

GAS STORAGE OPERATION

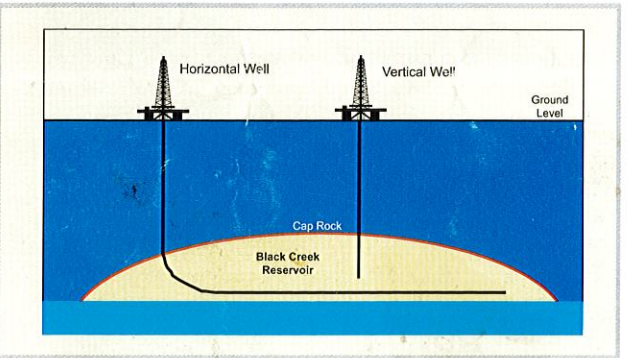


Over 40 years of reliable service

Innovative Developments

The Company's Gas Storage Operation is progressive and innovative, as demonstrated by the use of leading edge technologies in the more recent storage system designs. An example of this is the 1997 development of the Black Creek and Coveny reservoirs and the addition of the Sombra Compressor Station in 1998. The design of this compressor station allows it to be operated remotely from the central control room at the Tecumseh Compressor Station with the use of a state-of-the-art computer operator interface and control technology. In addition, the Sombra facility's mode of operation allows the smaller Black Creek reservoir to be cycled more than once per year. What this means is that gas can be injected into a partially depleted Black Creek reservoir during a warm winter day, when customer demand is below normal for that time, thereby re-filling the reservoir in readiness to provide gas withdrawals at higher rates on colder days later that same winter. This is a departure from the traditional way our other storage reservoirs are operated, where injection would typically occur only during the summer. This capability provides better asset utilization and greater flexibility to respond to changing customer needs.

Black Creek Reservoir Schematic



Another example of the Company's use of state-of-the-art technology is the drilling of horizontal wells in order to achieve higher per well injection and withdrawal rates. As shown above on the schematic, a horizontal well contacts more of the reservoir rock or storage zone than a conventional vertical well and thereby improves the rate at which gas can be injected or withdrawn from a single well. The drilling of a horizontal well in the Black Creek reservoir in 1997 was a first for the Ontario storage industry. Since then, two additional horizontal wells were drilled in the Ladysmith reservoir in 1999. The use of this advanced drilling technology has led to more efficient and cost effective storage developments.

Workplace Safety

Workplace safety is a high priority in our Gas Storage Operation. Thanks to our dedicated and safety conscious staff, the previous lost-time accident-free record of more than eighteen years is one of the best in the industry. Ongoing training to improve employee workplace safety awareness, as well as a formal safety program that encourages employee feedback, both foster continuous improvement in our work habits and provide for



an ongoing safe and healthy work environment for our employees.

Environmental Commitment

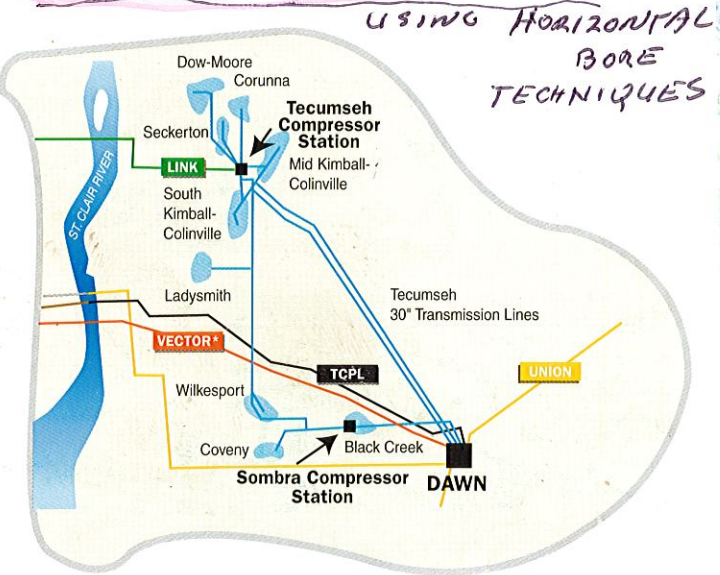
We are in the business of storing natural gas, the cleanest burning fossil fuel in use today. As well as advocating natural gas as an environmentally preferred fuel, the Company also conducts all of its operational and construction activities in an environmentally responsible manner. For example, proposed facility installations involve extensive environmental planning prior to reaching the



construction phase. During pipeline construction and drilling activities, the Company diligently employs environmentally sound practices so that land can be restored to the same (or better) condition that it was in prior to construction or well drilling. In addition, as part of a continuous environmental improvement program, several initiatives have been undertaken to reduce both the noise and air emissions from the older compressor units.

Future Outlook

Over the past forty years, these storage facilities have been progressively expanded and they have provided very reliable gas storage service to our customers. These facilities will continue to operate for many years into the future. Storage capacity will be added by the Company where it is available and economical to do so.



Compressor Stations				
Name	Number of Units	Type	Maximum kW	Rating HP
Tecumseh Station	11	integral/reciprocating	30,585	41,000
Sombra Station	2	separable/reciprocating	1,790	2,400
Crowland Station	1	separable/reciprocating	595	800
Chatham D Station	1	separable/reciprocating	825	1,085
TOTAL	15		33,795	45,285

Pipelines		
Size	km	Length mi
NPS 30	38.8	24.2
NPS 24	8.3	5.2
NPS 20	6.4	4.0
NPS 16	38.8	23.9
NPS 12 & under	15.5	9.7
TOTAL	107.8	67.0

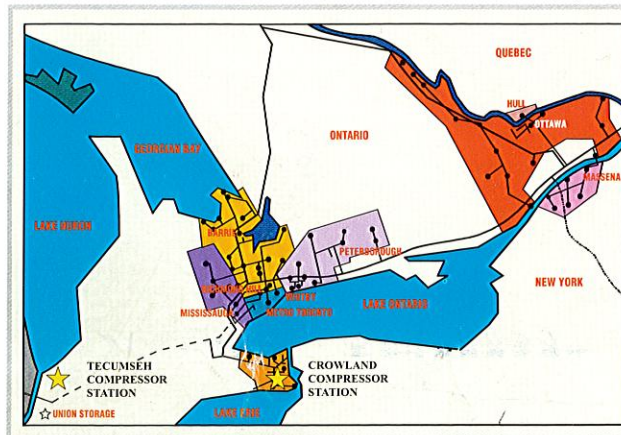
Units
 10³m³ = thousand cubic metres
 10⁶m³ = million cubic metres
 Bcf = billion cubic feet

MMcf = million cubic feet
 kW = kilowatts
 HP = horsepower

Who We Are

The Gas Storage Operation is a vital and integral component of Enbridge Gas Distribution, a regulated utility that distributes natural gas to 1.7 million customers in the greater Toronto, Niagara and Ottawa regions. Our underground gas storage operation is one of the largest in Canada and has the capacity to store nearly 100 billion cubic feet (Bcf) of gas in eleven storage reservoirs. All of the Company's storage facilities are situated in Lambton and Chatham-Kent Counties in southwestern Ontario, with the exception of the small Crowland storage facility, which is located in the Niagara Region.

Enbridge Gas Distribution Operating Areas



What We are All About

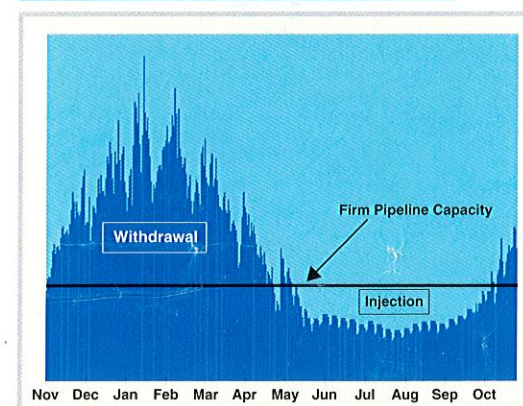
Western Canadian natural gas was introduced into the province of Ontario by the completion of the TransCanada Pipeline system in 1958. The resulting requirement for gas storage by the Company, was the key driver that led to the birth of our storage operation. Our storage operation began in 1964, under the name Tecumseh Gas Storage Ltd., a company owned by The Consumers' Gas Company Ltd. (now operating as Enbridge Gas Distribution) and Imperial Oil Ltd. The Tecumseh storage operation is now owned entirely by Enbridge Gas Distribution.

The purpose of the storage operation is to help manage the supply of natural gas delivered by pipeline into the province of Ontario. It is most economical to have these supplies delivered on a steady basis year-round, but demand for the gas fluctuates according to the weather. For example, residential gas customers will typically use considerably more gas on cold winter days to heat their homes but will use less gas in the summer. Storage facilities enable excess gas to be stored in the warmer months, and re-delivered to customers when demand is higher. By having storage available, Enbridge Gas Distribution can keep the gas flowing at or near contracted pipeline capacity year-round, even though the natural gas consumed by our customers varies seasonally. In addition, storage allows the Company to take advantage

of traditionally lower summer gas prices. Less expensive gas is purchased and stored in the summer when the demand for natural gas is low and then withdrawn from storage later during the winter when gas prices are typically higher. One of the major benefits of storage is a reduced overall cost of gas supply and delivery for customers.

The storage operation is a significant contributor towards the delivery needs of Enbridge Gas Distribution. On a cold winter day, nearly 55% of our customers' total gas requirements are satisfied by storage. On an annual basis, our customers rely on storage to provide approximately 25% of their gas supply needs. Even under extreme circumstances, whether it is one of the coldest days of the year or in the event of a short-term pipeline supply disruption, our customers can depend upon storage to help maintain the secure supply of natural gas to their homes and businesses.

Seasonal Gas Requirements



Where the Gas is Stored

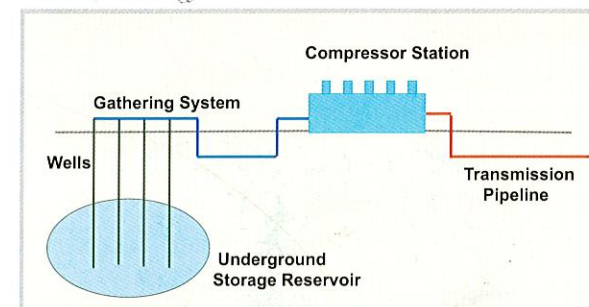
Gas is stored in underground reservoirs. The reservoirs are made up of porous rock, which lies 600 to 700 metres below the surface. The reservoirs in Lambton County are actually coral reefs that were created in a shallow marine environment hundreds of millions of years ago, in the same way that coral reefs are developing today in the Caribbean Sea. Naturally occurring holes in the coral reef make the reservoir rock porous, which provides the storage space for the gas. Impermeable overlying and underlying rock layers make the storage formation a natural, pressure tight container so that gas does not escape. The fact that these reef formations make excellent storage reservoirs is not surprising since they have contained natural gas and crude oil under pressure for millions of years prior to being converted and used for gas storage purposes. Reef formations comprise some of the best gas storage reservoirs in North America.

How the Storage Operation Works

The schematic below shows the five main components of the storage system: the transmission pipeline, the compressor station,

the gathering system, the storage wells and the underground storage reservoir itself. Natural gas enters or leaves the storage system by travelling through the transmission pipeline. The transmission pipeline is connected to a compressor station that adds the necessary energy or pressure to move the gas to and from the storage reservoir. The gas is transported to each storage field through a network of smaller diameter pipelines called a gathering system. Finally, the gas travels underground through wells drilled into the storage reservoir. The nature of the rock formations allow the storage reservoirs to be safely pressurized to a higher level than the original discovery pressure and that allows the Company to increase the storage capacity of the reservoirs.

Storage System Components



The Tecumseh Compressor Station is the focal point of the storage system and is comprised of eleven compressor units fuelled by natural gas. This facility is the largest reciprocating compressor station in North America that is used for gas storage service. It has an output power rating of 30,585 kW (41,000 HP) and can move over 48.2 10^6 m³ (1.7 Bcf) of gas per day. All of the Company's storage reservoirs within Lambton County are connected to this centralized facility, which allows for an operation that offers a high degree of flexibility, reliability and efficiency.

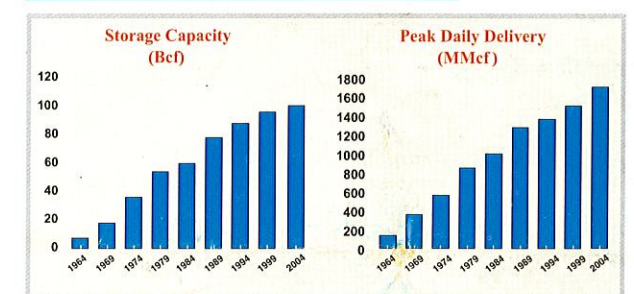
Over 40 Years of Growth

Reservoir	Working Capacity 10^6 m ³	Bcf	Number of Wells	Year In-Service
Corunna	122.8	4.3	7	1964
Seckerton	285.1	10.1	15	1964
Crowland	8.7	0.3	26	1965
Mid Kimball-Col.	634.8	22.4	32	1967
South Kimball-Col.	359.6	12.7	18	1967
Wilkesport	226.7	8.0	10	1978
Dow-Moore	740.6	26.1	26	1988
Black Creek	25.4	0.9	4	1997
Coveny	101.8	3.6	7	1997
Ladysmith	202.0	7.1	3	1999
Chatham D	46.7	1.6	4	2002
TOTAL	2,754.2	97.1	152	

$78.0 \text{ Bcf} \times \text{OVER } 13^{\text{FOLD}} = 97.1 \text{ Bcf}$
 Since storage operations commenced in 1964, the total working storage capacity has increased over 13 fold from 198 10^6 m³ (7 Bcf) to 2,754.2 10^6 m³ (97.1 Bcf), in order to match the growth in the demand for storage. This growth in storage capacity has been accomplished by progressively adding new storage reservoirs and by pressure elevation to safely increase storage capacity. As shown on the previous table, the Company's eleven storage reservoirs range in size from 0.3 Bcf to 26.1 Bcf.

Coincident with adding storage reservoirs and storage capacity, the maximum daily withdrawal rate has increased over 12 fold from 3,824 10^3 m³ (135 MMcf) to 48,200 10^3 m³ (1.7 Bcf). This was accomplished by progressively adding wells, pipelines, measurement and compressor facilities. The Tecumseh Compressor Station began operation in 1964 with three units and over the last 40 years has been expanded to eleven units.

Growth in Storage



Maximum Daily Withdrawal achieved in Jan. 2000 & 2004:
 48,200 10^3 m³ 1.7 Bcf
 Maximum Daily Injection achieved in Aug. 1997:
 27,013 10^3 m³ 954 MMcf

Pipeline and Well Integrity

The Enbridge Gas Storage integrity program utilizes the latest technology to monitor the storage wells, gathering and transmission pipeline network. This technology will assist Enbridge in evaluation of specific areas of possible concern such as corrosion, internal particulate, stress fractures, and internal laminates (cracks

due to fatigue) to ensure the pipelines and wells are in proper working condition and safe for gas distribution. Careful consideration of integrity results helps predict timing and extent of any required maintenance. The addition of integrity inspections to the stor-

age operation helps ensure that reliable, hazard free natural gas distribution will continue for years into the future.