



Transmission Services

Failure To Comply, Version 10

Response to Customer Comments

Posted: 10/20/2014

This document contains the Transmission Customer comments and Transmission Services' response to those comments for the Failure To Comply, Version 10 Business Practice posted for review from August 8th, 2014 through September 15th, 2014

Thank you for your comments.

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Southern California Edison

Southern California Edison (SCE) appreciates the opportunity to comment on Failure to Comply Version 10, Business Practice. If you have any questions, please contact: Danphy Wong, (626) 302-3763, danphy.wong@sce.com

SCE recommends the buffer volume be increased from the current 100-kWh in Section B.5.d. Having such a small deviation band promotes under-generating given the severity of the charge associated with a FTC charge. Therefore, SCE recommends that the buffer volume be increased to 2MWh.

Transmission Service's Response

The purpose of the Failure to Comply Penalty Charge is to incentivize resources to respond to dispatch orders to support transmission system reliability. Response within 100-kWh of the dispatch order meets this purpose. However, a response at 2 MWh may not provide the relief necessary.

Iberdrola Renewables'

Iberdrola Renewables appreciates the opportunity to provide comments on Bonneville's Failure to Comply Business Practice Version 10. Given the significant penalties involved with Bonneville's Failure to Comply (FTC) Business Practice and the limited time provided for parties to prepare for the proposed changes, Iberdrola Renewables requests the following:.

Penalty Grace Period: Iberdrola Renewables requests Bonneville implement a 60-day grace period between the October 1, 2014 implementation date and the date when FTC penalties will be assessed. Market participants will require time to test their systems and processes to ensure they operate as designed under the new FTC Business Practice and should not be subject to punitive penalties during this initial period.

Transmission Service's Response

As stated previously, the purpose of the Failure to Comply Penalty Charge is to incentivize resources to respond to dispatch orders to support transmission system reliability. Providing a grace period would remove the incentive to comply and may threaten system reliability. Under current practice resources have 10-minutes to comply with dispatch orders and under the proposed rules resources have at least 10-minutes to comply and in some situations longer. See Section B.1.c of the FTC business practice. .

Elimination of the "Touch Line" Rule: Iberdrola Renewables requests Bonneville eliminate the "touch line" requirement that exists during a down ramp (when the next schedule interval's FTC is below the current interval). Iberdrola Renewables schedules twelve wind facilities into Bonneville's system each hour. Manually managing curtailment set points on a fifteen minute basis simply isn't possible. Iberdrola has developed an automated solution that, while not ideal given generation will inevitably be lost, should help the company to avoid FTC penalties. This solution cannot, however, ensure the company's avoidance of FTC penalties

during downward ramping scheduling intervals given the “touch line” requirement. It is not possible for Iberdrola to program its systems to comply with curtailments and avoid FTC penalties with the existence of this requirement. Iberdrola understands Bonneville included the “touch line” rule to preclude potential gaming of market participants. Rather than penalize all market participants to manage a remote risk of bad behavior, Iberdrola believes Bonneville should eliminate the “touch line” requirement, monitor market participant behavior, and address suspected gaming on a case-by-case basis.

Transmission Service’s Response

Maintaining the Touch Line rule incentivizes resources to not allow their generation to ride through all ramp schedule intervals (D - xx:45 to xx:00 and A - xx:00 to xx:15) and to ensure Customers move their generation in the right direction during ramp times. The ability to ride through a schedule interval without the FTC Penalty charge means a resource would not have to comply with a dispatch order for that time period and therefore would not be providing the system relief that is needed. For example, when the last schedule interval (D) of an hour (xx:45-xx:00) is 250 MW, the first interval (A) of the hour (x1:00 - x1:15) is 200 MW, and the second interval (B) of the hour (x1:15-x1:30) is 250 MW then without the touch line rule a resource could ride through the first interval (A) of the hour (x1:00-x1:15) at 250 MW without penalty because 1) intervals D and B are both Higher Of schedule intervals and 2) interval A is a continuous ramp interval.

Curtailment Flag Implementation: Iberdrola Renewables operates generation assets in all major markets across the United States. In every other market a curtailment flag is communicated via ICCP when a generation facility is under active curtailment. The existence of a curtailment flag would enable improved SCADA programming to more accurately follow changing set points and avoid FTC penalties. Bonneville issues curtailment flags today to individual generators when the BAA experiences an SOL event. Iberdrola Renewables requests Bonneville mirror this curtailment flag programming for other types of curtailment events on its system.

Transmission Service’s Response

BPA will evaluate this suggestion in future modifications to the ICCP data link.

Next Interval Schedule Quantity in iCRS: Iberdrola Renewables requests Bonneville add each generator’s next interval schedule quantity as a new field in iCRS and also make this value available to participants via ICCP. Iberdrola understands this may be a longer-term initiative given the required programming changes in iCRS, but believes Bonneville should work to provide this information to assist market participants to better manage and automate response to curtailment directives.

Transmission Service’s Response

Changes to iCRS will be submitted for consideration to the iCRS technical team.

Power Services

General Criteria 1. “(e.g., though” change “though” to “through”.

Transmission Service’s Response

The suggested change has been made in the final document.

Tenaska Power Services Co.

What is the start date of Failure to Comply, version 10? (The current Business Practice is marked “Effective: TBD”.)

Transmission Service’s Response

The Failure to Comply business practice will be effective when 15-minute scheduling is expected to go live on 10/21/2014. However, if 15-minute scheduling goes live before 11/1/2014, this business practice will be made effective as of the actual date 15-minute scheduling goes live.

When will the FTC penalty price effective 10/1/14 be known/available?

Transmission Service’s Response

The Failure to Comply Penalty Charge can be found in the 2014 Transmission, Ancillary, and Control Area Rate Schedules Section II.B

In the table “Examples of FTC evaluation start time”, please explain the formulas used to determine the Begin Time in the first two examples.

Transmission Service’s Response

The first three examples in this table use the same rule from Section B.1.c.i. It says:

If the start time of the Dispatch Order is at the start of a scheduling interval, parties have until the later of the end of the scheduling interval ramp or 10 minutes from the time stamp of when the curtailment achieves its final state and is APPROVED by all parties to shed load or modify generation as directed.

In the first example the rule was applied as follows:

- a. Is the start time at the start of an interval? Yes = :00
- b. What time was the directive approved? At :45
- c. What time does the ramp end for interval :00? At :10
- d. What time does the 10-min window end? At :55 (before the start of interval A)

- e. Which available response time is later, c (:10) or d (:55 before the start of interval A)? c is later (:10) - end of ramp

In the second example the rule was applied as follows:

- a. Is the start time at the start of an interval? Yes = :15
- b. What time was the directive approved? At :00
- c. What time does the ramp end for interval :15? At :20
- d. What time does the 10-min window end? At :10 (before the start of interval B)
- e. Which available response time is later, c (:20) or d (:10 before the start of interval B)? C is later (:20) - end of ramp

In the third example the rule was applied as follows:

- a. Is the start time at the start of an interval? Yes = :45
- b. What time was the directive approved? At :40
- c. What time does the ramp end for interval :45? At :50
- d. What time does the 10-min window end? At :50
- e. Which available response time is later, c (:50) or d (:50)? They are the same - 10-min window rule will apply

A new (4th) example with the approval time at :42 will be added to the table. Under this new example the start time of the FTC evaluation period is at :52. The 10-min window rule will still apply however this moves the Start time of the FTC Window to not coincide with the same time as the end of the ramp in example 3. This is how the rule would apply in this case:

- a. Is the start time at the start of an interval? Yes = :45
- b. What time was the directive approved? At :42
- c. What time does the ramp end for interval :45? At :50
- d. What time does the 10-min window end? At :52
- e. Which available response time is later, c (:50) or d (:52)? D is later - 10-min window rule will apply

The last two examples (the new 5th and 6th examples) in this table use the same rule from Section B.1.c.ii. It says:

If the start time of the Dispatch Order is not at the start of a scheduling interval, parties have 10 minutes from the time stamp of when the curtailment achieves its final state and is APPROVED by all parties to shed load or modify generation as directed.

In the fifth example the rule was applied as follows:

- a. Is the start time at the start of an interval? No = :12
- b. What time was the directive approved? At :13
- c. What time does the ramp end for interval :15? Not applicable
- d. What time does the 10-min window end? At :23
- e. What time does the FTC Window start? :23 - 10-min window rule will apply

In the sixth example the rule was applied as follows:

- a. Is the start time at the start of an interval? No = :24
- b. What time was the directive approved? At :29
- c. What time does the ramp end for interval :30? Not applicable
- d. What time does the 10-min window end? At :39
- e. What time does the FTC Window start? :39 - 10-min window rule will apply

These descriptions will be added to the business practice to help provide more clarity.

In Section E, Examples 1 and 2, what does the dashed red line represent? There is no dashed red line in the legend.

Transmission Service's Response

See Section E.1.e, it is the Higher Of FTC level for determining the application of the FTC Penalty Charge.

In Section E, Examples 1 and 2, could BPA provide more explanation of why FTC is/isn't assessed for each interval in the examples?

Transmission Service's Response

Example 1:

Interval D - No FTC because the resource is below the Higher Of FTC level.

Interval A - There is FTC from 18:05 to 18:10 for exceeding the FTC level before the start of the Higher Of period. There is no FTC from 18:10 to 18:15 because the resource is below the Higher Of FTC level.

Interval B - There is no FTC from 18:15 to 18:20 because the resource is below the Higher Of FTC level. There is FTC from 18:20 to 18:25 because the resource has exceeded the Higher Of FTC level during the non-ramp period.

Example 2:

Interval D - No FTC because the resource is below the Higher Of FTC level.

Interval A - There is no FTC from 18:00 to 18:10 because the resource is below the Higher Of FTC level. There is no FTC from 18:10 to 18:15 because the resource is below the Higher Of FTC level.

Interval B - There is no FTC from 18:15 to 18:20 because the resource is below the Higher Of FTC level. There is FTC from 18:20 to 18:25 because the resource has exceeded the FTC level during the non-ramp period. There is no FTC from 18:25 to 18:30 because the resource is below the Higher Of FTC level.

These clarifications will be added to the FTC business practice.

In Section E, Example 1, is "FTC" around 18:07 a valid label? We remember the presenter in the related conference call noting that one label was invalid - was this the one?

Transmission Service's Response

Yes, FTC would apply between 18:05 and 18:10 because the resource exceeded the FTC level for the interval during that time period. FTC would no longer apply at 18:10 because the Higher Of rule would apply from the next schedule interval.

No, the table edit was in the Generation Imbalance business practice.

In Section E, Example 1, what is the FTC Level for Interval C?

Transmission Service's Response

Interval C (:30-:45) is not depicted in the graphs. Interval C has the same ramping rules and flat period as Interval B (:15-:30). FTC for schedule interval B would apply between 18:20 and 18:25 (the flat period for the interval) because the resource exceeded the curtailment level during this time period.

In Section E, Example 3, what are the units used on the x axis in the graph? Minutes before/after the hour?

Transmission Service's Response

The x-axis is minutes. Negative numbers are minutes before the top of the next hour and positive numbers are minutes into the next hour. BPA will add this clarification to the graph.

Are there any other examples with begin times, graphs, calculations of FTC penalties, etc.?

Transmission Service's Response

Please send in specific questions to your BPA Transmission Services Account Executive and BPA will review and provide feedback

Puget Sound Energy, Inc

Puget Sound Energy, Inc. ("PSE") respectfully submits these comments on the Draft Failure to Comply Business Practice, Version 10 (the "Draft Business Practice"). PSE appreciates the opportunity to comment on the Draft Business Practice and looks forward to working with BPA and others in the region with respect to the Draft Business Practice.

Determination of the Number of Intervals Within an Hour

Section A.3 of the Draft Business Practice states as follows:

The shortest schedule interval submitted for the hour will be used to determine the number of intervals within an hour. For example if one 15-minute schedule is submitted within an hour then all of the scheduling intervals for the hour will be

broken into 15 minute schedule interval. Likewise, if a 30 minute schedule is submitted within the hour then the hour will be broken into two 30 minute scheduling intervals.

Draft Business Practice as Section A.3. The first sentence in this Section A.3 is ambiguous as to who is the submitter with respect to the determination of the number of intervals within an hour. PSE suggests the following revision to Section A.3 to clarify that the shortest schedule interval submitted for the hour by a generator will be used to determine the number of intervals within an hour for that generator:

The shortest schedule interval submitted for the hour by a generator will be used to determine the number of intervals within an hour for that generator. For example if a generator submits one 15-minute schedule is submitted within an hour then all of the scheduling intervals for the hour will be broken into 15 minute schedule interval for that generator. Likewise, if a generator submits one 30 minute schedule is submitted within the an hour then the hour will be broken into two 30 minute scheduling intervals for that generator.

These suggested revisions clarify that each generator will determine the number of intervals

Transmission Service's Response

FTC applies uniformly across an hour based on average generation data collected at 1-minute intervals (See Section B.5.a) for the periods of time that a dispatch order is in effect. Actual schedule intervals are not necessary in the application of the Failure to comply Penalty Charge therefore this section will be deleted.

Definition of the "Touch Line" Rule

Section A.4 of the Draft Business Practice states as follows:

To establish the sum of schedules during ramping periods between scheduling intervals, the higher of the current interval FTC Level or the next interval FTC Level will be extended for the ramp time during the ramp when assessing the application of the Failure to Comply penalty charge. When the next schedule interval's FTC Level, as described in Section B.5.b for generation and Section C.2 for load, is lower than the current interval (a down ramp) the resource must be operating at or below the FTC Level of the next period for 1 minute following the end of the response time or ramp to that interval to avoid the application of the FTC penalty (the "touch line" rule).

Draft Business Practice as Section A.4. The phrases "next period," "end of the response time," and "ramp to that interval" in the last sentence of Schedule A.4 are ambiguous. It is unclear (i) whether the "next period" refers to the "next schedule interval" or some other period; (ii) what is meant by the "response time"; and (iii) whether the interval in the phrase "ramp to that interval" refers to the "next schedule interval" or some other interval.

Transmission Service's Response

Section A.4 as originally written has been deleted. The business practice has been revised to include definitions of the terms "Touch Line Rule" and "Higher of Rule." These definitions are intended to clarify the ambiguity of the terms in the original writing. Please see Transmission Service's response to the comments of PGE below for the rewrite of Section A.4.

Examples of the “Touch Line” Rule

Section E.4.a of the Draft Business Practice states as follows:

Example 3 shows a curtailment order being issued at 40 minutes into the hour to start at 40 minutes into the hour. There is then a 10-minute period, from the time the curtailment order was issued, for a generator to comply. After the 10-minute period, the Failure to Comply penalty will be assessed if a generator has not complied with the curtailment. This example shows the generation of three generators. Generator #3 is assessed Failure to Comply for not operating at or below the FTC Level of the next period for 1 minute following the end of the response time or ramp to that interval (“touch line”).

Draft Business Practice as Section E.4.a. The phrases “next period,” “end of the response time,” and “ramp to that interval” are identical to those used in Section A.4 of the Draft Business Practice and, therefore, contain the same ambiguities identified above.

Transmission Service’s Response

Section E has been revised throughout to remove the use of these terms. Section E will include references to the rules being depicted in the examples in place of this information.

PSE appreciates the opportunity to comment on the Draft Business Practice.

PGE

Section A.3 states “the shortest interval submitted for the hour will be used to determine the number of intervals within an hour.” PGE requests clarification regarding whether this language intends to capture intervals submitted because of curtailment and Redispatch.

Transmission Service’s Response

FTC applies uniformly across an hour based on average generation data collected at 1-minute intervals (See Section B.5.a) for the periods of time that a dispatch order is in effect. Actual schedule intervals are not necessary in the application of the Failure to comply Penalty Charge therefore this section will be deleted.

Section A.4 uses the term “touch line rule.” PGE requests BPA provide a definition of this term in the business practice.

Transmission Service’s Response

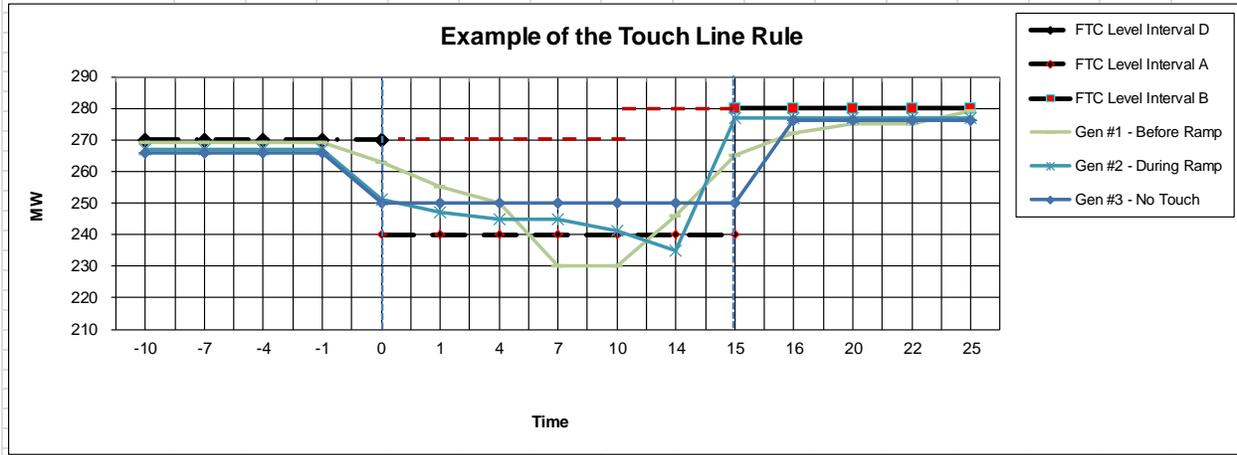
The following definitions for the Higher Of Rule and the Touch Line Rule will be added to Section A.4 of the business practice:

- a. Higher of Rule - The level used to determine FTC during ramping periods between a resource’s schedules shall be the higher of the approved sum of schedules at the start of the ramp or the approved sum of schedules at the end of the ramp from the immediately preceding or to the immediately subsequent schedule interval (the ramp times into or out of the current schedule interval).
- i. The Higher of Rule will apply at the start of the ramp to the resource’s next scheduled interval or after completion of the Touch Line rule (See Section 4.b), which ever is later.
 - ii. The following table illustrates the Higher of Rule periods of time for each schedule interval.

Schedule for Interval	Ramp From Interval	Higher of Period	Non-Ramp Periods	Ramp to Interval	Higher Of Period
A	D	xx:00 - xx:10	NA	B	xx:10 - xx:15
B	A	xx:15 - xx:20	xx:20 - xx:25	C	xx:25 - xx:30
C	B	xx:30 - xx:35	xx:35 - xx:40	D	xx:40 - xx:45
D	C	xx:45 - xx:50	NA	A	xx:50 - xx:60

- b. Touch Line Rule - A resource must have at least 1-minute average generation reading (See section B.5.a) at or below the FTC level at any time during the FTC Window for the Higher of Rule to apply when the FTC Level, as described in Section B.5.b for generation and Section C.2 for load, of the resource’s next scheduled interval is lower than the resource’s current schedule (a down ramp between intervals).
- c. Examples of the Touch Line rule:

Example of the Touch Line Rule															
Description \ Minutes	-10	-7	-4	-1	0	1	4	7	10	14	15	16	20	22	25
FTC Level Interval D	270	270	270	270	270										
FTC Level Interval A					240	240	240	240	240	240	240				
FTC Level Interval B											280	280	280	280	280
Gen #1 - Before Ramp	269	269	269	269	263	255	250	230	230	246	265	272	275	275	279
Gen #2 - During Ramp	267	267	267	267	251	247	245	245	241	235	277	277	277	277	277
Gen #3 - No Touch	266	266	266	266	250	250	250	250	250	250	250	276	276	276	276



Graph characteristics:

Negative numbers are minutes before the hour, positive are minutes after the hour.
 The dashed red line is the Higher Of period of time.
 Intervals D (xx:45 - xx:00), A (xx:00 - xx:15), and B (xx:15- xx:30) are curtailed.

Gen #1 - Before Ramp - This generator met the requirements of the Touch Line Rule by having 1-minute average generation reading below the current interval’s FTC level from minutes 7 to 10. The generator gets the full benefit of the Higher of Period (xx:10 - xx:15) when ramping out of Interval A and into Interval B.

Gen #2 - During Ramp - This generator met the requirements of the Touch Line rule by having 1-minute average generation reading below the current interval’s FTC level during minute 12 to 13. The generator gets the benefit of the Higher of Period starting at xx:13 (to xx:15) when ramping out of Interval A and into Interval B.

Gen #3 - No Touch - This generator did not meet the requirements of the Touch Line Rule because it did not have a 1-minute average generation reading below the FTC level at any point during the current interval. The Higher of Rule period (xx:10 - xx:15) when ramping out of Interval A and into Interval B does not apply. FTC will be charged from xx:10 - xx:15.

B.1.c.i & ii is covers a complex topic and PGE appreciates BPA’s efforts to provide such a thorough explanation of the FTC rule in this section.

Transmission Service’s Response

Further clarity will be added based on the questions and responses from Tenaska, above.