BAL-502-RFC-01 Mapping to Proposed BAL-502-RFC-02

BAL-502-RFC-01 Requirements		BAL-502-RFC-02 Requirements		
R1	The Loss of Load Expectation (LOLE) for any load in RFC due to resource inadequacy shall not exceed one occurrence in ten years. This requirement applies to all PRSGs within RFC	R1.1	Calculate a Planning reserve margin that will result in the sum of the probabilities for loss of load for the integrated peak hour for all days of each planning year analyzed (per R1.2) being equal to 0.1. (This is comparable to a "one day in 10 year" criterion)	
R2	Each LSE			
R2.1	shall be a member of a PRSG for determining its resource planning reserve requirements. Membership in PRSGs must recognize interconnected system arrangements and are subject to verification by RFC.			Applicability section has been modified to include the Planning Coordinator. LSE has been removed from the Applicability section
R2.2	shall report to RFC within 90 days of the effective date of BAL-502-RFC-01 which PRSG is responsible for determining its resource planning reserve requirements. In addition, if a LSE changes the PRSG that is responsible for determining its resource planning reserve requirements, the LSE shall notify RFC at least 90 days prior to the proposed change or 180 days prior to the planning period under review, whichever is greater.			Applicability section has been modified to include the Planning Coordinator. LSE has been removed from the Applicability section
R3	Resource Planning Reserve Requirement analyses performed by each PRSG shall:			
R3.1	be performed or verified annually	R1	The Planning Coordinator shall perform and document a Resource Adequacy analysis annually. The Resource Adequacy analysis shall [Violation Risk Factor: Medium]:	
		R1.2.1	Perform an analysis for Year One.	
		R1.2.2.1	Perform an analysis or verification at a minimum for one year in the 2 through 5 year period and at a minimum one year in the 6 though 10 year period.	
R3.2	express resource planning reserve requirements as a percentage of the 50:50 probability forecast peak load (Reserve Margin).	R1.1.2	The planning reserve developed from R1.1 shall be expressed as a percentage of the median forecast peak Net Internal Demand (planning reserve margin).	
R3.3	determine a resource planning reserve requirement for each of the PRSG members for the upcoming planning year as defined by the PRSG.	R1.1	Calculate a Planning reserve margin that will result in the sum of the probabilities for loss of load for the integrated peak hour for all days of each planning year analyzed (per R1.2) being equal to 0.1. (This is comparable to a "one day in 10 year" criterion).	

BAL-502-RFC-01 Requirements		BAL-502-RFC-02 Requirements	
		R1.2.1	Perform an analysis for Year One.

BAL-502-RFC-01 Requirements		BAL-502-RFC-02 Requirements		
R3.4	be performed or verified for the nine subsequent planning years to provide information for long-term resource planning without establishing specific resource planning reserve requirements	R1.2	Be performed or verified separately for each of the following planning years:	
		R1.2.2	Perform an analysis or verification at a minimum for one year in the 2 through 5 year period and at a minimum one year in the 6 though 10 year period.	
		R1.6	Document that the resource capacity is not counted more than once, as reserve, by multiple Planning Coordinators	
R3.5	model a “loss-of-load event” as system conditions before taking emergency actions (e.g. unplanned voltage reductions or public appeals) but including system conditions subsequent to taking planned contractual actions (e.g. direct control load management).	R1.1.1	The utilization of Demand Side Management does not contribute to the loss of load probability.	
		R1.4	• Any other Demand (Load) Response Programs not included in R1.3.1	
R3.6	consider the availability of all generating units within the PRSG committed to meet the adequacy of Group load. At a minimum, the calculations must consider the following characteristics of the generating unit population:			
R3.6.1	Historic generating unit performance and any projected changes	R1.3.2	· Historic resource performance and any projected changes	
		R1.4	· Sensitivity to resource outage rates .	
R3.6.2	Generating unit seasonal ratings	R1.3.2	· Seasonal resource ratings	
R3.6.3	The population of units deemed “typical” for compiling the history to determine generating performance statistics for new units			Requirement in BAL-502-RFC-01 not explicitly included in BAL-502-RFC-02
R3.6.4	Projected planned generator outages and maintenance schedules	R1.3.2	· Resource planned outage schedules, deratings, and retirements.	
R3.6.5	Fuel limitations, wind or hydro energy limitations or other reasons for limited dispatchability of generators	R1.3.2	· Modeling assumptions of intermittent and energy limited resource such as wind and cogeneration.	
		R1.4	· Availability and deliverability of fuel.	
		R1.4	· Impacts of extreme weather/drought conditions that affect unit availability.	

BAL-502-RFC-01 Requirements		BAL-502-RFC-02 Requirements		
R3.6.6	Common mode outages that effect resource adequacy	R1.4	· Common mode outages that affect Resource availability	
R3.6.7	Availability of Resources with Environmental or Regulatory Restrictions	R1.4	· Environmental or regulatory restrictions of resource availability.	
R3.7	consider the characteristics of other resources within the PRSG committed to meet the adequacy of Group load. At a minimum, the calculations must consider the following:			
R3.7.1	Limitations such as notice, buy-through provisions, duration, or frequency			Requirement in BAL-502-RFC-01 not explicitly included in BAL-502-RFC-02
R3.7.2	How it is dispatched			Requirement in BAL-502-RFC-01 not explicitly included in BAL-502-RFC-02
R3.7.3	Physical characteristics such as weather, cold load pickup, etc			Requirement in BAL-502-RFC-01 not explicitly included in BAL-502-RFC-02
R3.8	consider the characteristics of load, such as the following:			
R3.8.1	Load diversity	R1.3.1	· Load diversity.	
R3.8.2	Seasonal load variation	R1.3.1	· Seasonal load variations.	
R3.8.3	Load variability due to weather, regional economic forecasts, etc.	R1.3.1	· Median (50:50) forecast peak load.	
		R1.3.1	· Load forecast uncertainty including Load variability due to weather and regional economic forecasts.	
		R1.3.1	· Daily demand modeling assumptions (firm, interruptible).	
R3.8.4	Load forecast uncertainty	R1.3.1	· Load forecast uncertainty including Load variability due to weather and regional economic forecasts.	
R3.8.5	Contractual arrangements concerning load shedding agreements among PRSG members	R1.3.1	· Contractual arrangements concerning curtailable/interruptible load.	
R3.9	shall base the LOLE calculation on a methodology employing the sum of the daily loss of load probabilities	R1.1	Calculate a Planning reserve margin that will result in the sum of the probabilities for loss of load for the integrated peak hour for all days of each planning year analyzed (per R1.2) being equal to 0.1. (This is comparable to a “one day in 10 year” criterion).	

BAL-502-RFC-01 Requirements		BAL-502-RFC-02 Requirements		
R3.10	consider the benefit of interconnections to other entities outside the PRSG recognizing transmission limitations and the likelihood of capacity resources being available to the PRSG when needed	R1.3.2	· Modeling assumptions of firm capacity purchases from and sales to entities outside the Planning Coordinator area	
		R1.3.4	Assistance from other interconnected systems including multi-area assessment considering transmission limitations into the study area.	
R3.11	documentation of the consideration for each of the items in R3.1 through R3.10 must be provided.	R1.3	Include the following subject matter and documentation of its use:	
		R1.4	Consider the following Resource availability characteristics and document how and why they were included in the analysis or why they were not included:	
R4	Each PRSG shall document that it has an agreement to enforce the requirement of R3.3 on its LSE members.			Requirement in BAL-502-RFC-01 is deleted as non-enforceable
R5	Each LSE shall secure the resources needed to meet the resource planning reserve requirement established by a PRSG for the upcoming planning year.			Requirement in BAL-502-RFC-01 is deleted as non-enforceable
R6	The consideration of any resources within the PRSG not committed to serving the capacity needs of the Group that are included as resources in the calculation of required reserve levels or accepted as resources used to meet requirements must be specifically justified and documented	R1.4	· Market resources not committed to serving load (uncommitted resources) within the Planning Coordinator area.	
		R1.3.2	· Criteria for including planned resource additions in the analysis	Added requirement expressly identified in BAL-502-RFC-02
		R1.3.3	Transmission limitations, including the effect of firm commitments that prevent the delivery of generation reserves	Added requirement expressly identified in BAL-502-RFC-02
		R1.3.3.1	Criteria for including planned transmission facility additions in the analysis	Added requirement expressly identified in BAL-502-RFC-02
		R1.4	· Modeling assumptions for emergency operation procedures used to make reserves available.	Added requirement expressly identified in BAL-502-RFC-02
		R1.5	Consider the following Transmission characteristics and document how and why they were included in the Resource Adequacy analysis or why they were not included:	Added requirement expressly identified in BAL-502-RFC-02
		R1.5	· Transmission maintenance outage schedules.	Added requirement expressly identified in BAL-502-RFC-02
		R1.5	· Transmission forced outage rates	Added requirement expressly identified in BAL-502-RFC-02

BAL-502-RFC-01 Requirements

BAL-502-RFC-02 Requirements

R1.7	Document that all load in the Planning Coordinator area is included in a Resource Adequacy analysis and each end-use customer is included in one and only one Resource Adequacy analysis.	Added requirement expressly identified in BAL-502-RFC-02
R2	The Planning Coordinator shall annually document its projected load and resource capability, for each area or transmission constrained sub-area identified in the Resource Adequacy analysis [Violation Risk Factor: Medium].	Added requirement expressly identified in BAL-502-RFC-02
R2.1	This documentation shall cover each of the years in the ten year period in R1.2	Added requirement expressly identified in BAL-502-RFC-02
R2.2	This documentation shall include the Planning Reserve margin calculated per requirement R1.1 for each of the three years in the analysis.	Added requirement expressly identified in BAL-502-RFC-02
R2.3	The documentation as specified per requirement R2.1 and R2.2 shall be publicly posted no later than 30 calendar days prior to the beginning of Year One.	Added requirement expressly identified in BAL-502-RFC-02