

Table 1: Concordance Table - Dynamic Scheduling Amendments (Attachment Q-1)

Approved Attachment Q-1 Section	Proposed Attachment Q-1 Section	Amendment Proposed	Comment of Substantive Amendment Proposed
General	General	Implementation of a dynamic scheduling framework where both imports and exports can be dynamically scheduled using any transmission reservation priority.	When the Dynamic Scheduling was first approved by the Commission in 2005, dynamic scheduling was relatively new in the industry. Since that time, the use of dynamic scheduling has grown and the markets that support them have changed. As a result of the market and industry changes, BC Hydro is proposing to amend its Tariff to give Transmission Customers flexibility for dynamic scheduling similar to other Transmission Providers in the Western Electricity Coordinating Council (WECC). BC Hydro's proposed amendments will allow Transmission Customers to dynamic schedule on imports and exports using any transmission service under the Tariff, including Firm and Non-Firm Point-To-Point Transmission Service and Network Integration Transmission Service, which includes Network Economy Service. BC Hydro is also simplifying Attachment Q-1 by removing technical details that are not customarily addressed in the OATT itself. Technical details that explain how dynamic scheduling is implemented are more appropriately provided in its business practices or operating orders.
Section 1	Section 1		parameter production of the second of the se
1. Definitions	1. Definitions	The Definitions have been updated to reflect relevant terms used in dynamic scheduling industry practice, which align with definitions included in the North American Electric Reliability Corporation (NERC) Glossary of Terms dated August 1, 2017.	Some sections of Attachment Q-1 are proposed to be removed as they are technical details more appropriately located in business practices or operating orders. As a result, BC Hydro is proposing to remove a number of defined terms that are no longer required in the Tariff. Since the time the original Dynamic Scheduling attachment was drafted and approved, accepted industry definition of terms have changed. Generally, industry-accepted definitions are reflected in NERC's Glossary of Terms. To the extent possible, BC Hydro is proposing to revise definitions in Attachment Q-1 to be consistent with industry practice. Non-substantive housekeeping amendments have also been made to
1.(a) Automatic Generation Control		Deleted	alphabetize the definitions. The definition is not required as Tariff language using this term was only used in the definition of "Dynamic Schedule". The proposed definition of "Dynamic Schedule" no longer refers to Automatic Generation Control.



Business Practice Deleted Delet	Approved Attachment Q-1 Section	Proposed Attachment Q-1 Section	Amendment Proposed	Comment of Substantive Amendment Proposed
1.(c) Dynamic Schedule 1.(a) Dynamic Schedule 1.(b) eTag 1.(c) Interchange 1.(c) Interchange 1.(c) Interchange 1.(d) Interchange Transaction 1.(d) Interchange Transaction 1.(d) Interchange Transaction 1.(d) Interchange Transaction 1.(d) Dynamic Scheduling Energy 1.(e) Intermediary Energy 1.(e) Etalogue is proposed to be simplified. 2.(e) Intermediary Balancing Authority Area 2.(e) Intermediary Balancing Authority Area 3.(e) Intermediary Balancing Authority Area 4.(e) Intermediary Balancing Authority Area 4.(f) Receiving Balancing Authority Area 4.(f) Receiving Balancing Authority Area 4.(f) Receiving Balancing Authority Area 4.(g) ScaDA 4.(g) Sending Balancing Authority Area 4.(g) ScaDA 5.(g) Expension or Energy 6.(g) Expension or Energy 7.(g) Expension or Energy 8.(g)	1.(b) Dynamic Scheduling Business Practice		Deleted	This became redundant when Attachment Q-1 was incorporated into the OATT and has since been discontinued. Business practices related to dynamic scheduling are now addressed in various BC Hydro business
1.(c) Interchange 1.(d) Interchange Transaction 1.(e) Popamic Scheduling Transmission 1.(e) Popamic Scheduling Transmission 1.(f) "EMS" or Energy Management System 1.(g) Intermediary Balancing Authority Area 1.(e) Intermediate Balancing Authority Area 1.(e) Intermediate Balancing Authority Area 1.(f) Receiving Balancing Authority Area 1.(g) Receiving Balancing Authority Area 1.(g) Sending Balancing Authority Area 1.(g) Send	1.(c) Dynamic Schedule	1.(a) Dynamic Schedule	Updated	•
1.(d) Interchange New New Age definition aligns with the definition included in the NERC Glossary of Terms. 1.(d) Interchange Transaction New New definition aligns with the definition included in the NERC Glossary of Terms. 1.(d) Interchange Transaction Deleted The definition is not required as Tariff language is proposed to be simplified. 1.(e) Dynamic Scheduling Transmission Deleted The definition is not longer required. The term "EMS" only occurred in Section 3(e). To simplify the Tariff language, the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff the technical system by which the Transmission Provider issues control signals. 1.(e) Intermediary Balancing Authority Area Updated The definition have been updated to align with the definitions included in the NERC Glossary of Terms, with inconsequential adjustments (using Sending and Receiving, instead of Source and Sink). 1.(f) Receiving Balancing Authority Area Authority Area Updated The definition have been amended to align with the definitions included in the NERC Glossary of Terms. 1.(g) Sending Balancing Authority Area Deleted The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms. 1.(g) Sending Balancing Authority Area Deleted The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms. 1.(g) Sending Balancing Authority Area Deleted The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms. 1.(g) Sending Balancing Authority Area Deleted The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms. 1.(g) WECC 1.(h) WECC Renumbered No amendment Section 2 2. Availability of Dynamic Scheduling Transmission; 8. Limitations; and 12. Suppension or Reduction in Dynamic Schedules).		1.(b) eTag	New	New definition aligns with BC Hydro business practices
L(d) Dynamic Scheduling Energy L(e) Dynamic Scheduling Transmission L(f) EMES" or Energy Management System Deleted Deleted Deleted Deleted The definition is not required as Tariff language is proposed to be simplified. The definition is not not required as Tariff language is proposed to be simplified. The definition is not not required as Tariff language is proposed to be simplified. The definition is not not required as Tariff language is proposed to be simplified. The definition is not not required as Tariff language is proposed to be simplified. The definition is not not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language is proposed to be simplified. The definition is not required as Tariff language the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff language the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff language the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff language the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff language the reference to EMS in 3(e) was removed as it was not necessary to specify in t		1.(c) Interchange	New	,
Energy L(e) Dynamic Scheduling Transmission Deleted The definition is not required as Tariff language is proposed to be simplified. The definition is no longer required. The term "EMS" only occurred in Section 3(e). To simplify the Tariff language, the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff the technical system by which the Transmission Provider issues control signals. L(e) Intermediate Balancing Authority Area L(e) Intermediate Balancing Authority Area L(f) Receiving Balancing Authority Area Autho		1.(d) Interchange Transaction	New	
Simplified. Simplified. Simplified. The definition is no longer required. The term "EMS" only occurred in Section 3(e). To simplify the Tariff language, the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff the technical system by which the Transmission Provider issues control signals. The term and its definition have been updated to align with the definitions included in the NERC Glossary of Terms, with inconsequential adjustments (using Sending and Receiving, instead of Source and Sink).	1.(d) Dynamic Scheduling Energy		Deleted	
Deleted Section 3(e). To simplify the Tariff language, the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff the technical system by which the Transmission Provider issues control signals. 1.(e) Intermediary Balancing Authority Area 1.(e) Intermediate Balancing Authority Area 1.(e) Intermediate Balancing Authority Area 1.(f) Receiving Balancing Authority Area 1.(f) Receiving Balancing Authority Area 1.(g) Sending Balancing Authority Area	1.(e) Dynamic Scheduling Transmission		Deleted	, , , , , , , , , , , , , , , , , , , ,
Authority Area 1.(e) Intermediate Balancing Authority Area 1.(f) Receiving Balancing Authority Area 1.(g) Receiving Balancing Authority Area 1.(g) Sending Balancing Authority Area 1.(h) WECC 1	1.(f) "EMS" or Energy Management System		Deleted	Section 3(e). To simplify the Tariff language, the reference to EMS in 3(e) was removed as it was not necessary to specify in the Tariff the technical
Authority Area Authority Area 1. (g) Sending Balancing Authority Area 1. (k) SCADA 1. (k) SCADA 1. (h) WECC Section 2 2. Availability of Dynamic Scheduling Transmission; 8. Limitations; and 12. Suspension or Reduction in Dynamic Schedules Authority Area Authority Area Updated Updated Updated Updated Updated Updated The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms. The term is not used in Attachment Q-1 and is therefore not needed. No amendment This section combines and simplifies the provisions of section 2 (Availability and Limitations) This section combines and simplifies the provisions of section 2 (Availability); section 8 (Limitations) and section 12 (Suspension or Reduction in Dynamic Schedules).	1.(g) Intermediary Balancing Authority Area		Updated	included in the NERC Glossary of Terms, with inconsequential adjustments
Authority Area Authority Area Authority Area Authority Area Deleted The term is not used in Attachment Q-1 and is therefore not needed. The term is not used in Attachment Q-1 and is therefore not needed. No amendment Section 2 Amendments to simplify and combine related aspects of the availability and limitations of dynamic scheduling. This section combines and simplifies the provisions of section 2 (Availability); section 8 (Limitations) and section 12 (Suspension or Reduction in Dynamic Schedules).	1.(i) Receiving Balancing Authority Area		Updated	
1.(I) WECC Section 2 2. Availability of Dynamic Scheduling Transmission; 8. Limitations; and 12. Suspension or Reduction in Dynamic Schedules 2. Availability and Limitations 2. Availability and Limitations Amendments to simplify and combine related aspects of the availability and limitations of dynamic scheduling. Amendments to simplify and combine related aspects of the availability and limitations of dynamic scheduling. This section combines and simplifies the provisions of section 2 (Availability); section 8 (Limitations) and section 12 (Suspension or Reduction in Dynamic Schedules).	1.(j) Host Balancing Authority Area		Updated	The term and its definition have been amended to align with the definitions included in the NERC Glossary of Terms.
Section 2 2. Availability of Dynamic Scheduling Transmission; 8. Limitations; and 12. Suspension or Reduction in Dynamic Schedules 12. Availability and Limitations 23. Availability and Limitations 24. Availability and Limitations 25. Availability and Limitations 26. Availability and Limitations 27. Availability and Limitations 28. Availability and Limitations 29. Availability and Limitations 20. Availability and Limitations 21. Availability and Limitations 22. Availability and Limitations 23. Availability and Limitations 24. Availability and Limitations 25. Availability and Limitations 26. Availability and Limitations 27. Availability and Limitations 28. Availability and Limitations 29. Availability and Limitations 20. Availability and Limitations 21. Availability and Limitations 22. Availability and Limitations 23. Availability and Limitations 24. Availability and Limitations 25. Availability and Limitations 26. Availability and Limitations 27. Availability and Limitations 28. Availability and Limitations 29. Availability and Limitations 20. Availa	1.(k) SCADA		Deleted	The term is not used in Attachment Q-1 and is therefore not needed.
2. Availability of Dynamic Scheduling Transmission; 8. Limitations; and 12. Suspension or Reduction in Dynamic Schedules Amendments to simplify and combine related aspects of the availability and limitations of dynamic scheduling. This section combines and simplifies the provisions of section 2 (Availability); section 8 (Limitations) and section 12 (Suspension or Reduction in Dynamic Schedules).	1.(I) WECC	1.(h) WECC	Renumbered	No amendment
Scheduling Transmission; 8. Limitations; and 12. Suspension or Reduction in Dynamic Schedules Amendments to simplify and combine related aspects of the availability and limitations of dynamic scheduling. This section combines and simplifies the provisions of section 2 (Availability); section 8 (Limitations) and section 12 (Suspension or Reduction in Dynamic Schedules).	Section 2	Section 2		
	8. Limitations; and 12. Suspension or Reduction in Dynamic	2. Availability and Limitations	related aspects of the availability and	(Availability); section 8 (Limitations) and section 12 (Suspension or
	2.(a)	2.(a)(i)	Renumbered	No substantive amendment.



Approved Attachment Q-1 Section	Proposed Attachment Q-1 Section	Amendment Proposed	Comment of Substantive Amendment Proposed
	2.(a)(ii)	Partially new subsection	This subsection provides that dynamic scheduling will only be available if all arrangements necessary to facilitate dynamic schedules are in place with other Balancing Authority Areas ("BAAs").
2.(b) and (c)	2.(a)(ii)	Simplified and Expanded to Cover Situations where BC Hydro may be Receiving or Intermediate BAA	The existing requirements for dynamic scheduling when BC Hydro is Host BAA or Intermediary BAA are incorporated into a generic description in proposed 2.(a)(ii), which is applicable whether BC Hydro is the Sending, Receiving or Intermediate BAA.
	2.(a)(iii)	New	This section clarifies that BAAs need to have the required systems in place to dynamically schedule .
7(a) and (b)	2.(b)	Technical detail of dispatching removed. Description of limitations restated.	Technical description of dispatch in original section 7(a) is removed, as this level of detail is more appropriate in a business practice or operating order. Proposed section 2(b)incorporates description of conditions that may limit Transmission Provider's ability to accommodate dynamic scheduling on transmission capacity reservations. Proposed section 2(b) also describes conditions on which Dynamic Schedules may be suspended or reduced, as indicated in existing section 12.
8. Limitations	2.(c)	Moved.	No substantive amendment.
12. Suspension or Reduction in Dynamic Schedules		Combined into Proposed 2.(b)	See proposed 2.(b) above.
Section 3	Section 3		
3. Eligibility Requirements	3. Eligibility Requirements	General update to reflect Tariff requirements of a comprehensive dynamic scheduling framework.	Amendments to reflect that BC Hydro may now be the receiving BAA. Other amendments to this section are largely of a non-substantive housekeeping nature.
3.(c)	3.(a)	Renumbered	
3.(a)	3.(b)	Renumbered/Housekeeping amendments	
	3.(c)	New	Sets out the eligibility requirements where BC Hydro is the Receiving Balancing Authority Area.
3.(b)	3.(d)	Renumbered/Housekeeping amendments	
3.(d), (d) and (g)	3.(e), (f) and (h)	Renumbered/Housekeeping amendments	
3(f)	3(g)	Dynamic scheduling no longer limited to firm transmission	Proposed 3(g) requires a Transmission Customer to have a signed Transmission Service Agreement with BC Hydro.
3.(h)	Concluding paragraph	No amendment	,



Approved Attachment Q-1 Section	Proposed Attachment Q-1 Section	Amendment Proposed	Comment of Substantive Amendment Proposed
Section 4	Section 4		
4. Relationship Between Dynamic Scheduling Transmission and Dynamic Scheduling Energy	4. Approval and Use of Dynamic Scheduling	Content of section deleted or revised	Current sentence on reserving dynamic schedules has been incorporated into BC Hydro's Business Practices. Current sentence on procedures for dynamic scheduling has been reworded in new section 4, Dynamic Scheduling. Proposed section 4 clarifies that dynamic scheduling is subject to approval of the Transmission Provider's assessment of the availability and limitations on dynamic scheduling. Once approved, transmission customers may dynamically schedule using eTags in accordance with BC Hydro's business practices.
Section 5	-		
5. Resale and Reassignment of Unused Dynamic Scheduling Transmission		Deleted	This section has been removed, as resale or reassignment rights are addressed in the OATT.
Section 6	Section 5		
6. Official Dispatch Signal	5. Official Dispatch Signal	General update to reflect BC Hydro may be either the Sending or Receiving BAA.	Expands the approved Attachment Q-1 provision to set the requirement that both Sending and Receiving BAAs have a responsibility to coordinate and respond to dispatches of resources.
Section 7	Section 6		
7. Dispatch Instruction Data	6. Dispatch Instruction Data		
7.(a) and (b)		Deleted or moved	Dispatch instruction data requirements when BC Hydro is Sending Balancing Authority Area deleted as more appropriate in business practice or operating order. Constraints on dynamic scheduling moved to proposed section 2.(b)(i). See above.
7.(c)	6.	Renumbered/Housekeeping amendments	
Section 8	-		
8. Limitations		Moved to 2(c)	
Section 9	Section 7		
9. Losses	7. Losses	Renumbered/Housekeeping amendments	
Section 10	Section 8		
10. Settlement Data Discrepancy	8. Settlement Data Discrepancy	Renumbered/Housekeeping amendments	



Approved Attachment Q-1 Section	Proposed Attachment Q-1 Section	Amendment Proposed	Comment of Substantive Amendment Proposed
Section 11	-		
11. Failure of Dynamic Transfer Signal or Official Dispatch Signal		Deleted	Section deleted as more appropriate in an operating order or business practice.
Section 12	-		
12. Suspension or Reduction in Dynamic Schedules		Content moved to section 2(b)	See proposed 2(b) above.
Section 13	Section 9		
13. Sharing of Information	9. Sharing of Information	Renumbered/Housekeeping amendments	
Section 14	Section 10		
14. Charges for Dynamic Scheduling (DS) Service	10. Charges for Dynamic Scheduling (DS) Service	General update to reflect dynamic scheduling of imports and exports on any available transmission service.	In the approved Attachment Q-1, only exports may be dynamically scheduled and only Firm Point-To-Point Transmission Service reservations can be utilized for these schedules. This section has been updated to reflect that dynamic scheduling will be possible for both imports and exports on any transmission reservation, including Firm Point-To-Point, Non-Firm Point-To-Point and Network Integration Transmission Service.
	10.(a)	New	This section provides the applicable Tariff references when imports are dynamically scheduled using Network Integration Transmission Service.
14.(a) and 14.(b)	10.(b)	This section combines Short Term Firm and Long Term Firm provisions from the approved Attachment Q-1 and adds Non-Firm.	This section provides the applicable Tariff Rate Schedule when imports are dynamically scheduled using Point-To-Point Transmission Service.
14.(c)	10.(c)	This section has been expanded to consider all Ancillary Services instead of just Scheduling, System Control and Dispatch per approved Attachment Q-1	This section provides the applicable Tariff Rate Schedules for ancillary services, all of which are applicable to transmission reservations that can be used for dynamic scheduling.