

GUIDELINES FOR NEW FACILITIES

**TC Energy (NGTL SYSTEM)
TOLLS, TARIFF, FACILITIES & PROCEDURES COMMITTEE (TTFP)**

GUIDELINES FOR NEW FACILITIES

(Version 04)

Version #	Date	Reasons for Changes	Guidelines Section
Version 01	July 11, 2000 Nov 08, 2000	Initial report – “unopposed” resolution Initial report – “unopposed” resolution	F2000-01, F2000-02, F2000-03 F2000-04
Version 02	Oct 18, 2011	NEB Regulation for Alberta System Alberta System Integration Agreement Alberta System Rate Design: FT-D	Entire Entire F2000-03
Version 03	Oct 31, 2018	Administrative Updates	Entire
Version 04	Sept 25, 2020	Administrative Updates Added Appendix 3	Entire Appendix 3

GUIDELINES FOR NEW FACILITIES

TC Energy (NGTL SYSTEM) Tolls, Tariff, Facilities and Procedures (TTFP)

Guidelines for New Facilities

Under the Alberta System Integration Agreement the facilities of NOVA Gas Transmission Ltd. (NGTL) and ATCO Pipelines (AP) are operated as a single transmission system under NGTL's Tariff. NGTL will utilize the NGTL design philosophy for system expansions and extensions. The Agreement also identified distinct geographic areas ("Footprints") within Alberta for the construction of new facilities by each of NGTL and AP. NGTL's Guidelines for New Facilities apply to facilities constructed by NGTL and AP within their respective Footprints.

Definitions:

- NGTL System means the facilities in Alberta and BC owned by NGTL and the facilities in Alberta owned by AP.

Guiding Principles:

- These procedures apply to the NGTL System.
- NGTL/AP will expand the NGTL System to meet individual customer requests.
- NGTL will modify (expand/extend) the existing NGTL System to meet aggregate contractual obligations for receipt and delivery service.
- Customers are not precluded from building facilities. Third party construction has implications on ownership, operation and accountability.
- Guidelines would apply to the majority of situations.
- The established NGTL System Annual Plan process will be followed.

NGTL's design philosophy shall be used to identify and scope any required NGTL System facilities. NGTL shall be responsible for determining the requirement for new or modifications to existing NGTL System facilities.¹ NGTL shall prepare, maintain and amend on an annual basis the NGTL System Annual Plan.

NGTL's facility planning processes are outlined in the Annual Plan. The Annual Plan provides regulators and industry participants with an understanding of how specific facility applications fit into the overall long-term development of the NGTL System. The Annual Plan includes descriptions of NGTL's design assumptions and criteria, as well as the outlook for gas receipts and deliveries, and proposed facility additions.

NGTL shall file facility applications with the Canada Energy Regulator (CER) or its successor for facility additions on the NGTL System in BC and within the "NGTL Footprint" in Alberta. AP shall file facility applications with the Alberta Utilities Commission (AUC) for facility additions on the NGTL System within the "ATCO Footprint" in Alberta.

Facilities that are identified subsequent to presentation of the Annual Plan to the TTFP will be disclosed to the TTFP prior to filing the facility application.

¹ With the exception of Minor Modifications constructed by AP as defined in the Alberta System Integration Agreement.

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Circumstances (what/when) under which NGTL/AP will construct (own/operate) new facilities on the NGTL System.

As per the Alberta Energy and Utilities Board (“EUB”) Decision 2000-6 respecting NGTL’s 1999 Products and Pricing Application, NGTL will not construct (*own/operate*) laterals to connect to the NGTL System. As outlined in the EUB Decision 2000-6, the EUB accepted as reasonable NGTL’s submission that “*in general new connections of 12 inches or less in diameter distinctly associated with one or a few customers would normally be considered laterals, while facilities required to meet the aggregate forecast of more than one customer would normally be classified as mainline*”.

Under the following definitions/criteria NGTL/AP will construct (*own/operate*) new facilities on the NGTL System. For an illustrative example of the definitions refer to

Appendix 1 – Schematic to Aid Definitions.

Expansion Facilities:

NGTL will identify expansions on the NGTL System on an annual basis as per the Annual Plan process and will expand (*own/operate*) the NGTL System to/from the point of customer connection, generally downstream in the case of receipt and upstream in the case of deliveries. This would include any loop of the existing system, metering and associated connection piping and system compression.

Extension Facilities

Extension facilities are those facilities which connect new or incremental supply or markets to the NGTL System. The determination of whether NGTL/AP will construct the extension facility will depend on whether or not the majority of the criteria are met (Extension Facilities Criteria). NGTL/AP will use the criteria described in the table below as a guideline to construct extension facilities.

Extension Facilities Criteria

NGTL/AP Builds, Owns and Operates	NGTL/AP Does Not Build, Own and Operate
Facilities to serve the aggregate forecast as per the Annual Plan process, generally two or more gas plant receipts or industrial deliveries.	Facilities to serve specific customer requests. Facilities that cannot be justified by NGTL through the Annual Plan process, customer would build.
Facilities greater than or equal to 12 inches in diameter.	Facilities less than 12 inches in diameter.
Facilities greater than 20 kilometres in length, and associated connection piping.	Facilities less than 20 kilometres in length.
Volumes greater than 100 MMcf/d.	Volumes less than 100 MMcf/d.

Connection of Storage Facilities

Refer to the Connection of Storage Facilities Procedure for criteria pertaining to connection of new storage facilities.

Optimal Tie-in Procedure

Customers wishing to connect receipt or delivery facilities to the NGTL System may be required to construct facilities in order to make that connection. The Customer requesting service with NGTL will discuss the best location for connection to the system as well as the best timing for the construction of the tie-in facilities.

The Optimal Tie-in Procedure ensures the sharing of appropriate information to determine the lowest, cost-efficient solution, considering the overall cost to build to connect gas to the system while adhering to

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the design, efficiency and safety standards of NGTL. In addition, the process ensures fair and consistent treatment of all parties.

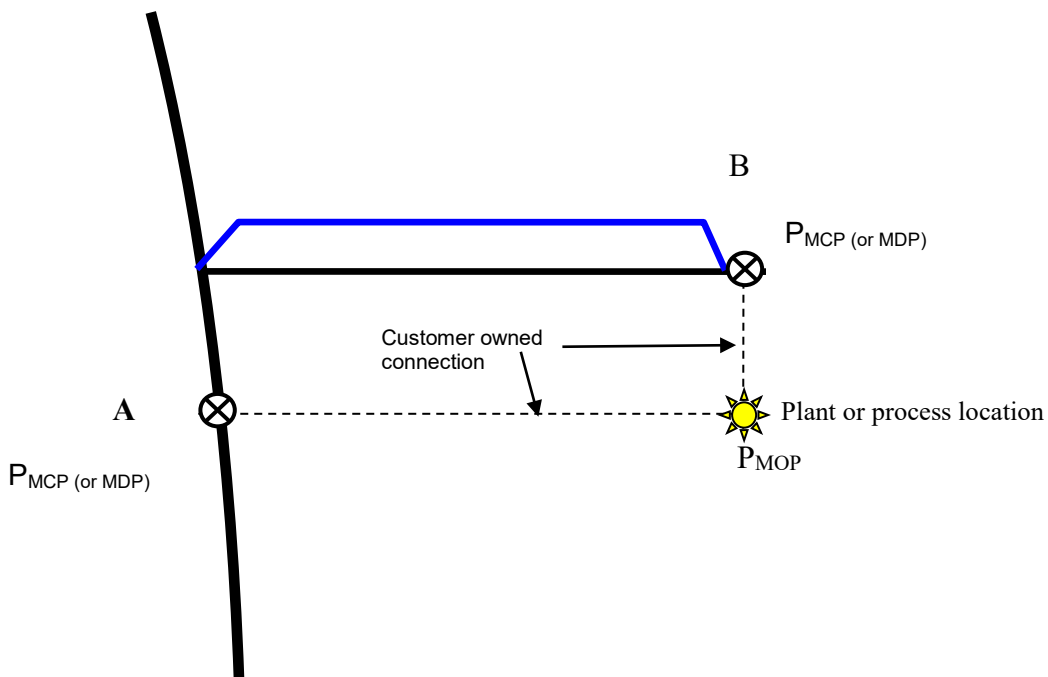
The procedure contemplates and establishes necessary criteria to ensure consistency in the determination of optimal tie-in points, such as a consistent method for determining the cost of NGTL and customer facilities. It must also address customer requests in a timely manner.

The following steps describe the process for the Optimal Tie-in to the NGTL System for customer facilities: (Also see Appendix 2 – Process for Determination of Optimal Tie-in and Associated Accountability).

1. Customer requests service by providing a completed Application for Service (AFS) to NGTL.

In order to ensure that NGTL has all of the necessary information to determine the facility requirements, a completed AFS with all of the required information including; plant location, plant capacity, plant maximum operating pressure (MOP), requested volume, on-stream date, gas quality, reserve information, etc. is required.

NGTL will provide customer with the Maximum Contract Pressure (MCP) for receipt facilities and the minimum delivery pressure (MDP) for delivery facilities at the alternative tie-in points as indicated in the illustrative example below.



2. NGTL estimates the capital costs of the facilities required (including NGTL System and customer cost) based on the customer requested volume and the volume potential in the local area.

The analysis includes customer connection costs to ensure the most orderly, economic and efficient construction of the combined facilities (i.e., if customer costs were ignored, NGTL would minimize its cost, causing the customer to incur additional costs that may be uneconomic). To highlight this situation and as an extreme example, if the customer costs were excluded from the analysis the most optimum tie-in from the perspective of the NGTL System would be the export delivery points.

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NGTL will perform hydraulic analysis to determine any capacity constraints and facility requirements based on the plant MOP or MDP as applicable and the NGTL junction pressure. All cost estimates, including customer costs, will be determined based on NGTL Rule of Thumb cost estimates and will not include capitalization (indirect capital) or AFUDC amounts.

In determining customer costs, NGTL will use its own estimate of the facilities required, typically pipe, to accommodate the customer's requested volume. Customer compression costs will also be included if NGTL has determined that more than one alternative exists for tie-in and there is a difference in the pipeline operating pressure between alternatives. In determining the estimate of capital costs, only practical pipe sizes will be used (i.e., NPS 4, 6, 8, 10 and 12 inches etc.).

NGTL will continue to maintain its system design criteria of sizing a system expansion loop or extension facility (subject to meeting extension criteria) to accommodate future volume potential in the area for receipt facilities and to accommodate an estimate of the aggregate demand for the area for delivery facilities.

Receipt Volume Forecast

In determining area supply potential for the purpose of appropriately sizing system expansion loops, two categories of gas supply are considered. The two categories are:

- a) Existing Gas Supply: This is gas production that is currently drilled, completed, and tied-in to gathering and processing facilities and is being marketed. This gas supply will decline naturally and, typically, production rates are maintained by the development of New Gas Supply.
- b) New Gas Supply: This is potential gas supply that must be drilled, completed, and tied-in to gathering and processing facilities in order to be marketed. Once this development occurs, this gas supply becomes existing gas. There is inherently more risk associated with New Gas Supply than there is with Existing Gas Supply. New Gas Supply is more affected by commodity price and geologic risk.

If applicable, gas supply available from interconnections with other pipeline systems is considered as well.

Delivery Volume Forecast

In determining area delivery potential for the purpose of appropriately sizing system extension and expansion loops, all potential deliveries within a market area are considered including receipts and deliveries on competitive pipelines, if applicable.

NGTL bases its analysis on:

- historical flow information;
- data from public sources (e.g., various news publications, customer websites and press releases, Government agencies such as the NEB or its successor and the AER, industry associations such as the Canadian Association of Petroleum Producers (CAPP), and public announcements).

Gas delivery forecasts are generated based on the above information and used in the hydraulic analysis for the area.

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- 3. NGTL will estimate and compare the cumulative present value cost of service (CPVCOS) of each alternative (both first year costs and future costs - including NGTL System and customer) using the aggregate volume assumption.**

The CPVCOS estimate for each alternative will be calculated as follows:

Estimate of	=	CPVCOS of NGTL System expansion facilities (including both directly attributable and non-directly attributable facilities); plus
CPVCOS		CPVCOS of NGTL System extension facilities (if any); plus CPVCOS of customer connection facilities.

The CPVCOS will be determined on the same basis as the CPVCOS as described in NGTL's Tariff, Appendix E, "Criteria for Determining Primary Term". The one exception to this is that the CPVCOS for tie-in determination will be based on depreciation rates currently in effect such that the CPVCOS is calculated over the depreciable life of the facility. Otherwise, the determination of CPVCOS for each tie-in alternative will include operating and maintenance expenses, municipal taxes, income taxes, and return on rate base.

- 4. NGTL identifies the least cost CPVCOS alternative as the optimal tie-in point.**

The optimal tie-in determination will be based upon the least cost comparison of the CPVCOS amounts determined in Step 3. The results from Step 3 will be discussed with the customer to illustrate the tie-in determination and key assumptions used for each alternative.

- 5. NGTL determines the contract terms and conditions as per NGTL's Tariff and reviews with the customer.**

If the customer has elected a tie-in option other than the optimal tie-in point, the shipper is responsible for costs associated with facilities in excess of costs at the optimal tie-in point through a contribution-in-aid-of-construction. NGTL would have some discretion to decline projects not using the optimal tie-in point which are not in the best interests of its other customers.

- 6. Customer accepts the terms and conditions of service including the optimal tie-in point.**

Another factor that may have an impact on the customer's decision is the receipt point specific toll at the connection point. NGTL will provide this information to the customer as it may factor into the customer's acceptance of the terms and conditions of service.

- 7. Customer executes the contract and NGTL proceeds with the necessary facilities application to the regulator.**

- 8. Upon approval from the regulator, NGTL proceeds with construction of the necessary facilities additions and subsequent service commencement proceeds.**

- 9. If Customer does not accept the terms and conditions of the contract including the optimal tie-in point, NGTL and the customer will work together to alter the assumptions (i.e., plant location, contract volume etc.) in an attempt to provide an alternative that is acceptable to the customer and NGTL.**

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10. Changed assumptions fail to gain customer acceptance and the customer wishes to tie-in at a point other than the optimal tie-in point.

If the customer wishes to tie-in at a point other than the optimal tie-in point and NGTL agrees the customer would be responsible, through a capital contribution, for all costs (including future costs) in excess of the cost of the optimal tie-in as the task force agreed that the rate base should remain neutral and that the remainder of the customers should not have to pay for the customer's sub-optimal tie-in choice.

11. If NGTL does not agree with the customer's wish to tie-in at the sub-optimal point, the customer may take the issue to the dispute resolution process.

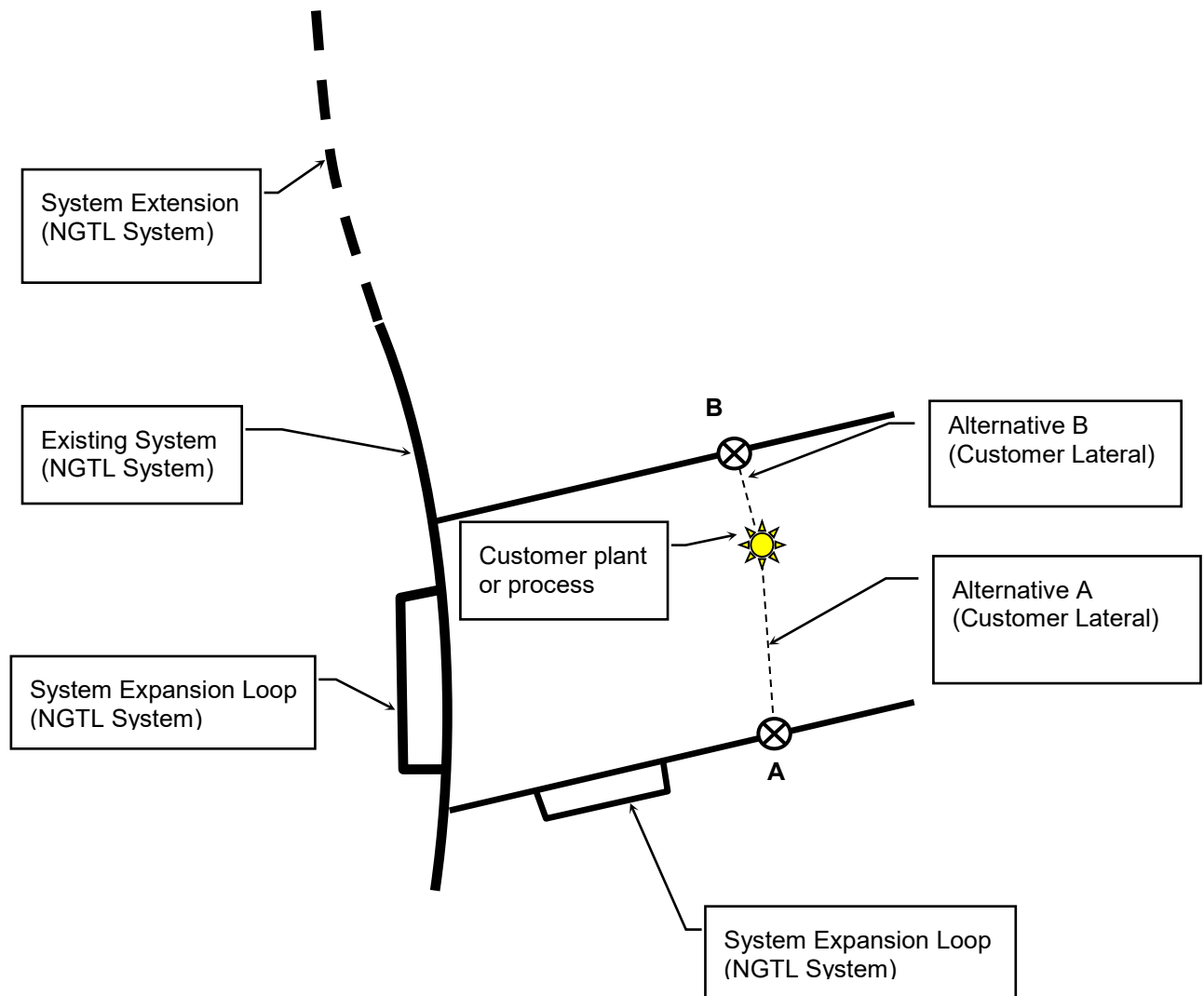
12. If the issue is resolved through the dispute resolution process, the customer executes a contract and NGTL would proceed with the necessary facilities application to the regulator.

Dispute Resolution Process

In the event that there are disagreements related to the optimal tie-in and as a result of the application of the guidelines, NGTL will seek to resolve the issues with the customer. Absent a mutually acceptable resolution, the customer may raise the dispute with the CER or its successor.

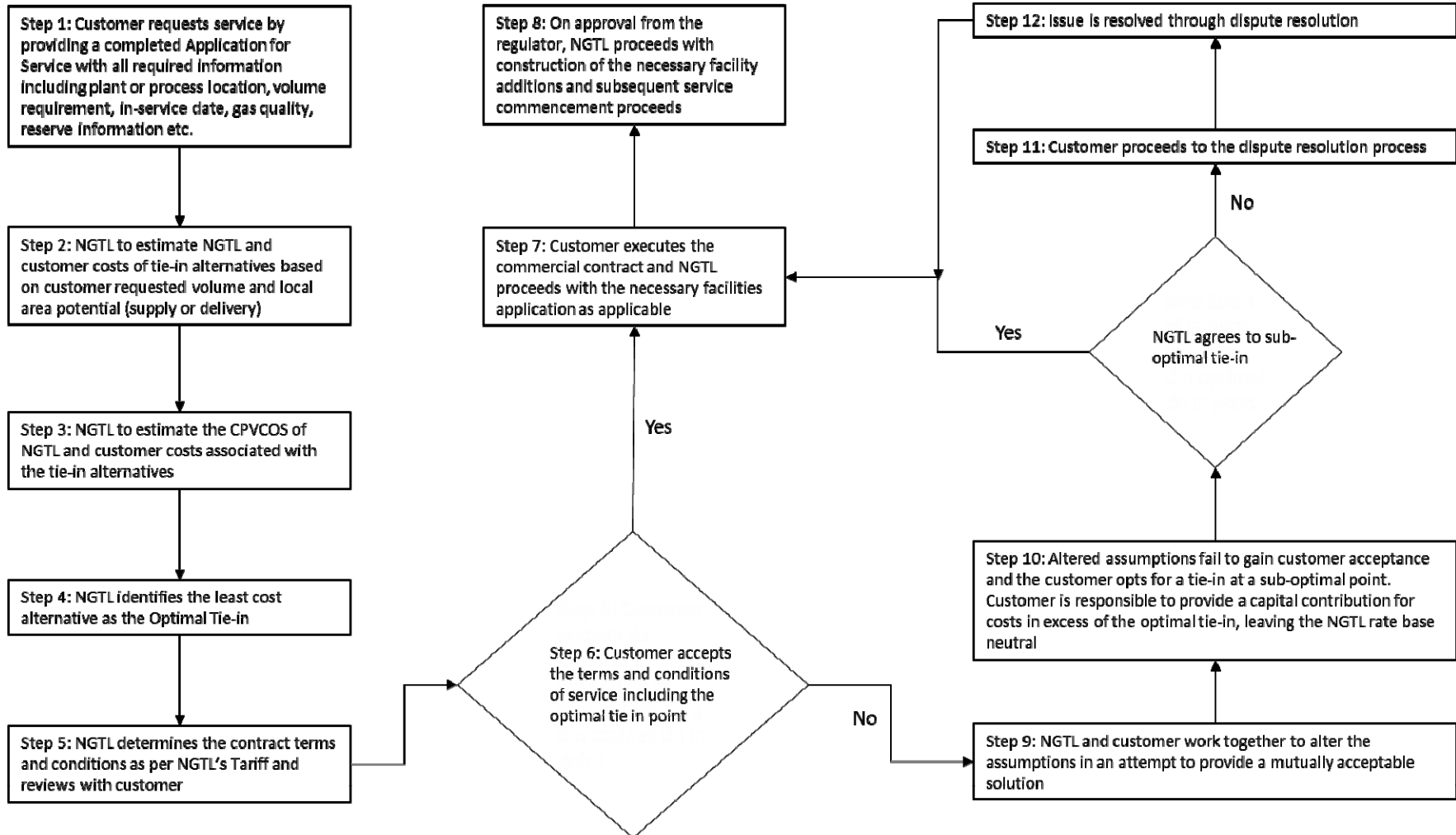
GUIDELINES FOR NEW FACILITIES – Appendix 1

Appendix 1 - Schematic to Aid Definitions



GUIDELINES FOR NEW FACILITIES – Appendix 2

Appendix 2 – Process for Determination of Optimal Tie-in and Associated Accountability



GUIDELINES FOR NEW FACILITIES – Appendix 3

Appendix 3 – Factors Considered in Requiring Longer Contract Terms and in Determining the Application of the Default Tolling Methodology

In the RH-001-2019 Decision and Order TG-001-2020, the CER approved the NGTL Rate Design and Services Settlement (Settlement) and related amendments to the NGTL Tariff.

As part of the comprehensive package of provisions contained in the Settlement, NGTL and its customers agreed that NGTL will apply rolled-in tolling and the rate design as applicable to the existing System as a default methodology for expansions and extensions conditional on an assessment of the degree of integration, nature of service and satisfactory determination that there is no excessive cross-subsidization having regard to project costs and associated contract revenues.

The NGTL Tariff sets out the minimum contract terms applicable to FT-R and FT-D services in various situations (i.e., if no new facilities are required; if new metering facilities are required; and if other facilities are required). These minimum contract terms were agreed to as part of the Settlement, which also provided that NGTL has sole discretion to require longer contract terms. The required minimum contract term is evaluated by NGTL on a case-by-case basis and may be increased to ensure no excessive cross-subsidization having regard to facility costs and associated revenues.

In the RH-001-2019 Decision and Order TG-001-2020, the CER directed NGTL to outline the quantitative and qualitative factors NGTL considers in requiring contract terms longer than the Tariff-defined minimum and determining the application of the default tolling methodology for new facilities. This Appendix was prepared in response to these directions.

Minimum Contract Term

At the time of contracting for FT-R, FT-D2 or FT-D3 service, or at the time of posting an open season for FT-D1 service, NGTL may require a minimum contract term longer than that defined in the Tariff – on a case-by-case basis—based on its informed judgment on a broad range of quantitative and qualitative factors, none of which are determinative or prescriptive. These factors include:

- the scale and scope of proposed facilities, including their associated costs;
- the extent to which proposed project's facilities are more likely to be primarily used by a limited subset of customers;
- the number of customers contracted to use the facilities;
- the incremental revenue generated by the contracts as compared to the incremental costs;
- other factors listed under default tolling methodology with respect to no excessive cross-subsidization;
- financial and capital market circumstances (such as access to capital for NGTL and/or its customers);
- the risk of contract non-renewals; and
- competitive considerations (such as the terms and conditions of service on competing alternatives).

When NGTL exercises its discretion regarding contract term, it may use a range of approaches, including requiring longer primary and/or secondary contract term, or restrictions on secondary contract terms (e.g., limiting transfer availability to a subset of facilities). Generally, NGTL will first address concerns over sufficient cost accountability by requiring longer contract term and/or by

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seeking restrictions to the secondary contract term prior to deviating from the default tolling methodology.

Default Tolling Methodology

When NGTL considers the tolling methodology to be applied to new facilities, it is guided by the requirements of the *CER Act* that tolls must be just and reasonable and not unjustly discriminatory as well as the principles and precedents established through the CER and its predecessor, which are reflected in the criteria defined in the Settlement. NGTL will assess a broad range of factors that relate to the established criteria on a case-by-case basis to determine whether a deviation from the default tolling methodology or an alternative solution such as implementing a surcharge or other forms of additional financial contributions is required. It is expected that such deviations will only occur in unusual circumstances where sufficient cost accountability is not already addressed through the use of longer contract terms.

NGTL's assessment will be based on its informed judgment on quantitative and qualitative factors, none of which are determinative or prescriptive, including:

- The degree to which the proposed facilities would be integrated with the System, including:
 - the extent to which a project can be operated/used independently from the existing NGTL System;
 - the potential number of customers utilizing the facilities over the long term;
 - the physical location of the project relative to the existing NGTL System;
 - the need by existing NGTL System customers for the incremental supply or demand;
 - the extent to which the facilities serve new versus existing markets or supply.
- The nature of the service to be provided using the proposed facilities in relation to the service provided on existing System.
 - Whether the facilities will primarily be used to provide the same service that is available on the existing System.
- No excessive cross-subsidization, which may be guided by an assessment of quantitative and qualitative factors, including:
 - the incremental costs and revenues of the facilities on a net present value basis;
 - the anticipated impact on NGTL System tolls;
 - the financial and credit circumstances of the underpinning customer(s);
 - the term of underpinning contracts terms and toll stability associated with the resulting revenues;
 - the aggregate need for the facilities by other customers on the System; and
 - other benefits to the System and existing customers including, but not limited to:
 - increased utilization of existing facilities;
 - increased connectivity to long-term gas supply;
 - increased connectivity to long-term gas markets;
 - impacts to physical System flows from the proposed facilities that result in a decreased need for fuel or other facilities, or that results in an increase to System reliability and/or improved System operations.