

**RÉPONSES À LA  
DEMANDE DE RENSEIGNEMENTS DE  
NEWFOUNDLAND AND LABRADOR HYDRO  
SUR L'EXPERTISE DE PHILIP Q. HANSER**



1 Information Requests Prepared by

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3 Qualifications: Dr. Sinclair is an energy economist specializing in wholesale  
4 electricity market monitoring and transmission system monitoring.

5 The purpose of these requests is to discover the basis of various statements made by  
6 HQT witness **Mr. Philip Hanser**.

7 All references herein are to Mr. Hanser’s Report dated June, 2010.

8 1. At ¶ 5, Mr. Hanser states his conclusion that “HQT’s methodology described in  
9 Attachment C-1 ... for ATC Coordination is consistent with FERC Order 890.”

10 **Information Request:**

11 (a) Are the conclusions in Mr. Hanser’s testimony limited to the  
12 methodology for ATC Coordination in Attachment C-1 (which is  
13 attached to Mr. Hanser’s Report as Attachment 2)?

14 **R1a**

15 Yes, my testimony is limited to the methodology for ATC Coordination in  
16 Attachment C-1.

17 (b) To which parts of Attachment C-1 does Mr. Hanser’s conclusion in the  
18 quoted passage refer? In responding, please provide page number of  
19 Attachment C-1 and specific passages.

20 **R1b**

21 My conclusion refers to the following paragraphs in the English version of  
22 Attachment C-1:

- 23 a. last paragraph on original sheet No. 198;  
24 b. section 3.a.ii last two paragraphs on original sheet No. 202;  
25 c. section 3.d.ii, second paragraph on original sheet No. 207.

26 2. At ¶ 5, Mr. Hanser states:

27 I have reviewed TransÉnergie’s Methodology for the calculation of ATC for  
28 interfaces with neighboring systems and I conclude that TransÉnergie has put  
29 into place a procedure to ensure that its ATC calculations are consistent with  
30 neighboring systems’ ratings.

31 **Information Request:**

32 (a) Please define what is meant by “ratings”.

1 **R2a**

2 “Ratings” in the context of that sentence refers to the firm capacity to  
3 receive (or deliver) power before the ETCs of the neighbouring system  
4 are taken into account. See English version original sheet No. 198.

5 (b) Does the term “ratings” mean ATC?

6 **R2b**

7 I refer to my response 2(a), above.

8 (c) Does the term ratings mean TTC?

9 **R2c**

10 I refer to my response 2(a), above.

11 (d) With respect to Mr. Hanser’s reference to “procedure”, does the  
12 “procedure” ensure consistent ATC “calculations” between HQT and  
13 neighboring systems? In responding, please identify the portions of Mr.  
14 Hanser’s testimony that describe how the “calculations” are consistent.

15 **R2d**

16 I consider that the procedure outlined in Attachment C-1 ensures  
17 consistent ATC calculations between HQT and neighbouring systems.  
18 Please refer to paragraph 27 of my June 2010 report.

19 3. At ¶ 16, Mr. Hanser states:

20 I find that HQT’s procedures and formulae are developed to specifically deal  
21 with the issue of coordinating and exchanging data and assumptions with  
22 neighboring systems to achieve consistent ATC values....

23 **Information request.**

24 (a) Please identify the HQT procedures to which Mr. Hanser refer that  
25 specifically deals with HQT exchanging data with neighboring systems.

26 **R3a**

27 I refer to Attachment C-1, Section 3.a.ii and Section 3.d.i and 3.d.ii.

28 (b) For the specific procedures identified in (a), please indicate what kind of  
29 data is exchanged with neighboring systems;

30 **R3b**

31 HQT’s representatives would be best placed to answer this question, if  
32 the Régie allows the question.

33 (c) Does the Attachment 2 to Mr. Hanser’s Testimony (Attachment C-1 of the  
34 HQT OATT) describe the procedures to which Mr. Hanser refers? If so,

1 please identify such procedures with precise reference to page and  
2 passages.

3 **R3c**

4 I refer to my response 3(a), above

5 4. At ¶ 25, Mr. Hanser states:

6 HQT's ATC methodology and information exchange or coordination  
7 procedures with neighboring systems are not the same as some of the utilities'  
8 Attachment Cs that I have reviewed.

9 **Information request:**

10 (a) Are HQT's ATC methodology and information exchange or coordination  
11 procedures with neighboring systems the same as *any* of the utilities'  
12 Attachment Cs that Mr. Hanser reviewed?

13 **R4a**

14 No, none are exactly the same. HQT's methodology is similar to the  
15 methodologies applied by two other transmission providers, British  
16 Columbia Transmission Corporation (BCTC) and Maine Public Service  
17 Company (MPS).

18 First, BCTC's OATT Attachment C states that the firm ATC from BC to  
19 Alberta ("BC>AB Path") is 480 MW, which is determined by the  
20 constraints on the Alberta system to import firm energy from BC. Even  
21 though higher levels of ATC can be supported by the BCTC transmission  
22 system, BCTC sets the ATC on that path to the lower of the ATCs feasible  
23 for the importing and exporting regions.

24 Second, MPS indicates in its OATT Attachment C that the ATCs  
25 calculated by MPS on its interface with New Brunswick Power (NBP) do  
26 not match the ones calculated by NB. Attachment C Sheet 163B indicates  
27 that since NBP's methodology is more constrained, NBP's calculation is  
28 the limiting factor at present. This suggests that MPS takes the minimum  
29 of the two ATCs calculated by MPS and NBP.

30 (b) If the answer to (a) is affirmative, please identify which utility has the same  
31 procedures as HQT.

32 **R4b**

33 I refer to my response 4(a), above.

34 5. At ¶ 25, Mr. Hanser states:

35 HQT's ATC methodology and information exchange or coordination  
36 procedures with neighboring systems are not the same as some of the utilities'  
37 Attachment Cs that I have reviewed. They differ in one particular manner.

1 **Information Request:**

2 In stating: “They differ in one particular manner.” Is Mr. Hanser testifying that the  
3 referenced HQT procedures differ in “one particular manner” from the Attachment Cs  
4 of other utilities that Mr. Hanser reviewed? If so, please indicate the particular  
5 manner in which they differ.

6 **R5**

7 I am referring to the fact outlined in the same paragraph of my report that  
8 “most of the AC systems in the U.S. that interconnect with each other  
9 regularly calculate ATCs across multiple interfaces simultaneously  
10 through the industry standard tool of load-flow analyses...” whereas, to  
11 my knowledge, HQT does not model its system simultaneously with all of  
12 its neighbouring systems.

13 6. At ¶ 27, Mr. Hanser states:

14 Thus, the most appropriate way for HQT to reflect FERC Order 890’s requirement to  
15 have consistent ATCs with neighboring systems across interfaces is to either adopt the  
16 neighboring system’s ATC or to request the neighboring system to adopt HQT’s ATC.

17 **Information Rrequest:**

18 (a) Will HQT invite all neighboring systems to “coordinate” ATC as  
19 envisioned by Mr. Hanser?

20 **R6a**

21 HQT’s representatives would be best placed to answer this question, if  
22 the Régie allows the question.

23 (b) Will HQT invite such coordination over the LAB-HQT interface? Please  
24 explain why or why not.

25 **R6b**

26 HQT’s representatives would be best placed to answer this question, if  
27 the Régie allows the question.

28 7. At ¶ 28, Mr. Hanser states:

29 The HQT approach has two notable features. First, since the ATC calculation  
30 does not rely on complex load flow calculations, the ATC calculation is very  
31 transparent.

32 **Information Request:**

33 (a) With respect to the referenced “HQT approach” is it Mr. Hanser’s testimony  
34 that the HQT approach will not use load flow calculations? Please explain the  
35 response.

1 **R7a**

2 No. I am referring to the fact that HQT considers the neighbouring  
3 systems' firm capability to receive (or deliver) power before the ETCs of  
4 the neighbouring systems when estimating its own firm transfer capability.

5 (b) With respect to the referenced "HQT approach" is Mr. Hanser's referring to the  
6 "least common denominator" approach referenced at ¶18 of his report? If not,  
7 please explain.

8 **R7b**

9 Yes. I consider HQT's approach a "lowest common denominator"  
10 approach.

11 (c) For the least common denominator approach referred to at ¶18 of Mr. Hanser's  
12 report, Mr. Hanser refers to "the lower of two ATCs." Does Mr. Hanser  
13 believe the "HQT approach" will require an initial ATC value by HQT that  
14 will be compared to an ATC value from the neighboring system?

15 a. If so, will HQT use load-flow calculations to establish this initial ATC?

16 i. If HQT will not use load-flow calculations to establish this  
17 initial ATC, how will this initial ATC be established?

18 b. If HQT will not establish an initial ATC value, how will the least  
19 common denominator be established?

20 **R7c**

21 I understand that HQT uses computer simulations to conduct load-flow  
22 calculations in order to determine the operating limits of its own  
23 transmission system. HQT then compares the resulting TTC net of TRM  
24 with the neighbouring system's TTC net of TRM, and takes the lower of  
25 the two values. Then, HQT subtracts the existing transmission  
26 commitments (ETC) from this value to determine the firm ATC.

27 8. With Respect to Attachment 2 to Mr. Hanser's Testimony (Attachment C-1 of the  
28 HQT OATT), please refer to the last paragraph on Sheet No. 198:

29 For interconnections where firm transfer capability is coordinated between the  
30 Transmission Provider's system and a neighboring system, such capability  
31 corresponds to the lower of the following capacity values: (1) firm capacity to  
32 receive (or deliver) power before the ETCs of the neighboring system are taken  
33 into account, and (2) firm capacity to receive (or deliver) power before the  
34 ETCs of the Transmission Provider are taken into account.

35 **Information Request:**

36 (a) Please define what is meant by the term "firm capacity";

1 **R8a**

2 “Firm capacity” refers to the firm transfer capability across an interface net  
3 of TRM, or equivalently the sum of firm available transmission capability  
4 (ATC) and existing firm transmission commitments (ETC).

5 (b) Please explain who determines “firm capacity”, (e.g., is it the transmission  
6 provider, the neighboring system, or both?).

7 **R8b**

8 In the context of the referenced section in Attachment C-1, each  
9 transmission provider determines its own system’s “firm capacity” (or TTC  
10 – TRM).

11 (c) Please explain how the value “firm capacity” is calculated;

12 **R8c**

13 I refer to my answer to 7(c) above.

14 (d) If “firm capacity” refers to transmission capacity calculated by HQT, please  
15 explain how it is calculated with reference to the notions of TTC, ETC, CBM,  
16 etc.

17 **R8d**

18 I refer to my answer to 7(c) above.

19 (e) Please explain what is meant by the “ETCs of the Transmission Provider.”

20 **R8e**

21 The information required is found in Section 3.b. of Attachment C-1.

22 9. With Respect to Attachment 2 to Mr. Hanser’s Testimony (Attachment C-1 of the  
23 HQT OATT), please refer to 3.d.ii) on Sheet No. 207:

24 For interconnections where firm transfer capability is coordinated between the  
25 transmission provider’s system and a neighboring system, the calculation of  
26 TRM for these interconnections corresponds to the difference between the total  
27 transfer capability (TTC) of the Transmission Provider and the firm transfer  
28 capability before the ETCs on the neighboring system are taken into account.

29 **Information Request:**

30 (a) Please define what is meant by the term “firm transfer capability”;

31 **R9a**

32 The term “firm transfer capability” has the same meaning as “firm  
33 capacity”.

1 (b) Please explain who determines “firm transfer capability”, (e.g., is it the  
2 transmission provider, the neighboring system, or both?).

3 **R9b**

4 Each transmission provider determines its own firm transfer capability.

5 (c) Please explain how the value “firm transfer capability” is calculated;

6 **R9c**

7 I refer to my answer to 7(c) above.

8 (d) If “firm capacity” refers to transmission capacity calculated by HQT, please  
9 explain how it is calculated with reference to the notions of TTC, ETC, CBM,  
10 etc.

11 **R9d**

12 I refer to my answer to 7(c) above.