



Database Compare – How to True up to the Most Recent Database

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The Leader in Energy Market Simulation Systems

Providing energy companies, consultants, and regulators advanced tools to support:

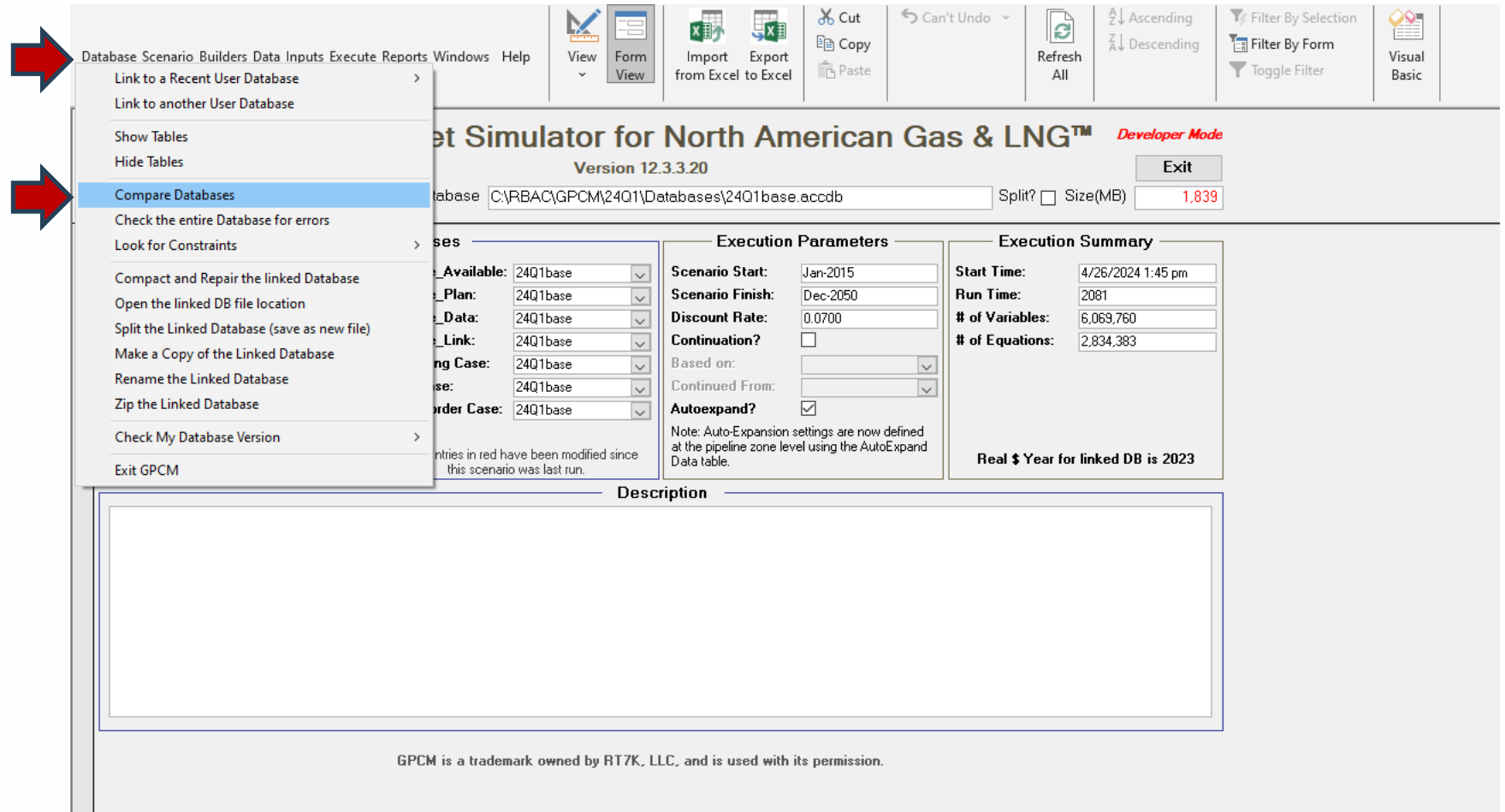
- Investment and M&A Strategy
- Environmental and Sustainability Goals
- Credible Risk Analysis
- Trading Strategy
- Policy Development and Assessment
- Energy Security

When to Use Database Compare

- Track changes between databases.
- Bring over data/assumptions from a previous database, so that you don't have to redo it manually.
- To true-up your reference database to GPCM's newest base case.
- To verify that changes have been made in another database.

How to use Database Compare

- In the GPCM ribbon go to the database menu
- Select Compare databases



How to use Database Compare

The screenshot displays the GPCM Market Simulator for North American Gas & LNG, Version 12.3.3.20, in Developer Mode. The main window is divided into several sections: Scenario Subcases, Execution Parameters, and Execution Summary. A red arrow labeled '1.' points to the 'Description' field in the Scenario Subcases section. A 'Database Compare' dialog box is open, showing a list of tables to compare. A red arrow labeled '2.' points to the 'Database 1' and 'Database 2' fields in the dialog box. The dialog box contains the following text: 'To compare databases, first select which table or group of tables you wish to compare. For example, All Infrastructure will compare the infrastructure cases of the two databases: Pipeline Zones, Links, etc. Individual tables, such as Demand, Supply, and Storage_Plan can also be compared. Note: you can also use wildcards to filter for several tables using the * character. For example *Link* will compare all input tables where the names include the word *Link*.' The 'Table(s):' dropdown is set to 'All Infrastructure'. The 'Database 1' field contains 'C:\RBAC\GPCM\24Q1\Databases\24Q1base.acddb' and the 'Database 2' field contains 'C:\RBAC\GPCM\23Q4\Databases\23Q4base.acddb'. The 'Cancel', 'Help', and 'Exec' buttons are visible at the bottom of the dialog box.

Database Scenario Builders Data Inputs Execute Reports Windows Help

View Form View Import Export from Excel to Excel Cut Copy Paste Can't Undo Refresh All Ascending Descending Filter By Selection Filter By Form Toggle Filter Visual Basic

GPCM® Market Simulator for North American Gas & LNG™ Developer Mode

Version 12.3.3.20

Scenario: 24Q1base Linked Database: C:\RBAC\GPCM\24Q1\Databases\24Q1base.acddb Split? ☐ Size(MB): 1.639

Exit

Scenario Subcases

Supply: 24Q1base Storage_Available: 24Q1base

Demand: 24Q1base Storage_Plan: 24Q1base

Pipeline_Available: 24Q1base Storage_Data: 24Q1base

AutoExpand_Data: 24Q1base Storage_Link: 24Q1base

Pipeline_Zone: 24Q1base Balancing Case: 24Q1base

Pipeline_Link: 24Q1base CO2 Case: 24Q1base

Supply_Link: 24Q1base Crossborder Case: 24Q1base

Demand_Link: 24Q1base

Interconnect_Link: 24Q1base

Note: Entries in red have been modified since this scenario was last run.

Execution Parameters

Scenario Start: Jan-2015

Scenario Finish: Dec-2050

Discount Rate: 0.0700

Continuation? ☐

Based on:

Continued From:

Autoexpand? ☒

Note: Auto-Expansion settings are now defined at the pipeline zone level using the AutoExpand Data table.

Execution Summary

Start Time: 4/26/2024 1:45 pm

Run Time: 2081

of Variables: 6,069,760

of Equations: 2,834,383

Real \$ Year for linked DB is 2023

Description

GPCM is a trademark owned by RT7K, LLC, and is used with its permission.

1. When the **Database Compare** window pops up, Select which table you want or select all infrastructure to compare.
2. Then select the databases you want to compare.

All Comparable Tables

Aggregation	CO2_Start	History	Map_Points	Storage_Available	Supply_Outlook	Transport_Zone
All Infrastructure	Country	Injection_Plan	Market_Point	Storage_Data	Target_Demand	VEH_Forecast
AXP_Zone_Data	Cust_Shares	Interconnect	Market_Point_Spread_GDS	Storage_Link	Target_Flow	VEH_Seasonality
Balancing	Customer	Interconnect_Link	Pipe_State_Link	Storage_Plan	Target_Flow_Points	WTI
Basin_Group	Customer_Location	LNG_Area	Pipe_State_Link_Capacity	Storage_Status	Target_Flow_Zones	
Census_Region	Demand	LNG_Path	Price_Spike_Zones	Supplier	Target_Supply	
CO2_Case	Demand_Link	LNG_Supply	Project	Supplier_Location	Transport_Available	
CO2_Market	ELC_Forecast	LNG_Supply_Case	State	Supply	Transport_Company	
CO2_Market_Location	Excluded_Dates	Location	State_Adj_State	Supply_Factors	Transport_Link	
CO2_Price	GEN_Forecast	Map_Links	Storage	Supply_Link	Transport_Location	

Note: Demand and Supply in database compare is the curves themselves even though its included in “All Infrastructure”

Database Compare Buttons

Compare- Do another comparison

Clear Checks- Deselect all checkboxes

Update- Overwrite the checked database with the other database's data

Excel- Send data to Excel

Close- Close the form

DB1:

C:\RBAC\GPCM\24Q1\Databases\24Q1base.accdb

DB2:

C:\RBAC\GPCM\23Q4\Databases\23Q4base.accdb

Compare

Clear Checks

Update

Excel

Close

Exclude FDQ, ZDQ, etc.

Tablename

Filter 1

Filter 2

Filter 3

Filter 4

Period

Affected Item

Difference

Case in Db 1

Case in Db 2

Value in Db 1

(dbl-click to select all)

Value in Db 2

(dbl-click to select all)

Show only Differences Larger Than:

	Location	Alberta (North)					Other	Changed	N/A	N/A	☒ Western Canada	☐ Null	
	Location	Alberta (South)					Other	Changed	N/A	N/A	☒ Western Canada	☐ Null	
	Project	GTN Xpress					Description	Changed	N/A	N/A	☐ In-serv 11/2024, 150/d addir	☐ In-serv 1/2024, 150/d adding	
	Project	LA Energy Gateway (LE					Description	Changed	N/A	N/A	☐ In-Serv 7/2025, 1.8 Bcf/d. L	☐ In-Serv 1/2025, 1.8 Bcf/d. L	
	Project	LNG Cedar Header					Description	Changed	N/A	N/A	☐ 377/d. In Serv 7/28. ***Feec	☐ 377/d. In Serv 7/27. ***Feec	
	Project	LNG Ksi Lisims Header					Description	Changed	N/A	N/A	☐ In-Serv 6/2028, 1,580/d. ***	☐ In-Serv 6/2028, 1,580/d. ***	
	Project	Mountain Valley					Description	Changed	N/A	N/A	☐ In-service Oct 2024, 2bcf/d,	☐ In-service Jul 2023, 2bcf/d, 2	
	Project	Permian Highway Exp					Description	Changed	N/A	N/A	☐ In-Serv 1/24. 550/d. Expansi	☐ In-Serv 11/23. 550/d. Expan	
	Project	Prince Rupert					Description	Changed	N/A	N/A	☐	☐ Cancelled - deliver natural ga	
	Project	Prince Rupert					URL 1	Changed	N/A	N/A	☐ https://lngprime.com/ameri	☐ https://www.transcanada.com	

All Infrastructure Compare

Database Scenario Builders Data Inputs Execute Reports Windows Help														
View Form Datasheet Import Export from Excel to Excel Copy Paste Refresh All Ascending Descending Filter By Selection Filter By Form Toggle Filter Visual Basic														
DB1: C:\RBAC\GPN214Q1\Datasheet\21Q1base.acdb														
DB2: C:\RBAC\GPN213Q4\Datasheet\21Q4base.acdb														
Compare Clear Checks Update Excel Close														
Exclude FDQ, ZDQ, etc. #1														
Table Name	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1	Value in Db 2	Show only Differences Larger Than:		
								21Q1base	21Q4base	(db1 click to select all)	(db2 click to select all)			
Demand_Link	LNG Delta Header	LNG Delta Export	LNGEXP-GLF	L.A Delta LNG Export	1/1/2024	Max Flow	Changed	21Q1base	21Q4base	1150	1150			130.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Indiana Misc Int Gas M	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Illinois Northern: Mid	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Peoples Energy Co	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Vestron Corp: S DI	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Indiana Misc LDC Gas I	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Illinois Misc LDC Gas I	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Kennecott Misc LDC Gas	Kennecott	1/1/2011	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN Starfield	Cascade Natural Gas Co	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN S line	Avista Corp	Washington Eastern	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN S line	Avista Corp	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc Int	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Black Hills Energy	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	NorthWestern Energy, I	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Encana Dakota Units	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc LDC	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Louisiana Energy Gates	L.A. Energy Gateway	Louisiana Southern: M	Louisiana Southern	7/1/2023	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Louisiana Energy Gates	L.A. Energy Gateway	Louisiana Western: M	Louisiana Western	7/1/2023	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	LNG Cedar Header	LNG Cedar Export	LNGEXP-P&C	BC Cedar LNG Export	7/1/2023	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	LNG Commencement Bay	LNG Commencement Bay	LNGEXP-GLF	L.A Commencement Bay	3/1/2027	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	SWT IntraProvince	SWT IntraProvince	SWT LDC Sales	NorthWest Territories	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	LNG Texas Header	LNG Texas Export	LNGEXP-GLF	TX Texas LNG Export	7/1/2027	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Indiana Misc Int Gas M	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Illinois Northern: Mid	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Peoples Energy Co	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Peoples Energy Co	Illinois Northern	1/1/2000	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Vestron Corp: S DI	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Indiana Misc LDC Gas I	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Illinois Misc LDC Gas I	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Indiana	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Indiana	1/1/2006	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Illinois Northern	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Illinois Northern	1/1/2006	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Kennecott Misc LDC Gas	Kennecott	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Kennecott	1/1/2001	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Midwestern Gas Trainers	Midwest North	Clean Energy and Other	Kennecott	1/1/2006	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN Starfield	Cascade Natural Gas Co	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN S line	Avista Corp	Washington Eastern	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Gas Transmission NW 0	GTN S line	Avista Corp	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc Int	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Black Hills Energy	South Dakota	1/1/1991	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	NorthWestern Energy, I	South Dakota	1/1/1991	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Encana Dakota Units	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc LDC	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	21Q1base	21Q4base	0	0			0.00
Total Differences:													5,168/31,131	
Records: 1 of 28310 Filtered Search														

When working in the database compare don't get too nervous about the number of records.

There are ways to narrow those records down to what you want.

- Filtering
- Checking “Exclude FDQ,ZDQ,etc.” box

“Exclude FDQ,ZDQ,etc.” box

Database Scenario Builders Data Inputs Execute Reports Windows Help

View Form Datasheet View Import from Excel to Excel Refresh All Filter By Selection Filter By Form Toggle Filter Visual Basic

DB1: C:\RBAC\GPC\124Q\Database\124QData.mdb
DB2: C:\RBAC\GPC\124Q\Database\124QData.mdb

Exclude FDQ, ZDQ, etc. ☒ 

TableName	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1 (dbl-click to select all)	Case in Db 2 (dbl-click to select all)	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)	Show only Differences Larger Than:
Demand_Link	LNG Delta Header	LNG Delta Export	LNGEXP-GLF	L.A. Delta LNG Exports	1/1/2024	Max_Flow	Changed	24Qbase	24Qbase	1130	1110	130.00
Demand_Link	Midwestern Gas Trunks	MPW North	Indiana Misc Int Gas M	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Illinois Northern Misc	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Peoples Energy Co.	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Vectren Corp. S IN	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Indiana Misc LDC Gas I	Indiana	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Illinois Misc LDC Gas S	Illinois Northern	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW South	Kentucky Misc LDC Co	Kentucky	1/1/2011	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW Blandfield	Cascade Natural Gas Co	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW S line	Avista Corp	Washington Eastern	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW S line	Avista Corp	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc Int	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Black Hills Energy	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	NorthWestern Energy, I	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Montana Dakota Unifit	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc LDC	South Dakota	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Louisiana Energy Gates	L.A. Energy Gateway	Louisiana Southern M	Louisiana Southern	7/1/2023	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Louisiana Energy Gates	L.A. Energy Gateway	Louisiana Western M	Louisiana Western	7/1/2023	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	LNG Cedar Header	LNG Cedar Export	LNGEXP-PAC	BC Cedar LNG Exports	7/1/2023	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	LNG Compressorvalv 2b	LNGEXP-GLF	L.A. Compressorvalv 2b	L.A. Compressorvalv 2b	3/1/2027	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	SWT IntraProvince	SWT IntraProvince	SWT LDC Sales	NorthWest Territories	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	LNG Texas Header	LNG Texas Export	LNGEXP-GLF	TX Texas LNG Exports	7/1/2027	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Indiana Misc Int Gas M	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Illinois Northern Misc	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Peoples Energy Co.	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Peoples Energy Co.	Illinois Northern	1/1/2000	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Vectren Corp. S IN	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Indiana Misc LDC Gas I	Indiana	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Illinois Misc LDC Gas S	Illinois Northern	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Clean Energy and Other	Indiana	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Clean Energy and Other	Indiana	1/1/2004	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Clean Energy and Other	Illinois Northern	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW North	Clean Energy and Other	Illinois Northern	1/1/2004	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW South	Kentucky Misc LDC Co	Kentucky	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW South	Clean Energy and Other	Kentucky	1/1/2001	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Midwestern Gas Trunks	MPW South	Clean Energy and Other	Kentucky	1/1/2004	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW Blandfield	Cascade Natural Gas Co	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW S line	Avista Corp	Washington Eastern	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Gas Transmission NW	GTW S line	Avista Corp	Oregon	1/1/2024	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc Int	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Black Hills Energy	South Dakota	1/1/1991	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	NorthWestern Energy, I	South Dakota	1/1/1991	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	Montana Dakota Unifit	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00
Demand_Link	Williston Basin Interests	Williston Basin Interests	South Dakota Misc LDC	South Dakota	1/1/1981	Demand_Link	In Db1 but not in Db2	24Qbase	24Qbase	0	0	0.00

Records: 1 of 25120 Filtered Search

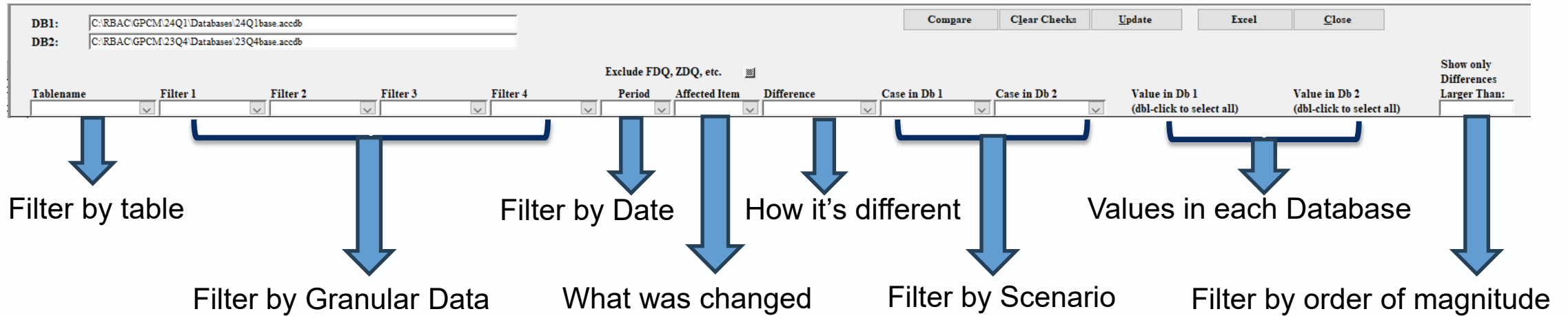
Total Difference: 9,169,781.32

Checking the “Exclude FDQ,ZDQ,etc.” box will remove the records where the FDQ,ZDQ,NDQ were changed between databases.

When truing up databases they may not be important to you because they don’t change a whole lot.

They usually change when calibrating the database with additional history.

Filtering



Importing Data

DB1:

C:\RBAC\GPCM\24Q1\Databases\24Q1base.accdB

DB2:

C:\RBAC\GPCM\23Q4\Databases\23Q4base.accdB

Compare

Clear Checks

Update

Excel

Close

Exclude FDQ, ZDQ, etc.

Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)	Show only Differences Larger Than:
							Changed					
Location	Alberta (North)					Other	Changed	N/A	N/A	Western Canada	Null	
Location	Alberta (South)					Other	Changed	N/A	N/A	Western Canada	Null	
Project	GTN Xpress					Description	Changed	N/A	N/A	In-serv 1/2024, 150/d addir	In-serv 1/2024, 150/d adding	
Project	LA Energy Gateway (LE					Description	Changed	N/A	N/A	In-Serv 7/2025, 1.8 Bcf/d. L	In-Serv 1/2025, 1.8 Bcf/d. L	
Project	LNG Cedar Header					Description	Changed	N/A	N/A	377/d. In Serv 7/28. ***Feec	377/d. In Serv 7/27. ***Feec	
Project	LNG Ksi Lisims Header					Description	Changed	N/A	N/A	In-Serv 6/2028, 1,580/d. ***	In-Serv 6/2028, 1,580/d. ***	
Project	Mountain Valley					Description	Changed	N/A	N/A	In-service Oct 2024, 2bcf/d,	In-service Jul 2023, 2bcf/d, 1	
Project	Permian Highway Exp					Description	Changed	N/A	N/A	In-Serv 1/24. 550/d. Expansi	In-Serv 11/23. 550/d. Expan	
Project	Prince Rupert					Description	Changed	N/A	N/A		Cancelled - deliver natural ga	
Project	Prince Rupert					URL1	Changed	N/A	N/A	https://lngprime.com/ameri	https://www.transcanada.com	

Use <> to update the database you want to change with the other database Value
 < will check the Db1 checkbox to be updated with DB2 values
 > will check the Db2 checkbox to be updated with DB1 Values
OR
 Use checkboxes to select which database to overstore
OR
 Double click the column header to check all boxes for the database of the filtered records

Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)
☐ Western Canada	☐ Null
☐ Western Canada	☐ Null
☐ In-serv 11/2024, 150/d addir	☐ In-serv 1/2024, 150/d adding
☐ In-Serv 7/2025, 1.8 Bcf/d. L	☐ In-Serv 1/2025, 1.8 Bcf/d. L
☐ 377/d. In Serv 7/28. ***Feec	☐ 377/d. In Serv 7/27. ***Feec
☐ In-Serv 6/2028, 1,580/d. ***	☐ In-Serv 6/2028, 1,580/d. ***
☐ In-service Oct 2024, 2bcf/d,	☐ In-service Jul 2023, 2bcf/d, 1
☐ In-Serv 1/24. 550/d. Expansi	☐ In-Serv 11/23. 550/d. Expan
☐	☐ Cancelled - deliver natural ga
☐ https://lngprime.com/ameri	☐ https://www.transcanada.com

Importing Data

Once you have the databases you want to update checked, Click **Update**



DB1:	C:\RBAC\GPCM\24Q1\Databases\24Q1base.acedb										Compare	Clear Checks	Update	Excel	Close
DB2:	C:\RBAC\GPCM\23Q4\Databases\23Q4base.acedb														
Exclude FDQ, ZDQ, etc. 															Show only Differences Larger Than:
Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)				
															
Location	Alberta (North)					Other	Changed	N/A	N/A	☒ Western Canada	  Null				
Location	Alberta (South)					Other	Changed	N/A	N/A	☒ Western Canada	  Null				
Project	GTN Xpress					Description	Changed	N/A	N/A	☐ In-serv 11/2024, 150/d addr	  In-serv 1/2024, 150/d adding				
Project	LA Energy Gateway (LE					Description	Changed	N/A	N/A	☐ In-Serv 7/2025, 1.8 Bcf/d. L	  In-Serv 1/2025, 1.8 Bcf/d. L				
Project	LNG Cedar Header					Description	Changed	N/A	N/A	☐ 377/d. In Serv 7/28. ***Feec	  377/d. In Serv 7/27. ***Feec				
Project	LNG Ksi Lisims Header					Description	Changed	N/A	N/A	☐ In-Serv 6/2028, 1,580/d. ***	  In-Serv 6/2028, 1,580/d. ***				
Project	Mountain Valley					Description	Changed	N/A	N/A	☐ In-service Oct 2024, 2bcf/d,	  In-service Jul 2023, 2bcf/d, 1				
Project	Permian Highway Exp					Description	Changed	N/A	N/A	☐ In-Serv 1/24. 550/d. Expansi	  In-Serv 11/23. 550/d. Expan				
Project	Prince Rupert					Description	Changed	N/A	N/A	☐	  Cancelled - deliver natural ga				
Project	Prince Rupert					URL 1	Changed	N/A	N/A	☐ https://lngprime.com/ameri	  https://www.transcanada.com				

Reminder: The database that is checked will be overstored with the other database's Value.

Example: Western Canada is checked and will be overstored with Null when you click update

Database Compare with Supply/Demand

- In the top ribbon go to the database menu
- Select Compare databases

The screenshot displays the 'Gas & LNG Simulator for North American Gas & LNG™' software interface. The top ribbon includes tabs for Database, Scenario, Builders, Data, Inputs, Execute, Reports, Windows, and Help. The 'Database' menu is open, showing options such as 'Link to a Recent User Database', 'Link to another User Database', 'Show Tables', 'Hide Tables', 'Compare Databases' (highlighted), 'Check the entire Database for errors', 'Look for Constraints', 'Compact and Repair the linked Database', 'Open the linked DB file location', 'Split the Linked Database (save as new file)', 'Make a Copy of the Linked Database', 'Rename the Linked Database', 'Zip the Linked Database', 'Check My Database Version', and 'Exit GPCM'. The main window shows the 'Execution Parameters' and 'Execution Summary' sections. The 'Execution Parameters' section includes fields for 'Scenario Start' (Jan-2015), 'Scenario Finish' (Dec-2050), 'Discount Rate' (0.0700), 'Continuation?' (unchecked), 'Based on:' (dropdown), 'Continued From:' (dropdown), and 'Autoexpand?' (checked). The 'Execution Summary' section shows 'Start Time' (4/26/2024 1:45 pm), 'Run Time' (2081), '# of Variables' (6,069,760), and '# of Equations' (2,834,383). The 'Real \$ Year for linked DB is 2023' is also displayed. The bottom of the window shows a 'Description' area and a copyright notice: 'GPCM is a trademark owned by RT7K, LLC, and is used with its permission.'

Demand Database Compare

GPCM® Market Simulator for North American Gas & LNG™Developer Mode

Version 12.3.3.20

Exit

Scenario 24Q1base Linked Database C:\RBAC\GPCM\24Q1\Databases\24Q1base.accdb Split? ☐ Size(MB) 1,839

Scenario Subcases

Supply:

24Q1base

Storage_Available:

24Q1base

Demand:

24Q1base

Storage_Plan:

24Q1base

Pipeline_Available:

24Q1base

Storage_Data:

24Q1base

AutoExpand_Data:

24Q1base

Storage_Link:

24Q1base

Pipeline_Zone:

24Q1base

Balancing Case:

24Q1base

Pipeline_Link:

24Q1base

CO2 Case:

24Q1base

Supply_Link:

24Q1base

Crossborder Case:

24Q1base

Demand_Link:

24Q1base

Interconnect_Link:

24Q1base

Note: Entries in red have been modified since this scenario was last run.

Execution Parameters

Scenario Start:

Jan-2015

Scenario Finish:

Dec-2050

Discount Rate:

0.0700

Continuation?

☐

Based on:

Continued From:

Autoexpand?

☒

Note: Auto-Expansion settings are now defined at the pipeline zone level using the AutoExpand Data table.

Execution Summary

Start Time:

4/26/2024 1:45 pm

Run Time:

2081

of Variables:

6,069,760

of Equations:

2,834,383

Real \$ Year for linked DB is 2023

Description

GPCM is a trademark owned by RT7K, LLC, and is used with its permission.

GPCM - Comparison Input

Database Compare

To compare databases, first select which table or group of tables you wish to compare. For example, All Infrastructure will compare the infrastructure cases of the two databases: Pipeline Zones, Links, etc. Individual tables, such as Demand, Supply, and Storage_Plan can also be compared.

Note: you can also use wildcards to filter for several tables using the * character. For example *Link* will compare all input tables where the names include the word 'Link'.

Table(s): All Infrastructure

Database 1: All Infrastructure se.accdb

Database 2: AXP_Zone_Data se.accdb

Cancel

Exec

AXP_Zone_Data

Balancing

Basin_Group

Census_Region

CO2_Case

CO2_Market

CO2_Market_Location

CO2_Price

CO2_Start

Country

Cust_Shares

Customer

Customer_Location

Demand

Demand_Link

Demand Database Compare

Database Scenario Builders Data Inputs Execute Reports Windows Help

View

Form View

Datasheet View

Import from Excel to Excel

Export from Excel to Excel

Cut Copy Paste

Can't Undo

Refresh All

Ascending

Descending

Filter By Selection

Filter By Form

Toggle Filter

Visual Basic

DB1: C:\RBAC\GPCM\24Q1\Datasets\24Q1base.accdb

DB2: C:\RBAC\GPCM\23Q4\Datasets\23Q4base.accdb

Compare

Clear Checks

Update

Excel

Close

Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Exclude FDQ, ZDQ, etc.	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)	Show only Differences Larger Than:
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	3/1/2015	Demand	Changed	24Q1base	23Q4base	289.2022	298.2617	9.06	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	3/1/2015	Demand2	Changed	24Q1base	23Q4base	486.8518	502.1029	15.25	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	4/1/2015	Demand2	Changed	24Q1base	23Q4base	462.4305	462.4306	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	4/1/2015	Elasticity	Changed	24Q1base	23Q4base	0.1999998	0.1999998	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	6/1/2015	Demand	Changed	24Q1base	23Q4base	333.3396	333.3397	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	6/1/2015	Demand2	Changed	24Q1base	23Q4base	372.4344	372.4346	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2015	Demand	Changed	24Q1base	23Q4base	425.1309	435.8437	10.71	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2015	Demand2	Changed	24Q1base	23Q4base	684.4411	701.6881	17.25	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2015	Elasticity	Changed	24Q1base	23Q4base	0.2000001	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	9/1/2015	Demand	Changed	24Q1base	23Q4base	365.94	363.9398	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	9/1/2015	Demand2	Changed	24Q1base	23Q4base	389.1463	389.1461	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/3/2015	Demand	Changed	24Q1base	23Q4base	245.6988	245.6989	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/3/2015	Demand2	Changed	24Q1base	23Q4base	413.617	413.6171	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	6/1/2016	Demand	Changed	24Q1base	23Q4base	315.5226	324.6215	9.10	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	6/1/2016	Demand2	Changed	24Q1base	23Q4base	507.9768	522.6254	14.65	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	6/1/2016	Elasticity	Changed	24Q1base	23Q4base	0.2	0.1999998	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2016	Demand	Changed	24Q1base	23Q4base	353.5974	353.5975	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2016	Demand2	Changed	24Q1base	23Q4base	569.2753	569.2755	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2016	Elasticity	Changed	24Q1base	23Q4base	0.1999998	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	9/1/2016	Demand	Changed	24Q1base	23Q4base	306.02	317.2976	11.28	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	9/1/2016	Demand2	Changed	24Q1base	23Q4base	492.678	510.8345	18.16	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	9/1/2016	Elasticity	Changed	24Q1base	23Q4base	0.2000001	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/1/2016	Demand	Changed	24Q1base	23Q4base	187.7424	194.7188	6.98	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/3/2016	Demand2	Changed	24Q1base	23Q4base	316.0513	327.7956	11.74	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	4/1/2017	Demand	Changed	24Q1base	23Q4base	133.0097	138.9158	5.91	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	4/1/2017	Demand2	Changed	24Q1base	23Q4base	249.5585	255.847	6.29	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	5/1/2017	Demand	Changed	24Q1base	23Q4base	175.9555	180.3894	4.43	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	5/1/2017	Demand2	Changed	24Q1base	23Q4base	283.2803	290.4186	7.14	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	5/1/2017	Elasticity	Changed	24Q1base	23Q4base	0.2000001	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2017	Demand	Changed	24Q1base	23Q4base	284.8183	293.0317	8.21	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	7/1/2017	Demand2	Changed	24Q1base	23Q4base	458.5442	471.7674	13.22	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	8/1/2017	Demand	Changed	24Q1base	23Q4base	260.0723	267.5721	7.50	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	8/1/2017	Demand2	Changed	24Q1base	23Q4base	418.7041	430.7784	12.07	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	10/1/2017	Demand	Changed	24Q1base	23Q4base	166.1174	170.3034	4.19	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	10/1/2017	Demand2	Changed	24Q1base	23Q4base	267.4412	274.1804	6.74	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	10/1/2017	Elasticity	Changed	24Q1base	23Q4base	0.1999998	0.1999998	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/3/2017	Demand	Changed	24Q1base	23Q4base	130.1088	134.9436	4.83	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	11/3/2017	Demand2	Changed	24Q1base	23Q4base	219.0292	227.1682	8.14	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	1/1/2018	Demand2	Changed	24Q1base	23Q4base	333.7961	333.7962	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	1/1/2018	Elasticity	Changed	24Q1base	23Q4base	0.1999999	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	2/1/2018	Demand	Changed	24Q1base	23Q4base	163.597	171.7306	8.13	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	2/1/2018	Demand2	Changed	24Q1base	23Q4base	285.632	299.8328	14.20	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	3/1/2018	Elasticity	Changed	24Q1base	23Q4base	0.2000001	0.2	0.00	
Demand	AEP Texas Central Cen	Texas South (ERCOT)	ELC	0	4/1/2018	Elasticity	Changed	24Q1base	23Q4base	0.1999998	0.2	0.00	
Total Difference:												804,400.86	

Record: 1 of 1689027 | No Filter | Search

Compare Demand

Filter by specific demand data

Check a box if you want to update with the other database's demand value

DB1: CORBAC\GPCM\24Q1 Databases\24Q1base.accdb
DB2: CORBAC\GPCM\23Q4 Databases\23Q4base.accdb

Compare Clear Checks Update Excel Close

Exclude FDQ, ZDQ, etc.

Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)	Show only Differences Larger Than:
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	3/1/2015	Demand	Changed	24Q1base	23Q4base	289.2022	298.2617	9.06
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	3/1/2015	Demand2	Changed	24Q1base	23Q4base	486.8518	502.1029	15.25
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	4/1/2015	Demand2	Changed	24Q1base	23Q4base	462.4305	462.4306	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	4/1/2015	Elasticity	Changed	24Q1base	23Q4base	0.1999998	0.1999999	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	6/1/2015	Demand	Changed	24Q1base	23Q4base	355.5596	355.5597	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	6/1/2015	Demand2	Changed	24Q1base	23Q4base	572.4344	572.4346	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	7/1/2015	Demand	Changed	24Q1base	23Q4base	425.1309	435.8437	10.71
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	7/1/2015	Demand2	Changed	24Q1base	23Q4base	684.4411	701.6881	17.25
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	7/1/2015	Elasticity	Changed	24Q1base	23Q4base	0.2000001	0.2	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	9/1/2015	Demand	Changed	24Q1base	23Q4base	365.94	365.9398	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	9/1/2015	Demand2	Changed	24Q1base	23Q4base	589.1463	589.1461	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	11/1/2015	Demand	Changed	24Q1base	23Q4base	245.6988	245.6989	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	11/1/2015	Demand2	Changed	24Q1base	23Q4base	413.617	413.6171	0.00
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	6/1/2016	Demand	Changed	24Q1base	23Q4base	315.5226	324.6215	9.10
Demand	AEP Texas Central Con	Texas South (ERCOT)	ELC	0	6/1/2016	Demand2	Changed	24Q1base	23Q4base	507.9768	522.6254	14.65

Supply Database Compare

Database Scenario Builders Data_Inputs Execute Reports Windows Help

View Form View Import from Excel Export to Excel Cut Copy Paste Can't Undo Refresh All Ascending Descending Filter By Selection Filter By Form Toggle Filter Visual Basic

GPCM® Market Simulator for North American Gas & LNG™ *Developer Mode*
Version 12.3.3.20 Exit

Scenario: 24Q1base Linked Database: C:\RBAC\GPCM\24Q1\Databases\24Q1base.acddb Split? ☐ Size(MB): 1,839

Scenario Subcases
Supply: 24Q1base Storage_Available: 24Q1base
Demand: 24Q1base Storage_Plan: 24Q1base
Pipeline_Available: 24Q1base Storage_Data: 24Q1base
AutoExpand_Data: 24Q1base Storage_Link: 24Q1base
Pipeline_Zone: 24Q1base Balancing Case: 24Q1base
Pipeline_Link: 24Q1base CO2 Case: 24Q1base
Supply_Link: 24Q1base Crossborder Case: 24Q1base
Demand_Link: 24Q1base
Interconnect_Link: 24Q1base
Note: Entries in red have been modified since this scenario was last run.

Execution Parameters
Scenario Start: Jan-2015
Scenario Finish: Dec-2050
Discount Rate: 0.0700
Continuation? ☐
Based on:
Continued From:
Autoexpand? ☒
Note: Auto-Expansion settings are now defined at the pipeline zone level using the AutoExpand Data table.

Execution Summary
Start Time: 4/26/2024 1:45 pm
Run Time: 2081
of Variables: 6,069,760
of Equations: 2,834,383

Real \$ Year for linked DB is 2023

Description

GPCM is a trademark owned by RT7K, LLC, and is used with its permission.

GPCM - Comparison Input

Database Compare
To compare databases, first select which table or group of tables you wish to compare. For example, All Infrastructure will compare the infrastructure cases of the two databases: Pipeline Zones, Links, etc. Individual tables, such as Demand, Supply, and Storage_Plan can also be compared.
Note: you can also use wildcards to filter for several tables using the * character. For example "Link*" will compare all input tables where the names include the word "Link".

Table(s): All Infrastructure
Database 1: Pipe_State_Link_Capacity
Price_Spike_Zones
Project
State
State_adj_state
Storage
Storage_Available
Storage_Data
Storage_Link
Storage_Plan
Storage_Status
Supplier
Supplier_Location
Supply
Supply_Factors
Supply_Link
Database 2: se.acddb
se.acddb
Cancel Exec

Supply Database Compare

DB1: C:\RBAC\GPCM\24Q1\Databases\24Q1base.accd6				Compare		Clear Checks		Update		Excel		Close		
DB2: C:\RBAC\GPCM\23Q4\Databases\23Q4base.accd6														
Exclude FDQ, ZDQ, etc. 														Show only Differences Larger Than:
Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)		Value in Db 2 (dbl-click to select all)		
Supply	Antrim Shale	MI	1		1/1/2011	Supply2	Changed	24Q1base	23Q4base	333.7383	< >	333.7384	< >	
Supply	Antrim Shale	MI	1		9/1/2011	Supply2	Changed	24Q1base	23Q4base	327.7848	< >	327.7847	< >	
Supply	Antrim Shale	MI	0		2/1/2012	Supply	Changed	24Q1base	23Q4base	285.7577	< >	285.7576	< >	
Supply	Antrim Shale	MI	0		2/1/2012	Elasticity	Changed	24Q1base	23Q4base	4.999892E-02	< >	4.999899E-02	< >	
Supply	Antrim Shale	MI	0		11/1/2013	Supply	Changed	24Q1base	23Q4base	252.2614	< >	252.2613	< >	
Supply	Antrim Shale	MI	0		10/1/2016	Supply	Changed	24Q1base	23Q4base	221.0445	< >	215.5892	< >	
Supply	Antrim Shale	MI	0		10/1/2016	Supply2	Changed	24Q1base	23Q4base	236.9096	< >	231.0628	< >	
Supply	Antrim Shale	MI	0		10/1/2016	Elasticity	Changed	24Q1base	23Q4base	4.999997E-02	< >	4.999989E-02	< >	
Supply	Antrim Shale	MI	1		10/1/2016	Supply	Changed	24Q1base	23Q4base	236.9096	< >	231.0628	< >	
Supply	Antrim Shale	MI	1		10/1/2016	Supply2	Changed	24Q1base	23Q4base	246.7132	< >	240.6244	< >	
Supply	Antrim Shale	MI	1		10/1/2016	Elasticity	Changed	24Q1base	23Q4base	4.999986E-02	< >	0.05	< >	
Supply	Antrim Shale	MI	0		5/1/2017	Supply	Changed	24Q1base	23Q4base	208.7514	< >	203.5995	< >	
Supply	Antrim Shale	MI	0		5/1/2017	Supply2	Changed	24Q1base	23Q4base	223.7343	< >	218.2126	< >	
Supply	Antrim Shale	MI	1		5/1/2017	Supply	Changed	24Q1base	23Q4base	223.7343	< >	218.2126	< >	
Supply	Antrim Shale	MI	1		5/1/2017	Supply2	Changed	24Q1base	23Q4base	232.9926	< >	227.2424	< >	
Supply	Antrim Shale	MI	0		5/1/2018	Supply	Changed	24Q1base	23Q4base	197.8201	< >	192.9703	< >	
Supply	Antrim Shale	MI	0		5/1/2018	Supply2	Changed	24Q1base	23Q4base	212.0184	< >	206.8204	< >	
Supply	Antrim Shale	MI	1		5/1/2018	Supply	Changed	24Q1base	23Q4base	212.0184	< >	206.8204	< >	
Supply	Antrim Shale	MI	1		5/1/2018	Supply2	Changed	24Q1base	23Q4base	220.7919	< >	215.3789	< >	
Supply	Antrim Shale	MI	0		6/1/2018	Supply	Changed	24Q1base	23Q4base	200.3199	< >	195.4029	< >	
Supply	Antrim Shale	MI	0		6/1/2018	Supply2	Changed	24Q1base	23Q4base	214.6975	< >	209.4276	< >	
Supply	Antrim Shale	MI	0		6/1/2018	Elasticity	Changed	24Q1base	23Q4base	4.999989E-02	< >	4.999997E-02	< >	
Supply	Antrim Shale	MI	1		6/1/2018	Supply	Changed	24Q1base	23Q4base	214.6975	< >	209.4276	< >	
Supply	Antrim Shale	MI	1		6/1/2018	Supply2	Changed	24Q1base	23Q4base	223.5819	< >	218.0939	< >	
Supply	Antrim Shale	MI	0		7/1/2018	Supply	Changed	24Q1base	23Q4base	199.9272	< >	195.0199	< >	
Supply	Antrim Shale	MI	0		7/1/2018	Supply2	Changed	24Q1base	23Q4base	214.2767	< >	209.0171	< >	
Supply	Antrim Shale	MI	0		7/1/2018	Elasticity	Changed	24Q1base	23Q4base	4.999997E-02	< >	5.000005E-02	< >	
Supply	Antrim Shale	MI	1		7/1/2018	Supply	Changed	24Q1base	23Q4base	214.2767	< >	209.0171	< >	
Supply	Antrim Shale	MI	1		7/1/2018	Supply2	Changed	24Q1base	23Q4base	223.1437	< >	217.6664	< >	
Supply	Antrim Shale	MI	1		7/1/2018	Elasticity	Changed	24Q1base	23Q4base	5.000001E-02	< >	4.999987E-02	< >	
Supply	Antrim Shale	MI	1		11/1/2018	Supply2	Changed	24Q1base	23Q4base	213.4003	< >	213.4004	< >	
Supply	Antrim Shale	MI	0		12/1/2018	Supply	Changed	24Q1base	23Q4base	188.5009	< >	188.5008	< >	
Supply	Antrim Shale	MI	1		1/1/2019	Supply2	Changed	24Q1base	23Q4base	201.8533	< >	201.8532	< >	
Supply	Antrim Shale	MI	1		10/1/2019	Supply2	Changed	24Q1base	23Q4base	203.0272	< >	203.0273	< >	
Supply	Antrim Shale	MI	0		3/1/2021	Supply	Changed	24Q1base	23Q4base	164.3691	< >	164.369	< >	
Supply	Antrim Shale	MI	0		5/1/2023	Supply	Changed	24Q1base	23Q4base	165.0368	< >	165.0369	< >	
Supply	Antrim Shale	MI	1		11/1/2023	Supply2	Changed	24Q1base	23Q4base	190.2304	< >	190.2303	< >	
Supply	Antrim Shale	MI	0		1/1/2024	Supply	Changed	24Q1base	23Q4base	147.398	< >	143.293	< >	
Supply	Antrim Shale	MI	0		1/1/2024	Supply2	Changed	24Q1base	23Q4base	165.9384	< >	161.3171	< >	
Supply	Antrim Shale	MI	1		1/1/2024	Supply	Changed	24Q1base	23Q4base	165.9384	< >	161.3171	< >	
Supply	Antrim Shale	MI	1		1/1/2024	Supply2	Changed	24Q1base	23Q4base	182.3049	< >	177.2278	< >	
Supply	Antrim Shale	MI	1		1/1/2024	Elasticity	Changed	24Q1base	23Q4base	8.562054E-02	< >	8.562063E-02	< >	
Supply	Antrim Shale	MI	0		2/1/2024	Supply	Changed	24Q1base	23Q4base	154.2379	< >	145.7987	< >	
Supply	Antrim Shale	MI	0		2/1/2024	Supply2	Changed	24Q1base	23Q4base	173.9436	< >	164.4263	< >	
Total Difference:													1,839,259.77	

Compare Supply

Filter by specific supply data

Check a box if you want to update with the other database's supply value

DB1: C:\RBAC\GPCM\24Q1\Databases\24Q1base.acddb
DB2: C:\RBAC\GPCM\23Q4\Databases\23Q4base.acddb

Compare Clear Checks Update Excel Close

Exclude FDQ, ZDQ, etc.

Tablename	Filter 1	Filter 2	Filter 3	Filter 4	Period	Affected Item	Difference	Case in Db 1	Case in Db 2	Value in Db 1 (dbl-click to select all)	Value in Db 2 (dbl-click to select all)	Show only Differences Larger Than:
Supply	Antrim Shale	MI	1		1/1/2011	Supply2	Changed	24Q1base	23Q4base	333.7383	< > 333.7384	0.00
Supply	Antrim Shale	MI	1		9/1/2011	Supply2	Changed	24Q1base	23Q4base	327.7848	< > 327.7847	0.00
Supply	Antrim Shale	MI	0		2/1/2012	Supply	Changed	24Q1base	23Q4base	285.7577	< > 285.7576	0.00
Supply	Antrim Shale	MI	0		2/1/2012	Elasticity	Changed	24Q1base	23Q4base	4.999892E-02	< > 4.999899E-02	0.00
Supply	Antrim Shale	MI	0		11/1/2013	Supply	Changed	24Q1base	23Q4base	252.2614	< > 252.2613	0.00
Supply	Antrim Shale	MI	0		10/1/2016	Supply	Changed	24Q1base	23Q4base	221.0445	< > 215.5892	-5.46
Supply	Antrim Shale	MI	0		10/1/2016	Supply2	Changed	24Q1base	23Q4base	236.9096	< > 231.0628	-5.85
Supply	Antrim Shale	MI	0		10/1/2016	Elasticity	Changed	24Q1base	23Q4base	4.999997E-02	< > 4.999989E-02	0.00
Supply	Antrim Shale	MI	1		10/1/2016	Supply	Changed	24Q1base	23Q4base	236.9096	< > 231.0628	-5.85
Supply	Antrim Shale	MI	1		10/1/2016	Supply2	Changed	24Q1base	23Q4base	246.7132	< > 240.6244	-6.09
Supply	Antrim Shale	MI	1		10/1/2016	Elasticity	Changed	24Q1base	23Q4base	4.999986E-02	< > 0.05	0.00
Supply	Antrim Shale	MI	0		5/1/2017	Supply	Changed	24Q1base	23Q4base	208.7514	< > 203.5995	-5.15
Supply	Antrim Shale	MI	0		5/1/2017	Supply2	Changed	24Q1base	23Q4base	223.7343	< > 218.2126	-5.52

Using Database Compare



Questions?



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RBAC leads the market in global and regional gas and LNG market simulation and predictive analytics in support of corporate investment and M&A strategy, ESG, risk analysis, planning, and commodity trading. Our products and expertise help companies go beyond the narratives and hype to identify the opportunities and define the risks inherent in the uncertainties of energy transition using reality and fact-based fundamentals and analysis.

We continuously enhance our market simulation systems with the latest software and computer technology while applying the best of mathematical economics to assist our clients achieve their goals. This is especially needed as we see fundamental shifts taking place in the energy industry to achieve energy transition goals and meet increasingly demanding requirements of ESG. We provide regularly scheduled updates of our simulation systems and databases to keep our clients up-to-date with the most current market information. We enhance the functionality of our systems to enable our customers to simulate the effect of new regulations or industry requirements.

Our aim is to continue to lead the market in best practices which raise the standard of market simulation, enabling rapid and flexible scenario generation, sensitivity analysis, risk-assessment and forecasting, giving clients the edge in the rapidly changing energy market.

Those using RBAC's products and services include energy industry firms and consultants, as well as government agencies involved with energy, transportation, and the environment.

RBAC's principal products include:

- **GPCM® Market Simulator for North American Gas and LNG™** focused on the North American gas & LNG markets. GPCM is the industry standard market simulator for North American gas.
- **G2M2® Market Simulator for Global Gas and LNG™** for simulating increasingly integrated gas and LNG markets worldwide.
- **Gas4Power®** for integrating gas and power market fundamentals to produce credible forecasts for both.
- **NGL-NA®** Market Simulator for North American Natural Gas Liquids

With RBAC's advanced simulation systems, licensees can create and run scenarios involving bio-methane (Renewable Natural Gas – RNG) mixed with natural gas and to assess the implications of carbon taxes and markets on supply, demand, and prices. Future enhancements will include the ability to simulate the advent of a future hydrogen market with both pure hydrogen pipelines as well as mixtures with methane. The Energy Analyst of today and the future needs these kinds of tools to conduct realistic assessments and help develop realistic strategies and plans to achieve the goals of the energy transition.

Dr. Robert Brooks founded RBAC in 1987 based on experience developing several well-respected predictive models for government and industry. He designed the first gas transportation model while getting his PhD at MIT and has led the industry ever since.

RBAC's staff includes industry-trained experts in natural gas supply and demand, transportation, storage, marketing, and trading. Our team applies its world-class expertise in mathematical modeling, statistical analysis, mathematical algorithm development, software engineering, and database design to current and future challenges, risks and opportunities in energy.

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