April 10, 2012

VIA EMAIL

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

Attention: Alanna Gillis, Acting Commission Secretary

Dear Ms. Gillis:

Re: An Inquiry into FortisBC Energy Inc. regarding the Offering of Products & Services in Alternative Energy Solutions & Other New Initiatives (the "Inquiry")
Project No. 3698635
Ferus Inc., LNG Division – Final Submission

With respect to the Inquiry, please find attached Ferus LNG’s Final Submission.

Yours truly,

Original Signed by

Nicholas Gretener

c: Ms. B. Lancaster – Ferus Inc., LNG
Interested Parties
FortisBC Energy Utilities
An Inquiry into FortisBC Energy Inc.
Regarding the Offering of Products and Services in
Alternative Energy Solutions and Other New Initiatives

FINAL SUBMISSION OF
FERUS LNG
D. BCUC EVALUATION PROCESS FOR NEW INITIATIVES ........................................ 42
   (a) Transfer Pricing—RMDM Principles Applicable ........................................ 42
   (b) Separate Classes of Service ........................................................................ 43

E. CODES OF CONDUCT ......................................................................................... 48
   (a) Code of Conduct—RMDM Principles Applicable ......................................... 48

F. UTILIZATION OF EEC FUNDS .......................................................................... 50
   (a) Past EEC LNG Funding Not Provided on a Non-Discriminatory Basis .......... 50
   (b) Future Potential EEC Funding ..................................................................... 53

G. CONCLUSION ..................................................................................................... 53

ATTACHMENTS

1. Excerpts from Forbearance, Regulation and Market Power in Natural Gas Storage: The Case of Ontario
2. Excerpts from Industrial Organization: A Strategic Approach
3. Ferus LNG Initial Proposed Guidelines
A. INTRODUCTION

(a) Format

1. This final submission ("Final Submission") in the Inquiry into FortisBC Energy Inc. Regarding the Offering of Products and Services in Alternative Energy Solutions and Other New Initiatives ("Inquiry") is submitted by Ferus Inc.'s LNG Division ("Ferus LNG"). For ease of reference, following this Introduction, the Final Submission follows the Areas for Consideration contained in the British Columbia Utilities Commission ("BCUC" or "Commission") February 9, 2012 Final Submission Guidelines.¹

(b) Procedure

2. Ferus LNG acknowledges the Commission's determination in Order G-9-12 against changing the approach put forward in Order G-118-11 that provides the FortisBC Energy Utilities ("FortisBC") with an applicant's final right of reply. To ensure as complete a hearing record as possible, and advance notice to all parties of Ferus LNG's positions on the issues at play, Ferus LNG provided legal arguments in its evidence and IR responses (see, for example, Section C(b) of this Final Submission). In the interests of procedural fairness and operating within the bounds of the process as determined by the Commission, to the extent that FortisBC or other parties have issues with the previously stated positions of Ferus LNG, Ferus LNG expects that such issues will have been raised in Final Submissions, with parties not waiting until Reply to do so.

¹ Final Submission Guidelines, Ex. A-22.
(c) **Focus of Ferus LNG Final Submission—LNG Services (Existing and New)**

3. In line with the Commission’s stated scope for the Inquiry, Ferus LNG has addressed the issues in the Inquiry at a principles level—as noted in its evidence, Ferus LNG is not expert in ratemaking nor has it engaged such expertise for the Inquiry. Consistent with its evidence, Ferus LNG’s Final Submission is focused on FortisBC’s recent initiatives into the Liquefied Natural Gas ("LNG") market sector.

4. FortisBC defines the LNG related "New Initiative" under review in the Inquiry as its "CNG/LNG Fueling Service", consisting of fueling stations for heavy-duty and vocational Natural Gas Vehicles ("NGVs"). However, FortisBC’s LNG activities go beyond fueling station initiatives. FortisBC is presently active in the following sectors: (i) production of LNG; (ii) storage of LNG; (iii) transportation of LNG by tanker fleet; and (iv) provision of LNG fueling services for the return-to-base, on-road transportation market. In addition, FortisBC has indicated that it is exploring at a high level the use of LNG for remote generation of electricity, among other uses.

5. The Commission described FortisBC's LNG related services in its July 19, 2011 Reasons for Decision attached as Appendix A to Order G-128-11 ("CNG-LNG Decision") as follows:

LNG is natural gas which has been cooled to -160 degrees Celsius and must be stored on vehicles and in stations at this low temperature if it is to remain in a liquid state. FEI states that this fuel, because of its density, is particularly well-suited for vehicles like highway tractors with high daily mileage requirements. Like CNG, the value chain for LNG involves a number of steps. The first of these is the production and initial storage of LNG which is currently done at FEI's Tilbury bulk LNG storage facility. The second step in the chain involves the delivery of LNG for use in a customer's fuelling station since there is no piped infrastructure for LNG. FEI states that its proposed LNG service offering contemplates FEI owning and operating the transport and delivery process although it will allow customer delivery of the LNG where appropriate. The third step in the value chain involves the fuel storage and dispensing at the customer fuelling station - services which again FEI will provide. As with the CNG

---

2 Order G-118-11, Appendix A, Ex. A-5, s. 2.1, p. 4.
3 Ferus LNG Evidence, Ex. C8-5-1, s. F.3, p. 13.
6 Ferus LNG – FortisBC 1.5, Ex. B-10, p. 3.
model, FEI anticipates that it will be positioned to provide a complete LNG service offering to the customer. This will involve the following:

- Provision of LNG supply at Tilbury (where it is offered for bulk sale under Rate Schedule 16 which is an interruptible service currently offered pursuant to a 5 year pilot project);
- Securing a service agreement with the customer for the LNG fuelling station (including cryogenic storage and dispensing);
- LNG transport from Tilbury to the customers' facility by transport truck, if required; and
- Investment in and maintenance of the storage and dispensing equipment.\(^7\)

6. It appears that while FortisBC considers fueling stations to be a "New Initiative", it does not include in that term the associated services of LNG production/dispensing/sales, storage and transportation.

7. Ferus LNG believes that with respect to the LNG "value chain" that leads to service for LNG and Compressed Natural Gas ("CNG") customers, all services comprising that value chain should be considered in the Inquiry. Specifically, these services would include:

   (i) LNG production/dispensing/sales services;
   (ii) LNG transportation (tanker) services; and
   (iii) LNG/CNG fueling services.

8. Further, as noted in its evidence and discussed in more detail in Section B(f), Ferus LNG does not believe that the guidelines to be developed in the Inquiry ("Guidelines") should limit themselves to existing activities undertaken by FortisBC but should be as comprehensive and generic as possible,\(^8\) speaking broadly to potential new initiatives in areas Ferus LNG defined in its evidence as "Natural Unregulated Services"—i.e. services not displaying natural monopoly characteristics.\(^9\) The Commission referred to such a service as a "natural competitive service" in its recent

\(^7\) CNG-LNG Decision, Ex. B-2, Appendix E.3, p. 10.
\(^8\) Ferus LNG Evidence, Ex. C8-5-1, p. 16, lines 11-12.
\(^9\) Ferus LNG Evidence, Ex. C8-5-1, p. 12, lines 6-10.
decision ("DSD Decision") on the Delta School District Thermal Energy Service ("TES"). The Guidelines should provide guidance to FortisBC and other parties on how such activities will be approached by the Commission.

9. FortisBC states in the conclusion to its final submission: "The FEU desire, above all else, certainty with respect to the rules by which it undertakes the New Initiatives and a clear path forward…" 10 Ferus LNG would strongly suggest that while not fettering future decisions by the BCUC, establishing Guidelines that provide guidance as to the BCUC’s general approach to future initiatives into Natural Unregulated Services will go a significant way to addressing FortisBC's desire to know the likely “rules of the game” as soon as possible. Such Guidelines would also provide much needed direction for other potential industry participants (in this respect, see Paragraph 83). Further, this would be consistent with the approach taken by the Commission in the 1997 Retail Markets Downstream of the Utility Meter ("RMDM") Guidelines. 11

(d) Establishing a Robust Market for LNG Related Services

10. Ferus LNG’s overarching objective in this proceeding is to set the table for LNG activities in BC in such a way as to encourage, to the maximum extent possible, the development of a vibrant, well functioning market for LNG services.

11. As noted in its evidence, Ferus LNG acknowledges that the development of the NGV market not just in BC but on a worldwide basis has been difficult and has experienced a number of “false starts”. This difficulty has almost always directly or indirectly resulted from the inherent inertia that occurs in moving from one well established source of fuels (i.e. gasoline and diesel fuels) to another. 12

12. However, in recent years the fundamentals of the alternative fuels market have changed substantially and there are now significant opportunities for a competitive market to develop in BC and elsewhere. 13 In particular, as the demand for these fuels has grown, there has been a corresponding increase in opportunities for companies

---

10 FortisBC Final Submission, para. 301, p. 128.
11 Retail Markets Downstream of the Utility Meter Guidelines, Ex. B-1, Tab 17.
12 Ferus LNG Evidence, Ex. C8-5-1, Section A.3, p. 2.
13 See, for example, Ferus LNG Evidence, Ex. C8-5-1, Section C, pp. 5-9.
capable of producing and delivering these fuels, at competitive prices, either directly to customers or to more publically available fueling stations.

13. Ferus LNG’s participation in this Inquiry is not intended to thwart any LNG related initiatives but rather to ensure that such initiatives do not create an unlevel playing field that in itself may stifle the development of a freely operating, competitive market in LNG services and result in costs and risks being unnecessarily shifted onto utility ratepayers. Ferus LNG accepts that in those relatively rare cases where “natural monopoly” conditions exist, the needs of the citizens of BC may best be protected through the offering of a monopolistic regulated service (including an obligation to serve), with the risks created by that monopoly mitigated through regulatory oversight by the BCUC. However, Ferus LNG believes that such naturally regulated markets are the exception and that in general, the public interest, as measured in terms of lowest costs and best practices, is best protected by ensuring effective competition occurs. Ferus LNG considers the development of such a market is critical to the ultimate success of the NGV/LNG industry and would be in the public interest of all British Columbians.

14. In order for Ferus LNG and other companies to justify their investment in the LNG sector in BC, it is critical that the market remain founded on principles of fair competition and equal access for all players. The issues of whether and how regulated utilities participate in this market will be critical to its future development. As such, the outcome of the Inquiry is of the utmost importance to Ferus LNG.

B. REGULATORY SCOPE OF THE BCUC

(a) Introduction

15. The following discussion of the regulatory scope of the BCUC covers both: (i) the concept of forbearance or exemption from active regulation; and (ii) the question of whether a public utility should be involved in providing Natural Unregulated Services in the first place (the "if" question). The Commission’s ability to regulate a public utility in accordance with the provisions of the UCA—this can be considered the "how" to regulate issue—is not addressed as this does not appear to be at issue since no party has raised any objections in this vein. For example, with respect to TES, FortisBC
states: "FortisBC will operate within whatever framework is established by the Commission for TES..."—FortisBC's major issue apparently being to obtain clarity (regulatory certainty) on that framework as soon as practical.14

16. In addition to the forbearance and "if" issues, the following broader regulatory issues are addressed below: (i) the ability of the Commission to consider wider competitive impacts in regulating public utilities; (ii) the scope of the Inquiry with respect to future as well as existing activities; and (iii) the status of past decisions in light of the Inquiry.

(b) **Legal Ability of BCUC to Refrain from Regulation—Forbearance**

17. Whether or not an activity carried out by a public utility is automatically "regulated" by virtue of the provisions of the *Utilities Commission Act*, R.S.B.C. 1996, c. 473 ("UCA"), subject to obtaining Lieutenant Governor in Council approval, the Commission has the legal ability to "forbear" from regulating the activity under s. 88(3) of the UCA.

18. In a co-authored paper on forbearance in the natural gas storage sector of Ontario ("Forbearance Paper"—Excerpts in Attachment 1), Dr. Roger Ware noted:

5.0 **REGULATION, MARKETS AND FORBEARANCE**

The impetus for deregulation of natural gas storage comes from two sources. First, there is a desire to encourage efficiency within the operation of the market, based on the view that an unregulated competitive market provides the best environment for delivering products and services to consumers at the lowest cost and using the best practice technology. Even if products could be delivered with equal efficiency under a regulated environment or through a private market, the latter would certainly save the administrative costs of regulation. Indeed, section 29 of the *Ontario Energy Board Act, 1998* embodies this view in requiring the Board to refrain from regulation when there is or will be "competition sufficient to protect the public interest".

The second goal is more direct: to encourage investment in new storage capacity...15

---

14 FortisBC Final Submission, para. 301, p. 128.
19. Ferus LNG understands that s. 88(3) of the UCA appears to be used primarily to exempt small operations that would otherwise be subject to the complexities of regulation when this is not required to protect customers. FortisBC noted:

   The Commission is admittedly unlikely to be interested in regulating a person that owns a single piece of equipment; however, it becomes easier to see why this service would be regulated in a hypothetical case where a large corporation was providing the service at hundreds of locations with hundreds of pieces of equipment.\(^{16}\)

20. The Commission has described the effect of s. 88(3) of the Act as follows:

   In practice, this provision for an exemption usually results in an order exempting regulated utilities from most provisions of Part 3 of the Act and allowing regulation to occur on a complaint basis. This provision has been used successfully for some years to exempt a number of public utilities from most regulation under the Act. A relevant recent example is Order G-81-08, which exempted Al Stober Construction Ltd. (ASC) from Part 3 of the Act with respect to the sale by ASC of heat from the Landmark Buildings, which have a geothermal heating and cooling system that from time to time generates excess heat, to the adjacent Strata Lands. This example of light-handed regulation is mostly used when both the utility and the customer are seeking the exemption. When regulation no longer serves the function of protecting customers a more light-handed regulation or deregulation becomes appropriate.\(^{17}\)

21. In the context of Natural Unregulated Services, Ferus LNG believes that such services should not be provided by a major utility such as FortisBC within the regulatory framework. If, however, they are, Ferus LNG also believes that forbearance is unlikely to be appropriate because ongoing regulatory safeguards will be required to prevent cross-subsidization and/or predatory pricing (see Section B(d)). While forbearance is premised on markets being subject to competition sufficient to protect the public interest, it should not result in utilities being able to compete in such markets with a competitive advantage derived through cross-subsidization, including the ability to use guaranteed returns to ameliorate the business risk associated with offering the new services.

---


\(^{16}\) ESAC – FortisBC 1.10.1, Ex. B-9, p. 37.

\(^{17}\) DSD Decision, s. 3.1.2, p. 11.
service (see Section B(h)). This aspect of forbearance was noted in the Forbearance Paper:

The CRTC, relying on section 34 of the Telecommunications Act, is willing to forbear from regulation when “a service or class of services provided by a Canadian carrier is or will be subject to competition sufficient to protect the interests of users”. The CRTC test thus resembles closely the language in section 29 of the *Ontario Energy Board Act, 1998*. Through application of these criteria, the CRTC has forborne from regulating the supply of long distance services, telephone equipment, customer inside wiring, business and residential local telephone services, high-speed Internet services, wireless telephone services and data services.

Because of the original status of these industries as natural monopolies, the CRTC approach emphasizes the need to ensure that a dominant incumbent firm is not able to exercise substantial market power. Indeed, much of the CRTC’s concern over forbearance has been a concern over prices that might be too low, rather than too high – in other words a concern about predatory behavior exercised by the incumbent firms…  

(c) **Legal Ability of BCUC to Prohibit Utility Participation in a Market or to Direct Greater Structural Separation**

22. FortisBC states that the UCA confers no discretion upon the Commission to decide, as a matter of regulatory policy, that certain entities, who otherwise meet the definition of "public utility" under the UCA, are not subject to the UCA. However, that does not address the core issue of whether the Commission has the jurisdiction to prohibit FortisBC from participating in a market as a public utility or to require greater separation. It is respectfully submitted that in the appropriate circumstances, the Commission has such jurisdiction, grounded both in its ratemaking jurisdiction and its jurisdiction to encourage the promotion of provincial clean energy objectives. As noted in the RMDM Guidelines and the associated legal opinion ("Fulton Opinion"):

The Commission has the jurisdiction to prohibit a public utility from participating in retail markets downstream of the meter if prohibition is the
only reasonable and effective means by which the Commission can mitigate or alleviate any negative effects on ratepayers.21

23. The Fulton Opinion discussed the interpretation of the UCA as follows:

…the various provisions of the Act must be interpreted in light of the purpose of the Commission, namely the protection of the ratepayer against the monopoly power of the utility. Further, the intention of the Legislature when the Act was enacted is important. As noted above, it seems unlikely the Legislature reasonably contemplated the participation of the public utilities in RMDM when the Act came into force in 1980. In our opinion, it is far more likely the Legislature had in mind the traditional services, operations, property and systems of a public utility, name production and delivery of natural gas and electricity.22

24. FortisBC relies on these conclusions of the Fulton Opinion in stressing the UCA's focus on ratepayer protection. For example, FortisBC states:

The FEU submit that this is an accurate description of the purpose or object of the UCA. It is consistent with the opinion of Commission counsel that was filed in the RMDM proceeding, in which Mr. Fulton stated: “In our view, the historical purpose of public utility tribunals was to protect the ratepayer from the market power of the monopoly public utility by setting prices and conditions of service.”23

25. While this may have been the historical purpose of the UCA, this purpose has evolved. Were the Fulton Opinion to be written today, it would have to incorporate the intention of the Legislature and the purpose of the UCA not only with respect to the terms of the UCA that were included in 1980, when the UCA first came into force, but also the intention of the Legislature and the purpose of the UCA some thirty years later with respect to amendments to the UCA dictated by the Clean Energy Act, S.B.C. 2010, c. 22 (“CEA”), which incorporated the provincial clean energy objectives into the UCA.

26. It is respectfully submitted that the UCA now expressly mandates the Commission to take into account the impact of its actions on the development of the greater clean energy industry in the province. In this regard, see also Section C(b).

21 Retail Markets Downstream of the Utility Meter Guidelines, Ex. B-1, Tab 17, s. 5.1.1, p. 21.
23 FortisBC Final Submission, para. 32, p. 17.
27. Following implementation of the Clean Energy Act amendments to the UCA, the Commission now has the jurisdiction to prohibit a public utility from participating in a market sector or to require greater separation between utility services and Natural Unregulated Services not only:

if prohibition or greater separation is the only reasonable and effective means by which to mitigate or alleviate negative effects on ratepayers;

but also:

if prohibition or greater separation is the only reasonable and effective means by which to further the provincial energy objectives.

28. While FortisBC argues that the Inquiry should focus on "how" it provides the New Initiatives, not "if", FortisBC does not appear to take issue with the Commission's jurisdiction to decide the "if" question in the appropriate circumstances.

29. Ferus LNG believes that if the Commission can prohibit a public utility from operating in a certain market in the appropriate circumstances, it naturally follows that the Commission can equally direct a public utility to exit a certain market in the appropriate circumstances.

30. The question then becomes: When should the Commission regulate?

(d) **What Activities Should Be Regulated?**

31. Ferus LNG believes that as a general rule, Natural Unregulated Services should not be regulated by the Commission. The forces of competition are superior to regulation in developing the marketplace as well as ensuring lowest prices and greatest efficiency in the delivery of services. Ferus LNG believes that the costs of regulation will generally outweigh any benefits of having regulated entities operate within competitive market sectors. In addition to the risk that regulatory oversight will not always ensure that all costs are prudently incurred, such costs include the detailed, extensive regulation required to ensure there is minimal cross-subsidization. An example is

24 FortisBC Final Submission, para. 23, pp. 11-12.

25 The furtherest FortisBC appears to go in this respect is to say that parties' challenges to its ability to pursue the New Initiatives "are not aligned with the Commission's jurisdiction to regulate how public utilities deliver their regulated services to the public"—see FortisBC Final Submission, para. 5, p. 2.
provided in the DSD Decision. There, despite FortisBC's efforts to minimize cross-subsidization, the Commission noted its concern that certain cost items appeared to be missing from the Cost of Service model. These included: capitalized overhead, cash working capital, inflation and escalation on capital replacements and sustaining capital items. The Commission also expressed its concern with the accuracy of the calculation of the future maintenance and capital replacement schedules provided confidentially in that proceeding.26

32. Another example of the time and effort required to guard against cross-subsidization in the absence of greater structural separation is the CNG-LNG Decision, where the Commission had to impose significant adjustments to the applied-for provisions of the General Terms and Conditions in order to protect natural gas ratepayers.27

33. As the structural separation between regulated services and Natural Unregulated Services decreases, proper cost allocation becomes an increasingly important and challenging exercise. This was recognized by the Commission in the DSD Decision:

Proper allocation of overhead and other expenses, whether within FEI or to an affiliate through a transfer pricing policy, should in theory be the same. Nevertheless, as noted above, cost allocation and its oversight are challenging. Therefore, the transparency and clarity provided by a separate corporate entity would assist in this regard.28

34. In the DSD Decision the Commission noted that greater separation should serve as the "starting point" in terms of regulatory policy:

While it is clear from the evidence that there is a range of corporate structures that can be considered to be sufficiently self-contained, the Panel must determine if we are able to consider the DSD class of service as a self-contained unit for rate-setting purposes. To this end, the Panel finds that greater separation is preferred as a starting point, with the onus being on the utility to argue the merits of greater integration.29

26 DSD Decision, s. 8.2.2, p. 85.
28 DSD Decision, s. 8.4.2.2, p. 96.
29 DSD Decision, s. 8.4.2.2, p. 94.
35. FortisBC relies extensively on the evidence of Dr. Roger Ware, filed in Rebuttal Evidence, in supporting its argument that there is an economic rationale for regulation irrespective of competition. However, Ferus LNG notes that while Dr. Ware concludes that FortisBC's participation in the TES sector is most likely to introduce economic efficiencies without detriment to natural gas ratepayers, Dr. Ware relies heavily on regulatory measures and the continuing oversight of the BCUC to guard against anti-competitive effects:

FEI is segregating TES from natural gas class of service for ratemaking purposes to ensure that rates paid by natural gas customers and TES customers are fair, just and reasonable as defined under the Act. I have been asked to assume, for the purposes of my opinions, that a cost allocation – including assignment of direct costs and a fair allocation of overhead – has been approved by the Commission.

Fair competition between FEI and other suppliers offering products in the emerging TES market can exist within an appropriate regulatory framework.

In an unregulated competitive market, an incumbent who controls one market might have an incentive to cross-subsidize their products and services in another market in order to gain a competitive advantage over rival suppliers. Such an incentive is mitigated at the very least here for FEI where both the relevant product classes, the gas utility business and the TES market, will be regulated. This means that no matter what success was achieved in winning business through cross-subsidization, the outcome would be a regulated rate of return. Moreover, there is a further, perhaps more important, safeguard against cross-subsidization in that regular rate hearings for the FEI gas utility business would straightforwardly reveal the presence of any cross-subsidization of revenue generated from natural gas into FEI TES projects. These hearings entail extensive scrutiny of the FEI revenue requirement, and in my opinion the presence of cross-subsidization would be transparent.

30 FortisBC Final Submission, paras. 47-61, pp. 22-28.
34 FortisBC Rebuttal Evidence, Ex. B-19, Attachment B, para. 28, p. 16.
36. In his book *Industrial Organization: A Strategic Approach* (Excerpts in Attachment 2), Dr. Ware discusses the issue of regulated entities operating within competitive market sectors:

**26.3.1 Why Regulated Firms Should Be Kept Out of Unregulated Markets**

This issue of the appropriate policy response to diversification by regulated monopolists into competitive markets has a long and controversial history. It continues to be very topical because the restructuring in network industries typically takes the form of allowing competition in some activities, or stages of production, of the regulated monopolist but not all. Should there be limitations on the range of activities offered by the incumbent monopolist? Should it be allowed to compete in the activities opened up for competition? In the case of telecommunications in the United States the definitive answer in 1982 was no...

Diversification by a regulated monopolist is also a relevant question to ask even if the regulated monopolist is not an input supplier for its competitors...The most common argument to restrict the regulated monopolist from entering competitive markets is that it will have an unfair advantage since it will use its profits from its regulated monopoly service to “cross-subsidize” its affiliates in competitive markets.35

37. Dr. Ware goes on to evaluate this cross-subsidization argument, and concludes in the immediately following section of his book:

**26.3.2 Access Pricing and Interconnection**

In the previous section we established that a regulated incumbent is likely to have incentives to thwart the development of competition through pricing and the terms of access or interconnection. The regulatory response to promote competition has taken one of two forms: (i) vertical separation as in the case of AT&T and (ii) the introduction of an equal access pricing regime.36

38. While Ferus LNG believes that the costs of regulation and potential anti-competitive impacts will generally outweigh any benefits (e.g. shared overhead) of having public utilities operate within competitive market sectors, if they are nevertheless allowed to operate within such sectors, then it is instructive to note, according to

---

FortisBC’s own expert, the importance of having an appropriate regulatory framework to address potential cross-subsidization. This framework comes with added costs in terms of time and expense both for the regulator and interested parties. While it may be difficult to precisely quantify these costs, they are an important consideration to be weighed by the Commission in assessing whether or not it is in the public interest to allow Fortis BC to operate in a Natural Unregulated Services marketplace.

39. The Commission has described this balancing act as follows:

The cost savings which can be gained through greater integration must be weighed against the benefits of full segmentation or separation, on a case by case basis. For certain functions, such as billing systems, an integrated approach may be the most cost-effective and desirable solution bearing the principle of fair access to monopoly resources in mind. In others, such as operations, a greater degree of separation may be appropriate and required. A more integrated structure and the resulting potential cost ambiguity require a greater degree of judgement to set appropriate rates. Conversely, increased self-containment allows for: easier evaluation and measurement of segments, future divestiture, clearer reporting, improved transparency and cost accuracy, clearer cost allocation, reduced possibility of cross-subsidization, improved objectivity and regulatory efficiency through simpler rate-setting.37

40. In summarizing its position as to why it wishes to offer the New Initiatives as regulated services, FortisBC states:

The provider of an offering that the UCA defines as being regulated does not bear the onus of demonstrating that regulation is a reasonable outcome. If any provider wants to pursue an unregulated service option in an otherwise regulated market, it should be free to apply for an exemption order and seek to demonstrate a rationale for providing the service without regulatory oversight.38 (emphasis added)

41. With respect, FortisBC is standing the issue on its head with this reasoning when it comes to Natural Unregulated Services. When FortisBC refers to "an otherwise regulated market", in the case of a Natural Unregulated Service it is really referring to a market that would otherwise be unregulated but for the fact that it is being provided by an already regulated entity.

37 DSD Decision, s. 8.4.2.2, pp. 94-95.
38 FortisBC Final Submission, para. 36, p. 18.
42. As noted by the Commission in the CNG-LNG Decision:

…it is only because FEI is already "otherwise a public utility" that this new business is required to be regulated. FEI would be free to pursue this business through a non-regulated subsidiary and thereby avoid Commission oversight. Other companies, not otherwise public utilities, may enter the industry and will not be subject to regulation.39

43. FortisBC similarly acknowledges that "…CNG/LNG Service is not regulated unless it is provided by an entity that is 'otherwise a public utility'."40

44. As noted in its evidence, Ferus LNG believes that it is the inherent character of the service at issue that should be determinative as to whether the service is regulated in the normal course—or in FortisBC's words, "when regulation is a reasonable outcome." Services that have no natural monopoly characteristics are inherently unregulated services, irrespective of which company, regulated or not, chooses to provide them.41 For a discussion of why LNG related services are not natural monopolies, see Section D(b). The arbitrary element of who the service provider is does not redefine that service's characteristics as far as regulation policy is concerned.

(e) Legal Ability of BCUC to Consider Competitive Impacts

45. FortisBC argues that there is no express or implied jurisdiction in the UCA to regulate "fair competition" or "unfair competitive advantage".42 FortisBC refers to the RMDM proceeding to advocate a narrow view of the Commission's jurisdiction, limited to a focus on ratepayers.43 FortisBC argues that the Commission regulates public utilities, not markets.44 FortisBC concludes that the Commission does not have the jurisdiction to regulate the relationship between classes of service so as to ensure that the relationship does not affect competition.45

46. With respect, FortisBC is wrong and misses the point as it relates to the interplay between the Commission's jurisdiction over rates and competition. At the time of the

40 FortisBC Evidence, Ex. B-2, s. 3.3.8, pp. 67-68.
41 Ferus LNG Evidence, Ex. C8-5-1, s. F.1, p. 11, lines 23-37.
42 FortisBC Final Submission, para. 74, pp. 33-34.
43 FortisBC Final Submission, paras. 74-75, pp. 33-34.
44 FortisBC Final Submission, para. 74, pp. 33-34.
45 FortisBC Final Submission, para. 72, p. 33.
RMDM Guidelines, the Commission concluded that the consideration of the long-term effects on the markets of utility provision of unregulated goods and services fell outside of its jurisdiction. This conclusion is no longer valid with the implementation of the Clean Energy Act and corresponding revisions to the UCA, which have broadened the Commission's jurisdiction. The UCA now contains express provisions granting the Commission jurisdiction with respect to matters affecting the objectives of the CEA. Indeed, the UCA now mandates the Commission to consider the objectives of the CEA.

47. All of this is acknowledged by FortisBC when it notes that: "In the context of CPCN applications, expenditure schedule applications, LTRP reviews, and energy supply contract filings, the Commission 'must consider the applicable of British Columbia's energy objectives'."

48. The provincial energy objectives the Commission is mandated to consider include: (i) reducing BC greenhouse gas ("GHG") emissions; (ii) encouraging the switching from one kind of energy source or use to another that decreases GHG emissions; and (iii) encouraging economic development and the creation and retention of jobs. The goals of reducing GHG emissions and encouraging the switching to less GHG intensive fuels are clearly not restricted to considering only the interests of FortisBC ratepayers. Rather, the goal is to encourage, in the public interest, as many BC users of energy as possible, regardless of whether they are FortisBC customers or not, to make the switch to less GHG intensive fuels—the aim being to reduce overall GHG emissions in the province. Similarly, the goal of encouraging economic development and the creation and retention of jobs is not limited to the perspective of FortisBC customers.

49. Through its legislated mandate to pursue these provincial energy objectives, the Commission's public interest assessment of LNG services must therefore consider competition from a wider perspective. Specifically, the Commission is mandated to consider how any FortisBC initiatives may affect not just FortisBC ratepayers, but the

---

46 Retail Markets Downstream of the Utility Meter Guidelines, Ex. B-1, Tab 17. s. 5.1.4, p. 24.
47 FortisBC Final Submission, para. 71, p. 32.
48 Utilities Commission Act R.S.B.C. 1996, c. 473, s. 1 definition of "British Columbia's energy objectives"; Clean Energy Act, S.B.C. 2010, c. 22, s. 2(g), (h) and (k).
overall development of the fuel switching industry in the province—including the industry involved in making LNG available as an alternative to diesel fuel.

50. In addition to its mandate with respect to provincial energy objectives, the Commission’s traditional ratemaking mandate is very broad. It includes the consideration of "…all matters that it considers proper and relevant affecting the rate,…"49

51. FortisBC states:

The starting point for the ongoing regulation should be that the New Initiatives are consistent with policy objectives, and the analysis undertaken in future applications should be limited to quantifying the benefits in each case.50

There is no express or implied provision in the UCA to support such a position—it is based entirely on FortisBC's stance that this matter has been decided in past decisions and is not open to review in the Inquiry.

52. Ferus LNG submits that past decisions should be grandfathered in order to protect the good faith investments already made (see Section B(i)). They should not and in fact cannot fetter the BCUC in developing forward looking guidelines. The "starting point" for how the New Initiatives fit within the policy objectives must always be evaluated in the context of meeting those objectives on a provincial level, not just with respect to FortisBC's customers. That analysis is relevant to the determination of "if" and "how" the New Initiatives should be regulated by the Commission. In this respect, see also Sections B(d) and C(b).

53. The above legal arguments regarding the Commission’s jurisdiction and mandate vis-à-vis competitive matters were set forth in BCUC – Ferus LNG – 7.1 (Ex. C8-7, pp. 9-12) and were not challenged in the final submission of FortisBC.

50 FortisBC Final Submission, para. 71, p. 32.
(f) Inquiry Scope Includes Future as well as Existing Services

54. FortisBC argues that the Inquiry should be focused on the existing four New Initiatives as defined by FortisBC and should not seek to anticipate other future offerings. FortisBC suggests that s. 23 of the UCA inhibits the Commission's ability to regulate or put in place guidelines that are aimed at undefined services or to direct how FortisBC develops future services. FortisBC relies on a Court of Appeal case to support this conclusion. Ferus LNG disagrees.

55. The scope of the Inquiry, as set out in Order G-118-11 Appendix A, specifically contemplates both existing and new (potential) activities:

   After assessing the variety of views by parties to the proceeding, the Panel has concluded that the issues to be put before the Inquiry are as outlined in the attached Scope and Issues document. The Panel encourages all parties to view AES and other new energy initiatives from a broad perspective including both existing activities and programs and potential activities and programs that deal with market activities beyond what has been the case in traditional gas utilities.

56. It is fully within the Commission's jurisdiction to scope the Inquiry as it has. The Court of Appeal case cited by FortisBC deals only with guidelines that attempt to act in a mandatory manner (imposing sanctions) and thereby fetter a regulator's discretion. Ferus LNG submits that the case cited by FortisBC has no application to properly devised guidelines that are just that, guidelines, which do not attempt to overstep and fetter the regulator's discretion. The Court of Appeal made this critical distinction clear in its decision:

62 This policy statement purported to be a guide to those engaged in the marketing and selling of penny stocks as to business practices the OSC regarded as appropriate. As was set out in greater detail in Pezim v. British Columbia (Superintendent of Brokers), [1994] 2 S.C.R. 557 [92 B.C.L.R. (2d) 145], major securities commissions such as the OSC have a policy role in the regulation of capital markets in the public interest as well as an adjudicative function in applying sanctions in specific cases. The following headnote from Ainsley is, I think, relevant to the point before us.

51 FortisBC Final Submission, para 17, p. 9.
52 FortisBC Final Submission, para. 19, p. 10.
53 Order G-118-11, Appendix A, Ex. A-5, s. 2.4, p. 6.
The validity of the policy statement turned on its proper characterization. If the statement was a non-binding statement or guideline intended to inform and guide those subject to regulation, the statement was valid and within the authority of the OSC; guidelines of this nature do not require specific statutory authority and such guidelines are not invalid merely because they regulate in the sense that they affect the conduct of those at whom they are directed. If, however, the statement imposed mandatory requirements enforceable by sanction, then the statement required statutory authority; a regulator cannot issue de facto laws disguised as guidelines.

63 The issue of non-mandatory guidelines is not a question before us. Here, I repeat, the Commission has explicitly purported to enforce the application of its directions with the threat of sanctions.54

57. There is no suggestion that the Guidelines arising from the Inquiry will be drafted to be anything other than true guidelines— that is "intended to inform and guide". To the contrary, the Commission’s Terms of Reference for the Inquiry recognize the general nature of the Guidelines:

The Inquiry...is a forward looking assessment with the aim to establish principles that can be applied to future regulatory processes...Parties are invited to bring forward relevant aspects of past decisions in their evidence that illustrate relevant principles and policies. The purpose in doing so should be to assist the Commission in determining what general principles or guidelines could be applied in future proceedings...55

58. Ferus LNG sees the Guidelines resulting from the Inquiry as being similar in nature to the RMDM Guidelines—in fact, as noted in later sections of this Final Submission, Ferus LNG believes that many of those guidelines have as much, if not more, relevance today. Ferus LNG is not aware of any challenges having been made to the Commission's jurisdiction with respect to the RMDM Guidelines.

59. Finally, the attempts by FortisBC to narrow the scope of the Inquiry appear to Ferus LNG to be at odds with FortisBC's stated desire for regulatory certainty. FortisBC states: "Above all else, the FEU's overarching objective coming out of this Inquiry will be

to restore a measure of certainty regarding how the FEU can undertake these beneficial New Initiatives.\textsuperscript{56} To the extent that the Commission provides guidance as to the future framework for Natural Unregulated Services, the path forward becomes more certain.

**g) CPCN Threshold**

60. Ferus LNG does not support a threshold of any amount exempting new initiatives from the requirements of a Certificate of Public Convenience and Necessity ("CPCN"). Ferus LNG refers to the submissions made in its January 16, 2012 letter in the Inquiry (Ex. C8-10) and will not repeat them here. In general, Ferus LNG believes that any new initiatives or initiatives into Natural Unregulated Services should be subject to the CPCN process until such time as the Commission is comfortable that the framework within which such initiatives will operate is well established and there is no prejudice to any interested parties in processing smaller projects under a dollar-threshold exemption. The fact that a $5 million threshold has been established for the mature natural gas facilities side of FortisBC’s business should serve as no precedent as to the merits of a threshold for less mature service initiatives.

**(h) Regulation v. Competition**

61. Throughout its Final Argument, FortisBC appears to suggest that if the BCUC allows FortisBC to offer CNG-LNG services on a regulated basis it will be able to offer those services at lower price than would occur in an open competitive market. FortisBC notes, for example, that its cost of service rates:

\[ \text{…flow the differential between the delivered cost of compressed or liquefied natural gas and the delivered cost of diesel to the customer, rather than keeping a greater portion as shareholder profit.}\textsuperscript{57} \]

62. Similarly, FortisBC notes that it would, as a regulated provider of LNG services, be able to bring significant "economies of scope" to its offering to customers that presumably other parties would not be able to provide.\textsuperscript{58}

\textsuperscript{56} FortisBC Final Submission, para. 7, p. 3.
\textsuperscript{57} FortisBC Final Submission, para. 199, p. 86.
\textsuperscript{58} FortisBC Final Submission, para. 200, p. 86.
63. FortisBC does not, however, provide any rationale as to why it could not offer these same advantages if operating as a participant in a competitive market. For example, in order to ensure market share, all companies normally assess what return they require on their investment when establishing price. FortisBC would in no way be limited in what return it generated for its shareholders in a competitive market and so could continue to flow as much of the differential between the cost of LNG and diesel fuel back to its customers as it chose (and the market required).

64. Similarly, the economies of scope that FortisBC currently enjoys would presumably continue whether it was offering CNG and LNG services through either a regulated or non-regulated business entity. This is particularly true since presumably many, if not all, of these economies of scope (and presumably scale as well) could be offered through the association of its non-regulated LNG entity directly back to Fortis Inc., the parent company and primary shareholder. Fortis Inc. already has significant non-regulated holdings, albeit in the hospitality industry, that could offer the new entity a number of corporate advantages that would not normally be available to a smaller company.

65. Alternatively, it is possible that FortisBC is only able to offer these economies of scope and lower prices because in fact at least a portion of its business risk, including cost of capital, is being absorbed by its much larger, regulated business entity. There are numerous references throughout the FortisBC argument that make it clear that its proposed rate design “substantially (emphasis added) transfers those risks to the fleet owner”\(^59\) i.e. leaving it clear that at least some risk remains with ratepayers (in this respect, see also Section D(b)). It is this clear evidence, that, despite the best efforts of both the BCUC and ratepayers in the design of the Cost of Service, at least some cross subsidization will always occur, that causes Ferus LNG to suggest that the BCUC should continue to insist that there is maximum separation between the FortisBC LNG services and other services offered under the regulatory compact.

\(^{59}\) FortisBC Final Submission, para. 193, p. 83.
**Grandfather Past CNG-LNG Services—Guidelines Operate Going Forward**

66. FortisBC states that arguments challenging its ability to pursue the New Initiatives "at all" (by this, Ferus LNG presumes FortisBC means pursuing such initiatives on a regulated basis) are at odds with past decisions and exceed the scope of the Inquiry.  

67. Past decisions with respect to LNG were couched in terms of "kick-starting" the market. For example, in the CNG-LNG Decision, the Commission stated (at p. 22): "FEU submits that it should build the fuelling facilities to "kick-start" the market..." In Appendix A to Order G-118-11 scoping the Inquiry, the Commission noted that the background to the Inquiry included various past proceedings where interveners had raised issues with respect to the scope of regulation as it relates to new initiatives and in its February 1, 2011 Decision accepting Terasen Gas Inc.'s Long Term Resource Plan, the Commission stated that an additional process may be required to determine how these new ventures fit within the context of a regulated utility.

68. The provision of LNG supply at Tilbury is carried out pursuant to Rate Schedule 16, which defines "LNG Service" as the interruptible service of the liquefaction, storage and dispensing of LNG. This Rate Schedule was approved by the Commission as a five year pilot in 2009.

69. FortisBC was clearly on notice that the framework for the provision of LNG related services had yet to be comprehensively addressed by the Commission.

70. While the Inquiry was scoped so as not to be a vehicle to re-open past decisions, the Commission encouraged all parties to view AES and other new energy initiatives from a broad perspective. Indeed, in the introductory comments to its final submission, FortisBC notes:

---

60 FortisBC Final Submission, para. 5, p. 2.
61 See, for example, CNG-LNG Decision, Ex. B-2, Appendix E.3.
62 Order G-118-11, Appendix A, Ex. A-5, s. 1.1, p. 3.
63 Order G-145-11, Appendix A ("EEC-NGV Decision), s. 3.7.1.1, p. 15.
64 Order G-118-11, Appendix A, Ex. A-5, s. 2.4, p. 6.
The Commission established this Inquiry pursuant to sections 23, 72, 82 and 83 of the Utilities Commission Act, R.S.B.C. 1996, c. 473 (the “Act” or the “UCA”), and defined its scope as “a forward looking assessment with the aim to establish principles that can be applied to future regulatory processes in the area of AES and other new initiatives”.

71. However, FortisBC also appears to suggest that past decisions, and with respect to LNG related services in particular the approval of the General Terms and Conditions for LNG and CNG Service ("GT&C 12B"), should apply going forward notwithstanding the outcome of the Inquiry.

72. To the extent FortisBC believes that past decisions (e.g. GT&C 12B) set a "generic" framework that should apply to all future LNG related services (i.e. "the cake is baked"), Ferus LNG disagrees (again, see Section B(f)). Indeed, if that were the case, there would have been little utility in holding the Inquiry.

73. In terms of LNG related services, while Ferus LNG does not seek to re-open past decisions involving service to, for example, Waste Management of Canada Corporation ("Waste Management") under the CNG-LNG Decision, Ferus LNG does believe that the Commission can fully address LNG related services to new customers on a go-forward basis. Such services need not be offered under the same terms or in the same manner as approved to date for existing customers of LNG services nor is there an inherent obligation to serve created by these decisions. In the CNG-LNG Decision, the Commission explicitly rejected the notion that FortisBC is under an obligation to provide this service to the public:

The Commission Panel does not agree with FEI’s position the “once Commission approval has been obtained for a tariff offering for CNG and LNG service” it will be under an obligation to provide this service to the public pursuant to section 28 of the Act. (Exhibit B-9, CEC IR 2.1.3) The Commission Panel is of the view that the obligation to serve stems from the nature of a monopoly provider of services with infrastructure which has natural monopoly characteristics such that a competitive market structure does not make economic sense. In the circumstances of this Application, the fuel dispensing service has no natural monopoly characteristics and could potentially be supplied by any number of competitors. As such, there

65 FortisBC Final Submission, para. 4, p. 2.
66 FortisBC Final Submission, paras. 23-23, pp. 11-12.
is no corresponding requirement to recognize an obligation to serve such potential customers.\textsuperscript{67}

74. Accordingly, to comply with the Inquiry's stated scope of not upsetting past decisions, while at the same time allowing the Inquiry's Guidelines to operate with effect going forward, Ferus LNG would propose that LNG related services that have been approved to date be "grandfathered", while LNG related services going forward be subject to the Guidelines resulting from the Inquiry. Grandfathering past decisions is a complete answer to any suggestions of retroactive ratemaking or procedural unfairness.

75. For clarity, with respect to CNG-LNG related services, Ferus LNG believes that service to Waste Management (the subject of the CNG-LNG Decision), service to BFI Canada Inc. ("BFI"—assuming approval of this application which is currently before the Commission\textsuperscript{68}—the BFI Application is not part of the Inquiry record and as such Ferus LNG will not make use of any of that record herein) and service to Vedder Transport Inc. ("Vedder Transport")\textsuperscript{69} should be grandfathered. In addition, the Tilbury interruptible LNG sales service should be grandfathered at its currently approved level for its initial five year pilot term (i.e. to December 31, 2014); thereafter this service should be subject to the Guidelines. Ferus LNG notes that FortisBC has no plans to expand the Tilbury facility or purchase additional tankers for 2012 and 2013.\textsuperscript{70} Any new LNG production/dispensing/sales, LNG transportation/tanker or LNG/CNG fueling services should also be subject to the Guidelines.

\textsuperscript{68} FortisBC Energy Inc. February 29, 2012 Application for a Certificate of Public Convenience and Necessity for Constructing and Operating a Compressed Natural Gas Refueling Station at BFI Canada Inc. – Project No. 3698665.
\textsuperscript{69} It appears that service to Vedder has only been approved on an interim basis. In its evidence, Ex. B-2, s, 5.3.4.2, p. 93, FortisBC speaks of the approval of "interim" service contracts for Vedder; See also Ex. A-3 in the Vedder Application whereby the Commission suspended the regulatory review of that Application.
\textsuperscript{70} FortisBC 2012-2013 Revenue Requirements & Natural Gas Rates Application, FortisBC Final Submission, para. 380, p. 156.
C. **PRINCIPLES AND GUIDELINES**

(a) **No Cross-Subsidization—RMDM Objectives Applicable**

76. Ferus LNG agrees with the guiding principle against cross-subsidization endorsed by the Commission with respect to CNG/LNG services in the CNG-LNG Decision:

The Panel is of the view that in a case such as this one, the public interest requires that, if FEI is to provide CNG/LNG services in its capacity as a public utility, it must do so without utilizing any potential economic leverage which it may have as a result of its status as a monopoly distributor of natural gas.71

... We believe there should be as little potential for cross-subsidization as it is possible to achieve.72

... Given that FEI may be in competition with other non-regulated businesses, the Commission Panel is concerned about the potential for cross subsidization by FEI’s existing ratepayers. The Panel considers that the public interest would not be served by effectively providing FEI with a competitive advantage over other potential market participants in the industry by allowing FEI to subsidize the costs of what would otherwise be an unregulated service, with existing ratepayer money. This again supports the Panel’s determination that, to the extent possible, the full cost of CNG and LNG service is to be recovered from the CNG and LNG customers, respectively.73

77. In terms of general principles that should guide the Commission in assessing Natural Unregulated Services, Ferus LNG believes the objectives and related comments from the RMDM Guidelines reproduced below are applicable (Ferus LNG notes that these objectives are consistent with those expressed by the Commission in the CNG-LNG Decision and its Appendix A Reasons for Decision in Order G-145-11 Decision ("EEC-NGV Decision):

...the objectives which will guide the Commission’s determinations with respect to utility and NRB [Non-Regulated Business] participation in the retail market downstream of the meter are as follows.

-------------------

73 CNG-LNG Decision, Ex. B-2, Appendix E.3, p. 29.
Figure 6: Commission Objectives

<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>There must be no subsidy of unregulated business activities, whether undertaken by the utility or its NRB, by utility ratepayers.</td>
</tr>
<tr>
<td>The risks associated with participation in the unregulated market must be borne entirely by the unregulated business activity, that is the risks must have no impact on utility ratepayers.</td>
</tr>
<tr>
<td>The most economically efficient allocation of goods and resources for ratepayers should be sought.</td>
</tr>
</tbody>
</table>

In addition, the Commission agrees with staff that greater achievement of one objective may require a lesser achievement of another objective so that trade-offs may be required. The Commission will be the sole arbiter of how the trade-off between objectives should be made in determining the extent and manner in which utility services and assets may be used to participate in the retail market downstream of the utility meter.74

(b) Market Development—Competitive Impacts

78. As noted in Section B(e), the implementation of the Clean Energy Act has changed the landscape for the Commission since the time of the RMDM Guidelines. Just as the objectives of the CEA are spurring new initiatives by FortisBC into non-traditional service areas to address non-traditional goals, such as reducing GHG emissions, the same objectives require a more expansive view of the public interest by the Commission. Included in that view is a consideration of how regulating Natural Unregulated Services may affect the development of the fuel-switching industry in BC—that is the development of the market for less intensive GHG fuels such as LNG versus diesel fuel. The prime CEA objective of reducing GHG emissions in the province is best met by enhancing overall reductions of emissions in the province, not simply reductions amongst FortisBC customers.

74 Retail Markets Downstream of the Utility Meter Guidelines, Ex. B-1, Tab 17, s. 5.1.2, pp. 22-23.
79. Accordingly, the development of the overall LNG market, and the associated timing, number of participants and associated energy demand of BC entities switching from more GHG intensive fuels to LNG, are all legitimate considerations for the Commission in determining if and how to regulate LNG related services.

80. In its Scope and Issues for the Inquiry, the Commission asked the question of whether some of the principles or guidelines it follows in assessing new initiatives (in addition to the interests of utility ratepayers and the rights of the utility shareholder) should include: (i) the impact on the broader public including potential competitors; and (ii) the furthering of British Columbia's energy objectives. Ferus LNG would answer this question emphatically in the affirmative, for the reasons outlined above and in Sections B(e) and C(b).

81. Policies that encourage the development of a competitive LNG industry are in harmony with the goal of maximizing the displacement of more GHG intensive fuels. Policies that inhibit the development of a competitive marketplace are not. Providing incentives to advance a utility's penetration of the marketplace at the expense of wider industry participation, for example, may result in winning the battle but losing the war.

82. To the extent that utilities are provided the opportunity to use incentives paid for by their traditional utility customers, or to otherwise have these traditional utility ratepayers bear some of the costs and risks of the LNG services market, a signal is sent to other potential players that there is a tilted playing field. Other potential market entrants may perceive that the ground has already been 'ceded' to the utility participants and choose to direct financial resources to other markets without such barriers to entry.

83. That these concerns with winning the battle but losing the war are not misplaced, is supported by the comments of Clean Energy Fuels ("Clean Energy") in this proceeding. Clean Energy is currently deferring investment decisions with respect to the LNG services market in BC pending the outcome of the Inquiry:

---

76 Ferus LNG Evidence, Ex. C8-5-1, s. E.2, p. 11.
77 BCUC - Ferus LNG – 1.1.1, Ex. C8-7, p. 2.
...We have raised substantial capital last year, to the tune of $450 million. We announced plans to do 150 stations over the next two years. And unfortunately we could not include B.C. because of this hearing, or this proceeding. We want to make sure that we fully understand the rules of the game before we further -- we get further engaged. And until that decision is made, we will be waiting to see what happens.\textsuperscript{78}

84. FortisBC says that the market has chosen it over other, non-regulated service options.\textsuperscript{79} This is perhaps not surprising given the significant EEC funding that was previously at FortisBC's disposal to attract such customers. Waste Management received $803,556 to convert its trucks to CNG service while Vedder Transport received $2,196,650 to convert its fleet to LNG service.\textsuperscript{80} These are significant subsidies that were supported by ratepayers, not shareholders, and which distort the normal competitive playing field.

85. Fortis BC also refers to its recent application to serve BFI. Ferus LNG notes that this application is ongoing and not part of the record in this Inquiry. As such, Ferus LNG will not comment on the specifics of that application, nor should others.

86. FortisBC also suggests that the private sector is not yet up to the task of providing LNG related services:

...WM, currently taking service under the WM Agreement, is the first new heavy duty commercial NGV fleet in BC in the recent years. Further, the Commission recently approved the interim service contracts for Vedder Transportation, which will use LNG for their initial fleet of 50 trucks. The market had stagnated prior to FEI's involvement in promoting CNG/LNG Service as a regulated service. It is reasonable to conclude that, if FEI does not provide the service, the potential to build NGV load on FEI's system and deliver the attendant benefits will be delayed or may not occur.\textsuperscript{81}

87. First, as discussed above, both of these market inroads (i.e. Waste Management and Vedder Transport) were captured with the use of substantial subsidies from

\textsuperscript{78} Transcript Volume 2 - Second Pre-Hearing Conference, p. 208, lines 10-18.
\textsuperscript{79} FortisBC Final Submission, para. 198, p. 85.
\textsuperscript{80} Ferus LNG – FortisBC – 1.3.1, Ex. B-10, p. 7.
\textsuperscript{81} FortisBC Application, Ex. B-2, s. 5.3.4.2, p. 93.
FortisBC's natural gas ratepayers. These were not projects that stood on their own economics.

88. Second, FortisBC has demonstrated that past history in the LNG sector is no predictor of the future. FortisBC has its own experience with "false starts" or failed projects in the NGV sector. For example, Terasen Gas commented on its past experience in the NGV sector as follows:

Terasen Gas believes that the 51% write-down of those assets experienced in 1999 was significant. However, the past experience is not indicative of the potential stranded asset risk of the proposed business model here… 82

89. While FortisBC's new NGV business model currently focuses on heavy duty vehicles and private fueling stations, as opposed to light duty vehicles and public fueling stations, Ferus LNG submits that what is truly different today is the sea change that has occurred over the last few years in the natural gas market:

"The way we look at it is that over the last four or five years, we have seen a phenomenal renaissance in the natural gas industry," says Eric Marsh, Encana's executive vice-president, Natural Gas Economy. "I've spent 28 years in the industry, and believe that in no time during that 28 years has there been more change than in the past three or four years."

The shale gas revolution, he says, is driving the renaissance by making vast volumes of natural gas available to North American consumers at prices that are cheaper than they were a decade ago, even as global oil prices are again heading higher. It is that disconnect—and daily production of some 3.6 billion cubic feet per day—that is driving Encana's push to put more natural gas vehicles on North American roads, and it's launching its mission from its own back alley. 83

90. This "shale gas revolution", which has dramatically changed the economics of LNG related services, was also highlighted by Mr. John Walker, President and CEO of FortisBC, in his opening statement in the FortisBC 2012-2013 Revenue Requirements and Natural Gas Rates Application:

82 BCUC – FortisBC – 1.50.3, Ex. B-11, p. 166.
83 Ferus LNG Evidence, Ex. C8-5-1, s. C.4, p. 8.
...the development of an abundant supply of Shale Gas in BC and in North America, resulting in historically low prices for natural gas, reinforces the role that natural gas can play as part of the overall energy picture.84

91. The B.C. Natural Gas Strategy refers to this singular development as a "Game Changer":

**Shale Gas is a "Game Changer"**

Over the past decade, the development of horizontal drilling, and improvements to hydraulic fracturing have made abundant shale gas recoverable. This has changed the natural gas industry forever, making natural gas an abundant natural resource.

With shale gas now in play, it is conservatively estimated that B.C. has at least 100 trillion cubic feet of recoverable gas. This compares with total production of 22.5 trillion cubic feet in the province between 1954 and 2010.85 (emphasis added)

92. The B.C. Natural Gas Strategy, in calling for the development of new markets for natural gas, lists as an action/strategy: "Attract investment for new value-added projects to B.C. by providing a stable, supportive development framework."86

93. As noted in the evidence of Ferus LNG87 and others,88 these developments have spurred the interest of private sector parties in developing LNG related services. Indeed, these developments may well have contributed to FortisBC's renewed interest in this market sector.

94. With such a game changer for natural gas—one that the province considers to have changed the industry forever—it would be a mistake to conclude, based on past experience, that utility involvement (particularly using economic leverage from traditional utility operations) is essential today for the development of this market. To the contrary,

84 FortisBC 2012-2013 Revenue Requirements and Natural Gas Rates Application, Opening Statement of Mr. John Walker, Ex. B-23, p. 2.
87 Ferus LNG Evidence, Ex. C8-5-1, s. C, pp. 5-9.
as noted above, utility involvement on the wrong basis (cross-subsidization) may win the battle but lose the war.

(c) **Greater Separation Between Regulated Services and Natural Unregulated Services**

95. In order to guard against cross-subsidization and its resulting anti-competitive impacts, Ferus LNG believes that there should be the greatest separation practical between the provision of regulated services and Natural Unregulated Services. This core principle of greater separation being the preferred starting point is in harmony with the DSD Decision:

> While it is clear from the evidence that there is a range of corporate structures that can be considered to be sufficiently self-contained, the Panel must determine if we are able to consider the DSD class of service as a self-contained unit for rate-setting purposes. To this end, the Panel finds that greater separation is preferred as a starting point, with the onus being on the utility to argue the merits of greater integration.  

96. Greater separation also assists in achieving the principle of no cross-subsidization with less costly and time consuming regulatory oversight. This was recognized by the Commission in the DSD Decision:

> Proper allocation of overhead and other expenses, whether within FEI or to an affiliate through a transfer pricing policy, should in theory be the same. Nevertheless, as noted above, cost allocation and its oversight are challenging. Therefore, the transparency and clarity provided by a separate corporate entity would assist in this regard.

97. FortisBC appears to generally recognize that greater separation assists in minimizing cross subsidization. In response to a question as to whether it is easier to overcome the risk of cross-subsidization among projects by applying for a separate capital structure and allowed Return on Equity ("ROE") for each project, FortisBC replied:

---

80 DSD Decision, s. 8.4.2.2, p. 94.
90 DSD Decision, s. 8.4.2.2, p. 95.
As a general principle, the more granularity with customer classes there is, the less cross-subsidization there will be.\textsuperscript{91}

98. The principle of greater separation has also been supported by the Competition Bureau:

- Structurally separate utility competitive and non-competitive activities.

In any industry in which there are regulated essential facilities to which businesses need access in order to compete, the owners of the facilities will have incentives to provide preferential access to the facilities to their affiliates and to cross-subsidize their unregulated activities from their regulated activities. Guaranteeing the benefits from competition will require that careful attention be paid to ensuring that such preferential access and cross-subsidization does not occur. This is most easily achieved where there is structural separation between competitive and non-competitive businesses. Such separation should be established unless there is clear evidence that its economic costs would outweigh its competitive benefits.\textsuperscript{92} (emphasis added)

99. With respect to this core principle of greater separation, Ferus LNG believes that the principles from the RMDM Guidelines reproduced below are applicable:\textsuperscript{93}

Four corporate structures, under which retail products and services could potentially be provided, were identified in the staff position paper: i) through the utility as a regulated tariff product; ii) through the utility as a non-regulated product; iii) through an NRB affiliated with the utility either as a subsidiary or through a parent company and using some utility facilities and services; or iv) through an NRB but using no utility facilities or services. These structures are differentiated primarily by the extent to which utility assets and services are used to provide goods and services into the downstream retail market. These four corporate structures are presented in Figure 4.
…the Commission accepts that the following principles should govern the choice of corporate structure.

i) If a natural monopoly exists for the good or service, it should be provided as a regulated tariff item (Corporate Structure 1 in Figure 4).

ii) Utility participation in the unregulated downstream market by completely stand-alone NRBs using no utility resources is the preferred option since it provides the maximum protection to utility

......
ratepayers (Corporate Structure 4 in Figure 4). Variations from this option should be undertaken only when it can be shown that this option would result in substantial stranded costs for the utility and/or that a transfer pricing policy mechanism will act to provide sufficient protection for ratepayers.

iii) The onus should always be on the utility to prove that the benefits associated with use of utility resources are sufficient to warrant the changed structure and that the transfer pricing policy mechanism will provide sufficient protection to ratepayers.

iv) If the Commission decides to allow the use of utility resources in the provision of the unregulated good or service, the preferred option is through a related-NRB (Corporate Structure 3 in Figure 4). Direct participation by the utility in the provision of an unregulated good or service should be allowed only when the costs associated with forcing the provision through the related-NRB structure would significantly offset the benefits associated with the use of the utility's resources and it can be shown that a transfer pricing policy mechanism will provide sufficient protection for ratepayers (Corporate Structure 2 in Figure 4).

v) Utilities and their related-NRBs will be encouraged to move unregulated products which use utility resources into stand-alone NRBs as soon as market conditions warrant (Corporate Structure 4 in Figure 4). When a utility-provided product is moved to an NRB, the NRB will be required to pay fair market value to the utility for the assets, including goodwill, associated with the product. In addition, utilities will be required to provide periodic proof that the benefits associated with the use of utility services continue to exist and that ratepayers continue to be sufficiently protected. The Commission will make directions to prohibit the use of utility assets and services in the provision of goods and services downstream of the retail market at any time that it finds it in the interests of ratepayers to do so.

(d) Degrees of Separation

100. Taking the four potential corporate structures identified in the RMDM Guidelines and supplementing them with the potential for establishing a separate class of service for Natural Unregulated Services, yields five degrees of separation. Proceeding from the greatest degree of separation to the least:

1. NRB Using No Utility Resources;
2. NRB Using Some Utility Resources;
3. Separate Corporate Division of the Public Utility;
4. **Separate Class of Service within the Public Utility; and**

5. **No Structural Separation.**

101. Currently, the status quo for LNG services provided by FortisBC is Degree 5—No Structural Separation. Cost allocation is achieved through rate schedules and service contracts.

102. Ferus LNG believes that the provision of Natural Unregulated Services is best achieved through the establishment of an NRB using no utility resources (Degree 1). If the Commission determines that Natural Unregulated Services should nevertheless be provided within a regulated model, then Ferus LNG believes the Commission should seek the greatest separation practical within that model.

103. In the DSD Decision, the Commission concluded that a separate corporate affiliate was the appropriate degree of separation with respect to the DSD TES service (subject to any change that may result from the Inquiry):

   The Commission Panel notes that companies sometimes establish a separate corporate entity when they embark on a new and potentially risky business activity. A separate corporate entity would facilitate proper recognition of the financial impacts of risks associated with TES. These risks include those associated with a utility’s “duty to serve.” The affiliate would have debt interest costs, capital structure and return on equity appropriate for its risk profile. A separate affiliate should largely deal with the issue of preferential access to FEI customer information. This will contribute to a level playing field in which competition for TES can flourish…

104. It is important to remember that should FortisBC disagree with the degree of separation the Commission believes is appropriate with respect to the provision of any Natural Unregulated Service, the FortisBC corporate family always has the option of providing such service through an NRB using no utility resources.

---

94 See, for example, BCUC – Ferus LNG - 1.1.2 & 1.1.3, Ex. C8-7, p. 3; 1.4.1, Ex. C8-7, pp. 6-7; 1.5.1, Ex. C8-7, pp. 7-8; 1.10.1, Ex. C8-7, p. 16.

95 DSD Decision, s. 8.4.2.2, p. 95.

96 Ferus LNG Evidence, Ex. C8-5-1, s. D.2, p. 10.
(e) **Utility Onus to Demonstrate the Merits of Greater Integration**

105. As per the DSD Decision, greater separation between the provision of regulated services and Natural Unregulated Services should be the starting point, with the onus being on the utility to argue the merits of greater integration.  

106. Factors the utility may have reference to in arguing for greater integration include the impact of such greater integration with respect to the ability of the Commission: (i) to reasonably and effectively mitigate or alleviate any negative effects on ratepayers; and (ii) to further the provincial energy objectives enshrined in the UCA (i.e. to further development of the clean energy industry). In this respect, see also Sections B(e) and C(b).

107. The Commission in the DSD Decision stated: "The cost savings which can be gained through greater integration must be weighed against the benefits of full segmentation or separation, on a case by case basis." Ferus LNG agrees that the appropriate degree of separation for each Natural Unregulated Service should be established on a case by case basis.

(f) **Initial Proposed Guidelines**

108. In its evidence, Ferus LNG set forth eight proposed Guidelines for consideration by the BCUC, which are reproduced in Attachment 3 (note that in the evidence, the number 5 was repeated twice as a heading in the Guidelines— the corrected numbering is used in Attachment 3). FortisBC in its argument reviewed and commented specifically on the proposed Guidelines.

109. FortisBC took no issue with proposed Guideline 1 except to suggest that the guideline should reference the Commission's ratepayer focus, not the interests of potential competitors.
110. Presumably this position is based on FortisBC's views as to the narrow jurisdiction of the Commission when it comes to competitive issues. For the reasons outlined in Section B(e), Ferus LNG disagrees. Ferus LNG submits that the present wording of the proposed Guideline referring to the interest of utility ratepayers, the utility shareholder and the impact on the broader public including potential competitors is appropriate.

111. FortisBC also took no issue with proposed Guidelines 2 through 7, except for the last bullet of Guideline 7.100 FortisBC did take issue with establishing a separate rate of return for CNG/LNG Fueling Service as FortisBC states this is a natural gas service.101 For the reasons outlined in Section D(b), Ferus LNG believes Natural Unregulated Services should have their own, separate returns on equity.

112. FortisBC did take issue with proposed Guideline 8, noting that with the current prohibition on EEC funding this Guideline is moot with respect to Ferus LNG and suggesting that the proposal makes little sense as EEC funds are routinely applied to incentives to adopt technologies that are developed and provided to customers in the competitive market.102 Ferus LNG’s concerns with respect to EEC funding relate to the anti-competitive impacts such funding has when disbursed on a discriminatory basis (see Section F(a)). As was noted in Ferus LNG’s evidence, provided EEC funding is distributed in a truly non-discriminatory fashion, Ferus LNG encourages such funding.103

(g) **Forward Operating Guidelines that Best Meet Principles**

113. The core principles relevant to Natural Unregulated Services are to avoid cross-subsidization and unnecessary regulatory costs and to provide for as much separation as practical between such services and regulated services. Further, the Guidelines should take a broad view of the public interest, consistent with the direction of the *Clean Energy Act*, whose objectives are now incorporated in the UCA.

---

100 FortisBC Final Submission, paras. 278-279, pp. 119-120.
101 FortisBC Final Submission, para. 281, pp. 120-121.
102 FortisBC Final Submission, para. 280, p. 120.
103 Ferus LNG Evidence, Ex. C8-5-1, Section G.2(c), p. 19, lines 24-27.
114. Ferus LNG’s initial Guidelines, proposed in its evidence, were presented in an attempt to avoid disturbing past decisions (i.e. under the presumption that a complete separation between regulated services and Natural Unregulated Services was not possible within the context of past decisions approving LNG related service to parties such as Waste Management and Vedder Transport). 104

115. Ferus LNG explained the context of its initial proposed Guidelines as follows:

Ferus LNG’s evidence reflects the reality of the regulated presence of FortisBC in the NGV/LNG sector today. While full separation of regulated activities from Natural Unregulated Services is best achieved though the establishment of a separate, non-regulated company to carry out such activities, Ferus LNG understood from the BCUC’s directions that past decisions were not to be re-opened. [Exhibit A-5: Order G-118-11 Appendix A, s. 2.3, page 5] Working within that reality (i.e. accepting the existing regulated corporate structure), Ferus LNG is looking to achieve the least amount of cross-subsidization of costs or risks that is practical. As the BCUC noted in the Decision G-128-11 ("CNG-LNG Decision"), "…there should be as little potential for cross-subsidization as it is possible to achieve." [CNG-LNG Decision, page 24] 105

…Ferus LNG believes that the optimum method of developing the LNG market would be for FortisBC to operate in this market outside of the regulated model, with a separate, non-regulated entity.

If the BCUC disagrees with this position and remains prepared to accept that FortisBC should continue to operate in the LNG sector under the third regulated corporate structure outlined above, Ferus LNG is requesting the Commission, at a minimum, develop guidelines that can minimize the amount of cross-subsidization under that corporate structure. 106

116. Having reviewed the record in the Inquiry and the status of past decisions on LNG related services, and as noted in Section B(i), Ferus LNG now believes that it would be appropriate for the BCUC to grandfather past CNG-LNG services (Waste Management, Vedder Transport and BFI (if approved); and Tilbury for the term of the pilot). In doing so, the Commission will be unfettered in dealing with future applications for LNG related services in whatever manner it deems appropriate. Furthermore, it

104 See, for example, BCUC – Ferus LNG – 1.1.2, Ex. C8-7, p. 3; 1.4.1, Ex. C8-7, pp. 6-7; 1.5.1, Ex. C8-7, pp. 7-8; BCSEA/SC – Ferus LNG – 1.8.2, Ex. C8-9, p. 9.
105 BCUC – Ferus LNG – 1.2.1, Ex. C8-7, p. 4.
106 BCUC – Ferus LNG – 1.5.1, Ex. C8-7, pp. 7-8.
could do so without risk of disturbing past decisions and investments made based on those decisions.

117. As noted in Section B(i), Ferus LNG does not believe that "the cake is baked" with respect to "if" and "how" LNG related services should be regulated on a going forward basis. Indeed, this is the raison d'etre of the Inquiry.

(h) Final Proposed Guidelines

118. In light of the foregoing, Ferus LNG has revised its proposed Guidelines to insert an additional four Guidelines between previously proposed Guidelines 4 and 5 to encourage as much separation as practical between the provision of regulated services and Natural Unregulated Services while still providing FortisBC with an unfettered opportunity to persuade the Commission that a closer relationship would be in the public interest. In addition, the last former proposed Guideline related to EEC funding has been amended to clarify that EEC funding may be found to be permissible if provided on a truly non-discriminatory basis.

119. The complete final proposed Guidelines read as follows:

1. In evaluating new initiatives to be undertaken by public utilities, including service offerings related to the LNG market, the Commission will be guided by the overall public interest, including:
   - the interest of utility ratepayers;
   - the impact on the broader public including potential competitors;
   - the furthering of British Columbia energy and environmental objectives; and
   - the rights of the utility shareholder.

2. With respect to LNG related services (including the production/dispensing/sale, transportation and storage of LNG and the provision of LNG for transportation or power generation purposes), the Commission finds that such services have no natural monopoly characteristics and would not normally be subject to regulation. As such, these services constitute "Natural Unregulated Services."
3. In evaluating other new or innovative services proposed to be undertaken by public utilities, the Commission shall determine as a threshold issue: (i) whether such services have natural monopoly characteristics; and (ii) whether such services would not normally be subject to regulation.

4. If the Commission determines that a service: (i) has no natural monopoly characteristics; and (ii) would not normally be subject to regulation, then such service shall constitute a Natural Unregulated Service.

5. Unless a public utility can demonstrate to the Commission's satisfaction the net merits of greater integration by providing a Natural Unregulated Service through the public utility, such service shall be provided through a non-regulated entity.

6. If the Commission is persuaded that there are net merits to providing a Natural Unregulated Service through a public utility, then unless the public utility can demonstrate to the Commission's satisfaction the net merits of greater integration by providing the service through a separate corporate division of the public utility, such service shall be provided by the public utility through a separate corporate entity.

7. If the Commission is persuaded that there are net merits to providing a Natural Unregulated Service by a public utility through a separate corporate division, then unless the public utility can demonstrate to the Commission's satisfaction the net merits of greater integration by providing the service through a separate class of service, the service shall be provided by the public utility through a separate corporate division.

8. If the Commission is persuaded that there are net merits to providing a Natural Unregulated Service by a public utility through a separate class of service, then unless the public utility can demonstrate to the Commission's satisfaction the net merits of greater integration by providing the service without establishing it as a separate class of service, the service shall be provided by the public utility through a separate class of service.

9. All Natural Unregulated Services provided by a public utility shall be regulated by the Commission on a stand-alone basis ("Stand Alone Regulation") to ensure there is no cross subsidization of costs or risks between the Natural Unregulated Service and the public utility’s other services.

10. The overriding objective of Stand Alone Regulation is to ensure that the public utility provides the relevant service
without utilizing any economic leverage which it may have as a result of its status as a monopoly provider of other services.

11. Components of Stand Alone Regulation will include terms and conditions requiring that rates charged to a customer of a Natural Unregulated Service:

- Incorporate actual construction costs of facilities constructed to provide the service ("Facilities"), as opposed to forecast costs;
- Fully recover the capital cost of the Facilities (including estimated negative salvage value) within the term of the contract or include provisions requiring the customer to purchase the equipment for its undepreciated capital cost;
- Ensure that actual operating and maintenance costs are recovered as fully as possible;
- Inflate operating and maintenance costs by the regional CPI annually;
- Reflect no amount for capitalized overhead such that all operating and maintenance costs are recovered from the customer over the term of the contract; and
- Provide an allowance for overhead and marketing to be recovered from the customer.
- Are based on a separate determination of the rate of return for each Natural Unregulated Service, depending on the risks and other circumstances of that service.

12. No funding recovered from a public utility’s other ratepayers, including EEC funding, shall be used by a public utility to support a Natural Unregulated Service, unless such funding is made available on a non-discriminatory basis. For clarity, "non-discriminatory basis" refers to funding that is provided without any service, infrastructure or other commitment being required from the recipient of the funding to the public utility.

120. The new proposed Guidelines refer specifically to LNG services and markets since this is the focus of Ferus LNG’s interest and evidence. However, Ferus LNG believes they may be appropriate for other elements of the Inquiry. New proposed Guidelines 5, 6, 7 and 8 also leave the degree of separation to be required for the provision of Natural Unregulated Services to the discretion of the Commission, to be determined on a case by case basis as the Commission deems appropriate for the circumstances of any particular Natural Unregulated Service. The guiding principles are
to avoid cross-subsidization and to prefer greater separation. In all cases the onus is on the public utility to establish, to the Commission's satisfaction, the net merits of greater integration. This is consistent with the RMDM Guidelines and the approach of the Commission in the DSD Decision. 107

D. BCUC EVALUATION PROCESS FOR ALTERNATIVE ENERGY SOLUTIONS AND NEW INITIATIVES

(a) Transfer Pricing—RMDM Principles Applicable

121. In order to guard against cross-subsidization and its resulting anti-competitive impacts in the provision of Natural Unregulated Services, Ferus LNG believes that the transfer pricing principles and related comments from the RMDM Guidelines reproduced below are applicable (Ferus LNG notes that these principles are consistent with those expressed by the Commission in the CNG-LNG Decision and the EEC-NGV Decision):

...the Commission is convinced that any transfer pricing policy must ensure that ratepayers are kept harmless from any excursion by the utility, either directly or indirectly, into the downstream retail market.

...the Commission concludes that a utility's transfer pricing policy should ensure the following:

i) The operating costs of non-regulated activities are not reflected in the utility's cost of service.

ii) The costs of developing new business ventures are charged to and recovered from the NRB.

iii) The accounting costs are transparent and will normally fully recover for all services, including overhead, space, employee benefits, inconvenience, and a profit margin where appropriate. If the service provided by the utility to the related-NRB could also be obtained from an independent supplier, the price paid by the related-NRB to the utility should be no less than the competitive market price and will never be below the incremental cost.

iv) The financial costs of each business are borne by the business. In the exceptional case where the utility provides guarantees, it must be given financial compensation.

107 DSD Decision, s. 8.4.2.2, p. 94.
v) Utilities will be required to file periodic reports which demonstrate that they are adhering to the transfer pricing policy. The form and timing of the report will be determined by the Commission.108

122. FortisBC has an existing Transfer Pricing Policy and Code of Conduct which conforms with the RMDM Guidelines—however, FortisBC does not believe that they should apply to LNG related services (see Section E(a)). While the current lack of separation between FortisBC’s traditional regulated services and its LNG related services (Degree 5—No Structural Separation) may make transfer pricing concepts largely inapplicable, this simply exacerbates concerns with the potential for cross-subsidization and anticompetitive impacts under the current model.

(b) Separate Classes of Service

123. As noted in Section C(c), Ferus LNG believes that one of the core principles applicable to assessing Natural Unregulated Services should be to provide for the greatest separation practical between such services and regulated services. Consistent with such an approach, Ferus LNG believes that the minimum degree of separation should be to designate Natural Unregulated Services as classes of service separate from a public utility’s traditional regulated classes of service.

124. Ferus LNG believes that the nature or inherent character of a Natural Unregulated Service—i.e. that it does not display natural monopoly characteristics—warrants, at a minimum, the separation provided through a separate class of service.

125. FortisBC suggests that LNG related services need not be established as separate classes of service as they are a natural extension of the natural gas class of service.109 In this respect it is instructive to consider the drivers behind the FortisBC NGV and TES service initiatives. They are reported in Table 2-9 of the FortisBC evidence.110 The drivers for the two initiatives are virtually identical and include the addition of load to the natural gas system.

108 Retail Markets Downstream of the Utility Meter Guidelines, Ex. B-1, Tab 17, s. 5.2, pp. 24-25.
109 FortisBC Final Submission, para. 192, p. 82.
110 FortisBC Evidence, Ex. B-2, Table 2-9, p. 59.
126. FortisBC notes the benefits to natural gas customers of the TES service:

Over time, FEI capturing new TES customers or retaining customers that would otherwise never take natural gas service or leave FEI completely can result in additional natural gas throughput on the system that would otherwise not have been there. This helps to maintain competitive natural gas rates for the benefit of natural gas customers.\(^\text{111}\)

127. Indeed, addressing declining natural gas load is a significant driver of the NGV initiative but also of the TES initiative:

In terms of why the Companies have elected to pursue TES (along with the other New Initiatives), addressing declining natural gas load is a significant driver.\(^\text{112}\)

128. FortisBC discusses NGV service in the context of natural gas service as follows:

The EEC initiative, Biomethane Service and NGV Service are part of the natural gas class of service...Based on accepted regulatory practice and the requirements of the Act, the benefits of natural gas throughput from these initiatives accrue to natural gas customers as a whole, and in principle all natural gas customers will be better off or worse off over time depending on the amount of throughput contributed by those initiatives.\(^\text{113}\)

129. As noted above, FortisBC believes that TES service similarly benefits natural gas customers and that addressing declining natural gas load is a significant driver for that service. As such, it appears to be a rather arbitrary distinction to establish TES service, and not NGV service, as a separate class of service.

130. The Commission has not accepted the rationale that NGV service is a natural extension of FortisBC's existing regulated business and, more significantly, has emphasized that a critical distinction in evaluating LNG service is the fact that such service has no natural monopoly characteristics:

While this new business may or may not be a natural extension of FEI's existing regulated business, as argued by FEI at page 19 of the Application, the retail distribution of liquefied or compressed natural gas has no monopoly characteristics. Accordingly, non-regulated entities are free to enter this marketplace. This is a significantly different situation from

\(^{111}\) BCUC – FortisBC – 1.4.2, Ex. B-11, p. 18.  
\(^{113}\) BCUC – FortisBC – 1.15.1, Ex. B-11, p. 57.
that faced by FEI in the regulated distribution of natural gas to consumers and businesses.114

131. Supporting the view that the assessment of a service for regulatory policy purposes (i.e. should it be regulated and if so, how?) should be based on whether such service has natural monopoly characteristics or not, is the fact that the UCA does not cover such activities absent their being carried out by providers of other "natural regulated services" (i.e. those exhibiting natural monopoly characteristics)—a conclusion reached by FortisBC with respect to CNG/LNG service when it states that such service "...is not regulated unless it is provided by an entity that is "otherwise a public utility.""115

132. Further, as noted by the Commission, where a service has no natural monopoly characteristics and could potentially be supplied by any number of competitors, there is no corresponding requirement to recognize an obligation to serve such potential customers.116

133. Establishing Natural Unregulated Services as separate classes of service facilitates the proper allocation of costs and provides greater protection for utility ratepayers. As noted by FortisBC:

The proper allocation of costs is key to the effective offering and regulation of multiple classes of service. The FEI 2010-2011 RRA NSA stipulates that the costs of developing thermal energy systems will be recovered from TES customers. The customer or group of customers for a particular TES project will have a separate cost of service, rate or rates and, if applicable, contribution calculation. Having separate rates and cost of service for the TES class of service protects natural gas customers and leads to just and reasonable rates for both gas and alternative energy customers.117

134. Establishing Natural Unregulated Services as separate classes of service allows for separate costs of capital (capital structure and ROE). FortisBC justified its

115 FortisBC Evidence, Ex. B-2, Section 3.3.8, 67-68.
application for a 50 basis point risk premium for TES service over the benchmark ROE for its natural gas class of service as follows:

The additional risk premium in the cost of service above the benchmark ROE is to reflect that the thermal energy service is in the early stages of development, which makes it inherently riskier than FEI's mature natural gas class of service.\footnote{DSD Decision, p. 103.}

135. The same can be said for LNG services—that is FortisBC’s most recent foray into this market is relatively new compared to the mature natural gas class of service. FortisBC acknowledges that establishing NGV Service as a separate class of service will require a higher ROE for that business, notwithstanding the contractual protections in place (i.e. pay-out provisions covering undepreciated assets):

Further, the FEU believe that although separating the Biomethane Service and NGV Service could reduce the stranding risk to core natural gas customers (\textit{notwithstanding the fact that for NGV Service, stranded risk is already primarily borne by the NGV customer, not by all natural gas customers}), since that risk is shifted to the shareholder it could also have the effect of increasing the cost of those services for customers due to the need for a higher ROE in these lines of business.\footnote{BCUC – FortisBC – 1.9.4, Ex. B-11, p. 43.} (emphasis added)

136. FortisBC explains why it does not require a higher ROE or capital structure adjustment when the NGV business is rolled-in to the natural gas class of service as follows:

...conceptually, should material risk be added to the natural gas class of service by virtue of the type of projects undertaken, the natural gas class of service may require higher ROE and capital structure, which will be paid by natural gas customers. However, the level of investment in NGV-related assets is small in relation to the total natural gas rate base of over $2.5 billion. Also, NGV service is backed by long term contracts, which mitigates much of the associated risks such as early termination fees and take or pay volume commitments. As such, we do not expect that NGV service adds to business risk to the natural gas class of service, and therefore will not require ROE and capital structure adjustments to reflect a higher risk profile for that reason.\footnote{FortisBC Rebuttal Evidence, Ex. B-19, para. 37, p. 22.} (emphasis added)
137. FortisBC appears to be arguing that while the ROE required for a stand-alone NGV business would be higher than that for its mature, natural gas business, it does not need to adjust its natural gas business ROE or capital structure since the impact is minimal, due to the large size of its natural gas rate base. In effect, it appears to be recognized that there is cross-subsidization of the NGV business by the natural gas business but since the impact "does not move the needle", it is acceptable. First of all, such an approach is not in compliance with the Commission’s view that "there should be as little cross-subsidization as it is possible to achieve." 121 Secondly, such cross-subsidization will only get worse should the NGV initiatives be successful and grow—i.e. they will start to "move the needle."

138. FortisBC also argues that since LNG is just another form of natural gas, its provision of LNG production, transportation and fueling stations are all simply natural extensions of its current natural gas delivery business. That argument is premised on the assumption that the natural gas delivery business is regulated because of the product itself.

139. Ferus LNG would suggest, however, that natural gas delivery in BC became a regulated service because of the nature of the delivery system—i.e. a complex and very extensive series of interconnected pipelines that were required to cost effectively transport and distribute natural gas, rather than as a result of the nature of the product they carried. It is evident that when the natural gas system in BC was first being developed, it did not make sense to have several entities running separate (and competing) natural gas pipelines into homes and businesses. Such a situation would be neither economic nor safe and clearly not in the public interest.

140. This is not, however, the situation for LNG services where natural gas is initially cooled at specialized facilities and then transported in discrete truck loads to similarly specialized and discrete fueling stations. Clearly, the production of LNG can be offered on a competitive basis, as can the transportation and delivery to market. A much more accurate analogy to LNG would be services for propane, gasoline or even anhydrous

ammonia, where none of the production, transportation or distribution of these products are considered to be "regulated" services in BC (or elsewhere for that matter).

141. That the production of LNG or its transportation to market are not natural monopolies is further emphasized by the fact that there are currently a number of very large LNG production facilities either planned or under construction on the BC coast.\footnote{122 BC LNG Strategy, Ex. B-23, pp. 3-5.}

If the production of LNG were a natural monopoly, then presumably these LNG production facilities would be, by definition, regulated by the BCUC and not, as is currently the case, by the BC Oil and Gas Commission. Similarly, the transportation of the resulting LNG, which in this case is to be moved via tanker to offshore markets, would also be regulated under the auspices of the BCUC.

142. Finally, establishing Natural Unregulated Services as separate classes of service also greatly simplifies the task of spinning such services out from the public utility in the future, should that be desired by the utility or the Commission. As noted by FortisBC:

> In the hypothetical circumstances that assets were to be spun off to an ESCO, the separation of the classes of service eliminates any direct impact on natural gas customers associated with the transaction itself…\footnote{123 BCOAPO – FortisBC – 1.5.2, Ex. B-5, p. 21.}

143. For all of the above reasons, Ferus LNG believes that the extra separation afforded by establishing a separate class of service should be the minimum for LNG related services.

**E. CODES OF CONDUCT**

(a) **Code of Conduct—RMDM Principles Applicable**

144. In conjunction with the provision of Natural Unregulated Services by a public utility or related entity, Ferus LNG believes that the code of conduct principles and related comments from the RMDM Guidelines reproduced below are applicable:

> As with the transfer pricing policy, the Commission is convinced that any code of conduct must ensure that ratepayers are kept harmless from any excursion by the utility, directly or indirectly, in the downstream retail market.
...the Commission determines that the code of conduct principles contained in the staff position paper should be modified as follows:

i) The regulated company will not provide to the NRB any market-sensitive or confidential information that would inhibit a competitive energy services market from functioning. If customers agree to a release of customer information to the NRB, it should be provided to other market participants under the same terms and conditions and for the same price. Should an individual customer make a specific request to have information released to a particular third party, it will be released to that party only. The utility will be able to recover from the customer the costs associated with the provision of this information.

ii) No regulated company personnel will state or imply that favoured treatment will be available to customers of the company as a result of using any service of an NRB. In addition, no regulated company personnel will condone or acquiesce in any other person stating or implying that favoured treatment will be available to customers of the company as a result of using any service of an NRB.

iii) No regulated company personnel will preferentially direct customers seeking competitively offered services to an NRB. If a customer, or potential customer, requests from the regulated company information about products or services offered by an NRB or its competitors in downstream markets, the regulated company may provide such information, including a directory of retailers of the product or service, but shall not promote any specific retailer in preference to any other retailer.

iv) The regulated company will formally advise all employees of expected conduct related to these principles and it will undertake to perform periodic audits of the relationships to ensure compliance with these principles. These audits will be performed no less than once a calendar year and filed with the Commission.

v) Complaints by non-affiliated parties about the application of these principles, or any alleged breach thereof, will be brought to the immediate attention of the senior management of the regulated company and subsequently a report of the complaints, and action taken, will be filed with the Commission. The report will be filed with the Commission within one month of the complaint being made.

vi) The financing of the utility and NRB will be accounted for entirely separately with the financing costs reflecting the risk profile of each entity. No cross-guarantees or any form of financial assistance whatsoever should be provided directly or indirectly by a utility to its NRB without approval of the Commission.
vii) Use of the utility name by a related-NRB will require approval by the Commission to ensure that its use will not interfere with the Commission's ability to protect ratepayers.

145. Ferus LNG notes that FortisBC has an existing Transfer Pricing Policy\textsuperscript{124} that it uses in conjunction with its existing Code of Conduct,\textsuperscript{125} which conforms with the RMDM Guidelines. In its final submission, FortisBC states: "The FEU has in place a Code of Conduct and a Transfer Pricing Policy that governs relationships with NRBs, including those in an unregulated affiliate. The FEU is not, in this Inquiry, challenging the Commission's past orders in this regard."\textsuperscript{126}

146. However, Ferus LNG also notes FortisBC's position that:

The FEU submit that there is no reason to implement a code of conduct in respect of FEI's CNG/LNG Fueling and Biomethane services.\textsuperscript{127} . . .

Implementing a Code of Conduct in respect of either of these offerings would only add complexity to how information is shared within the natural gas class of service, and would unnecessarily add costs to natural gas, CNG/LNG Fueling and Biomethane customers.\textsuperscript{128}

147. While the current lack of separation between FortisBC's traditional regulated services and its LNG related services (Degree 5—No Structural Separation), may make code of conduct concepts largely inapplicable, this simply exacerbates concerns with the potential for cross-subsidization and anticompetitive impacts under the current model.

F. UTILIZATION OF EEC FUNDS

(a) Past EEC LNG Funding Not Provided on a Non-Discriminatory Basis

148. Ferus LNG acknowledges that as a result of the EEC-NGV Decision, EEC funding is no longer available to NGV customers. Nevertheless, it is important to understand the context of Ferus LNG's concerns with how EEC funding was made available in the past.

\textsuperscript{124} BCUC – FortisBC 1.38.1 Attachment, Ex. B-11.
\textsuperscript{125} BCUC – FortisBC 1.144.1 Attachment, Ex. B-11.
\textsuperscript{126} FortisBC Final Submission, para. 300, p. 127.
\textsuperscript{127} FortisBC Final Submission, para. 292, p. 124.
\textsuperscript{128} FortisBC Final Submission, para. 295, p. 125.
149. Ferus LNG had some difficulty in this proceeding determining exactly how EEC funding had been distributed by FortisBC in the past. The critical issue, in Ferus LNG's opinion, is whether such funding was provided on what Ferus LNG would consider a "non-discriminatory" basis. FortisBC indicated that this was the case, but then clarified what it considered to be "non-discriminatory" in paragraph 36 of its Rebuttal Evidence:

36. In Exhibit C8-7, in response to BCUC IR 3.1, Ferus states:

"NGV vehicles are, of course, mobile and can migrate to different fueling stations. If all market participants in British Columbia have access to EEC funding for BC purchased and registered NGVs regardless of the fueling source/supplier, and if the Commission finds that ratepayers do indeed benefit from the potential resulting increased throughput, then Ferus LNG supports the use of EEC program funds for NGV incentives."

FEU Response: There are no EEC programs for NGV at the current time. However, if incentives for NGV (whatever they might be called) are to be dispensed, the rationale for giving such incentives would be that they add load to FEU's system. This will occur regardless of the NGV provider so long as the provider's assets are connected to FEU's system. (emphasis added)

150. Following this evidence, it became clear to Ferus LNG that what FortisBC considers "non-discriminatory" and what Ferus LNG considers "non-discriminatory" in the context of EEC funding for NGVs is not the same. FortisBC appears to consider it non-discriminatory if EEC funding is offered to any party that is willing to source its supply off the FortisBC system. FortisBC says that while this is a "complementary" arrangement, it does not amount to "tying" the awarding of incentives to the provision of the fueling infrastructure.

151. Ferus LNG disagrees—and this is more than a minor matter of semantics. FortisBC clearly states that the rationale for the EEC incentives is to add load to its system—that can only happen if the NGV customer is connected to and sourcing its supply off the FortisBC system. This is confirmed by FortisBC when it states: "This will occur regardless of the NGV provider so long as the provider's assets are connected to FEU's system." When FortisBC says "regardless of the NGV provider", FortisBC is

---

129 FortisBC Rebuttal Evidence, Ex. B-19, para. 41 including FN 5, pp. 24-25.
assuming that this NGV provider is utilizing its system to transport the product that will be used by the NGV customer. Similarly, FortisBC states that: "Natural gas provided for CNG/LNG Fueling Service is new natural gas load..."\(^\text{130}\)

152. Ferus LNG submits that tying the NGV incentive to the use of the FortisBC system makes the provision of the EEC funding discriminatory. It requires the NGV customer to commit to the FortisBC system rather than remain completely free in its ability to choose other LNG suppliers that can provide LNG independent of any other FortisBC facilities (i.e. LNG producers that have the ability to fuel the NGV customer at non-FortisBC fueling stations or, with respect to return-to-base fleets, LNG producers that have the ability to transport, or arrange for the transportation, of their product to the FortisBC fueling station).

153. Ferus LNG only considers EEC funding to be dispensed on a "non-discriminatory" basis if the NGV customer is not tied to sourcing its supply from the FortisBC system—a critical distinction. While Ferus LNG acknowledges that disconnecting the EEC funding from the use of the FortisBC system may not meet the goal of adding load to that system, it is the only way in which the funding would truly be provided on a non-discriminatory basis.

154. By tying the EEC funding to the FortisBC system, FortisBC obtains a competitive advantage in the marketplace by being able to cross-subsidize the costs of its NGV service with contributions from its natural gas ratepayers (who are the source of the EEC funding). If the EEC funding were available regardless of the source of the LNG (i.e. whether or not it used the FortisBC system), then the anti-competitive impact of the cross-subsidization is negated—that is, while the funding would still come from the FortisBC natural gas ratepayers, it would not be providing FortisBC with a competitive edge over other, independent LNG providers.

\(^\text{130}\) FortisBC Final Submission, para. 294, p. 124.
(b) Future Potential EEC Funding

155. It is Ferus LNG's position that any EEC funding that might be considered for any future initiatives by FortisBC, or any other regulated entity, with respect to Natural Unregulated Services should only be permitted if the anti-competitive effects of providing such funding are negated by ensuring the funding is provided on a truly non-discriminatory basis.

156. In terms of allocating any EEC funding, Ferus LNG believes that the optimum method of dispensing such funding to avoid any discrimination is for a third party to do so, not FortisBC. Should FortisBC be in charge of allocating such funding it will inherently have a potential advantage not available to others as well as a conflict of interest. No party that may directly benefit from the funding should be involved in its allocation. While this may add a layer of regulation or bureaucracy, that is the price to be paid to ensure that funding is dispensed in a manner that will not create anti-competitive impacts.

G. CONCLUSION

157. Ferus LNG welcomed the Commission's Inquiry as it sees the recent foray of FortisBC into non-traditional service areas to be an important development. The role public utilities have to play in providing Natural Unregulated Services requires the kind of comprehensive review afforded by the Inquiry.

158. To Ferus LNG's knowledge, the last time these issues were canvassed in a comprehensive manner by the Commission was the proceeding that culminated with the RMDM Guidelines. Ferus LNG believes the principles and guidance provided in the RMDM Guidelines remain relevant and applicable today, perhaps even more so.

159. Ferus LNG supports the core principles from the RMDM Guidelines—which were most recently re-affirmed by the Commission in the CNG-LNG Decision, the EEC-NGV Decision and the DSD Decision—to the effect that: (i) there should be as little cross-subsidization between utility services and Natural Unregulated Services as possible; and (ii) the starting point in assessing utility involvement in Natural Unregulated
Services should be a preference for greater separation, with the onus being on the utility to establish the net merits of greater integration.

160. Ferus LNG urges the Commission to approve the Guidelines it has proposed in Section C(h). Ferus LNG does not believe that any further process is required with respect to developing the Guidelines. The Commission is fully capable of making such drafting refinements as it may deem appropriate after having reviewed the evidence and submissions in this proceeding.

161. Ferus LNG thanks the Commission for the opportunity to provide its input into these important matters that will help set the table with respect to the development of LNG and Natural Unregulated Services in BC.

ALL OF WHICH IS RESPECTFULLY SUBMITTED, this 10th day of April, 2012.
Attachment 1

To the Final Submission of
Fortis LNG dated
April 10, 2012

Filed in the BCUC
AES and New Initiatives Inquiry

Excerpts from

Forbearance, Regulation and Market Power in Natural Gas Storage: The Case of Ontario
by
David Brown, Roger Ware and Howard Wetston

World Energy Congress 2007
World Energy Congress 2007

Forbearance, Regulation, and Market Power

in Natural Gas Storage:

The Case of Ontario

by

David Brown¹, Roger Ware², and Howard Wetston³

¹ David Brown is a Senior Policy Advisor at the Ontario Energy Board. He provided staff support to the Board panel in the 2006 NGEIR proceeding.
² Roger Ware is a Professor of Economics at Queen’s University, Kingston, Ontario. He was retained by the OEB to give advice on competition issues to the Board Panel with respect to the NGEIR Hearing.
³ Howard Wetston is Chair, Ontario Energy Board, and former Commissioner of Competition, Competition Bureau.
The OEB Staff’s NGEIR report recommended a generic hearing which would decide what new services should be offered by natural gas utilities, how these should be priced and regulated, and, importantly, whether the Board should refrain or “forbear” from regulating the utilities’ pricing of natural gas storage.

4.0 MANDATE OF THE NGEIR PROCEEDING

The NGEIR proceeding was launched on the Board’s own motion and considered the following questions:

- What new natural gas services, including storage services, should be made available for gas-fired generators?
- Should the Board refrain in whole or in part from regulating rates charged for natural gas in Ontario?
  - Is the storage market competitive?
  - Who should receive cost-based pricing?
  - How should the amount of storage be allocated between the classes of customers?
  - Who should receive the “premium”: the excess of market revenue on sales of storage services over cost-based rates for storage?\(^9\)

5.0 REGULATION, MARKETS AND FORBEARANCE

The impetus for deregulation of natural gas storage comes from two sources. First, there is a desire to encourage efficiency within the operation of the market, based on the view that an unregulated competitive market provides the best environment for delivering products and services to consumers at the lowest cost and using the best practice technology. Even if products could be delivered with equal efficiency under a regulated environment or through a private market, the latter would certainly save the administrative costs of regulation. Indeed, section 29 of the Ontario Energy Board Act, 1998 embodies this view in requiring the Board to refrain from regulation when there is or will be “competition sufficient to protect the public interest”.

\(^9\) Procedural Order No. 1 provides the exact wording of issues addressed in the hearing.
\(^10\) Prior to the NGEIR decision Ontario’s gas distribution utilities had authority to sell storage services that were in excess of their in-franchise needs at prices within ranges approved by the OEB. These “range rates” approximated market-based prices but were reviewed annually by the OEB. Most of the revenue generated by such sales – the “premium” – was held for the benefit of ratepayers via lower distribution rates.
The second goal is more direct: to encourage investment in new storage capacity. The regulatory authorities in both the US and in Ontario have articulated the need for greater investment in storage, and the US National Petroleum Council has estimated the magnitude of the new investment required at 700 Bcf by 2025. Part of this is seen as a response to the growth in demand, but perhaps more important is the view that storage plays a vital role in reducing the volatility of natural gas prices. It is well known that natural gas storage plays an important role in smoothing seasonal production and consumption of natural gas, with the result that the differential between summer and winter spot prices is smaller than it would be without the availability of storage. Less well known is that natural gas storage can play a similar role in reducing price spikes because of unanticipated increases in demand from gas-fired power generators, who may be called to run generating capacity on a day ahead or even hour ahead basis. An essential characteristic of storage in this context is the ability to withdraw stored gas or inject pipeline gas quickly, known as high deliverability.

6.0 IDENTIFYING MARKET POWER IN NATURAL GAS STORAGE

Natural gas storage facilities are, in economic terms, a commodity whose supply is virtually fixed in the short term but can be varied through new investment in the long term, at least to the extent permitted by geological conditions. It is possible that the owners of such facilities will earn rents (or at least quasi-rents) even under competitive conditions. This makes the analysis and identification of market power more complex than in a case of a commodity where the production technology implies an elastic supply.

In the US, the Federal Energy Regulatory Commission (FERC) has considered applications for new storage field investments for many years. The key decision in many of these cases is not forbearance from regulation, which is not available as a policy option in the US, but whether to allow the entrant to charge market-based rates for natural gas storage or cost-based rates (based on a standard Cost of Service/Rate of Return methodology). By contrast, the Canadian Regulatory and Telecommunications Commission has had considerable experience with granting forbearance from regulation in the

---

12 See, for example, Statement of Policy, 74 FERC ¶ 61, 076 (1998).
pipeline capacity, local production and LNG peaking gas facilities. Second, even where the applicant is found to have market power, a storage operator may be permitted to charge market-based rates if such an outcome is determined to be in the public interest.

6.3 The Framework for Forbearance established by the Canadian Radio-television and Telecommunications Commission (CRTC)

The CRTC, relying on section 34 of the Telecommunications Act, is willing to forbear from regulation when “a service or class of services provided by a Canadian carrier is or will be subject to competition sufficient to protect the interests of users”. The CRTC test thus resembles closely the language in section 29 of the Ontario Energy Board Act, 1998. Through application of these criteria, the CRTC has forborne from regulating the supply of long distance services, telephone equipment, customer inside wiring, business and residential local telephone services, high-speed Internet services, wireless telephone services and data services.

Because of the original status of these industries as natural monopolies, the CRTC approach emphasizes the need to ensure that a dominant incumbent firm is not able to exercise substantial market power. Indeed, much of the CRTC’s concern over forbearance has been a concern over prices that might be too low, rather than too high – in other words a concern about predatory behaviour exercised by the incumbent firms. In its 2006 decision that establishes a framework for forbearance over competition in local telephone service, the CRTC required that the dominant firm’s market share must have fallen below 75 percent before forbearance would proceed. It is interesting to note that in this case the process of forbearance has apparently not moved fast enough for the Canadian Government. The Minister of Industry recently announced17 that he would overrule the CRTC’s process and fully deregulate the Internet-based digital phone market more quickly than the CRTC had envisioned.

6.4 The Role of Quasi-Rents in Competition Analysis of Natural Gas Storage

Competition in natural gas storage is interesting because storage basins are likely to earn locational rents, or at least locational quasi-rents. That is, a storage field that is located close to a consuming area may compete with other storage


Forbearance, Regulation, Market Power
Brown, Ware, and Wetton
August 20, 2007
Attachment 2

To the Final Submission of
Fortis LNG dated
April 10, 2012

Filed in the BCUC
AES and New Initiatives Inquiry

Excerpts from

*Industrial Organization: A Strategic Approach*

by

Jeffrey Church and Roger Ware

Irwin McGraw-Hill
2000
INDUSTRIAL ORGANIZATION

A Strategic Approach

Jeffrey Church
The University of Calgary

Roger Ware
Queen's University, Ontario
26.3 Regulatory Reform in Network Industries

the sole supplier. In the transition from monopoly to competition, it may be necessary to have some sort of temporary restraint on incumbents. Alternatively, it may be possible to create competition by requiring the incumbent to divest assets. Competition is created by literally carving up the incumbent monopolist.

- **Financing Social Obligations.**
  Regulated rates may embody cross-subsidies: for political reasons the prices of some services or the rates for some customer classes may have been below incremental costs and financed by raising the rates of other services above stand-alone costs. If these so-called social obligations are to continue, alternative means to finance their delivery will be required. Competition will force down the incumbent’s rates for those services that are the source of the cross-subsidy and the incumbent will not be willing to continue to charge noncompetitive rates for the favored customer classes or services. The alternative means—if they are to be competitively neutral—must not be bypassable by suppliers.

Two important and controversial aspects associated with this policy prescription relate to vertical structure and vertical control:

- **Vertical Structure.**
  What will be the vertical structure of the industry? Will the monopolist in the network activity be permitted to provide services downstream? If there is vertical separation, the monopolist in the network activity is not permitted to compete in the competitive services that use the network. If there is vertical integration with liberalization, regulatory entry barriers into the competitive activities/segments are eliminated, but the incumbent can continue to provide services in the competitive segments. The issue of vertical structure is similar to whether regulated firms should be allowed to diversify into unregulated markets.

- **Vertical Control.**
  Vertical control refers to the regulatory regime to control the price and terms of access to the monopoly network activity by competitors. Vertical integration complicates access pricing and may require additional competitive safeguards to curb the incentive and opportunity for anticompetitive behavior by the vertically integrated firm.

26.3.1 Why Regulated Firms Should Be Kept Out of Unregulated Markets

This issue of the appropriate policy response to diversification by regulated monopolists into competitive markets has a long and controversial history. It continues to be very topical because the restructuring in network industries typically takes the form of allowing competition in some activities, or stages of production, of the regulated monopolist but not all. Should there be limitations on the range of activities offered by the incumbent monopolist? Should it be allowed to compete in the activities opened up for competition? In the case of telecommunications in the United States the definitive answer in 1982 was no: to promote competition in long distance, the Department of Justice required AT&T to divest its local telephone networks, creating the Regional Bell Operating Companies (RBOCs, or Baby Bells).\(^2\) One of the major debates leading up to reform of the Telecommunications Act of 1996 in the United States was entry by the Baby Bells into interstate long-distance telephony.

CHAPTER 26  Issues in Regulation

Diversification by a regulated monopolist is also a relevant question to ask even if the regulated monopolist is not an input supplier for its competitors. For instance, in the race to build and dominate the information highway, cable TV operators have tried to convince regulators to adopt regulations that prevent telephone companies from providing information and broadcasting services. The most common argument to restrict the regulated monopolist from entering competitive markets is that it will have an unfair advantage since it will use its profits from its regulated monopoly service to “cross-subsidize” its affiliates in competitive markets.

To evaluate this argument, suppose that a monopolist in market \( R \) is regulated so that its price in \( R \) equals average cost. Suppose further that it competes in an unregulated market \( U \). Because regulation in market \( R \) is effective at controlling the market power and profits of the monopolist, it has an incentive to try and circumvent regulation to earn its monopoly profits. It can do this in one of two ways:

- **Tying or Discriminatory Provision of Access.** This involves the regulated monopolist realizing its monopoly profits in markets for downstream or complementary products.
- **Cost Misallocation or Cross-Subsidization.** This involves the regulated monopolist manipulating costs in such a way that they are transferred, for regulatory purposes, from the unregulated market to the regulated market.

**Anticompetitive Discrimination and Tying**

- **Discrimination.**
  Becoming an effective cost-based regulatory constraint in the regulated market by using anticompetitive discrimination involves the following three steps:
    - The monopolist enters production of an unregulated product (\( U \)) that uses \( R \) as an input.
    - The monopolist then discriminates against competitors in the market for \( U \) by either
      - lowering the quality of its \( R \),
      - raising its cost of access to \( R \),
      - or in the extreme denying access altogether.
    - The monopolist charges a supracompetitive price for \( U \).

To see how this works, consider the following simple example. Suppose output in market \( U \) requires one unit of \( R \) plus one unit of labor that costs $1.00. Let the cost per unit of \( R \) for the monopolist be $1.00 and its price be \( P^R \). Suppose that firms in \( U \) could substitute an alternative input besides \( R \), but its cost is $3.00 per unit.

If the monopolist were not regulated it could raise its price to $3.00 and earn profits of $2.00 per unit. At a price of $3.00 the monopolist matches the price of the alternative input and is the sole supplier to \( U \). Alternatively, if it vertically integrates and denies access to others it can set a price for \( U \) of $4.00. This is the maximum price that any other firm could charge if it used the inferior substitute. Again the monopolist makes profits of $2.00 per unit. Whether the monopolist vertically integrates or supplies downstream firms as a monopolist, it earns the same profits.

Suppose further that a regulator controls the price of the monopolist. The regulatory regime sets price equal to average cost. But which price? If the vertically integrated firm is the sole supplier both upstream and downstream, then the regulator would set the price of \( U \) equal to $2.00. However, because it is possible to have competition downstream, the regulator might
26.3.2 Access Pricing and Interconnection

In the previous section we established that a regulated incumbent is likely to have incentives to thwart the development of competition through pricing and the terms of access or interconnection. The regulatory response to promote competition has taken one of two forms: (i) vertical separation as in the case of AT&T and (ii) the introduction of an equal access pricing regime. Of course vertical separation also requires the determination of an access price. But because the monopolist does not have an incentive to favor an affiliate, access pricing is relatively uncomplicated. In the case of vertical separation, the optimal price of access can be determined using the Ramsey pricing principles discussed in Chapter 25. In this section we consider the case of access pricing and interconnection when the incumbent will continue to compete with entrants provided access to its essential facility.

26.3.3 The Interconnection Problem

Figure 26.4 provides an illustration of the access pricing problem between a long-distance competitor and an incumbent telephone operator that provides both long-distance and local service. The switch that connects the “local loops” (A₁S and A₂S) of callers is denoted S. Local calls can only be made using the incumbent’s network: a call from A₁ to A₂ must travel through S. However, the incumbent can also use its switch to provide service to point C. This complementary service might be long distance, in which case C is a local switch in another city, or it might be a value-added service like access to an information database or call waiting. The segment SC is potentially competitive. If other

![Diagram](image)
Attachment 3

Ferus LNG Initial Proposed Guidelines

1. In evaluating new initiatives to be undertaken by public utilities, including service offerings related to the NGV and the LNG market, the Commission will be guided by the overall public interest, including:
   - the interest of utility ratepayers;
   - the impact on the broader public including potential competitors;
   - the furthering of British Columbia energy and environmental objectives; and
   - the rights of the utility shareholder.

2. With respect to LNG related services (including the production, transportation and storage of LNG and the provision of LNG for transportation or power generation purposes), the Commission finds that such services have no natural monopoly characteristics and would not be subject to regulation unless the services were being provided by an organization that is already a regulated public utility. As such, these services constitute "Natural Unregulated Services."

3. In evaluating other new or innovative services proposed to be undertaken by public utilities, the Commission shall determine as a threshold issue: (i) whether such services have natural monopoly characteristics; and (ii) whether such services would not be subject to regulation, unless the services were being provided by an organization that is already a regulated public utility.

4. If the Commission determines that a service: (i) has no natural monopoly characteristics; and (ii) would not be subject to regulation, unless the service were being provided by an organization that is already a regulated public utility, then such service shall constitute a Natural Unregulated Service.

5. All Natural Unregulated Services provided by a public utility shall be regulated by the Commission on a stand-alone basis ("Stand Alone Regulation") to ensure there is no cross subsidization of costs or risks between the Natural Unregulated Service and the public utility's other services.

6. The overriding objective of Stand Alone Regulation is to ensure that the public utility provides the relevant service without utilizing any economic leverage which it may have as a result of its status as a monopoly provider of other services.

7. Components of Stand Alone Regulation will include terms and conditions requiring that rates charged to a customer of a Natural Unregulated Service:
   - Incorporate actual construction costs of facilities constructed to provide the service ("Facilities"), as opposed to forecast costs;
• Fully recover the capital cost of the Facilities (including estimated negative salvage value) within the term of the contract or include provisions requiring the customer to purchase the equipment for its undepreciated capital cost;
• Ensure that actual operating and maintenance costs are recovered as fully as possible;
• Inflated operating and maintenance costs by the regional CPI annually;
• Reflect no amount for capitalized overhead such that all operating and maintenance costs are recovered from the customer over the term of the contract; and
• Provide an allowance for overhead and marketing to be recovered from the customer.
• Are based on a separate determination of the rate of return for each Natural Unregulated Service, depending on the risks and other circumstances of that service.

8. No funding recovered from a public utility's other ratepayers, including EEC funding, shall be used by a public utility to support a Natural Unregulated Service.