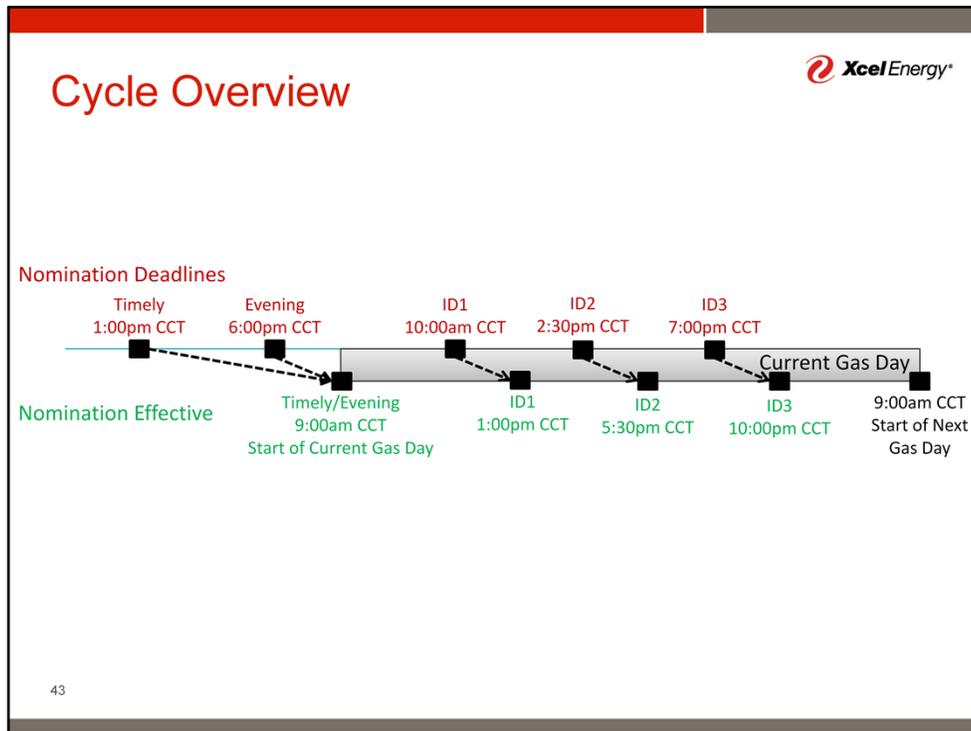


Gas Transactional System
Gas Scheduling

6/3/19





We will begin with an overview of the nomination cycle. With the exception of PSCO, all of the TSPs will operate with NAESB 5 cycles. PSCO will utilize only the Timely cycle at go live. Regulatory efforts are underway to enable 5 cycles for PSCO.

The figure above shows an overview of the nomination cycle for a given gas day. The top line provides the nomination deadline for each cycle. The lower line provides the nomination effective times for each cycle.

Viewing Current Cycle



The screenshot displays the CAW dashboard interface. A 'Nomination Cycle Summary' window is open, showing a calendar for 04/01/2019 with columns for TIM, EVE, ID1, ID2, and ID3. A blue box labeled '1 Hover Over' points to the calendar icon. An orange box labeled '2 Verify Status' points to an 'Open' button. Below the calendar, a table lists nomination deadlines for 04/01/2019:

Day	TIM	EVE	ID1	ID2	ID3
04/01/2019	01:00PM CCT	06:00PM CCT	10:00AM CCT	02:30PM CCT	07:00PM CCT

The background dashboard includes sections for 'Nomination Cycle Summary', 'Scheduling Cycle Summary', and 'Nomination Deadlines', each with a table of dates and cycle types (TIM, EVE, ID1, ID2, ID3).

44

Nomination cycle deadlines are available for review via the CAW dashboard. For a given day, the status of a specific cycle can be determined by hovering over the cycle icon for that day. A message will appear with the current cycle status.

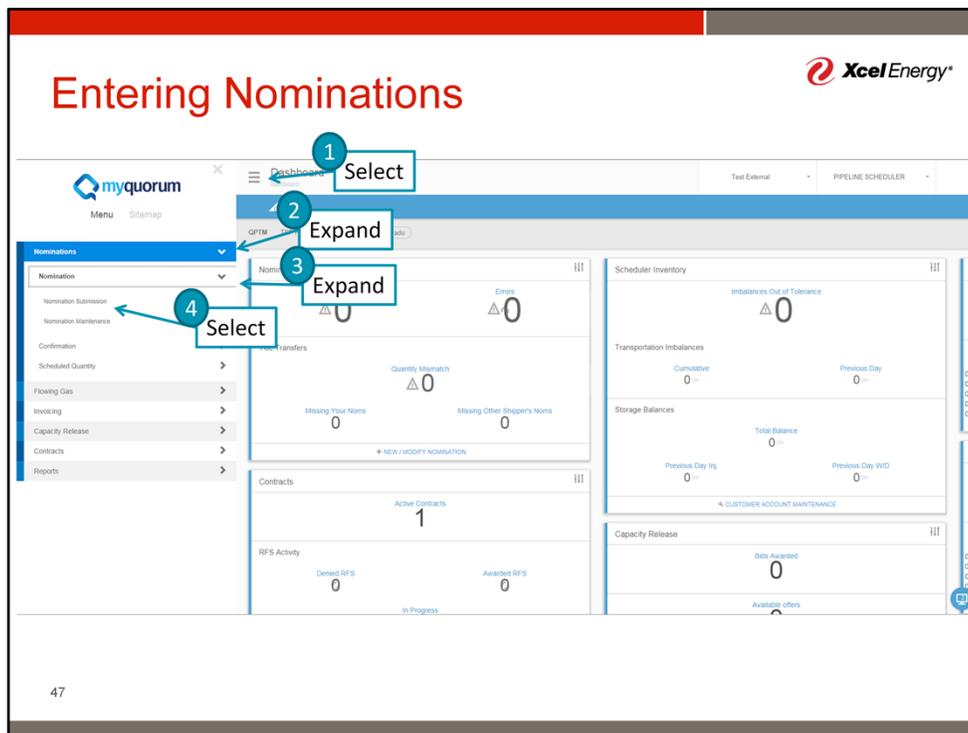
Changing Dashboard (if needed)



The screenshot shows the Xcel Energy dashboard interface. At the top, there is a navigation bar with a hamburger menu, the text 'Dashboard', and a user profile 'Test External'. A dropdown menu is open, showing 'PERSONAS' with two options: 'PIPELINE SCHEDULER' and 'PIPELINE OPERATOR'. Two callouts are present: callout '1' points to the 'PERSONAS' dropdown, and callout '2' points to the 'PIPELINE SCHEDULER' option. The dashboard content includes several widgets: 'Nominations' with 'Cuts' and 'Errors' both at 0; 'Title Transfers' with 'Quantity Mismatch' at 0 and 'Missing Other Shopper's Name' at 0; 'Contracts' with 'Active Contracts' at 1; 'RFS Activity' with 'Denied RFS' and 'Awarded RFS' both at 0; 'Scheduler Inventory' with 'Imbalances Out of Tolerance' at 0; 'Transportation Imbalances' with 'Cumulative' and 'Previous Day' both at 0; 'Storage Balances' with 'Total Balance' at 0; 'Capacity Release' with 'Bids Awarded' at 0; 'Nomination Cycle Summary' with a table of dates and status indicators; and 'Scheduling Cycle Summary' with a table of dates and status indicators. The number '45' is visible in the bottom left corner of the dashboard area.

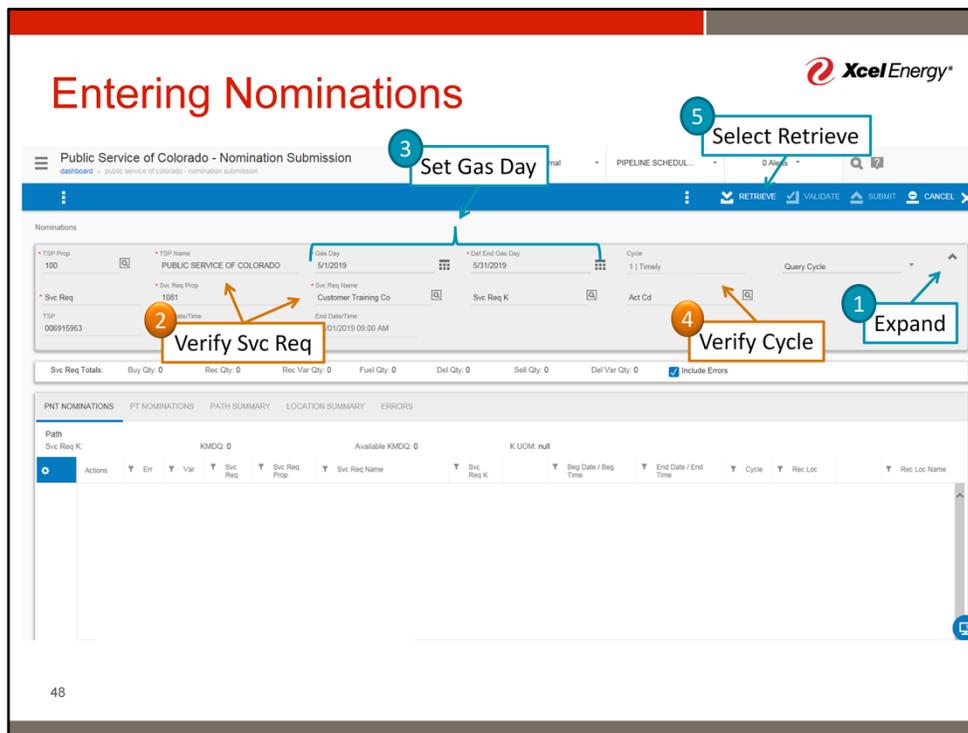
It may be necessary to switch personas if the Nomination Cycle Summary widget is not visible. To do so, click the current persona name on the top menu bar. From the list of options, select Pipeline Scheduler.

Entering Nominations



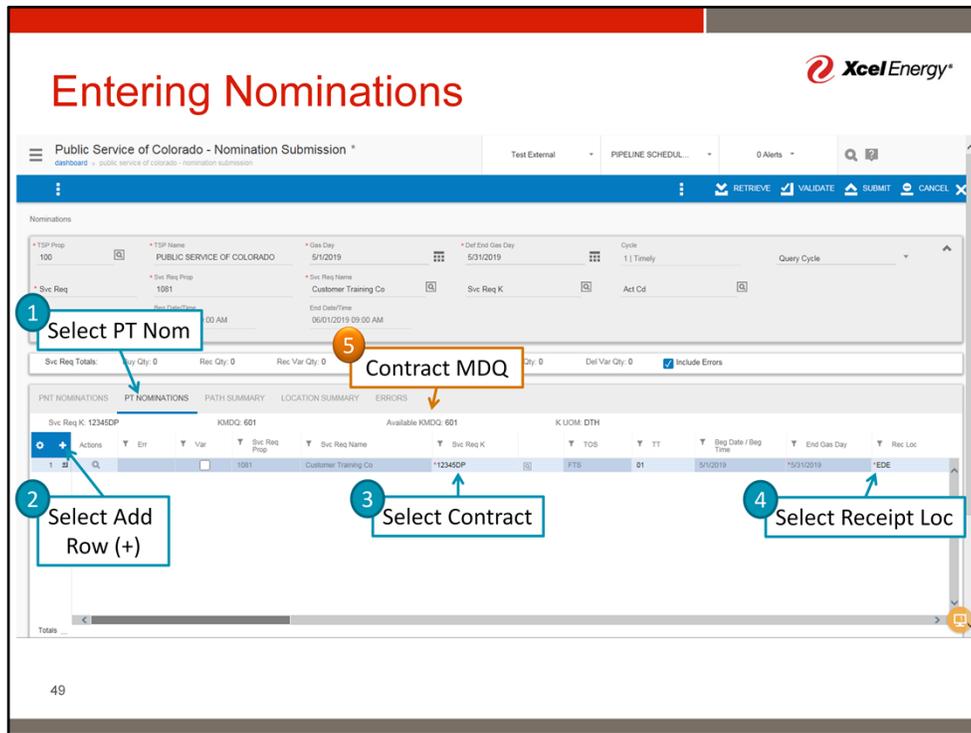
To enter a nomination, we begin by selecting the “Hamburger” menu button. From the menu, expand Nominations, expand the Nomination sub menu, and select the Nomination Submission screen.

Note: The sites Search Option or Nomination Widget New/Modify Nomination link can also be used to find the Nomination Submission screen without the menu.



Once the Nomination Submission screen loads:

1. Expand the Nomination Header section
2. Verify the TSP & Service Requestor. Both should be automatically set unless the scheduler is associated with multiple TSPs or Companies.
3. Enter the Gas Day Period of interest
 1. Note, the Def End Gas Day field will behave differently depending on the first gas day selected. For example, The system will automatically default to the end of the month if the first is selected more than 1 gas day prior to the flow day. On the flow day of or day before, the end gas day will be the same day.
4. Verify the Cycle. It will be automatically set based on the current cycle for the period selected.
5. Select Retrieve to refresh the lower portion of the screen.

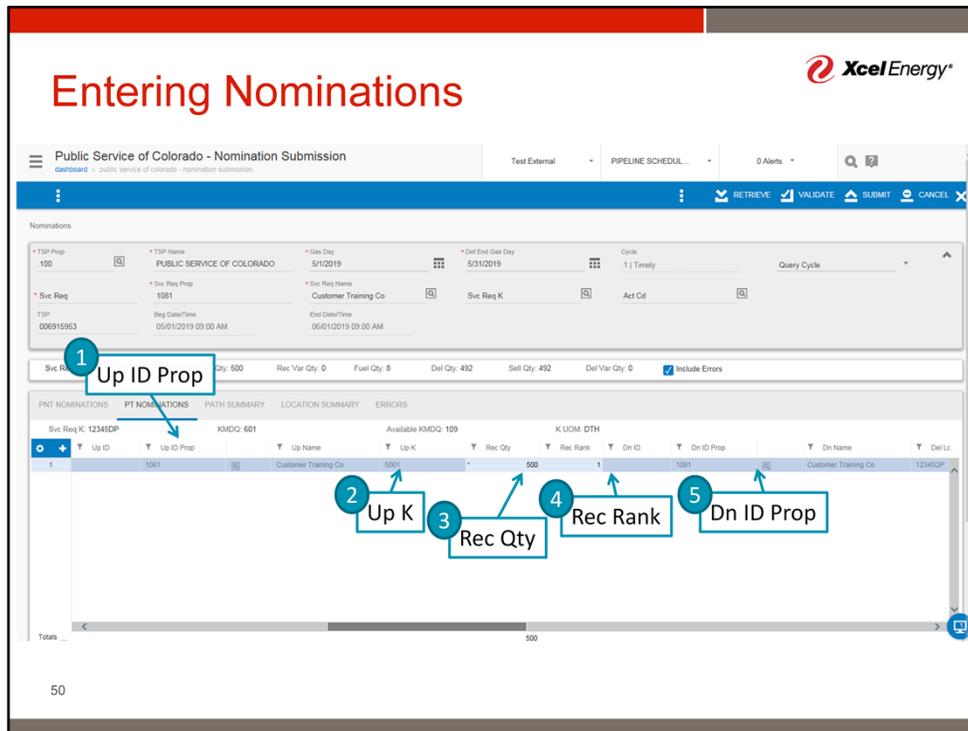


Select the PT Nominations tab to begin entering a nomination.

On the tab:

1. Select the + button to add a new row
 1. Note: repeat this step for each nomination line item
2. Select the Service Requestor Contract by either typing the first two digits of the contract number or selecting the lookup button.
3. Select the Receipt Location

Scroll right to continue data population...



In the next portion of the screen, enter:

1. Enter Up ID Prop – Typically the same as your Svc Req Prop
2. The Up Contract ID – This field is required at the moment, will be optional in production
3. Enter the Receipt Quantity – This is Delivery Plus Fuel. Alternatively, you can enter Delivery in subsequent steps and the system will back calculate Receipt quantity.
4. Rank the Receipt Nominations
5. Enter the Down Stream ID Prop – Typically the same as your Svc Req Prop

Scroll right to continue data population...

Entering Nominations

XcelEnergy

Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDUL... 0 Alerts

RETRIEVE VALIDATE SUBMIT CANCEL

Nominations

* TSP Prop: 100 * TSP Name: PUBLIC SERVICE OF COLORADO * Del Day: 5/1/2019 * Del End Date: 5/31/2019 Cycle: 1 | Timely Query Cycle

* Svc Req: 1081 * Svc Req Name: Customer Training Co * Svc Req K: Act Cd

TSP: 006915953 Buy Date/Time: 05/01/2019 09:00 AM End Date/Time: 06/01/2019 09:00 AM

Svc Req Totals: Buy Qty: 500 Rec Qty: 500 Rec Var Qty: 0 Fuel Qty: 8 Del Qty: 492 Sell Qty: 492 Del Var Qty: 0 Include Errors

PNT NOMINATIONS **PT NOMINATIONS** PATH SUMMARY LOCATION SUMMARY ERRORS

Svc Req K: 12345DP KMDQ: 601 Available KMDQ: 109 K UOM: DTH

	Del Loc	Del Loc Name	Del Qty	Del Rank	Fuel Qty	Fuel Pct	Hourly Profile	User ID	Update Date	Pkg Id	Bid Trans Rate
1	12345DP	12345 DP DELIVERY POOL	492	1	8	1.58000	XCLX		04/02/2019 09:24:35 AM		
Totals			492		8						

51

In the next portion of the screen, enter:

1. Delivery Location – Most contracts will only have one option. The delivery location is a delivery pool unique to the contract.
2. If not already populated, enter the Delivery Quantity
3. Rank the Delivery Quantity
4. Optional, you may enter a Package Id.

Scroll right to continue data population...

Entering Nominations



Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDUL... 0 Alerts

RETRIEVE VALIDATE SUBMIT CANCEL

Nominations

* TSP Prop: 100	* TSP Name: PUBLIC SERVICE OF COLORADO	* Gas Day: 5/1/2019	* Del End Gas Day: 5/31/2019	Cycle: 1 Timely
* Svc Req: 006915953	* Svc Prod Prop: 1081	* Gas Prod Name: Customer Training Co	* Svc Req K: []	Act Cd: []
TSP Buy Date/Time: 05/01/2019 09:00 AM	End Date/Time: 06/01/2019 09:00 AM			

Svc Req Totals: Buy Qty: 500 Rec Qty: 500 Rec Var Qty: 0 Fuel Qty: 8 Del Qty: 492 Sell Qty: 492 Del Var Qty: 0 Include Errors

PNT NOMINATIONS PT NOMINATIONS PATH SUMMARY LOCATION SUMMARY ERRORS

Svc Req K: 12345DP KMDQ: 601 Available KMDQ: 109 K UOM: DTH

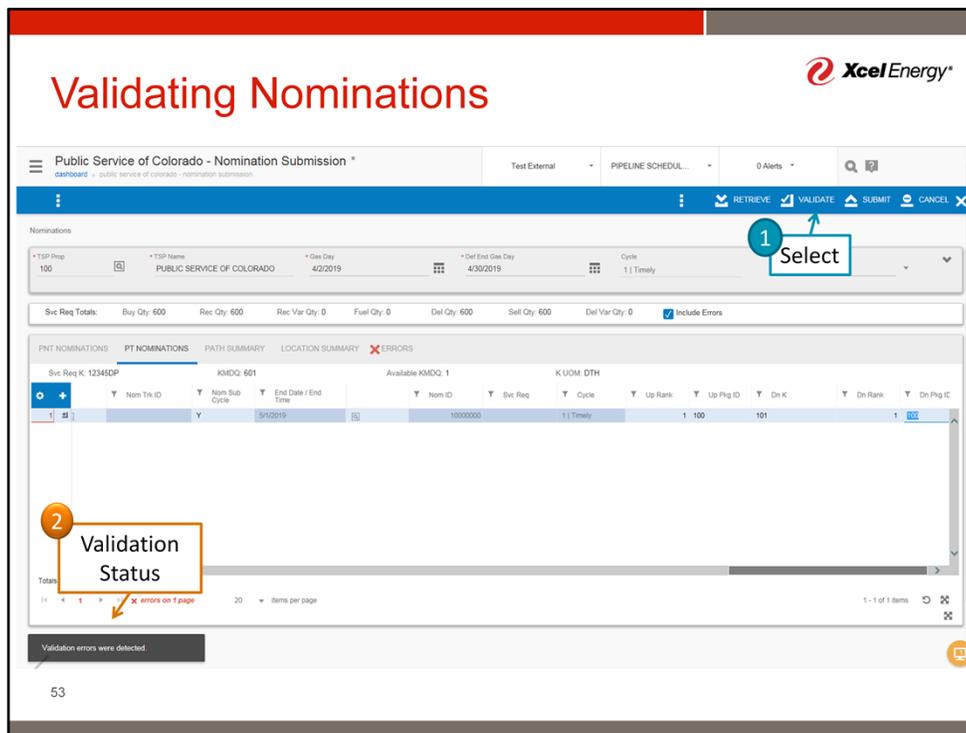
	Y Nom Trk ID	Y Nom Sub Cycle	Y End Date / End Time	Y Nom ID	Y Svc Req	Y Cycle	Y Up Rank	Y Up Pkg ID	Y Dn K	Y Dn Rank	Y Dn Pkg ID
1			6/1/2019	5959978		1 Timely	1			1	

Totals ...

52

1 Rankings

The remaining nomination entry fields are related to ranking.



Next the nomination can be verified by clicking the validate button. Once selected, a status message will appear at the bottom of the screen.

Note, there are two types of errors:

- BI – Can Save and submit with nom error – Xcel scheduler will review and determine if the NOM can be accepted.
- LI – Cant submit – in the event this occurs, the three dots (mini hamburger menu) can be selected. Within the menu, select save. At this point, Xcel can be contacted for support clearing the error.

Validating Nominations

Public Service of Colorado - Nomination Submission *
Test External PIPELINE SCHEDUL... 0 Alerts

RETREIVE VALIDATE SUBMIT CANCEL

Nominations

TSP Prep: 100 TSP Name: PUBLIC SERVICE OF COLORADO Gas Day: 4/2/2019 Def End Gas Day: 4/30/2019 Cycle: 1 | Timely Query Cycle

Svc Req Totals: Buy Qty: 600 Rec Qty: 600 Rec Var Qty: 0 Fuel Qty: 0 Del Qty: 600 Sell Qty: 600 Del Var Qty: 0 Include Errors

PMT NOMINATIONS PT NOMINATIONS PATH SUMMARY LOCATION SUMMARY **ERRORS**

Additional Dates with Errors:

	Err	Severity	Validation Date	Svc Req N	Loc Name	Del Loc	Del Loc Name	Plg ID	Error Message		
1	11	NN0000250	ERROR	4/2/2019	12345DP	EDE	RIVER TOWN BORD...	12345DP	12345 OP DELIVERY POOL	101	This is an up record and the receipt location id EDE has an attribute of

1 Select

2 Error Message

54

When an error is present, you can select the Errors tab to view any Error Messages.

Validating Nominations

Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDUL... 0 Alerts

RETRIEVE VALIDATE SUBMIT CANCEL

Nominations

TSP Prop: 100 TSP Name: PUBLIC SERVICE OF COLORADO Gas Day: 4/2/2019 Def End Gas Day: 4/30/2019 Cycle: 1 | Timely Query Cycle

Svc Req Totals: Buy Qty: 600 Rec Qty: 600 Rec Var Qty: 0 Fuel Qty: 0 Del Qty: 600 Sell Qty: 600 Del Var Qty: 0 Include Errors

PNT NOMINATIONS PT NOMINATIONS PATH SUMMARY LOCATION SUMMARY ERRORS

Svc Req K: 12345DP	KMDQ: 601	Available KMDQ: 1	K UOM: DTH					
Beg Date / Beg Time	End Gas Day	Rec Loc	Rec Loc Name	Up ID	Up ID Prop	Up Name	Up K	Rec Qty
4/22/2019	4/30/2019	EDE	EAST DENVER TOWN BO...	1081		Customer Training Co		600

Totals ... 600

1 - 1 of 1 items

55

Based on the content of the error message, you can navigate to the associated tab. In the tab, you will see items highlighted in red which are associated with the error.

Validating Nominations

Public Service of Colorado - Nomination Submission * | Test External | PIPELINE SCHEDUL... | 0 Alerts

RETRIEVE | VALIDATE | SUBMIT | CANCEL

Nominations

TSP Prep: 100 | TSP Name: PUBLIC SERVICE OF COLORADO | Gas Day: 4/2/2019 | Def End Gas Day: 4/30/2019 | Cycle: 1 | Timely

Svc Req Totals: Buy Qty: 600 | Rec Qty: 600 | Rec Var Qty: 0 | Fuel Qty: 0 | Del Qty: 600 | Sell Qty: 600 | Del Var Qty: 0 | Include Errors:

PNT NOMINATIONS | PT NOMINATIONS | PATH SUMMARY | LOCATION SUMMARY | ERRORS

Svc Req K: 1234567	KMDQ: 601	Available KMDQ: 1	K UOM: DTH					
Req Date / Req Time	End Gas Day	Rec Loc	Rec Loc Name	Up ID	Up ID Prep	Up Name	Up K	Rec Qty
1 4/2/2019	4/30/2019	*EDE	EAST DENVER TOWN BO...	1081		Customer Training Co	000	600

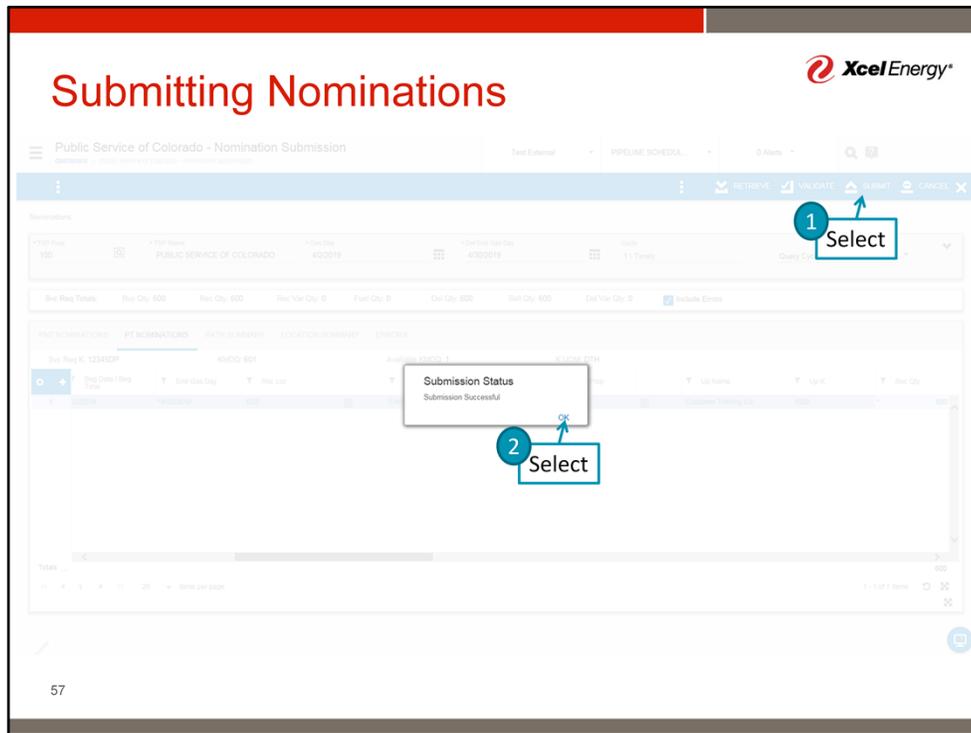
Total: 600

Validation successful.

56

Once the issue has been resolved, you can revalidate the nom to ensure all errors have been cleared.

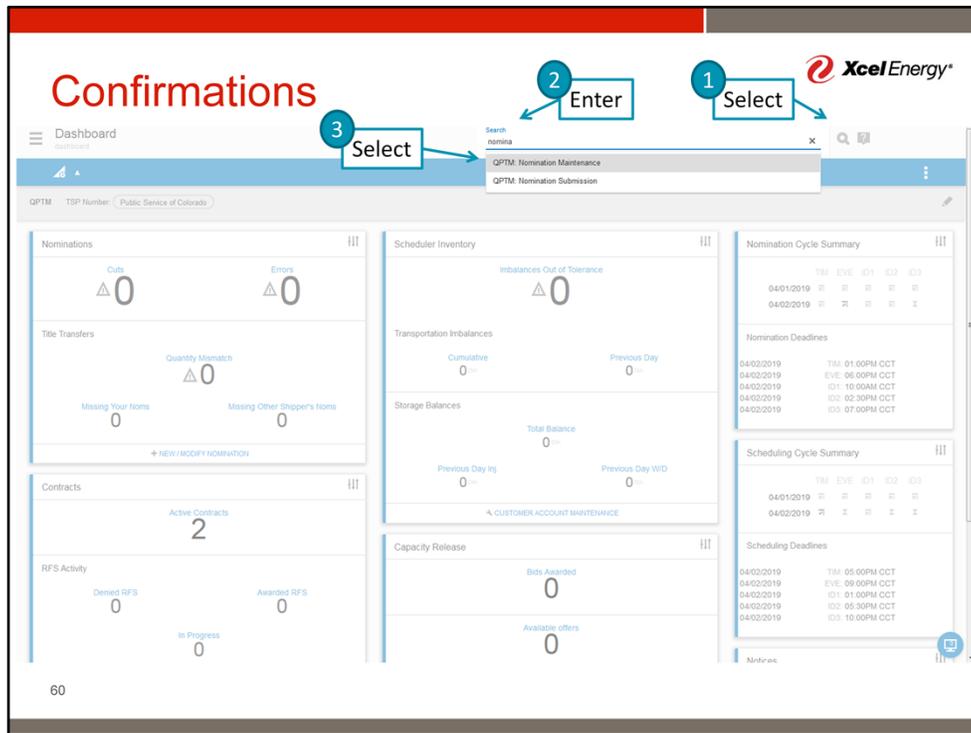
It is a best practice to always validate noms before selecting save.



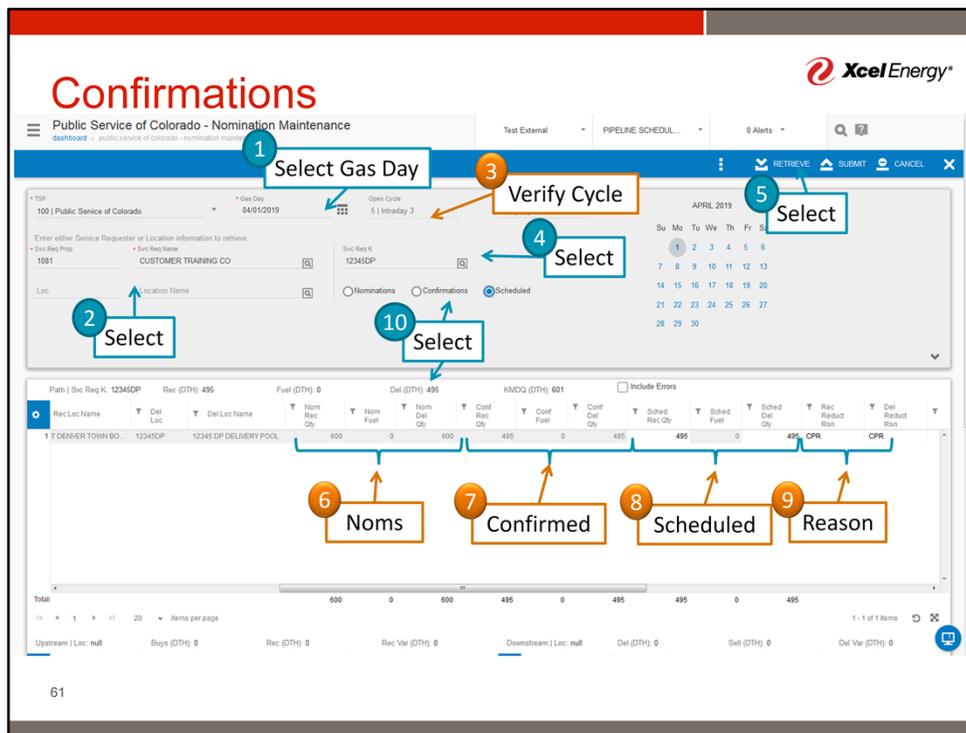
To submit a validated nom, simply select the submit button. A screen will appear with the submission status. It should state Submission Successful. Select OK

Once submitted, the application will return to the Nom Screen. The X can be selected to close the Nom screen, or additional noms can be entered.

Viewing Confirmed Quantity



Once a nom has been submitted, the current scheduled quantity can be viewed through the Nomination Maintenance screen. To access, Select the magnifying glass, start entering the screen name, and then select the screen name.



On the Nomination Maintenance screen:

1. Select the Gas Day of interest
2. Enter your service request name by selecting the lookup button or typing the Svc Req Prop
3. The Cycle will be auto set based on time of day
4. Optional, you may select a specific contract using the Svc Req K field. If not selected, all contracts will be returned
5. Select Retrieve to get scheduled information.
6. The first portion of the window will show Nominated quantities
7. The next block will show confirmed quantities
8. Scheduled quantities are shown next. Note: Scheduled and confirmed are typically the same.
9. In the final block, a reason code is provided if a reduction has occurred.
10. At the top of the data grid is information related to contract MDQ and total quantities. Selecting the radio buttons toggles those totals based on the particular phase of the scheduling process. (e.g. selecting scheduled will show scheduled deliveries.

Modifying Nominations *Specific Days*

Actions to see individual days

Modifying Nominations

Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDULE 0 Alerts

RETRIEVE VALIDATE SUBMIT CANCEL

Nominations

TSP Prop: 100 TSP Name: PUBLIC SERVICE OF COLORADO Gas Day: 5/1/2019 Def End Gas Day: 5/31/2019 Cycle: 1 | Timely Query Cycle

Svc Req: 1081 Svc Req Prop: 1081 Svc Req Name: Customer Training Co Svc Req K: Svc Req K Act Cd

TSP: 006915953 Beg Date/Time: 05/01/2019 09:00 AM End Date/Time: 06/01/2019 09:00 AM

Svc Req Totals: Buy Qty: 535 Rec Qty: 535 Res Var Qty: 0 Fuel Qty: 9 Del Qty: 526 Sell Qty: 526 Del Var Qty: 0 Include Errors

PNT NOMINATIONS		PT NOMINATIONS		PATH SUMMARY		LOCATION SUMMARY		ERRORS		
Svc Req K: 12345FR		KMDQ: 50		Available KMDQ: 16		K UOM: DTH				
+	+	Q	+	+	+	+	+	+	+	
Actions	En	Var	Svc Req Prop	Svc Req Name	Svc Req K	TGS	TT	Beg Date / Beg Time	End Gas Day	Rec Loc
1	Q	BV	1081	Customer Training Co	12345DP	FTS	01	5/1/2019	5/31/2019	EDE
2	Q	BV	1081	Customer Training Co	12345FR	ITS	01	5/1/2019	*5/31/2019	EDE

63

To modify an individual day, select the Action button for a specific nom instead.

Note: Use this approach for intra day modification. The Cycle will indicate current cycle based on queried gas day.

Modifying Nominations



Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDULE 0 Alerts

Monthly View - Path

Svc Req K: 12345FR Pig lot

Rec Loc: EDE Up K: 5002 Up Name: Customer Training Co

Del Loc: 12345FR Dn K: Dn Name: Customer Training Co

	Case Day	All Buys at Location	Upstream Variance	Rec Qty	Fuel Qty	Del Qty	All Sells at Location
1	5/1/2019		35	0	35	1	34
2	5/2/2019		35	0	35	1	34
3	5/3/2019		35	119	50	1	49
4	5/4/2019		35	0	35	1	34
5	5/5/2019		35	0	35	1	34
6	5/6/2019		35	0	35	1	34
7	5/7/2019		35	0	35	1	34
8	5/8/2019		35	0	35	1	34
9	5/9/2019		35	0	35	1	34
10	5/10/2019		35	0	35	1	34
11	5/11/2019		35	0	35	1	34
12	5/12/2019		35	0	35	1	34
13	5/13/2019		35	0	35	1	34
14	5/14/2019		35	0	35	1	34

1 Rec Qty

2 Del Qty

1 Select

CANCEL CHANGE

64

A dialog box will appear showing noms by day. Modify the day of interest. The opposite rec/del quantity will auto calculate. Select Change.

Modifying Nominations

Public Service of Colorado - Nomination Submission * Test External PIPELINE SCHEDUL... 0 Alerts

RETREIVE VALIDATE **SUBMIT** CANCEL

Nominations

TSP Prop: 100 TSP Name: PUBLIC SERVICE OF COLORADO Gas Day: 5/1/2019 Def End Gas Day: 5/31/2019 Cycle: 1 | Timely

Svc Req: 1081 Svc Req Name: Customer Training Co Svc Req K: Act Cd:

Start Date/Time: 05/01/2019 09:00 AM End Date/Time: 06/01/2019 09:00 AM

Svc Req Totals: Buy Qty: 535 Rec Qty: 535 Rec Var Qty: 0 Fuel Qty: 9 Del Qty: 526 Sell Qty: 526 Del Var Qty: 0 Include Errors

PNT NOMINATIONS **PT NOMINATIONS** PATH SUMMARY LOCATION SUMMARY ERRORS

Svc Req K: 12345FR KMDQ: 50 Available KMDQ: 16 K UOM: DTH

	Y	Rec Loc	Y	Rec Loc Name	Y	Up ID Prop	Y	Up K	Y	Rec Qty	Y	Rec Rank	Y	Dn ID Prop	Y	Dn Name	Y	Del Loc Name	Y	Del Qty				
1		EDE		EAST DENVER TOWN BO...		1081		Cust...		5001		500		1		1081		12345DP		Customer Training Co		12345 DP DELIVERY POOL		492
2		EDE		EAST DENVER TOWN BO...		1081		Cust...		2002		35		2		1081		12345FR		Customer Training Co		12345 FR DELIVERY POOL		34

Totals ... 535 526

Select Submit to save the change.

Modifying Nominations

Public Service of Colorado - Nomination Submission

Test External PIPELINE SCHEDULE Alerts

RETRIEVE TALKOUT SUBMIT CANCEL

Submission Status
Submission Successful
OK

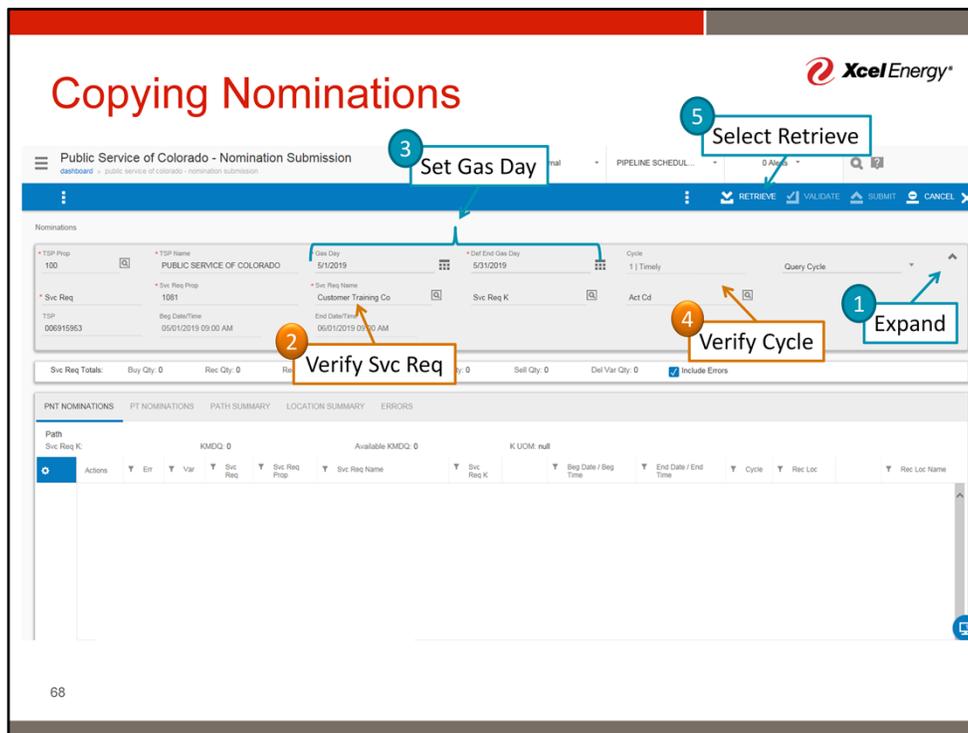
1 Select

PT NOMINATIONS	PT NOMINATIONS	PTCH SUMMARY	LOCATION SUMMARY	ERRORS
1	123456	123456	EAST DENVER TOWN HL	123456
2	123456	123456	EAST DENVER TOWN HL	123456

66

The system will now indicate if the update was successful. Select OK to close the screen.

Copying Nominations



A commonly utilized function is to copy nominations from a prior month to a future month. To do so, first recall the prior month's nomination :

1. Expand the Nomination Header section
2. Verify the Svc Req Name
3. Enter the Gas Day Period
4. Select the Cycle
5. Select Retrieve

Copying Nominations

Public Service of Colorado - Nomination Submission

Text External PIPELINE SCHEDULED 0 Alerts

RETRIEVE VALIDATE SUBMIT CANCEL

Nominations

TSP Prop: 100 TSP Name: PUBLIC SERVICE OF COLORADO Gas Day: 5/12/2019

1 Select

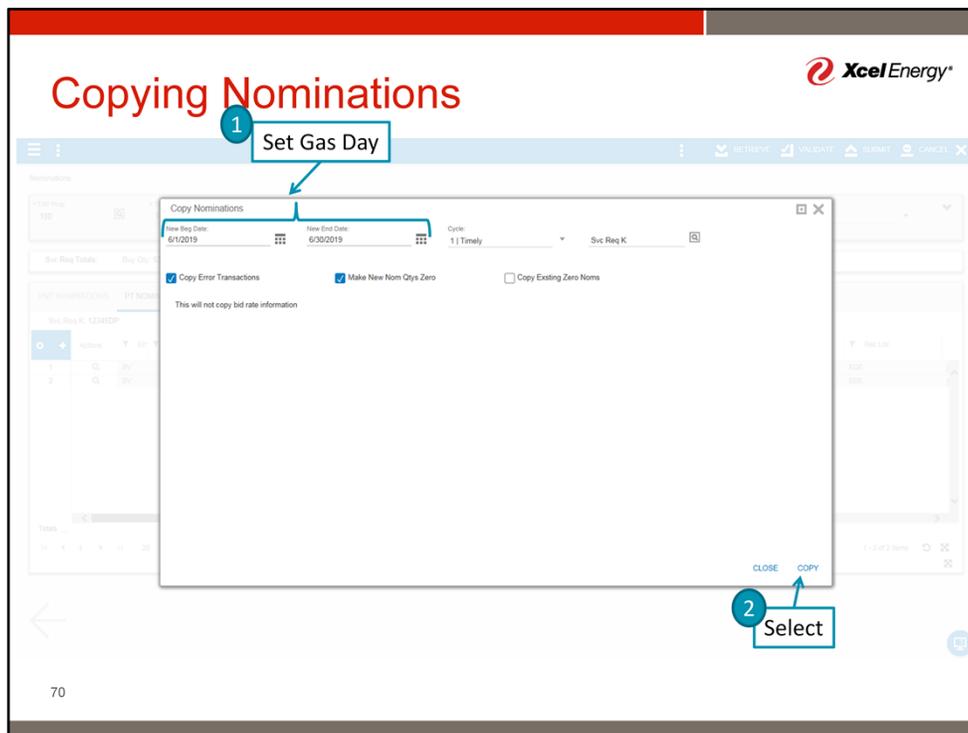
Service Request Totals: Buy Qty: 535 Rec Qty: 535 Rec Var Qty: 0 Fuel Qty: 9 Del Qty: 526 Sell Qty: 526

PNT NOMINATIONS		PT NOMINATIONS		PATH SUMMARY		LOCATION SUMMARY		ERRORS	
Svc Req K: 12345DP		KMDQ: 601		Available KMDQ: 109		K LUC			
	Actions	En	Var	Svc Req Prop	Svc Req Name	Svc Req K	TOS		
1		BV	<input type="checkbox"/>	1061	Customer Training Co	12345DP	FTS		
2		BV	<input type="checkbox"/>	1061	Customer Training Co	12345FR	ITS		

- CLOSE
- COPY
- SAVE
- PUSH FOR UPS/DOWNS
- CLASSIFICAT...
- IMPORT NOMINATIONS
- RECALC ALL FUEL
- RECALC ALL HEATING FACTORS
- DOWNLOAD NOM IMPORT TEMPLATE
- SELECT ACTIVITY
- BULK COPY NOMS
- CLEAR ZERO QUANTITY NOMS
- NEW ACTIVITY
- NOMINATION LOCATION REPORT DOWNLOAD

69

Next Select the three button menu (hamburger menu). In the menu, select Copy.



When the dialog box appears, enter the future dates where the noms should be copied to. Select copy.

Copying Nominations

Public Service of Colorado - Nomination Submission

Verify Dates

1

3 Select

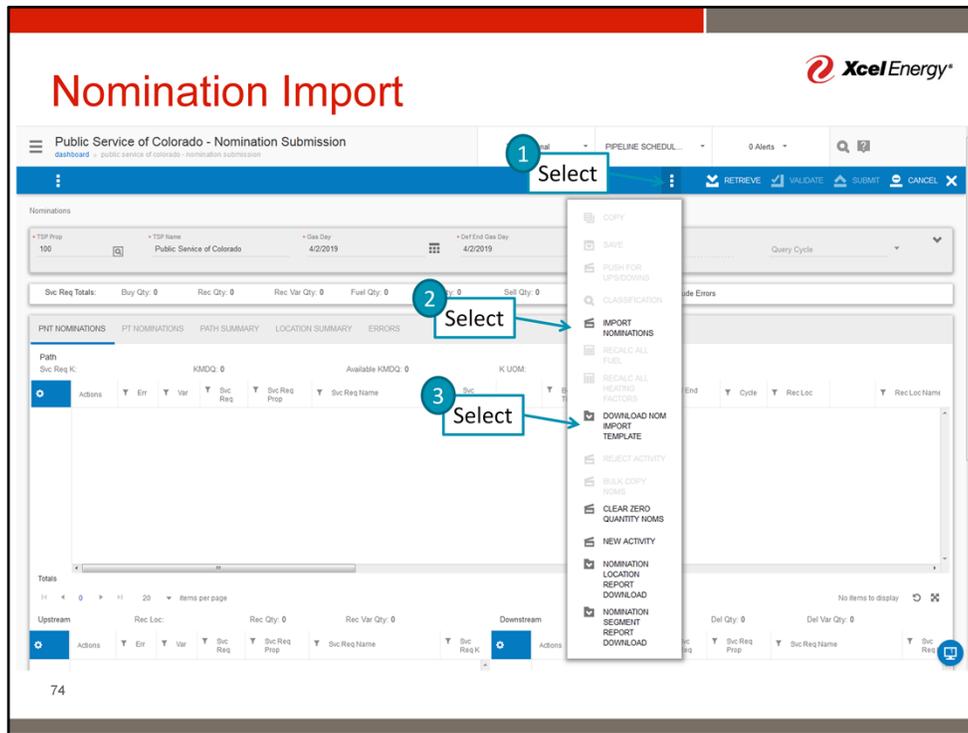
2 Verify Noms

Svc Req Totals:		Buy Qty: 0	Rec Qty: 0	Rec Var Qty: 0	Fuel Qty: 0	Del Qty: 0	Sell Qty: 0	Del Var Qty: 0	<input checked="" type="checkbox"/> Include Errors																																	
<p>PNT NOMINATIONS PT NOMINATIONS PATH SUMMARY LOCATION SUMMARY ERRORS</p> <p>Svc Req K: 1234EDP KMDQ: 601 Available KMDQ: 601 K UOM: DTH</p> <table border="1"> <thead> <tr> <th>#</th> <th>Err</th> <th>Var</th> <th>Svc Req Prog</th> <th>Svc Req Name</th> <th>Svc Req K</th> <th>TOS</th> <th>TT</th> <th>Req Date / Req Time</th> <th>End Gas Day</th> <th>Req Loc</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td>1081</td> <td>Customer Training Co</td> <td>*12345DP</td> <td>FTS</td> <td>01</td> <td>6/1/2019</td> <td>*6/30/2019</td> <td>*EDE</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>1081</td> <td>Customer Training Co</td> <td>12345FR</td> <td>ITS</td> <td>01</td> <td>6/1/2019</td> <td>6/30/2019</td> <td>EDE</td> </tr> </tbody> </table>										#	Err	Var	Svc Req Prog	Svc Req Name	Svc Req K	TOS	TT	Req Date / Req Time	End Gas Day	Req Loc	1			1081	Customer Training Co	*12345DP	FTS	01	6/1/2019	*6/30/2019	*EDE	2			1081	Customer Training Co	12345FR	ITS	01	6/1/2019	6/30/2019	EDE
#	Err	Var	Svc Req Prog	Svc Req Name	Svc Req K	TOS	TT	Req Date / Req Time	End Gas Day	Req Loc																																
1			1081	Customer Training Co	*12345DP	FTS	01	6/1/2019	*6/30/2019	*EDE																																
2			1081	Customer Training Co	12345FR	ITS	01	6/1/2019	6/30/2019	EDE																																

71

The Nomination screen will now be shown with the gas day range set to the future date period. Validate the noms and then select submit.

Nomination Import



As a final option for nomination input, the system has the ability to import nominations from a spreadsheet. To use this functionality, open the three dot (mini hamburger) menu, download the template. Once complete, use the Import Nominations function to import.