

BAL-003-1 Detailed Implementation Timeline

August 20, 2014

Standard BAL-003-1 Approval and Effective Dates

NERC Reliability Standard BAL-003-1 was approved by the Federal Energy Regulatory Commission (FERC) on January 16, 2014. The Frequency Response Measure (FRM) and Frequency Bias are based on annual measurements and calculations and require a full 12 months of measurement. Given this complexity, clarification is necessary regarding the implementation and data collection dates.

As such, in accordance with the approval and posting date in the Federal Register:

- The final rule was published in the Federal Register on January 23, 2014, with an effective date of March 24, 2014. Therefore, one year after the approval date is March 24, 2015.
- The first calendar day of the first quarter one year after the approval date is April 1, 2015. Pursuant to the BAL-003-1 implementation plan, this is the effective date for requirements R2, R3, and R4.
- The first calendar day of the first quarter two years after the approval date is April 1, 2016. Pursuant to the BAL-003-1 implementation plan, this is the effective date for requirement R1.

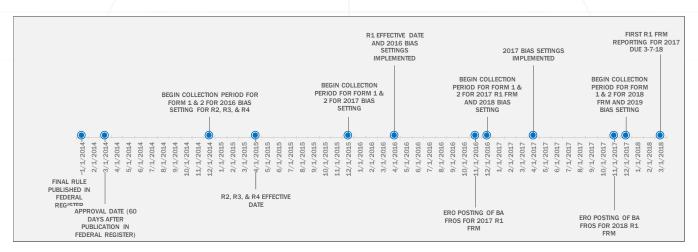


Figure 1: BAL-003-1 Implementation Timeline

R2, R3, and R4 Implementation - Compliance begins April 1, 2016

Requirements R2, R3 and R4 require that a Balancing Authority (BA) has a Frequency Bias Setting based on Form 1 and Form 2, as prescribed in BAL-003-1 and its attachment. Since collection of data for the calculation of Frequency Bias Settings on the forms does not require compliance with BAL-003-1 requirements during the collection, Forms 1 and 2 can be collected before the April 1, 2015 effective date of requirements R2, R3 and R4. Therefore, the first full year of data collection on Forms 1 and 2 will be from



December 2014 through November 2015, with submittal of the forms to NERC in December 2015, for calculation of the 2016 Frequency Bias Settings. The 2016 Frequency Bias Setting will then go into effect April 1, 2016, in accordance with BAL-003-1.

Those BAs using variable bias must use the approach outlined in BAL-003-1 Requirement R3 as of April 1, 2016.

L10 Calculations – Concurrent with R2, R3, and R4 Implementation on April 1, 2016

For consistency in calculation and implementation, the CPS Bounds for L10 should be also be implemented April 1, 2016. Forms 1 and 2 used for calculating the 2016 Frequency Bias Settings will also be used for the calculation of the L10 values. As described above, those forms will be based on frequency events occurring from December 2014 through November 2015, in accordance with the tenets of BAL-003-1 and its attachment.

R1 Implementation - Measurement begins December 1, 2016

BAL-003-1 Requirement R1 becomes effective on April 1, 2016. Requirement R1 is an annual measure, requiring a full 12 months of performance measurements, collected through Forms 1 and 2 for a period of December through November of the following year, in accordance with BAL-003-1 and its attachment. Since those forms cannot be collected before April 1, 2016, R1 will first become enforceable for frequency events occurring from December 2016 through November 2017. Frequency Response Measures for compliance with Requirement R1 will be submitted no later than March 7, 2018.

That compliance will be judged against BA Frequency Response Obligations (BA FRO) calculated for 2017 prior to December 2016 based on the Interconnection Frequency Response Obligations (IFROs) calculated and approved by the NERC Operating Committee in September 2016.

IFRO and BA FRO Calculations – Official calculations for IFRO and BA FRO begin June 2016

IFRO calculations are done annually between June 1 and the September Operating Committee meeting. The 2017 IFROs will be calculated by NERC staff are based on:

- Interconnection frequency characteristics for a three-year period for calendar years 2013 through 2015.
- Interconnection frequency response performance for frequency events for a three-year period from June 1, 2013 through May 31, 2016.

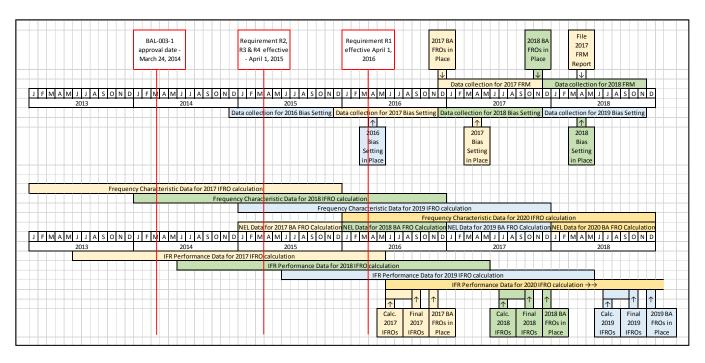
NERC staff will calculate the BA FROs will be based on net energy for load (NEL) and Generation from FERC Form 714s (and equivalent submittals from entities not subject to form 714 data submittals) for the



preceding calendar year, which become available in June each year. The data for calculating the 2017 BA FROs will be based on the data submitted in June 2016 for calendar year 2015.

Data Collection and Calculation Timelines

The following timeframes will be used for collection and calculation of the various parameters for the implementation of BAL-003-1.



Data Collection for Frequency Bias Setting				
Item	Start Date	End Date	Used for	Comments
2014 NEL and generation data from FERC Form 714 or like submittals	Jan. 1, 2014	Dec. 31, 2014	Calculating 2016 Frequency Bias Settings to go into effect April 1, 2016	Available in June 2015
FRS Forms 1 and 2 for BAL- 003-1 Frequency Events	Dec. 1, 2014	Nov. 30, 2015	Calculating 2016 Frequency Bias Settings to go into effect April 1, 2016	



Data Collection for Frequency Bias Setting				
Item	Start Date	End Date	Used for	Comments
2016			Frequency Bias	Implement
Frequency Bias	Dag 1 2015	Fab. 10, 2016	Settings for 2016	Frequency Bias
Setting	Dec.1 2015	Feb. 10, 2016	BAL-003-1 R2, R3,	Settings April 1,
calculation			& R4	2016
				Implement
2016 L10 value				Frequency Bias
2016 L10 value calculation	Dec.1 2015	Feb. 10, 2016	2016 L10 values	Settings April 1,
				2016, assuming
				CPS2 still in place

FRS Forms 1 and 2 for Frequency Response Measurement				
Item	Start Date	End Date	Used for	Comments
FRS Forms 1 and 2 for BAL- 003-1 Frequency Events	Dec. 1, 2016	Nov. 30, 2017	Calculating 2017 FRM performance in compliance with R1	To be submitted by April 1, 2018

Data Collection for IFRO and BA FRO Calculations				
Item	Start Date	End Date	Used for	Comments
Interconnection frequency characteristics	Jan. 1, 2013	Dec. 31, 2015	Calculating starting frequency in the 2017 IFRO calculations in 2016	Calculated from 3 years of 1-second frequency data, published in 2016 FR Annual Analysis Report
Interconnection Frequency Response performance (3 years)	Jan. 1, 2013	Dec. 31, 2015	Calculating FR Performance ALR1- 12 metric for 2016 SOR	Uses frequency events selected for ALR1-12 metric
Interconnection Frequency Response performance (3 years) for ALR1- 12 frequency events	June 1, 2014	May 30, 2016	Calculating adjustment factors for 2017 IFROs in 2016	Uses frequency events selected for ALR1-12 metric



Data Collection for IFRO and BA FRO Calculations				
Item	Start Date	End Date	Used for	Comments
2015 NEL and generation data from FERC Form 714 or like submittals	Jan. 1, 2015	Dec. 31, 2015	Allocation of 2017 IFROs into BA FROs and 2017 Frequency Bias Settings	Available in June 2016
2017 IFRO Calculation	June 1, 2016	August 15, 2016	Calculating 2017 BA FROs for R1	Approval of 2017 IFROs at Sept. 2016 OC meeting
2017 BA FRO Allocation	Sept. 15, 2016	Oct. 31, 2016	BAL-003-1 R1 compliance	To be issued by NERC in October 2016 for implementation Dec. 1, 2016 through Nov. 30, 2017