

**Enbridge Gas Compendium for Examination of John Rosenkranz
(North Side Energy, LLC)**

	Item	Location of Full Document
1.	Report on Dawn Parkway System Turnback Risk	Exhibit M-4
2.	Summary of Recent Unsuccessful Pipeline Expansion Projects	Taken from www.gem.wiki (Global Energy Monitor)
3.	Response to SEC Interrogatory #1	Exhibit N.M4.SEC-1

Enbridge Gas application to change its natural gas rates beginning January 1, 2024

Ontario Energy Board Case No. EB-2022-0200

REPORT ON DAWN PARKWAY SYSTEM CAPACITY TURNBACK RISK

Prepared for the Federation of Rental-housing Providers of Ontario

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I. INTRODUCTION AND SUMMARY

Enbridge Gas Inc. (EGI) filed its application for 2024 Rates on October 31, 2022. The EGI application includes evidence on the long-term utilization of the Dawn Parkway System that responds to concerns that in-franchise customers could face higher costs if ex-franchise customers with long term contracts for Dawn Parkway System transportation services turn back capacity when their contracts expire.¹

Concerns about potential capacity turnback were raised during the Union Gas 2016 Dawn Parkway Expansion Project leave to construct proceeding.² The parties in that case did not agree on whether changes in Union's cost allocation or ex-franchise contracting practices were needed to address turnback risks, but did agree that these issues would be taken up at the next cost of service proceeding.³

The Issues List for this proceeding includes capacity turnback risk as Issue 38: "How should Dawn Parkway capacity turnback risk be dealt with?" This report looks at the potential for ex-franchise transportation customers to turn back Dawn Parkway System capacity, and identifies actions that would (a) limit cost shifting from ex-franchise customers to in-franchise services if turnback occurs, and (b) reduce EGI customers' exposure to capacity turnback by making it less likely that the Dawn Parkway System will be overbuilt. The purpose of the report is to expand the information available to the Board by examining the demand for Dawn Parkway System transportation services from the perspective of the New York and New England gas distribution companies (LDCs) that currently hold long-term contracts with EGI.

The report is organized as follows:

Section II describes EGI's ex-franchise contracts for gas transportation service on the Dawn Parkway System, and the changes that have occurred since the start of the last incentive rate-making (IRM) period in 2014. Based on the EGI Index of Customers reports for January 2014 and January 2023, we find that when the pre-amalgamation contracts held by Enbridge Gas Distribution (EGD) are removed, the total amount of Dawn Parkway System capacity under contract to ex-franchise customers in the two years was almost the same. By this measure, ex-franchise transportation contracts amounted to 2.4 PJ/d in 2023, compared to 2.5 PJ/d in 2014.

¹ Exhibit 1, Tab 11.

² OEB Case No. EB-2014-0261.

³ EB-2014-0261 Settlement Agreement, February 27, 2015 ("For the purposes of settlement, while the parties agree that leave to construct should be granted, there is no agreement on how turnback risk should be dealt with in the context of the proposed facilities. The Parties agree that this issue will be dealt with in Union's next cost of gas proceeding.")

Section III looks at how Dawn Parkway System transportation services are used by New York and New England LDCs. We find that while the Dawn Parkway System transportation capacity held by U.S. LDCs increased by just four percent from 2014 to 2023, there were large changes in the transportation paths that the U.S. LDCs used to deliver gas from Dawn to their city gates. All Dawn-to-Kirkwall capacity that was previously held by U.S. LDCs, and some of the Dawn-to-Parkway transportation service that was linked to downstream contracts with TransCanada and Iroquois Gas Transmission System (IGTS), was turned back. By contrast, the Dawn-to-Parkway transportation services for U.S. LDCs that were linked to downstream transportation on the Portland Natural Gas Transmission System (PNGTS) grew from zero in 2014 to 238,606 GJ/d in 2023. A map of the pertinent pipeline paths is provided in Attachment 1.

Section IV reviews EGI's forecast of Dawn Parkway System capacity and requirements. EGI projects a small reduction in ex-franchise transportation contracts from winter 2022-23 to winter 2028-29, but still has plans to expand the Dawn Parkway System to meet projected growth in in-franchise requirements. The Kirkwall-Hamilton expansion project is planned for 2026, and the Dawn-Enniskillen expansion could occur as soon as 2029.

Section V assesses the risk that ex-franchise customer demand for Dawn Parkway System transportation service will decrease, giving particular attention to the contracts held by New York, New England, and Atlantic Canada LDCs. We find that risk of turnback is higher for the New York and New England LDCs that use the IGTS transportation path. These LDCs are likely to have more alternatives to gas purchases at Dawn, tend to make less use of Dawn storage services, and hold a greater share of their Dawn Parkway System capacity under contracts that could expire within the next three years.

Section VI summarizes the findings and recommendations.

II. THE DAWN PARKWAY SYSTEM

The Dawn Parkway System is a 229 km gas transmission system that extends from the Dawn Hub to interconnections with TransCanada PipeLines at Kirkwall and Parkway. EGI uses the Dawn Parkway System to deliver natural gas to in-franchise customers and to provide gas transportation services for ex-franchise customers. For the 2023-24 winter, EGI expects that ex-franchise customer demand of 2,356,771 gigajoules per day (GJ/d) will make up about 30 percent of the total Dawn Parkway System design day demand of 7,891,876 GJ/d.⁴

⁴ Exhibit I.2.7-SEC-150.

Tables 1 and 2 show the Dawn Parkway System transportation capacity under long-term contracts with ex-franchise customers by customer type and transportation path for 2014 and 2023.⁵ Ex-franchise customers in both years include (1) TransCanada, (2) Ontario power generators, (3) LDCs in Ontario and Quebec, and (4) LDCs in New York and New England.

EGI offers west-to-east transportation service to ex-franchise customers on three paths: (1) Dawn-to-Parkway, (2) Dawn-to-Kirkwall, and (3) Kirkwall-to-Parkway. From 2014 to 2023, contracted capacity for Dawn-to-Parkway and Kirkwall-to-Parkway transportation service increased, while all contracts for Dawn-to-Kirkwall capacity that were previously used to transport gas to Niagara-area export points were turned back.⁶

Table 1: Dawn Parkway System Transportation Contracts, January 1, 2014 (GJ/d)

		Dawn-Parkway	Dawn-Kirkwall	Kirkwall-Parkway	Total
		(A)	(B)	(C)	(D)
1	TransCanada	310,798	233,941	263,249	807,988
2	Ontario Power Generators	459,654	49,500	-	509,154
3	Energir (Gaz Metro)	285,000	-	-	285,000
4	Atlantic Canada LDCs	-	-	-	-
5	New York/New England LDCs	520,758	197,041	-	717,799
6	Other ⁷	83,786	38,306	36,751	158,843
7	Ex-Franchise Excluding EGD	1,659,996	518,788	300,000	2,478,784
8	Enbridge Gas Distribution	2,157,173	67,929	-	2,225,102

SOURCE: Exhibit I.1.11-FRPO-13

Table 2: Dawn Parkway System Transportation Contracts, January 1, 2023 (GJ/d)

		Dawn-Parkway	Dawn-Kirkwall	Kirkwall-Parkway	Total
		(A)	(B)	(C)	(D)
1	TransCanada	62,695	-	299,550	362,245
2	Ontario Power Generators	471,429	49,500	-	520,929
3	Energir	579,646	-	-	579,646
4	Atlantic Canada LDCs	19,169	-	-	19,169
5	New York/New England LDCs	747,219	-	-	747,219
6	Other	23,822	-	163,807	187,629

⁵ Long-term contracts are defined as contracts with terms longer than one year.

⁶ The remaining contract for Dawn-to-Kirkwall transportation service is held by Thorold CoGen L.P. for a power generating facility in Ontario.

⁷ Ontario LDCs, natural gas marketers, and industrial end users.

7	Total Ex-Franchise	1,903,980	49,500	463,357	2,416,834
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SOURCE: Exhibit I.1.11-FRPO-13

III. TRANSPORTATION SERVICES FOR NEW YORK AND NEW ENGLAND LDCS

Before the amalgamation of EGD and Union Gas Limited, EGD was the largest ex-franchise shipper on the Dawn Parkway System. Today the largest users of ex-franchise Dawn Parkway System transportation services are the New York and New England LDCs, with 747,219 GJ/d of Dawn-to-Parkway capacity under long-term contracts as of January 1, 2023.

While the total amount of Dawn Parkway System capacity held by New York and New England LDCs is almost the same today as it was in 2014, the downstream delivery and ultimate destination of the gas shipped on the Dawn Parkway System has changed. Table 3 shows the Dawn Parkway System capacity under contract to New York and New England LDCs broken out by delivery path. The “IGTS” path combines Dawn-to-Parkway capacity with TransCanada transportation service from Parkway to the Iroquois export point, and transportation service on IGTS from the Canadian border. The “PNGTS” path combines Dawn-to-Parkway capacity with TransCanada transportation service from Parkway to the East Hereford export point, and downstream transportation on PNGTS.

As shown in Table 3, U.S. LDCs no longer hold contracts for Dawn-to-Kirkwall capacity for export at Niagara or Chippawa, and Dawn Parkway System capacity on the IGTS path has also declined. This has been offset by an increase in Dawn Parkway System capacity held by LDCs shipping on PNGTS, and a smaller increase in Dawn Parkway System capacity held by Vermont Gas and St. Lawrence Gas, which receive gas directly from TransCanada at Phillipsburg and Cornwall.

Table 3: U.S. LDC Contracts for Dawn-to-Parkway Transportation by Delivery Path (GJ/d)

	Path	2014	2023	Difference
		(A)	(B)	(C)
1	Niagara/Chippawa	197,041	-	(197,041)
2	IGTS	489,473	458,816	(30,657)
3	PNGTS	-	238,606	238,606
4	TransCanada Direct	31,285	49,797	18,512
5	Total	717,799	747,219	29,420

SOURCE: Exhibit I.1.11-FRPO-13

The net reduction in Dawn Parkway System capacity tied to the IGTS path is the result of (a) 87,856 GJ/d turned back by the National Grid Downstate New York LDCs, (b) 63,532 GJ/d

under new contracts entered into by Connecticut LDCs, and (c) 6,333/GJ that was shifted from the IGTS path to the PNGTS path for Northern Utilities.

For the PNGTS path, the 238,606 GJ/d increase in Dawn Parkway System transportation services stems primarily from two expansion projects.⁸

1. The Portland XPress (PXP) project, which was backed by long-term contracts for 137,378 dekatherms per day (Dth/d) of firm transportation capacity for New England and Atlantic Canada LDCs.⁹ Service commenced in 2018, 2019, and 2020. Because PNGTS bundled the PXP service with upstream transportation from Dawn, all of the PXP shippers obtained a corresponding amount of Dawn Parkway System capacity under contracts that extend through 2040.
2. The Westbrook XPress (WXP) project added 123,973 Dth/d of firm transportation capacity for New England and Atlantic Canada LDCs, end users, and marketers. Service commenced in 2019, 2021, and 2022.

The PXP and WXP projects provided access to gas supplies that replaced the offshore Nova Scotia gas production and LNG imports that gas consumers in Atlantic Canada and New England had previously relied on. It is also notable that for several of the New England LDCs that participated in the PNGTS PXP expansion, gas transportation service from Dawn was not their first choice. These LDCs had entered into precedent agreements for transportation services tied to the Kinder Morgan Northeast Energy Direct (NED) pipeline project (discussed below), and settled on the PXP project as the next-best alternative when the NED project was cancelled.¹⁰

IV. DAWN PARKWAY SYSTEM DEMAND AND CAPACITY FORECAST

⁸ The amount of Dawn Parkway System capacity shown for the PNGTS path also increased between 2014 and 2023 because a TransCanada contract for 35,872 GJ/d of Dawn to East Hereford transportation service that was held by Northern Utilities was broken into separate contracts for EGI Dawn-to-Parkway service and TransCanada Parkway-to-East Hereford service.

⁹ One dekatherm is approximately equal to one gigajoule (1 Dth = 1.055056 GJ).

¹⁰ For example, in its application in Docket DPU 17-172 requesting Massachusetts Department of Public Utilities approval of contracts for the PXP expansion, Bay State Gas Company (now Eversource Gas) stated: “Unfortunately, the NED project has been terminated and the Company must find an alternative to satisfy the needs the NED capacity would have satisfied. The Proposed Contracts will provide direct access to growing natural gas supplies at the Dawn Hub” (Exhibit CMA/MDA-1, page 13).

EGI engaged ICF Resources (ICF) to assess the future utilization of the Dawn Parkway System.¹¹ The ICF report includes: (a) a review of EGI’s ex-franchise transportation contracts, (b) information on historical gas flows on the Dawn Parkway System and at the Iroquois and East Hereford export points, and (c) demand forecasts for the Ontario, New York and New England gas markets through 2028. ICF concludes that the risk that ex-franchise customers will turn back contracts for Dawn Parkway System transportation services during the next IRM period is small, and that the Dawn Parkway System “likely will remain contracted through 2028 at levels similar to today’s levels.”

ICF gives three reasons for this conclusion:

1. The Dawn Parkway System is highly utilized today, and LDCs’ reliance on the Dawn Parkway System to meet growth in winter and peak day demands is increasing.
2. With sustained demand for natural gas and limited alternative infrastructure options in Eastern Canada and the Northeast U.S., the Dawn Parkway System will remain a reliable way for LDCs and marketers to source natural gas from Dawn storage.
3. ICF expects that most customers will renew their contracts on the Dawn to Parkway system as they have done in the past.

EGI’s forecast of ex-franchise customer demand for Dawn Parkway System transportation services is in line with the ICF conclusion. EGI projects a small decrease in ex-franchise demand for Dawn Parkway System transportation services between 2022-23 and 2025-26, and no change over the remaining years of the forecast (see Table 4, line 4).

Table 4: Dawn Parkway System Design Day Demand vs. Capacity (TJ/d)

		2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29
1	Dawn to Parkway	1,904	1,891	1,883	1,969	1,969	1,969	1,969
2	Dawn to Kirkwall	50	50	50	50	50	50	50
3	Kirkwall to Parkway	422	408	264	264	264	264	264
4	Total Ex-Franchise ¹²	2,376	2,349	2,197	2,283	2,283	2,283	2,283
5	Total Demand	7,948	7,892	7,766	7,992	8,012	8,035	8,062
6	Total Capacity	8,008	7,981	7,873	7,977	8,030	8,029	8,025
7	Surplus/(Shortfall)	60	89	106	(15)	18	(6)	(37)

SOURCE: Exhibit 2, Tab 7, Schedule 1, page 22; Exhibit I.2.7-ED-113; and Exhibit I.2.7-SEC-150

¹¹ ICF Resources, LLC. “Assessment of the Future Utilization of the Enbridge Gas Dawn to Parkway System”, dated October 11, 2022.

¹² Excludes M17 demand of 9 TJ/d in all years.

EGI expects that growth in in-franchise customer requirements will cause total Dawn Parkway System design day demand to increase by 170 TJ/d from 2023/24 to 2028/29 (see Table 4, line 5). To avoid a large capacity shortfall, the 2023-2032 Asset Management Plan includes two Dawn Parkway System expansion projects:¹³

1. The Kirkwall-Hamilton NPS 48 Project would increase Dawn Parkway System capacity by 72.4 TJ/d at an estimated cost of \$245.9 million. The planned in-service date is November 1, 2026.¹⁴
2. The Dawn-Enniskillen NPS 48 Project, which could be in service as early as 2029, has an estimated cost of \$339.2 million.¹⁵

V. CAPACITY TURNBACK RISK

While the likelihood that a large amount of Dawn Parkway System capacity will be turned back during the next five-year IRM period may be small, there are several reasons why the risk of capacity turnback by LDCs in New York and New England should not be ignored.

First, these LDCs have alternatives to contracting for gas transportation services from Dawn. Second, most of the LDCs with Dawn Parkway System transportation contracts do not rely on Dawn storage services. Third, much of the transportation service held by U.S. LDCs is currently under contracts that have remaining terms of three years or less.

A. Alternatives to Gas Transportation from Dawn

The alternatives available to LDCs and end users in the Northeast U.S. and Atlantic Canada include: (1) new pipeline capacity from the Marcellus shale gas producing areas in Pennsylvania that does not go through the Dawn Hub, (2) transportation on the TransCanada Mainline from Alberta via North Bay, and (3) gas purchases at intermediate points along the transportation path from Dawn.

1. Pipeline Expansion Projects

Pipeline capacity into Downstate New York and New England from the gas production and storage areas in the Gulf Coast and Appalachia is fully-contracted, and recent attempts to build new gas pipelines to connect these markets to the Marcellus shale gas producing areas have failed. However, a significant amount of new pipeline capacity has been built into southern New York and New England in recent years.

¹³ Exhibit 2, Tab 6, Schedule 2, page 74.

¹⁴ EGI previously applied for leave to construct the Kirkwall-Hamilton facilities in EB-2019-0159.

¹⁵ Exhibit I.2.6-ED-98, page 6.

The Constitution Pipeline and the Kinder Morgan Northeast Energy Direct project are two large-scale gas infrastructure projects that were cancelled during the 2015-2020 period.

- The Constitution Pipeline was a proposed 124-mile greenfield pipeline from the Marcellus shale gas producing areas in Pennsylvania to a connection with IGTS at Wright, NY. The Constitution Pipeline sponsors proposed an initial capacity of 650,000 Dth/day. The Federal Energy Regulatory Commission (FERC) issued Constitution Pipeline a certificate of public convenience and necessity in December 2014, but the project did not obtain all required permits from the State of New York. The project was cancelled in 2020.¹⁶
- The NED project was a larger project that would have transported more than 1,200,000 Dth/d from Pennsylvania to the existing interconnection of PNGTS, Maritimes & Northeast Pipeline (M&N), and Tennessee Gas Pipeline at the Massachusetts-New Hampshire border. Kinder Morgan filed a certificate application at FERC in November 2015, but withdrew the application in May 2016.¹⁷

Despite these high-profile failures, other projects to expand pipeline capacity into New York and New England did go forward:

- The Dominion Transmission New Market project added 112,000 Dth/d from Leidy Hub in Pennsylvania to Upstate New York for two National Grid LDCs. The project, which was completed in 2017, included new gas compression facilities to inject up to 85,000 Dth/d into IGTS at Canajoharie, NY.
- The TGP East 300 Upgrade project is another compression-only project that will transport up to 115,000 Dth/d from the Susquehanna Co., PA to Westchester Co., NY for Con Edison. The project is currently in construction and service is expected to start in late 2023.¹⁸
- The Algonquin Incremental Market (AIM) project expanded the Algonquin Gas Transmission (AGT) pipeline to provide 342,000 Dth/d from New Jersey and New York for New England LDCs. The AIM facilities were placed into service in 2016 and 2017.¹⁹

¹⁶ FERC Docket No. CP13-497. Project information is available at elibrary.ferc.gov/eLibrary/search.

¹⁷ FERC Docket No. CP16-21.

¹⁸ FERC Docket No. CP20-493.

¹⁹ FERC Docket No. CP14-96.

- The Atlantic Bridge (AB) project expanded the AGT pipeline by 132,705 Dth/d from New York to Massachusetts, and added 92,226 Dth/d of transportation service on M&N from Massachusetts into Maine. The AB facilities were placed into service in 2017, 2019, and 2021.²⁰

AGT marketing representatives have said that future projects to expand gas pipeline capacity into New England are being considered.²¹

2. TransCanada North Bay Junction Long Term Fixed Price Service

TransCanada proposed the North Bay Long Term Fixed Price Service (NBj LTGP) as a market-priced alternative to attract shippers to the TransCanada Mainline. In its January 22, 2019 application to the Canadian Energy Regulator, TransCanada stated its expectation that “absent NBj LTGP, shippers would not contract for long-haul mainline service and would instead contract for short-haul FT service from Parkway.”²²

TransCanada entered into long-term contracts with LDCs and end users for 670,343 GJ/d of long-haul transportation service from Alberta. This includes new service to Iroquois (35,720 GJ/d), East Hereford (111,723 GJ/d), and Energir EDA (157,000 GJ/d). Because the NBj LTGP service was available, the Atlantic Canada LDCs, marketers, and end users that contracted for 107,724 GJ/d in the PNGTS WXP project entered into contracts for an equal amount of long-haul capacity on the TransCanada Mainline, and did not acquire any additional transportation service from Parkway or Dawn.

3. Short-haul Transportation

Our review of the Index of Customers reports of EGI, TransCanada, IGTS and PNGTS identified examples of LDCs contracting for pipeline transportation services on shorter paths and buying gas at trading points that are closer to the ultimate market.²³ This includes instances where companies contracted for TransCanada transportation services from Parkway, or IGTS transportation services from the Canadian border, but did not contract with EGI for Dawn Parkway System capacity.

For example:

²⁰ FERC Docket No. CP16-9.

²¹ M. Dirrane presentation to the Northeast Gas Association 2022 Regional Market Trends Forum, March 29, 2022. At northeastgas.org/2022_reg_mktrends_presentations.php.

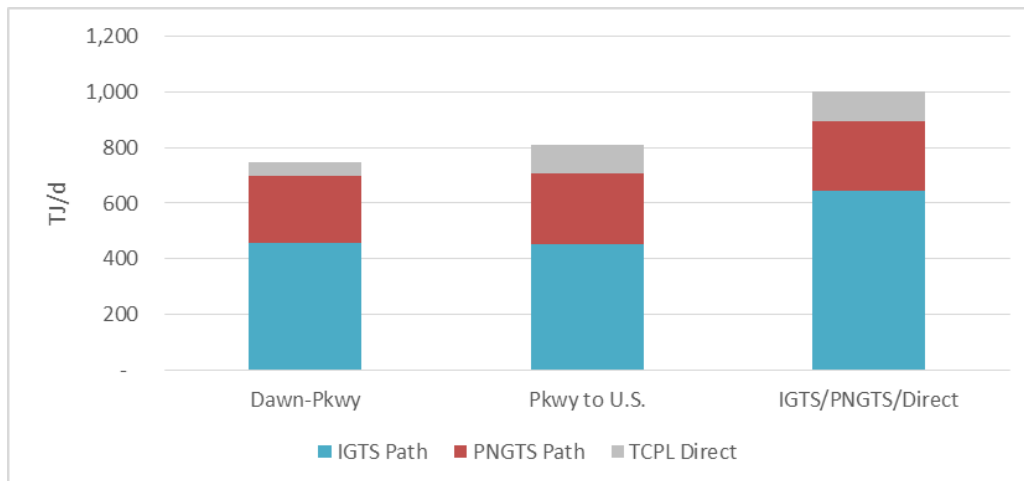
²² RH-002-1018 Application, page 19.

²³ The Informational Postings are available at <http://www.tccustomerexpress.com/mainline.html>, <https://iol.iroquois.com/Infopost/Pages/Default.php>, and <https://ebb.tceconnects.com/infopost/>.

- Vermont Gas has contracts for 84,799 GJ/d of TransCanada FT service from Parkway to the Phillipsburg export point, but has long-term transportation contracts from Dawn to Parkway for 28,600 GJ/d.
- Irving Oil Limited has contracts for 37,677 GJ/d of TransCanada FT service from Parkway to East Hereford, but has no long-term transportation contracts on the Dawn Parkway System.
- National Grid and Con Edison have commitments for 125,000 Dth/d of IGTS transportation service from the Canadian border under the IGTS Expansion by Compression (ExC) project.²⁴ It does not appear that either LDC has contracted for additional upstream transportation service from TCPL or EGI.

Figure 1 shows the pipeline transportation capacity under contract to New York and New England LDCs for each segment of the IGTS, PNGTS and TransCanada Direct transportation paths as of January 2023. In total, these LDCs hold contracts for 1,001,717 GJ/d of transportation service to their city gates from these paths. Approximately 75 percent of this capacity is backed by contracts for Dawn Parkway System transportation service (747,219 GJ/d). For the other 25 percent, LDCs appear to be buying gas at intermediate points such as Parkway, Iroquois, or Wright, NY, and reducing their fixed transportation costs by contracting for service on a shorter transportation path.

Figure 1: Transportation Contracts by Pipeline Segment, January 2023



SOURCE: Attachment 2

²⁴ FERC Docket No. CP20-48.

B. Dawn Storage

EGI states that U.S. Northeast customers use Dawn storage “and contract for storage injections/withdrawals in alignment with their Dawn Parkway System capacity”.²⁵ In fact, most New York and New England LDCs do not contract for Dawn Parkway System transportation service in order to access Dawn storage. Table 5 shows that just 33 percent of the Dawn Parkway System transportation service under contract to New York and New England LDCs is backed by Dawn storage withdrawal capacity.

Table 5: Gas Transportation and Storage Contracts by Delivery Path, 2023 (GJ/d)

	Path	Dawn-Parkway Transportation (A)	Dawn Storage Daily Withdrawal (B)	(B)/(A) (C)
1	IGTS	458,816	150,311	33%
2	PNGTS	238,606	83,350	32%
3	TCPL Direct	49,797	14,565	29%
4	Total	747,219	248,226	33%

SOURCE: Attachment 2

C. Evergreen Contracts

A third factor affecting turnback risk is the fact that a large portion of the Dawn Parkway System transportation capacity held by New York and New England LDCs is eligible to expire within the next three years. These “evergreen” contracts renew year-to-year, with a two-year notice to terminate. Most of the contracts with near-term expiration days are on the IGTS Path. Eighty-six percent of the Dawn Parkway System transportation capacity that New York and New England LDCs currently hold on the IGTS delivery path (390,876 GJ/d) is tied to contracts that are eligible to expire as early as October 31, 2025. By comparison, none of the contracts for Dawn Parkway System transportation service on the PNGTS delivery path have expiration dates earlier than October 31, 2033.

D. Energy Transition

Many of the U.S. LDCs that hold long-term contracts for Dawn Parkway System transportation services are located in states with ambitious greenhouse gas (GHG) reduction goals. For example, both Massachusetts and New York have enacted legislation that establishes a “net zero” GHG emission target for 2050.

²⁵ Exhibit 1, Tab 11, Schedule 1, Page 5.

In the near term, the forecasts that New York and New England LDCs have filed with state regulators continue to show moderate growth in gas demand. Table 6 shows the 2022-23 design day planning load forecasts and average annual demand growth rates for 13 New England LDCs for a five-year forecast period. The weighted average growth rate for these New England LDCs is 1.4 percent.

Table 6: New England LDC Design Day Requirements Forecasts

	LDC	2022-23 Design Day (MDth/d)	Annual Avg. Growth Rate	State	Case/Docket
1	Boston Gas	1,437	2.4%	MA	22-149
2	Eversource Gas	520	0.9%	MA	21-118
3	NSTAR Gas	558	1.5%	MA	22-86
4	Berkshire Gas	66	0.9%	MA	22-148
5	Liberty (MA)	81	0.9%	MA	22-129
6	Fitchburg Gas	24	0.2%	MA	23-35
7	Rhode Island Energy	405	1.3%	RI	5043
8	CT Natural Gas	363	0.4%	CT	22-10-03
9	So. Connecticut Gas	334	0.3%	CT	22-10-03
10	Yankee Gas	482	1.5%	CT	22-10-03
11	Liberty (EnergyNorth)	166	0.9%	NH	DG 22-064
12	Northern Utilities	144	1.1%	ME	2023-00078
13	Vermont Gas	72	0.0%	VT	21-0167-PET
14	Weighted Average		1.4%		

SOURCE: LDC resource plans filed with state utility regulators.

In 2020 the Massachusetts Department of Public Utilities opened a proceeding to examine the future role of gas utilities in meeting the state’s GHG objectives. The independent consultants’ study prepared for the proceeding shows sharp declines in conventional natural gas use between now and 2050 under all scenarios.²⁶ A similar analysis of National Grid’s New York LDCs shows growth in natural gas use from 2020 to 2025, small reductions in natural gas use from 2025 to 2030, and much steeper declines from 2030 to 2050.²⁷

²⁶ Energy and Environment Economics, Inc. and ScottMadden Inc., “The Role of Gas Distribution Companies in Achieving the Commonwealth’s Climate Goals”, Massachusetts Department of Public Utilities Docket No. 20-80, March 18, 2022.

²⁷ Guidehouse Inc., “National Grid New York Climate Leadership and Community Protection Act Study”, New York Department of Public Service Docket No. 19-G-0309, February 15, 2023, Pages 72-74.

In cases where the LDC forecasts of future gas use are high relative to the results of the longer-term planning studies, this may be intentional. Because the timing and impact of building electrification and new energy efficiency programs on future gas use is uncertain, some LDCs have chosen not to factor these into their current forecasts.²⁸ As a result, the LDC forecasts may not be reliable indicators of these companies' future decisions to renew or terminate long-term contracts for transportation and storage services.

VI. Findings and Recommendations

There is some risk that existing ex-franchise transportation customers could turn back Dawn Parkway System capacity. Turnback risk is likely to be higher for the IGTS path than for the PNGTS path because these customers have shorter remaining contract terms and tend to be less reliant on Dawn storage. The potential for capacity turnback would be expected to increase over time as more gas infrastructure alternatives become available, and as state and local initiatives to reduce natural gas use and encourage the use of non-pipeline alternatives expand.

Even if the near-term risk is low, it would be prudent for EGI to implement measures to (1) limit cost shifting between ex-franchise and in-franchise services if turnback occurs, and (2) reduce exposure to capacity turnback by making it less likely that the Dawn Parkway System will become overbuilt. Two proposed measures are described here.

1. Add “guardrails” to the proposed cost allocation methodology.

EGI allocates Dawn Parkway System demand costs between in-franchise and ex-franchise services based on the Company's forecast of design day requirements. For ex-franchise services, the design day requirement is the projected contract demand.

Dawn Parkway System costs are classified as Dawn Station, Kirkwall Station, Parkway System, or Dawn Parkway. Dawn Station, Kirkwall Station, and Parkway Station demand costs are allocated between in-franchise and ex-franchise rate classes based on the design day demands at each location. Dawn Parkway includes the costs of transmission mains and other compressor station costs. The Dawn Parkway demand costs are allocated in proportion to the distance-weighted design day demands (commodity-kilometres).²⁹ For 2024, approximately

²⁸ For example, Berkshire Gas states that its most recent five-year forecast does not include new decarbonization measures (“...at this time, the Company's forecasts do not include any adjustments for any decarbonization measures that may affect gas demand, other than the existing energy efficiency measures already approved by the Department). The Berkshire Gas Company, “Long Range Forecast and Supply Plan”, Docket DPU 22-148, November 2022, page 7.

²⁹ Exhibit 7, Tab 1, Schedule 2, pages 19-20.

one-third of the total Dawn Parkway System demand costs are allocated to ex-franchise services (see Table 7).

Under EGI’s proposed cost allocation methodology, if there is no change in the design day requirements of in-franchise customers, but the amount of Dawn Parkway System capacity under contract to ex-franchise customers becomes smaller, a larger share of Dawn Parkway System demand costs is allocated to in-franchise services. In-franchise customers would pay more, even though their demand for Dawn Parkway System transmission facilities is unchanged.

Table 7: Dawn Parkway System Demand Cost Allocation (\$000)

	Classification	Revenue Requirement	Ex-Franchise Rate Classes	Ex-Franchise Share
		(A)	(B)	(C)
1	Dawn Station	32,257	11,720	36.3%
2	Kirkwall Station	1,436	1,221	85.0%
3	Parkway Station	47,006	24,151	51.4%
4	Dawn Parkway	222,298	64,406	29.0%
5	Total	302,997	101,498	33.5%

SOURCE: Exhibit 7, Tab 3, Schedule 1, Attachment 8

To reduce the risk of undue cost shifting, EGI should put limits on the ex-franchise demands that will be used to allocate Dawn Parkway System costs at the next rate rebasing, based the requirements forecast that EGI uses to obtain Board approval for a Dawn Parkway System expansion. The objective would be to allocate Dawn Parkway System costs based on the demands for which the transmission facilities were constructed, not just the actual demands in effect at the time of rebasing.

For example, assume that the in-franchise and ex-franchise demands projected for the rebasing year at the time EGI files a leave of construct application are 70 units and 30 units, respectively, for a total demand of 100 units (see Table 8). If, at the time of the next rebasing, the total projected demand for Dawn Parkway System capacity is less than 100 units because of unexpected ex-franchise turnback, the ex-franchise demand units used for cost allocation would be adjusted upward to reduce or eliminate the shortfall, up to the original forecast of 70 units.

Table 8: Dawn Parkway Cost Allocation Example

		Forecast	Actual	Adjusted
		(A)	(B)	(C)
1	In-Franchise	70	71	71

2	Ex-Franchise	30	27	29
3	Total	100	98	100

2. Allow buy-out payments in reverse open seasons.

The Storage and Transportation Access Rule (STAR) requires EGI to hold a reverse open season to allow existing customers to permanently turn back capacity before undertaking an expansion in order to avoid unnecessary investments.³⁰ One shortcoming of EGI's reverse open seasons is that in a situation where the cost to expand facilities is higher than the average embedded cost that EGI uses to set rates, an existing customer may be unwilling to turn back capacity, even though the value that the customer places on the capacity is lower than EGI's cost to build. However, the same customer may be willing to relinquish capacity in return for a buyout payment that would still allow EGI to meet its projected requirement at a lower total cost.

Including a buyout option in reverse open seasons would be consistent with the Integrated Resource Planning (IRP) framework, which requires EGI to consider demand side IRP Alternatives to meet system needs. Reducing ex-franchise customer demand for Dawn Parkway System capacity by buying out an existing contract would be similar to other targeted demand-side management measures in which customers are compensated for reducing gas use during periods of high demand. Allowing customers to submit a buyout offer in a reverse open season is not explicitly addressed by STAR, but this change would support the objective of avoiding unnecessary expansions.

³⁰ STAR Section 2.2.1(iii) states: "A transmitter offering new capacity shall offer a reverse open season to allow existing firm transportation service shippers the opportunity to permanently turn back existing firm transportation capacity to avoid unnecessary expansions."

ATTACHMENT 1

TO

REPORT ON DAWN PARKWAY SYSTEM CAPACITY TURNBACK RISK

NORTHEAST NORTH AMERICA PIPELINE MAP

Ontario Energy Board Case No. EB-2022-0200

April 21, 2023



ATTACHMENT 2

TO

REPORT ON DAWN PARKWAY SYSTEM CAPACITY TURNBACK RISK

NEW YORK AND NEW ENGLAND LDC CONTRACTS BY PATH, JANUARY 2023

Ontario Energy Board Case No. EB-2022-0200

April 21, 2023

**ATTACHMENT 2
NEW YORK AND NEW ENGLAND LDC CONTRACTS BY PATH, JANUARY 2023**

IGTS PATH		Dawn to Parkway			Parkway to Iroquois			IGTS from Canada			Dawn Storage			
		Contract	GJ/d	Expires	Contract	GJ/d	Expires	Contract	GJ/d	Expires	Contract	GJ	GJ/d	Expires
1	Boston Gas Company	M12197	17,915	10/31/2024	63478	17,718	10/31/2026	42001	52,203	11/1/2027				
2	Eversource Gas	M12204	27,803	10/31/2024	63398	27,498	10/31/2026	182003	28,840	11/1/2027	LST143	1,688,090	27,958	3/31/2024
3	Connecticut Natural Gas	M12166	6,410	10/31/2025	41224	264	10/31/2026	60001	25,292	11/1/2027	LST136	980,000	11,760	3/31/2026
4	Connecticut Natural Gas	M12201	18,077	10/31/2025	41225	6,436	10/31/2026	60007	19,064	11/1/2025	LST137	1,300,000	15,600	3/31/2025
5	Connecticut Natural Gas	M12206	9,170	10/31/2015	41238	17,879	10/31/2026	60011	5,000	11/1/2027				
6	Connecticut Natural Gas				41239	8,807	10/31/2026	60013	5,000	11/1/2024				
7	Connecticut Natural Gas	M12214	6,489	10/31/2025	42382	6,330	10/31/2026	60015	6,000	11/1/2027				
8	Connecticut Natural Gas	M12297	39,789	10/31/2036	64586	39,789	10/31/2036	60016	15,000	5/1/2025				
9	Connecticut Natural Gas							60017	10,000	11/1/2028				
10	So. Connecticut Gas				41221	475	10/31/2026	53001	35,409	11/1/2024	LST134	1,820,000	21,840	3/31/2026
11	So. Connecticut Gas	M12202	34,950	10/31/2025	41222	9,656	10/31/2026	53006	10,000	11/1/2028	LST135	1,700,000	20,400	3/31/2025
12	So. Connecticut Gas	M12207	13,970	10/31/2025	41230	34,567	10/31/2026	53010	9,106	11/1/2024				
13	So. Connecticut Gas	M12213	9,735	10/31/2025	41231	13,342	10/31/2026	53011	3,000	11/1/2024				
14	So. Connecticut Gas	M12299	23,743	10/31/2036	64585	23,743	10/31/2036	53012	10,000	11/1/2027				
15	So. Connecticut Gas							53013	10,000	11/1/2025				
16	So. Connecticut Gas							53015	10,000	11/1/2028				
17	Yankee Gas	M12203	43,116	10/31/2024	41223	5,336	10/31/2026	59001	59,690	11/1/2027	LST147	3,165,168	52,753	3/31/2024
18	Yankee Gas	M12210	20,560	10/31/2024	41236	42,642	10/31/2026	59004	5,058	11/1/2027				
19	Yankee Gas	M12212	5,380	10/31/2024	41237	20,334	10/31/2036	59012	6,115	11/1/2024				
20	Yankee Gas							59013	8,160	11/1/2024				
21	Yankee Gas							59014	2,000	11/1/2024				
22	Yankee Gas							59015	20,000	11/1/2027				
23	Rhode Island Energy	M12164	1,081	10/31/2024	42386	1,068	10/31/2026	50001	1,012	11/1/2027				
24	Liberty (EnergyNorth)	M12200	4,317	10/31/2024	41232	4,270	10/31/2026	47001	4,047	11/1/2027				
25	Northern Utilities							181003	6,569	11/1/2024				
26	Con Edison/O&R	M12171	21,825	10/31/2024	42379	11,859	10/31/2026	56001	20,234	11/1/2028				
27	Con Edison/O&R				42380	9,695	10/31/2026							
28	National Grid - Downstate NY	M12193	43,170	10/31/2024	63477	42,696	10/31/2026	55001	87,760	11/1/2026				
29	National Grid - Downstate NY	M12194	39,934	10/31/2024	63476	39,494	10/31/2026	55016	25,000	11/1/2026				
30	National Grid - Downstate NY							55018	7,000	11/1/2026				
31	National Grid - Upstate NY	M12186	55,123	10/31/2024	42385	54,437	10/31/2026	73005	51,596	11/1/2026				
32	Central Hudson	M12195	10,792	10/31/2024	41233	10,674	10/31/2026	51001	20,234	11/1/2032				
33	Central Hudson	M12182	5,467	10/31/2024	42389	5,399	10/31/2026							
34	NY State Electric & Gas							52001	17,199	11/1/2026				
35	NY State Electric & Gas							52004	6,800	9/1/2025				
36	Liberty (St. Lawrence Gas)							164006	3,000	11/1/2028				
37	Liberty (St. Lawrence Gas)							164019	4,500	11/1/2028				
38	Total IGTS Path		458,816			454,408			609,888	Dth/d		150,311		
39									643,466	GJ/d				

ATTACHMENT 2
NEW YORK AND NEW ENGLAND LDC CONTRACTS BY PATH, JANUARY 2023

PNGTS PATH		Dawn to Parkway			Parkway to East Hereford			PNGTS from Canada			Dawn Storage			
		Contract	GJ/d	Expires	Contract	GJ/d	Expires	Contract	GJ/d	Expires	Contract	GJ	GJ/d	Expires
1	Boston Gas Company	M12273	60,328	10/31/2040	64272	60,328	10/31/2040	233314	57,068	10/31/2040				
2	Eversource Gas							208535	45,500	10/31/2040				
3	Eversource Gas	M12292	64,588	10/31/2040	64198	63,121	10/31/2040	208540	16,000	11/31/2032	LST144	1,920,202	16,881	3/31/2024
4	Eversource Gas				63997*	16,881	10/31/2026	233301	14,300	10/31/2040				
5	Berkshire Gas	M12293	4,239	10/31/2040	64197	4,239	10/31/2040	233318	4,010	10/31/2040				
6	Rhode Island Energy	M12274	30,656	10/31/2040	64273	30,656	10/31/2040	233317	29,000	10/31/2040				
7	Liberty (EnergyNorth)	M12284	5,348	10/31/2040	64195	5,285	10/31/2040	233320	5,000	10/31/2040				
8	Liberty (EnergyNorth)							208544	1,000	11/30/2032				
9	Northern Utilities	M12256	42,962	10/31/2033	57055	6,333	10/31/2032	208543	40,003	11/30/2032	LST155	6,330,336	66,469	3/31/2028
10	Northern Utilities	M12296	10,814	10/31/2040	57901	35,872	10/31/2033	233339	10,000	10/31/2040				
11	Northern Utilities	M12279	10,875	10/31/2037	63265	10,569	10/31/2040	240520	10,000	10/31/2037				
12	Northern Utilities				67167	10,660	10/31/2037							
13	Bangor Natural Gas	M12283	8,796	10/31/2037	67168	8,653	10/31/2037	253561	8,080	10/31/2037				
14	U.S. LDCs		238,606			252,597			239,961	Dth/d			83,350	
15									253,172	GJ/d				
16	Liberty (Gas New Brunswick)	M12270	2,650	10/31/2040	58575	2,651	10/31/2040	240518	8,000	10/31/2040				
17	Liberty (Gas New Brunswick)	M12271	4,831	10/31/2040	60652	4,830	10/31/2040							
18	Liberty (Gas New Brunswick)	M12272	959	10/31/2040	63263	959	10/31/2040							
19	Liberty (Gas New Brunswick)	M12277	112	10/31/2040	58576	112	10/31/2040							
20	Eastward Energy	M1276	10,617	10/31/2040	58578	10,552	10/31/2040	233321	10,000	10/31/2040				
21	Irving Oil				57056	27,095	10/31/2040	208547	25,401	11/30/2032				
22	Irving Oil				58621	10,582	10/31/2040	208548	10,030	10/31/2033				
23	Atlantic Canada		19,169			56,781			53,431	Dth/d			-	
									56,373	GJ/d				
24	Total PNGTS Path		257,775			309,378			293,392	Dth/d			83,350	
25									309,545	GJ/d				

*Dawn Receipt Point

ATTACHMENT 2
NEW YORK AND NEW ENGLAND LDC CONTRACTS BY PATH, JANUARY 2023

TCPL DIRECT PATH		Dawn to Parkway			Parkway to Export Point			Dawn Storage			
		Contract	GJ/d	Expires	Contract	GJ/d	Expires	Contract	GJ	GJ/d	Expires
1	Vermont Gas	M12119	20,000	10/31/2037	33556	10,000	10/31/2026	LST154	263,764	3,165	3/31/2024
2	Vermont Gas	M12190	500	10/31/2024	36188	10,000	10/31/2026				
3	Vermont Gas	M12224	8,100	10/31/2024	36190	2,000	10/31/2026				
4	Vermont Gas				47856	3,500	10/31/2026				
5	Vermont Gas				47857	4,500	10/31/2026				
6	Vermont Gas				55180	6,500	10/31/2031				
7	Vermont Gas				55181	12,000	10/31/2031				
8	Vermont Gas				55187	6,000	10/31/2031				
9	Vermont Gas				57251	20,279	10/31/2032				
10	Vermont Gas				57252	6,000	11/30/2032				
11	Vermont Gas				58715	4,000	10/31/2033				
12	Liberty (St. Lawrence Gas)	M12126	10,785	3/31/2025	19233	10,300	10/31/2026	LST131	950,000	11,400	3/31/2024
13	Liberty (St. Lawrence Gas)	M12249	10,412	10/31/2032	57057	10,000	10/31/2032				
14	Total Direct Path		49,797			105,079				14,565	

Status of recent US NE Gas Pipeline Projects

- All Information on the projects taken from [Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

Northeast Supply Enhancement Project (NESE):¹

- Capacity: 400,000 Dth/d
- Transport natural gas from Pennsylvania through New Jersey.
- Start Year: 2020
- Status: **Cancelled**

Access Northeast Pipeline Project:²

- Capacity: 500 million cubic feet per day
- Project added no pipe, but instead would have upgraded 125 miles of the Algonquin pipeline system
- Status: **Cancelled**, June 2017

PennEast Pipeline Phase I:³

- Capacity: 1,107 MMcf/d
- The pipeline would move Marcellus Shale region in Pennsylvania to New Jersey
- The pipeline was proposed to run from Dallas, Luzerne County to Pennington, Mercer County, New Jersey, a distance of approximately 115 miles (185 km).
- Start Year: 2021
- Status: **Cancelled**

PennEast Pipeline Phase II:⁴

- Capacity: 1,107 MMcf/d
- Start Year: 2023
- Status: Cancelled

Northern Access Pipeline – Northern Access 2016 (NY to ON) Expansion:⁵

- Project Capacity: 350 MMcf/d

¹ [Williams Gas Pipeline - Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

² [Access Northeast Gas Pipeline - Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

³ [PennEast Gas Pipeline - Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

⁴ [PennEast Gas Pipeline - Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

⁵ [Empire Pipeline - Global Energy Monitor \(gem.wiki\)](https://gem.wiki/)

- The expansion pipeline would have extended from New York, USA to Ontario, Canada
- Start year: 2024 (originally 2016)
- **Status: Shelved**

Northern Access Pipeline – Northern Access 2016 (PA to NY) Expansion: ⁶

- Capacity: 497 million cubic feet per day
- The expansion project would begin in Sergeant Township, McKean County, PA and extend to an existing Porterville Compressor Station in the Town of Elma, Erie County, NY.
- **Status: Proposed**
- Start year: 2024 (Originally approved for 2016) – subject to ongoing legal battles.

⁶ [Empire Pipeline - Global Energy Monitor \(gem.wiki\)](#)

Response to School Energy Coalition Interrogatory

Reference: Exhibit M4, page 15. Mr. Rosenkranz recommends that Enbridge offer a buyout option as part of the reverse open season that are required to be held before undertaking expansion projects. Please provide further details regarding how this process would work and provide an illustrative example with calculations.

Response:

The first step in the process would be simple. EGI would modify the reverse open season bid form that customers are required to use to submit offers to turn back capacity to include a blank for a buyout payment amount. As to how these turn-back proposals would be evaluated, North Side Energy believes expanding the scope of reverse open seasons to allow existing shippers to add a buy-out price to an offer to permanently turn back existing firm transportation capacity falls within the definition of a targeted demand-side IRP Alternative, since it would reduce or eliminate the need for new facilities to address design day constraints on the Dawn Parkway System by lowering ex-franchise customer contract demands. A buy-out offer would therefore need to be evaluated within the context of the full range of alternatives using the methods adopted under IRP Framework. For this reason, North Side Energy is not able to provide a simple illustrative example.

Response to EGI Interrogatory

Reference: Exhibit M4, page 14

At page 14, North Side Energy states: “To reduce the risk of undue cost shifting, EGI should put limits on the ex-franchise demands that will be used to allocate Dawn Parkway System costs at the next rate rebasing, based the requirements forecast that EGI uses to obtain Board approval for a Dawn Parkway System expansion.”

Please confirm this recommendation is applicable to the next Rebasing proceeding, post 2028, and not the 2024 to 2028 timeframe of this Application. If not confirmed, please explain what is being sought in this Application. Please also explain if the proposal would only apply if a subsequent expansion of the Dawn Parkway System was approved during the IR Term.

Response:

Not confirmed. Because this proposal would modify EGI's cost allocation mechanism, which is under review in this proceeding, and the impact on rates at the next rebasing would be tied to facilities expansion decisions that occur during the upcoming incentive rate-making (IRM) period, North Side Energy believes that the current rate proceeding is an appropriate time for the Board to direct EGI to implement a proposal of this type. EGI is correct that this proposal would not affect rates until the next rebasing, and that it would only cause rates to be different if an expansion of the Dawn Parkway System is approved during the IRM term.