	Trade	Cash In/Out Quantity	Cash In/Out Direction
CITY OF AAA	14700	Due From Sec Req	100	Market	100	0	0	0	0	<input type="button" value="Edit"/>

## Imbalance to Storage across Legal Entities Election

If using another customer's storage contract, click the radio button for 3rd Party Storage Contract and the following screen will appear.

Enter information for the required fields:

- \*Storage Contract
- \*Storage Point (click the drop down for valid point(s) specific to contract)
- \*Accept or Reject Authorized Overrun charges (FDD only)

After clicking **Submit**, enter contact information for both customers involved.

**Required fields:**

- \*Contact Name: First Name, Last Name
- \*Contact Phone Number (Extension is optional)
- \*Email Address
- \*Confirmed Email Address

**\*If there is an agency agreement in place between the two transacting parties the contact information will automatically populate using the posted imbalance contact information.**

**\*If there is not an agency agreement and the 3<sup>rd</sup> party contract holder does not have a current month posted imbalance the contact information will need to be entered manually.**

Click **Submit**.

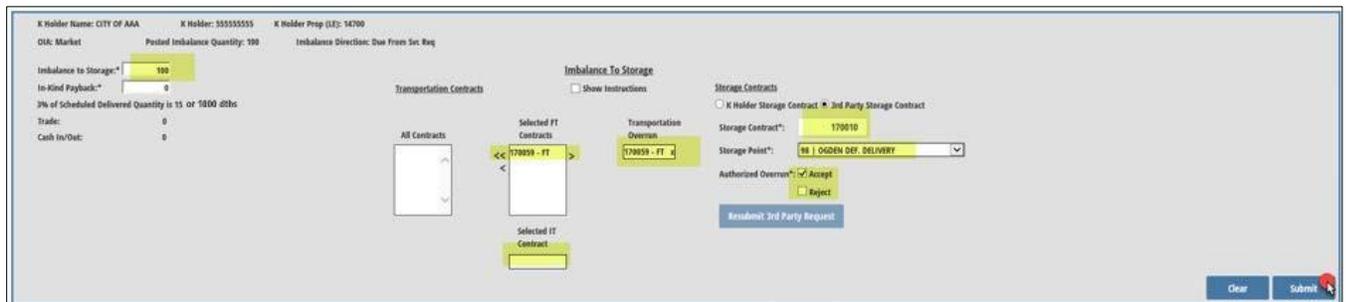
The transaction will be automatically accepted for NNG to approve and an email will be generated with the election information for both parties. No further action will be required.

If there is not an agency agreement an email will be generated and sent to both parties, including Northern. The party whose storage contract is selected must Reply All to the email, either accepting or rejecting the request. Without the reply email, the request cannot be effectuated by Northern.

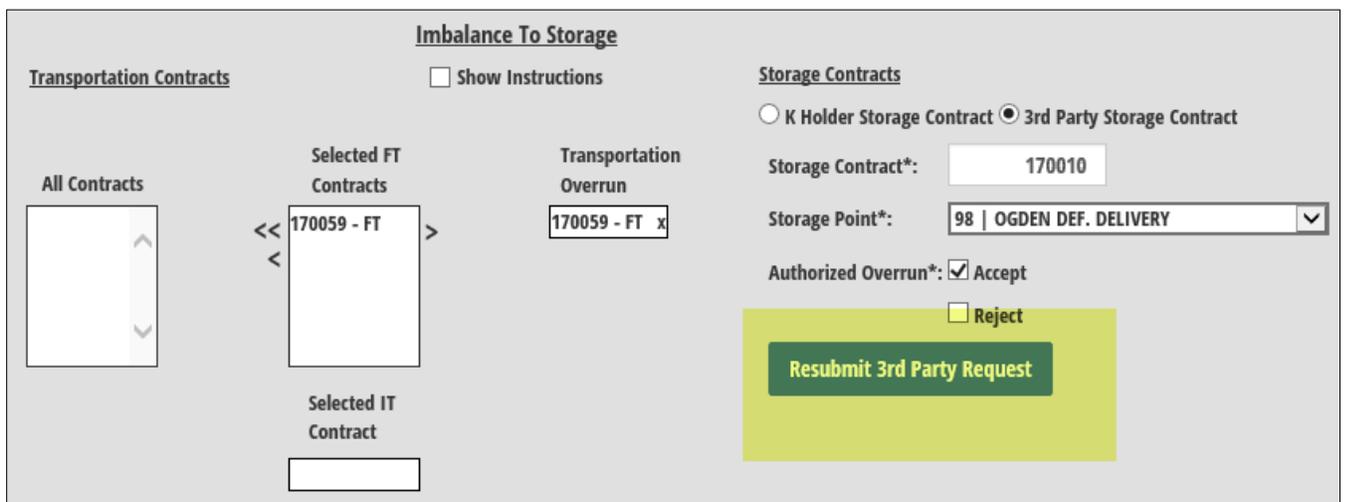
The election can be viewed on the Imbalance Resolution Election screen.



To make additional changes click **Edit** and the election entry screen will be displayed.



Click the Resubmit 3rd Party Request drop down to change contact information only.



In either case, the information screen will reappear, prefilled as originally submitted provided the storage customer remains the same. If the storage contract is changed to a

different customer and submitted, the deferred delivery party data will have to be re-entered.

Enter information changes here.

**IMBALANCE TO STORAGE QUANTITY INFORMATION**

Contract Holder Name / LE Number: AAA GAS CO. / 14696  
Imbalance Period: 201901 Storage Contract: 170010 - FD Authorized Overrun: Yes  
Imbalance to Storage: 100 Storage Point: 98 Injection or Withdrawal: Withdrawal

<u>Imbalance Party Data</u>		<u>Deferred Delivery Party Data</u>	
Company Name:	DDD GAS CO.	Company Name:	AAA GAS CO.
Contact Name:*	Joe Jones	Contact Name:*	Mary Pine
Contact Phone Number:*	(555) 555-5555 Ext: #####	Contact Phone Number:*	(444) 444-4444 Ext: 1234
Email Address:*	jjones@cityofaaa.com	Email Address:*	marypine@aaagas.com
Confirmed Email Address:*	jjones@cityofaaa.com	Confirmed Email Address:*	marypine@aaagas.com
Fax Number:	(###) ###-####	Fax Number:	(###) ###-####
Contract Holder Name:	CITY OF AAA	Contract Holder Name:	AAA GAS CO.

Click **Submit** to save changes.

If changes are made to either the election or the contact information screen, a new email will be sent for acceptance.

## **In-Kind Payback Overview**

In-Kind (physical) Payback is another imbalance resolution option available to customers. This option allows customers to resolve monthly transportation imbalances equal to 3% of the customer's monthly scheduled volumes or 1,000 Dth, whichever is greater, by the physical delivery of gas to Northern or the physical receipt of gas from Northern.

Under the In-Kind Payback option, the imbalance is resolved through the normal nomination/scheduling process in the month following the election month (2nd month after the imbalance is incurred). For example; (1) Imbalance incurred in May (imbalance month), (2) imbalance resolution elections in June (election month) and (3) In-Kind Payback scheduled in July (payback month).

Two In-Kind Payback points of interest (POI) have been established to facilitate the activity; POI 78556 for Field In-Kind Payback and POI 78557 for Market In-Kind Payback. These in-kind POIs are restricted to In-Kind Payback activity and will be eligible receipt and delivery points on the customer's existing transportation agreements.

When nominating In-Kind Payback, customers should use the following transaction types: 111- Payback In-Kind Current Business and 112- Payback In-Kind Overrun. In-Kind Payback customers should also reference Northern contract 111675 as the upstream or downstream contract, as applicable. Customers may nominate to receive or deliver any quantity of payback for the day, up to the quantity of In-Kind Payback election on any of its active transportation contracts (TF, TFX and TI).

The Transportation Management System (TMS) will not schedule more In-Kind Payback than the elected quantity. Northern will attempt to schedule the In-Kind Payback volumes as requested, subject to any related storage or transportation allocations. The transportation scheduling priorities for In-Kind Payback resolution will follow the priority of the agreement scheduled. If Northern is allocating storage services, In-Kind Payback volumes will have the same scheduling priority as Max Rate IDD.

When In-Kind Payback is scheduled to resolve a long position (Due To Svc Req), transportation commodity charges (Firm or Interruptible) related to In-Kind Payback delivery volumes would be billed on a current month basis (the month that the payback volumes are scheduled). Customer is responsible for all applicable transportation commodity charges (Firm or Interruptible) related to In-Kind Payback activity, billed on a current month basis (the month that the payback volumes are scheduled). When In-Kind Payback is scheduled to resolve a short position (Due From Svc Req), there would be no transportation charges since Northern would have billed the customer the transportation and fuel charges when the imbalance was created. In a long position (Due To Svc Req) the delivery is scheduled at a physical point on the customer's transportation contract and the In-Kind Payback volume is a part of the DDVC calculation. In a short position (Due To Svc Req), the In-Kind Payback volume has no impact on Daily Delivery Variance Charge (DDVC) calculations.

A customer may elect In-Kind Payback along with imbalance trading. During the trade process the customer may trade up to their entire imbalance, but the elected In-Kind Payback volume is not available for trading. Northern will reserve the elected In-Kind Payback volume from the customer's total imbalance quantity and will hold that elected In-Kind Payback volume as an imbalance until the payback month. Any residual imbalance volumes will be cashed out at the applicable weekly high/low Market Area or Field Area monthly (MIP) for the payback month.

Northern may call In-Kind Payback blackout periods for the Market Area and/or the Field Area. The decision to call a blackout period must be made and the pertinent information posted to Northern's website by no later than the 20th calendar day of the imbalance month. When a blackout period is called within the imbalance month, In-Kind Payback may be scheduled during the payback month only up to the greater of 1% of the customer's monthly scheduled volumes, or 1,000 Dth.

For example, if a Market Area Blackout for long imbalances is called in May (imbalance month), scheduling of In-Kind Payback in July would be limited to the greater of 1% of the customer's monthly scheduled volumes, or 1,000 Dth.

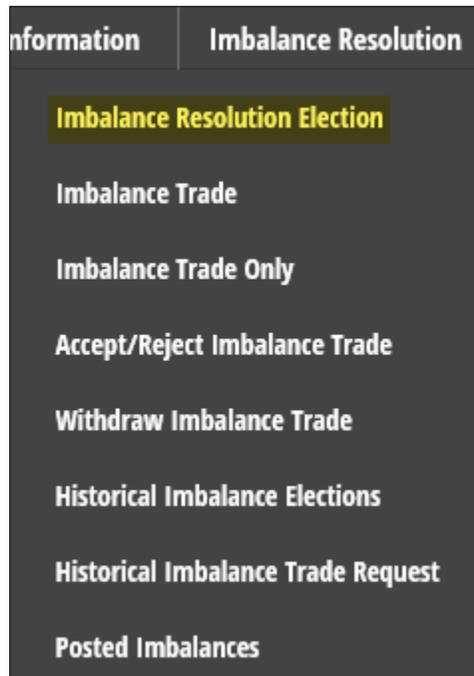
Northern will post on the website by the 20th day of the imbalance month whether the month is a blackout period, whether the blackout is applicable to the Market Area or the Field Area and whether the blackout pertains to long or short imbalances. The blackout periods (Market Area or Field Area) are applicable to only one direction of imbalance (long or short) during any one month. The website posting will also include the market and operational conditions that required the calling of the blackout period including the intra-month price differentials.

Northern may call a maximum of ten blackout periods per calendar year in the Market Area and a maximum of five blackout periods per calendar year in the Field Area. Northern may not call a blackout period in the Field Area until a trigger month occurs. A trigger month would occur if Northern has called a blackout period for the Market Area, and Field Area transportation imbalances incurred at non-OBA points exceed 1% of the customers' aggregated scheduled transportation volumes in the same direction (long or short) as the Market Area blackout. The month following a trigger month, Northern could begin calling blackout periods in the Field Area. Each trigger event will allow for blackout periods to be called in the Field Area for a 12-month consecutive period thereafter. If during the 12-month period, another trigger event occurs, a new 12-month period will commence during which Northern shall have the right to call blackout periods in the Field Area.

Any residual imbalance volumes that were not resolved through In-Kind Payback will be cashed out at the applicable weekly high/low Market Area or Field Area MIP for the payback month. These volumes and associated charges will appear on the production month prior period invoice.

## In-Kind Payback Election

From the Imbalance Resolution drop down, click Imbalance Resolution Election.



If an agent with more than one customer, click **Edit** to highlight the customer to begin the election for In-Kind Payback.

A screenshot of a web application interface for 'Imbalance Resolution Election'. The page title is 'Imbalance Resolution Election' and the current imbalance period is '201901'. The interface includes a table with columns for 'K Holder Name', 'K Holder Prop (S/D)', 'Imbalance Direction', 'Posted Imbalance Quantity', 'OIS', 'Imbalance to Storage', 'In-Kind Payback', 'Remaining Imbalance', 'Trade', 'Cash In/Out Quantity', and 'Cash In/Out Direction'. A red circle highlights the 'Edit' button in the table. Below the table, there is a form with fields for 'Imbalance to Storage', 'In-Kind Payback', and 'Trade'. A red arrow points from the 'In-Kind Payback' field to a callout box. The callout box contains the text: 'Displays maximum volumes that may be elected for In-Kind Payback, will display either 3% or during a blackout period will be 1% of Scheduled Delivered Quantity.'

A callout box with a grey background and a white border. It contains the text 'In-Kind Payback:\*' followed by a text input field containing the number '0'. Below the input field, there is a yellow highlighted line of text: '3% of Scheduled Delivered Quantity is 3000 or 1000 dths'.

Enter volumes in the In-Kind Payback field. If there is a blackout period, the screen will display 1% of Scheduled Delivered Quantity along with the actual quantity in dekatherms.

K Holder Name: AAA GAS CO.      K Holder: 111111111      K Holder Prop (LE): 14696  
 OIA: Market      Posted Imbalance Quantity: 20000      Imbalance Direction: Due From Svc Req

Imbalance to Storage:\*   
**In-Kind Payback:\***

3% of Scheduled Delivered Quantity is 3000 or 1000 dths

Trade: 0  
 Cash In/Out: 19500  
 Due From Svc Req

Example within acceptable 3%.

K Holder Name: AAA GAS CO.      K Holder: 111111111      K Holder Prop (LE): 14696  
 OIA: Market      Posted Imbalance Quantity: 20000      Imbalance Direction: Due From Svc Req

Imbalance to Storage:\*   
**In-Kind Payback:\***

Your in-kind quantity election is greater than the in-kind payback limit allowed

3% of Scheduled Delivered Quantity is 3000 or 1000 dths

Trade: 0  
 Cash In/Out: 16000  
 Due From Svc Req

Error message will display if election is greater than allowed.

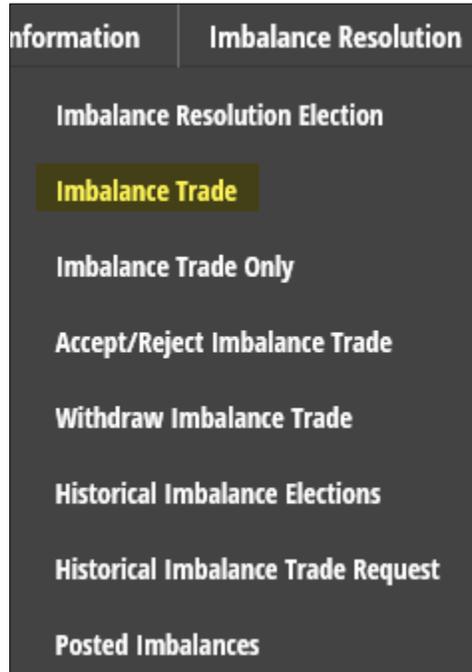
Click **Submit**.

The election can be viewed on the Imbalance Resolution Election screen. Click **Edit** to make changes.

Home    Update Information    Imbalance Resolution    Current Imbalance Period: 201901    Imbalance Resolution Election										
Filter: filter results <input type="checkbox"/> Include Pending Trades										
K Holder Name	K Holder Prop (LE)	Imbalance Direction	Posted Imbalance Quantity	OIA	Imbalance to Storage	In-Kind Payback	Remaining Imbalance	Trade	Cash In/Out Quantity	Cash In/Out Direction
AAA GAS CO.	14696	Due From Svc Req	20000	Market	0	500	19500	0	19500	Due From Svc Req
										Edit

## Imbalance Trade

Click Imbalance Trade under the Imbalance Resolution drop down. Imbalance Trade is used for single trade requests. Agents may use Imbalance Trade Only to perform multiple requests at one time. See Imbalance Trade Only procedures listed later in this document.



A customer may resolve their imbalance utilizing the imbalance trade election. A customer may negotiate with other customers or customer's agent to trade their existing imbalances. An agent is allowed to trade imbalances on behalf of more than one customer at the same time.

Imbalances can be traded as long as they affect the same OIA, Market or Field.

All customers will have until the close of the 17th business day of the month following the month the imbalance occurred, to complete volumetric imbalance trading elections.

Imbalance trades will be executed at no additional cost to the customer.

Imbalance trades can only be withdrawn by the initiating trader and must be prior to the confirming trader's confirmation of the trade.

After the close of the 17th business day of the month following the month the imbalance occurred, Northern will calculate customer's final imbalance for the prior month's gas flow. Any residual imbalances net of trading and not resolved by other methods in accordance with the terms of the tariff will be cashed in/out at the high/low MIP for the production month. Customers taking on more imbalance than their posted imbalance may be subject to additional credit review.

Initiating Trader can choose from the drop down menu or fill in the required fields.

### **Required Fields:**

**\*Contract Holder–Initiating Trader Name** – Drop down menu will include the users’ own imbalance and if the user represents other customers that have an imbalance, their imbalances will be displayed.

**\*Operation Impact Area–Initiating Trader** - Choose from the drop down menu: Market or Field

**\*Trade Quantity Requested:** Enter value of dekatherm (Dth) requested (*must be a positive integer*)

**\*Imbalance Type: Initiating Trader** - Choose from the drop down menu:  
 Long (Due To Svc Req)  
 Short (Due From Svc Req)

Other initiating trader fields will auto-fill. Fax number is optional.

The contract holders Posted OIA, Posted Imb Qty and Posted Imb Dir will display on the screen to assist in entering the trade.

**\*Imbalance Trade Direction Indicator** - Choose one radio button:

**Imbalance Trade Direction Indicator:\***

**To Init Trdr** (The quantity is being traded to the initiating trader from the confirming trader.)

**From Init Trdr** (The quantity is being traded from the initiating trader to the confirming trader.)

Choose the Contract Holder -Confirming Trader Name, using the drop down menu, which lists every customer with a posted imbalance.

Confirming Trader information will auto-fill. Fax number is optional.

**Contract Holder - Confirming Trader Name:\*** CCC GAS CO. ▼

**Contract Holder - Confirming Trader (DUNS):** 33333333

**Confirming Trader Name:** CCC GAS CO.

**Confirming Trader (DUNS):** 33333333

**Confirming Trader Contact Name:** TOM GREEN

**Confirming Trader Contact Phone Number:** (402) 398-5678

**Confirming Trader Contact E-mail:** billingerror@nngco.com

**Confirming Trader Contact Fax:** (###) ###-####

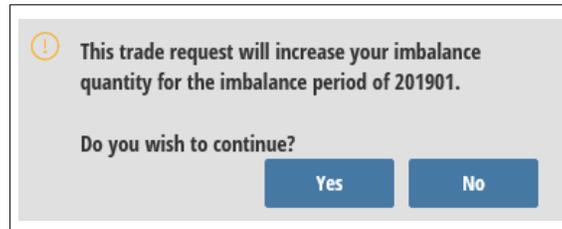
Click **Submit**. "Trade has been submitted" will appear at the top of your screen.

Trades can be reviewed by clicking Initiating Trader Review Imbalance Position to review how the trade affects the remaining balance. See two examples below.

The long/short (due to or due from) along with the direction of the imbalance will determine if it will increase/decrease the customer's posted imbalance.

You will receive a pop up notice if you increase your posted imbalance. Agents may experience this as they often will increase their own posted imbalance by taking on imbalances of their customers, and then trade the entire cumulative imbalance with third parties.

You may click **Yes** or **No** to proceed.



### Example #1

Selecting the **From Init Trdr** indicator enables the initiating trader to review their imbalance position.



If the initiating trader represents both parties, the impact to the confirming party can be viewed by clicking the **Confirming Trader Review Imbalance Position** button.



The remaining imbalance was reduced by 500 Dth on the Initiating Trader side.

**CURRENT IMBALANCE POSITION INCLUDING ALL TRADES**

Contract Holder - Trader Name: BBB GAS CO.  
 Posted Imbalance Quantitv: 30000 Imbalance Direction: Due To Svc Req  
 Elected In-Kind Payback: 0  
 Elected Imbalance To Storage: 0  
 Remaining Imbalance Quantity: 30000

Existing Trades

Beginning Trade Quantity	Beginning Imbalance Direction	Trade Quantity	Svc Req Name	Trade Status	Remaining Trade Quantity	Ending Imbalance Direction
30000	Due To Svc Req	500	CCC GAS CO.	Pending	29500	Due To Svc Req

Final Imbalance Quantity: 29500 Imbalance Direction: Due To Svc Req

### Example #2

Selecting the **To Init Trdr** indicator also enables the initiating trader to review their imbalance position.

Initiating Trader Review Imbalance Position

If the initiating trader represents both parties, the impact to the confirming party can be viewed by clicking the **Confirming Trader Review Imbalance Position** button.

Confirming Trader Review Imbalance Position

Home Update Information Imbalance Resolution Administration Current Imbalance Period: 202002 Imbalance Trade

Contract Holder - Initiating Trader Name: BBB GAS CO. Contract Holder - Initiating Trader (DUNS): 22222222

Operational Impact Area - Initiating Trader: Market Posted OIA: Market  
 Trade Quantity Requested: 500 Posted Imb Qty: 1527  
 Imbalance Type : Initiating Trader: Long (Due To Svc Req) Posted Imb Dir: Long (Due To Svc Req)

Contract Holder - Confirming Trader Name: CCC GAS CO.  
 Contract Holder - Confirming Trader (DUNS): 33333333

Initiating Trader Name: BBB GAS CO.  
 Initiating Trader (DUNS): 22222222  
 Initiating Trader Contact Name: JOHN DOE  
 Initiating Trader Contact Phone Number: (402) 398-5679  
 Initiating Trader Contact E-mail: BILLINGERR@NNGCO.COM  
 Initiating Trader Contact Fax: (000) 000-0000

Confirming Trader Name: CCC GAS CO.  
 Confirming Trader (DUNS): 33333333  
 Confirming Trader Contact Name: TOM GREEN  
 Confirming Trader Contact Phone Number: (402) 398-5679  
 Confirming Trader Contact E-mail: billingerr@nngco.com  
 Confirming Trader Contact Fax: (000) 000-0000

Imbalance Period - Initiating Trader: 202002

Imbalance Trade Direction Indicator:  
 To Init Trdr (The quantity is being traded to the initiating trader from the confirming trader.)  
 From Init Trdr (The quantity is being traded from the initiating trader to the confirming trader.)

Clear Submit

Initiating Trader Review Imbalance Position  
 Confirming Trader Review Imbalance Position

The remaining imbalance was increased by 500 Dth on the Initiating Trader side.

CURRENT IMBALANCE POSITION INCLUDING ALL TRADES

Contract Holder - Trader Name: BBB GAS CO.  
Posted Imbalance Quantity: 30000 Imbalance Direction: Due To Svc Req  
Elected In-Kind Payback: 0  
Elected Imbalance To Storage: 0  
Remaining Imbalance Quantity: 30000

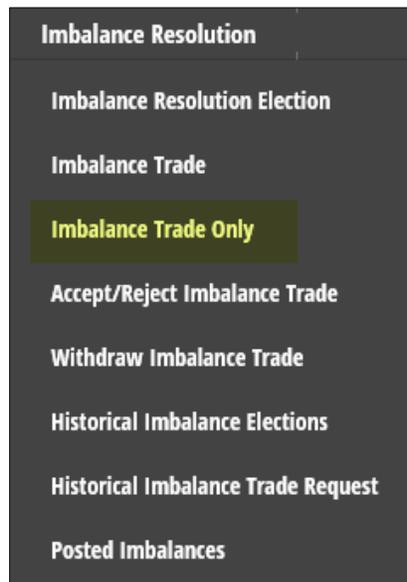
Existing Trades

Beginning Trade Quantity	Beginning Imbalance Direction	Trade Quantity	Svc Req Name	Trade Status	Remaining Trade Quantity	Ending Imbalance Direction
30000	Due To Svc Req	500	CCC GAS CO.	Pending	30500	Due To Svc Req

Final Imbalance Quantity: 30500 Imbalance Direction: Due To Svc Req

### Imbalance Trade Only

Click Imbalance Trade Only under the Imbalance Resolution drop down.



An agent is able to trade imbalances on behalf of more than one customer at the same time as long as the agent has their own imbalance.

Agents without their own imbalance will perform Imbalance Trade instead of Imbalance Trade Only for the customers they trade on behalf of.

Agent will retrieve all customers they are agent for, so long as there has not been another election of a different means performed. Click the box for each customer to resolve the entire imbalance.

Click the box for each customer to resolve their entire imbalance. If the agent does not want to resolve the entire imbalance for one or more customers, leave the box blank.

To resolve partial imbalances or utilize another form of resolution, you will need to utilize **Imbalance Trade** instead of **Imbalance Trade Only** or, choose another form of resolution from the Imbalance Resolution Election screen.

Contract Holder - Initiating Trader Name	Contract Holder - Initiating Trader Proprietary Code (LE)	Posted Imbalance Quantity	Imbalance Direction	OIA	Trade Quantity Requested	
CITY OF AAA	14700	100	Due From Svc Req	Market	0	<input type="checkbox"/>
CITY OF BBB	14701	200	Due To Svc Req	Market	0	<input type="checkbox"/>
CITY OF CCC	14702	300	Due To Svc Req	Market	0	<input type="checkbox"/>

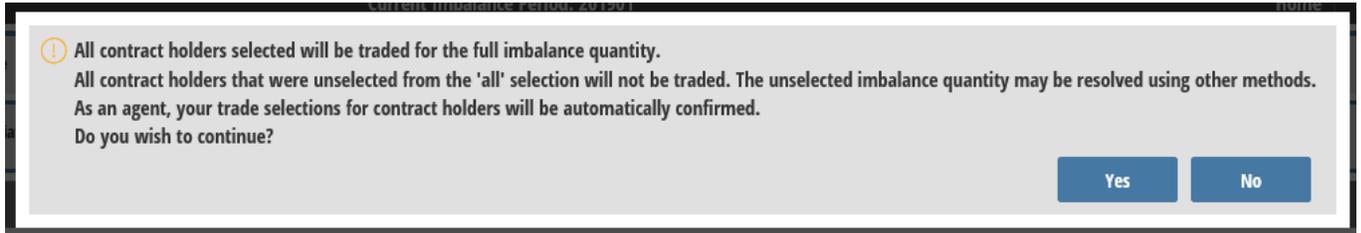
A checkmark will appear in each box when selected.

Contract Holder - Initiating Trader Name	Contract Holder - Initiating Trader Proprietary Code (LE)	Posted Imbalance Quantity	Imbalance Direction	OIA	Trade Quantity Requested	
CITY OF AAA	14700	100	Due From Svc Req	Market	100	<input checked="" type="checkbox"/>
CITY OF BBB	14701	200	Due To Svc Req	Market	200	<input checked="" type="checkbox"/>
CITY OF CCC	14702	300	Due To Svc Req	Market	300	<input checked="" type="checkbox"/>

Contract Holder - Initiating Trader Name	Contract Holder - Initiating Trader Proprietary Code (LE)	Posted Imbalance Quantity	Imbalance Direction	OIA	Trade Quantity Requested	
CITY OF AAA	14700	100	Due From Svc Req	Market	100	<input checked="" type="checkbox"/>
CITY OF BBB	14701	200	Due To Svc Req	Market	200	<input checked="" type="checkbox"/>
CITY OF CCC	14702	300	Due To Svc Req	Market	300	<input checked="" type="checkbox"/>

Click **Submit** to save changes.

After clicking **Submit** the message below will appear:



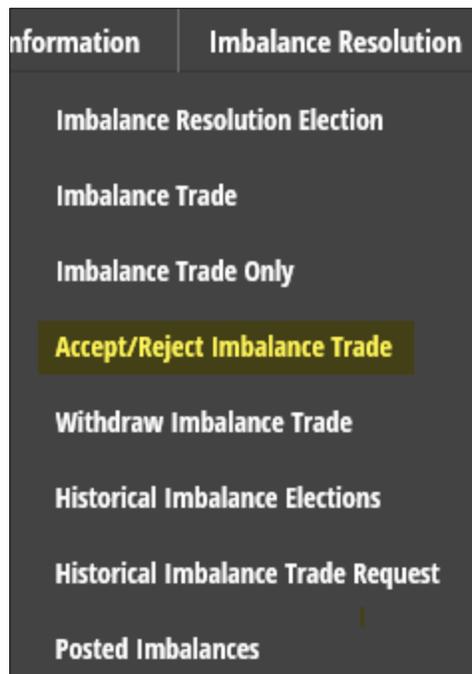
Click **Yes** to submit successfully. All agent trades will be automatically accepted.

Click **No** to go back to the Imbalance Trade Only election screen to make additional changes.

### Accept/Reject Imbalance Trade

When an imbalance trade request is submitted, an email will be sent to the confirming customer. The confirming customer must log into the IRES system to accept or reject the request in order for the trade to be effectuated. Once the confirming customer accepts or rejects, Northern will approve or reject the trade request with an email notice going to each customer.

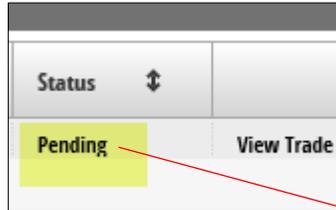
Go to Imbalance Resolution drop down and click Accept/Reject Imbalance Trade.



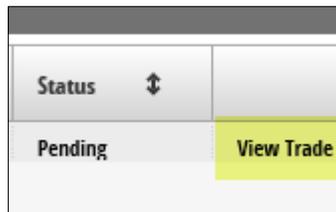
Go to the Home page and under Trades Awaiting Approval, click **View Trade** to go back to the Accept/Reject Imbalance Trade screen.



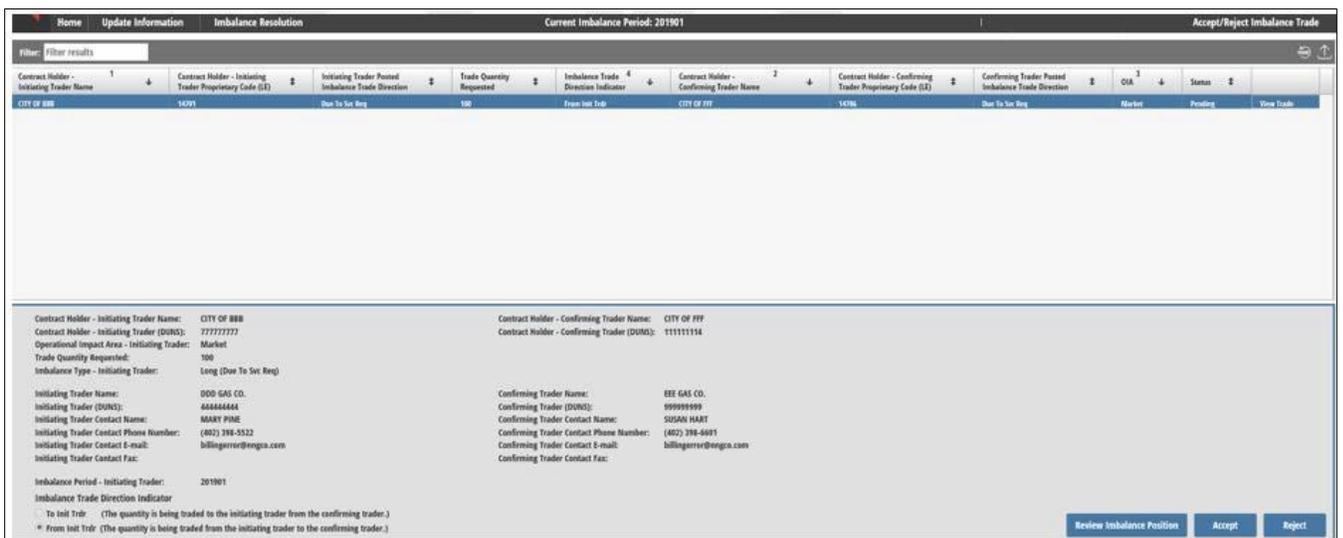
The status will show **Pending**.



To view details, click **View Trade**.



Details of the trade are shown at the bottom of the screen.



The imbalance trade can be accepted or rejected by clicking **Accept** or **Reject**. Either action will generate an email to the Initiating, Confirming parties and Northern.

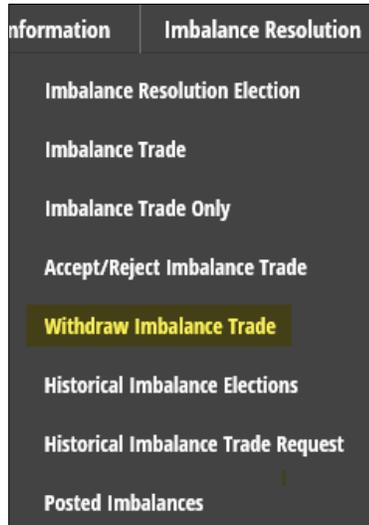
The imbalance position can be viewed prior to accepting or rejecting the trade by clicking the **Review Imbalance Position** button.

The balance may increase or decrease based on other trades or other resolution methods that have already been accepted. The imbalance direction may also be affected by switching between Due to Svc Req and Due from Svc Req until all trades are approved.

Beginning Trade Quantity	Beginning Imbalance Direction	Trade Quantity	Svc Req Name	Trade Status	Remaining Trade Quantity	Ending Imbalance Direction
300	Due To Svc Req	100	City of BBB	Pending	400	Due To Svc Req

## Withdraw Imbalance Trade

Once a trade has been submitted only the initiating trader will be able to withdraw the imbalance trade request, which must be in pending status. If the confirming trader has already accepted the request, then the trade is complete and not eligible to be withdrawn.



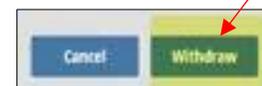
Contract Holder - Initiating Trader Name	Contract Holder - Initiating Trader Proprietary Code (SIC)	Initiating Trader Passed Imbalance Trade Direction	Trade Quantity Requested	Imbalance Trade Direction Indicator	Contract Holder - Confirming Trader Name	Contract Holder - Confirming Trader Proprietary Code (SIC)	Confirming Trader Passed Imbalance Trade Direction	OIA	Status
CITY OF FFF	14706	Due To Not Req	130	To Not Trd	AAA GAS CO.	14606	Due From Not Req	Market	Pending

Click **Withdraw**, to view the details of the imbalance trade request. Then either click **Withdraw** which will cancel the transaction or **Cancel** which will leave the trade request in pending status.

Contract Holder - Initiating Trader Name	Contract Holder - Initiating Trader Proprietary Code (SIC)	Initiating Trader Passed Imbalance Trade Direction	Trade Quantity Requested	Imbalance Trade Direction Indicator	Contract Holder - Confirming Trader Name	Contract Holder - Confirming Trader Proprietary Code (SIC)	Confirming Trader Passed Imbalance Trade Direction	OIA	Status
CITY OF FFF	14706	Due To Not Req	130	To Not Trd	AAA GAS CO.	14606	Due From Not Req	Market	Pending

<b>Contract Holder - Initiating Trader Name:</b> CITY OF FFF <b>Contract Holder - Initiating Trader (DUNS):</b> 11111114 <b>Operational Impact Area - Initiating Trader:</b> Market <b>Trade Quantity Requested:</b> 130 <b>Imbalance Type - Initiating Trader:</b> Long (Due To Not Req) <b>Initiating Trader Name:</b> AAA GAS CO. <b>Initiating Trader (DUNS):</b> 99999999 <b>Initiating Trader Contact Name:</b> SUSAN HARRI <b>Initiating Trader Contact Phone Number:</b> (402) 388-4481 <b>Initiating Trader Contact E-mail:</b> billingsm@engco.com <b>Initiating Trader Contact Fax:</b> <b>Imbalance Period - Initiating Trader:</b> 201901 <b>Imbalance Trade Direction Indicator</b> <small>* To Not Trd: (The quantity is being traded to the initiating trader from the confirming trader.)</small> <small>From Not Trd: (The quantity is being traded from the initiating trader to the confirming trader.)</small>	<b>Contract Holder - Confirming Trader Name:</b> AAA GAS CO. <b>Contract Holder - Confirming Trader (DUNS):</b> 11111111 <b>Confirming Trader Name:</b> AAA GAS CO. <b>Confirming Trader (DUNS):</b> 11111111 <b>Confirming Trader Contact Name:</b> FRID JONES <b>Confirming Trader Contact Phone Number:</b> (402) 388-1234 <b>Confirming Trader Contact E-mail:</b> billingsm@engco.com <b>Confirming Trader Contact Fax:</b> <b>Withdrawal Request Date:</b> 02/13/2019
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## Historical Imbalance Election

Select Historical Imbalance Elections from the drop down to view previous imbalance resolution elections.



Historical Imbalance Elections can be viewed by imbalance period for up to six years.

The elections may also be exported to Excel using the  icon designated here.

K Holder Name	K Holder Prop (LE)	Imbalance Direction	Posted Imbalance Quantity	OIA	Imbalance to Storage	In-Kind Payback	Remaining Imbalance	Trade	Cash In/Out Quantity	Cash In/Out Direction	Last Update	View
CITY OF AAA	14790	Due From Sic Req	100	Market	0	0	100	0	100	Due From Sic Req	Mary Pine	View
CITY OF BBB	14791	Due To Sic Req	200	Market	0	0	200	0	200	Due To Sic Req	Mary Pine	View
CITY OF CCC	14792	Due To Sic Req	300	Market	0	0	300	0	300	Due To Sic Req	Mary Pine	View
DDD GAS CO.	14899	Due To Sic Req	50000	Market	100	200	49700	0	49700	Due To Sic Req	Mary Pine	View

Click **View** to see details of the historical imbalance resolution elections.

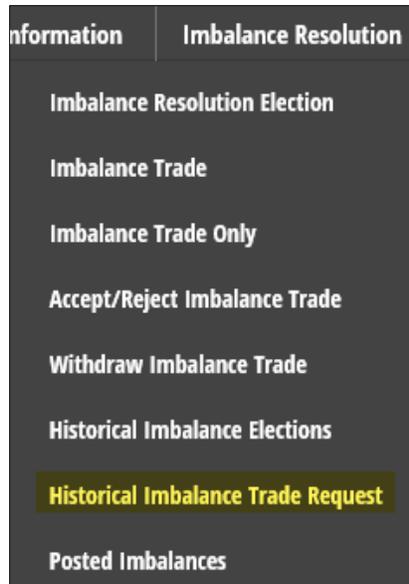
K Holder Name: DDD GAS CO. K Holder: 44444444 K Holder Prop (LE): 14899  
 OIA: Market Posted Imbalance Quantity: 50000 Imbalance Direction: Due To Sic Req  
 Imbalance to Storage: 100  
 In-Kind Payback: 200  
 % of Scheduled Delivered Quantity is 7500  
 Trade: 0  
 Cash In/Out: 49700  
 Due To Sic Req

Rank	Contract Number	Service Type	Allow Overrun
1	170060	FT	Y

Storage Contract: 170010 AAA GAS CO. / 14096  
 Storage Point: 08 OGDEN DEF. DELIVERY  
 Authorized Overrun:  Accept  Reject

## Historical Imbalance Trade Request

Select Historical Imbalance Trade Request from the drop down to view previous imbalance trades.



Using the drop down menu to choose the imbalance period.

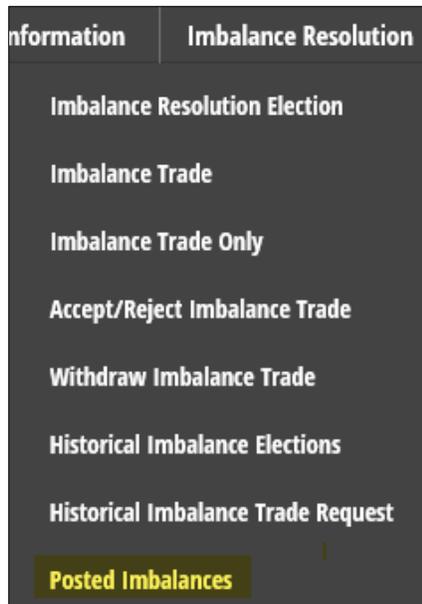
The screenshot shows the 'Historical Imbalance Trade Request' page. At the top, there is a navigation bar with 'Home', 'Update Information', 'Imbalance Resolution', and 'Current Imbalance Period: 201901'. Below this, there is a filter section with 'Imbalance Period: 201901' and a red arrow pointing to it with the text 'Choose imbalance period from the drop down menu.' To the right is an 'Export' button with an upward arrow icon. The main area contains a table with columns: Imbalance Period, Contract Holder - Initiating Trader Name, Contract Holder - Initiating Trader Proprietary Code (LE), Initiating Trader Posted Imbalance Trade Direction, Trade Quantity Requested, Imbalance Trade Direction Indicator, Contract Holder - Confirming Trader Name, Contract Holder - Confirming Trader Proprietary Code (LE), Confirming Trader Posted Imbalance Trade Direction, DIA, and Status. The table lists several trades for various contract holders like CITY OF AAA, CITY OF BBB, CITY OF CCC, and DDD GAS CO.

Click **View** to display the trade details.

The screenshot shows the trade details view for a specific trade. At the top, there is a navigation bar with 'Home', 'Update Information', 'Imbalance Resolution', and 'Current Imbalance Period: 201901'. Below this, there is a filter section with 'Imbalance Period: 201901'. The main area contains a summary of trade information: K Holder Name: CITY OF AAA, K Holder: 555555555, K Holder Prop (LE): 54700, DIA: Market, Posted Imbalance Quantity: 100, Imbalance Direction: Due From Svc Req. Below this is a table of 'Approved Trades' with columns: Contract Holder - Initiating Trader Name, Contract Holder - Initiating Trader Proprietary Code (LE), Initiating Trader Posted Imbalance Trade Direction, Trade Quantity Requested, Imbalance Trade Direction Indicator, Contract Holder - Confirming Trader Name, Contract Holder - Confirming Trader Proprietary Code (LE), Confirming Trader Posted Imbalance Trade Direction, and DIA. The table shows 'No records to display'. A red circle highlights a 'View' button in the table above, with a red arrow pointing to it and the text 'Click on View to display the trade information.'

## Posted Imbalances

Select Posted Imbalances from the drop down to view imbalance on Northern’s website.



Posted Imbalances on Northern’s website.

Home / Informational Postings / Posted Imbalances

### Posted Imbalances

Date Requested: Apr 18 2019 10:40 AM

TSP Name: Northern Natural Gas Company  
 TSP: 784158214  
 Imbalance Period: 01/2019

RELOAD DOWNLOAD Imbalance Resolution Election System

Posting #	Svc Req Name	Svc Req	K'Holder Name	K'Holder Prep	K'Holder	OIA	Imb Dir	Posted Imb Qty	Trade Status	Trade Qty	Trade Price (\$/Dollar)	Svc Req Contact	Svc Req Phone	Start D/T	Cr
01 000001	AAA GAS CO.	11111111	AAA GAS CO.	1245	11111111	Market	Due To Svc Req	4668	Open			JOE SMITH		2/13/2019 9:00:00 AM	
01 000002	BBB GAS CO.	22222222	BBB GAS CO.	4789	22222222	Market	Due From Svc Req	747	Open			SUE JONES		2/13/2019 9:00:00 AM	
01 000003	CCC GAS CO.	33333333	CCC GAS CO.	5421	33333333	Market	Due To Svc Req	11380	Open			BILL GREEN		2/13/2019 9:00:00 AM	

## Imbalance to Storage with Multiple Points

A customer may choose to distribute Imbalance to Storage volumes among multiple points provided there is adequate storage FDQ available. If there is not sufficient FDQ, the balance will be cashed-out if the customer does not specify a specific storage overrun contract.

The **Request for Imbalance to Storage with Multiple Points** form can be found on the [Support>Agreements/Forms](#) page under the heading *Trading/Imbalance Forms*.

<http://www.northernnaturalgas.com/support/Pages/AgreementsForms.aspx>

### — Trading / Imbalance Forms

- [Request for Imbalance to Storage with Multiple Points](#)

This form should be completed and submitted to Northern no later than 10:00 PM of the 12th business day to request Imbalance to Storage with Multiple Points.

Submit | Close | Print Preview

**Northern Natural Gas**

### Request for Imbalance to Storage with Multiple Points

Legal Entity Name  \*

Legal Entity Number  \*

Contact Name  \*

Email Address  \*

Contact Phone Number  (  \* )  \* -  \*

Contract Holder

Imbalance Period  \*

Submitter Name  \*

Date

Storage Contract	Point Name	Point Number	Imbalance Quantity*	Verified by NNG
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> *	<input type="text"/>

Insert item

Submit | Close | Print Preview

The \* designates a required field.

To insert additional Point Numbers with specific volumes, click .

When completed, click **Submit** in the upper left hand corner.

## Customer Imbalance Tiering

Volume differences between monthly receipts and deliveries shall be accumulated and recorded in a customer account. Northern and customer shall manage monthly receipts or deliveries so that the account balance shall be kept as near to zero as practicable. Imbalances shall be determined on a dollar valued basis, which means that Northern will first determine the imbalance quantity for each month by legal entity on an Dth basis and then will determine a dollar value using the Dth quantity and the applicable MIP, as tiered for imbalance level.

### Tiering of MIPs

Except for Small Customers, the Market Area, Field Area, or Gulf Coast MIP is tiered based upon the monthly imbalance level of the legal entity, in accordance with the following schedule:

Imbalance Level*	Due Northern	Due Customer
0% - 3%	HIGH MIP * 1.00	LOW MIP * 1.00
Greater than 3% up to 5%	HIGH MIP * 1.02	LOW MIP * 0.98
Greater than 5% up to 10%	HIGH MIP * 1.10	LOW MIP * 0.90
Greater than 10% up to 15%	HIGH MIP * 1.20	LOW MIP * 0.80
Greater than 15% up to 20%	HIGH MIP * 1.30	LOW MIP * 0.70
Greater than 20%	HIGH MIP * 1.40	LOW MIP * 0.60

\*The imbalance level is determined by dividing the legal entity's monthly Volumetric Imbalance by its monthly deliveries. Such monthly deliveries shall exclude Customer's deliveries under MPS agreements, solely for purposes of calculating Customer's transportation imbalances percentage.

For any legal entity listed as a Small Customer on Sheet No. 510 of Northern's Tariff, tiering shall be as set forth above, except the imbalance level and associated valuation applicable for the first tier of MIP \* 1.00 is equal to the greater of 1,000 Dth or 3%.

The tier valuation factors listed above will be applied to the portion of the imbalance level which falls within each tier.

Delivery point operators of an operational zone point shall have the ability to determine the imbalance level by an alternate method ("alternate imbalance level determination"), by submitting a request to Northern which allows for the use of third party deliveries to the selected operational zone point when determining imbalance tiers, subject to the following criteria:

- Requester is the operator of a zone point
- Billing of the last-through-the-meter methodology is used
- Prior to the beginning of any month (or at the time of the elections) Northern has been provided the legal entity(s) delivery to the delivery point operator's operational zone for the month
- Monthly imbalance level exceeds 3%

The delivery point operator must submit a request to use the alternate imbalance level determination. The request must include the following:

- Time period for the election - the time period can be prior to the beginning of any month and remain in effect until changed by the delivery point operator
- The zone point that will use the alternate imbalance level determination rule - only one zone point can be elected even if requester has multiple zone points

- A statement verifying that the zone point has last-through-the-meter methodology
- A statement that all legal entities' deliveries to the selected zone point should be used in determining the imbalance level for the delivery point operator

If the delivery point operator meets the criteria above and Northern has received a request prior to the beginning of any month, then Northern will begin with the month requested and until changed by the delivery point operator:

- Aggregate the deliveries by any customer to the selected zone point (including points behind the zone delivery point) to determine the imbalance tiers
- Include all the delivery point operator's deliveries under any transport contract (to any point including all zone points) to determine the imbalance tiers

For additional information regarding resolution of imbalances see Section 32 - Balancing of the General Terms and Conditions of Northern's Tariff beginning on Sheet No. 267.