Evergy Metro

Missouri Filing Requirements and Rule

Compliance

Integrated Resource Plan

20 CSR 4240-22.080

April 2024



Volume 2: Rule Compliance

Technical Integrated Resource Plan Volumes¹

Nine (9) separate volumes comprise this IRP filing:

- 1. Volume 1: Executive Summary
- 2. Volume 2: Missouri Filing Requirements & Rule Compliance
- 3. Volume 3: Load Analysis and Load Forecasting
- 4. Volume 4: Supply-Side Resource Analysis
- 5. Volume 4.5: Transmission and Distribution Analysis
- 6. Volume 5: Demand-Side Resource Analysis
- 7. Volume 6: Integrated Resource Plan and Risk Analysis
- 8. Volume 7: Resource Acquisition Strategy Selection
- 9. Volume 8: Stakeholder Engagement

References to the required documentation and information specified in 20 CSR 4240-22.030 – 20 CSR 4240-22.080 can be seen per volume below.

¹ 20 CSR 4240-22.080 (2); 20 CSR 4240-22.080 (2)(C); 20 CSR 4240-22.080 (2)(C)(1); 20 CSR 4240-22.080 (2)(C)(2);

Volume 1: Executive Summary

An executive summary, separately bound and suitable for distribution to the public in paper and electronic formats. The executive summary shall be an informative non-technical description of the preferred resource plan and resource acquisition strategy. This document shall summarize the contents of the technical volume(s) and shall be organized by chapters corresponding to 20 CSR 4240-22.030–20 CSR 4240-22.070

Table 1: Volume 1 Rules Requirements according to 20 CSR 4240-22.080

(2)	
(2) (E)	
(2) (E) 1.	
(2) (E) 2.	
(2) (E) 3.	
(2) (E) 4.	
(2) (E) 5.	
(2) (E) 5. A.	
(2) (E) 5. B.	
(2) (E) 5. C.	
(2) (E) 6.	
(2) (E) 7.	
(2) (E) 8.	

Volume 3: Load Analysis and Load Forecasting

PURPOSE: This rule sets minimum standards for the maintenance and updating of historical data, the level of detail required in analyzing loads, and the purposes to be accomplished by load analysis and by load forecast models. The load analysis discussed in this rule is intended to support both demand-side management efforts of 4 CSR 240-22.050 and the load forecast models of this rule. This rule also sets the minimum standards for the documentation of the inputs, components, and methods used to derive the load forecasts.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) (A)	(2) (A)	(3) (A)	(4) (A)	(5) (A)	(6) (A)	(7) (A)	(8) (A)
(1) (B)	(2) (B)	(3) (B)	(4) (A) 1. A.	(5) (B)	(6) (A) 1.	(7) (A) 1.	(8) (B)
(1) (C)	(2) (B) 1.		(4) (A) 1. B.	(5) (C)	(6) (A) 1. A.	(7) (A) 2.	(8) (C)
(1) (D)	(2) (B) 2.		(4) (A) 1. C.		(6) (A) 1. B.	(7) (A) 3.	(8) (C) 1.
	(2) (B) 3.		(4) (A) 2.		(6) (A) 2.	(7) (A) 4.	(8) (C) 2.
	(2) (C)		(4) (A) 2. A.		(6) (A) 3.	(7) (A) 5.	
	(2) (C) 1.		(4) (A) 2. B.		(6) (B)	(7) (A) 6.	
	(2) (C) 2.		(4) (A) 2. C.		(6) (C)	(7) (A) 7.	
	(2) (C) 3.		(4) (A) 3.		(6) (C) 1.	(7) (B)	
	(2) (D)		(4) (A) 4.		(6) (C) 2.	(7) (B) 1.	
	(2) (D) 1.		(4) (B)		(6) (C) 3.	(7) (B) 2.	
	(2) (D) 2.		(4) (B) 1.		(6) (C) 4.	(7) (B) 3.	
	(2) (D) 3.		(4) (B) 2.			(7) (B) 4.	
	(2) (E)					(7) (C)	
	(2) (F)						

Table 2: Volume 3 Rule Requirements according to 20 CSR 4240-22.030

Volume 4: Supply Side Resource Analysis

PURPOSE: This rule establishes minimum standards for the scope and level of detail required in supply-side resource analysis.

(1)	(2)	(3)	(4)	(5)
	(2) (A)	(3) (A)	(4) (A)	(5) (A)
	(2) (B)	(3) (A) 1.	(4) (B)	(5) (B)
	(2) (C)	(3) (A) 2.	(4) (C)	(5) (C)
	(2) (C) 1.	(3) (A) 3.		(5) (D)
	(2) (C) 2.	(3) (A) 4.		(5) (E)
		(3) (A) 5.		(5) (F)
		(3) (A) 6.		
		(3) (B)		

Table 3: Volume 4 Rules Requirements according to 20 CSR 4240-22.040

Volume 4.5: Transmission and Distribution Analysis

PURPOSE: This rule specifies the minimum standards for the scope and level of detail required for transmission and distribution network analysis and reporting.

(1)	(2)	(3)	(4)	(5)	(6)
(1) (A)		(3) (A)	(4) (A)		
(1) (B)		(3) (A) 1.	(4) (B)		
(1) (C)		(3) (A) 3.	(4) (C)		
(1) (D)		(3) (A) 4.	(4) (C) 1.		
		(3) (A) 5.	(4) (C) 1. A.		
		(3) (A) 6.	(4) (C) 1. B.		
		(3) (A)2.	(4) (C) 1. C.		
		(3) (B)	(4) (C) 1. D.		
		(3) (B) 1.	(4) (C) 2.		
		(3) (B) 2.	(4) (C) 2. A.		
		(3) (B) 3.	(4) (C) 2. B.		
		(3) (B) 4.	(4) (C) 2. C.		
		(3) (B)5.	(4) (C) 3.		
		(3) (C)	(4) (C) 3. A.		
		(3) (D)	(4) (C) 3. B.		
		(3) (D) 1.	(4) (C) 3. C.		
		(3) (D) 2.	(4) (C) 3. D.		
		(3) (D) 3.	(4) (C) 4.		
		(3) (D) 4.	(4) (C) 5.		
		(3) (D) 5.	(4) (D)		
		(3) (D) 6.	(4) (D) 1.		
			(4) (D) 2.		
			(4) (E)		
			(4) (E) 1.		
			(4) (E) 2.		

Table 4: Volume 4.5 Rule Requirements according to 20 CSR 4240-22.045

Volume 5: Demand-Side Resource Analysis

PURPOSE: This rule specifies the principles by which potential demand-side resource options shall be developed and analyzed for cost effectiveness, with the goal of achieving all cost-effective demand-side savings. It also requires the selection of demand-side candidate resource options that are passed on to integrated resource analysis in 4 CSR 240- 22.060 and an assessment of their maximum achievable potentials, technical potentials, and realistic achievable potentials.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) (A)		(3) (A)	(4) (A)	(5) (A)	(6) (A)		
(1) (A) 1.		(3) (B)	(4) (B)	(5) (A) 1.	(6) (B)		
(1) (A) 2.		(3) (C)	(4) (C)	(5) (A) 2.	(6) (C)		
(1) (A) 3.		(3) (D)	(4) (D)	(5) (A) 3.	(6) (C) 1.		
(1) (B)		(3) (E)	(4) (D) 1.	(5) (B)	(6) (C) 2.		
(1) (C)		(3) (F)	(4) (D) 2.	(5) (B) 1.			
(1) (D)		(3) (G)	(4) (D) 3.	(5) (B) 2.			
(1) (E)		(3) (G) 1.	(4) (D) 4.	(5) (B) 3.			
(1) (E) 1.		(3) (G) 2.	(4) (D) 5.	(5) (C)			
(1) (E) 2.		(3) (G) 3.	(4) (D) 5. A.	(5) (C) 1.			
		(3) (G) 4.	(4) (D) 5. B.	(5) (C) 2.			
		(3) (G) 5.	(4) (D) 5. C.	(5) (C) 3.			
		(3) (G) 5. A.	(4) (D) 5. D.	(5) (D)			
		(3) (G) 5. B.	(4) (E)	(5) (E)			
		(3) (G) 5. C.	(4) (F)	(5) (F)			
		(3) (G) 5. D.	(4) (G)	(5) (G)			
		(3) (G) 5. E.					
		(3) (G) 5. F.					
		(3) (G) 5. G.					
		(3) (G) 5. H.					

Table 5: Volume 5 Rule Requirements according to 20 CSR 4240-22.050

Volume 6: Integrated Resource Plan and Risk Analysis

PURPOSE: This rule requires the utility to design alternative resource plans to meet the planning objectives identified in 4 CSR 240- 22.010(2) and sets minimum standards for the scope and level of detail required in resource plan analysis and for the logically consistent and economically equivalent analysis of alternative resource plans. This rule also requires the utility to identify the critical uncertain factors that affect the performance of alternative resource plans and establishes minimum standards for the methods used to assess the risks associated with these uncertainties.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(2) (A)	(3) (A)	(4) (A)	(5) (A)		(7) (A)
	(2) (A) 1.	(3) (A) 1.	(4) (B)	(5) (B)		(7) (B)
	(2) (A) 2.	(3) (A) 2.	(4) (B) 1.	(5) (C)		(7) (C)
	(2) (A) 3.	(3) (A) 3.	(4) (B) 2.	(5) (D)		(7) (C) 1.
	(2) (A) 4.	(3) (A) 4.	(4) (B) 3.	(5) (E)		(7) (C) 1. A.
	(2) (A) 5.	(3) (A) 5.	(4) (B) 4.	(5) (F)		(7) (C) 1. B.
	(2) (A) 6.	(3) (C)	(4) (B) 5.	(5) (H)		(7) (C) 2.
	(2) (A) 7.	(3) (C) 1.	(4) (B) 6.	(5) (I)		(7) (C) 3.
	(2) (B)	(3) (C) 2.	(4) (B) 7.	(5) (J)		(7) (C) 4.
		(3) (C) 3.	(4) (B) 8.	(5) (K)		
		(3) (D)	(4) (B) 9.	(5) (L)		
			(4) (C)			
			(4) (C) 1.			
			(4) (C) 1. A.			
			(4) (C) 1. B.			
			(4) (C) 1. C.			
			(4) (C) 2.			
			(4) (D)			
			(4) (E)			
			(4) (F)			
			(4) (G)			
			(4) (H)			

Table 6: Volume 6 Rule Requirements according to 20 CSR 4240-22.060

Capacity Balance Spreadsheet²

The capacity balance spreadsheet for the preferred resource plan and each candidate resource plan has been included in Volume 6 Section 2.

² 20 CSR 4240-22.080 (2)(D)

Volume 7: Resource Acquisition Strategy Selection

PURPOSE: This rule requires the utility to select a preferred resource plan, develop an implementation plan, and officially adopt a resource acquisition strategy. The rule also requires the utility to prepare contingency plans and evaluate the demand-side resources that are included in the resource acquisition strategy.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) (A)			(4) (A)	(5) (A) 1.	(6) (A)	(7) (A)	(8) (A)
(1) (B)			(4) (B)	(5) (A) 2.	(6) (B)	(7) (B)	(8) (A) 1.
(1) (C)			(4) (C)	(5) (A) 3.	(6) (C)	(7) (C)	(8) (A) 2.
(1) (D)				(5) (A) 4.	(6) (D)		(8) (A) 3.
				(5) (A) 5.	(6) (E)		(8) (A) 4.
				(5) (B)	(6) (F)		(8) (A) 5.
				(5) (B) 1.	(6) (G)		(8) (B)
				(5) (B) 2.			(8) (B) 1.
							(8) (B) 1. A.
							(8) (B) 1. B.
							(8) (B) 2.
							(8) (B) 2. A.
							(8) (B) 2. B.
							(8) (C)

Table 7: Volume 7 Rule Requirements according to 20 CSR 4240-22.070

Letter of Transmittal³

Our commitment to the approved preferred resource plan and resource acquisition strategy has been signed by Evergy, Inc. officers with the authority to bind and commit Evergy to the resource acquisition strategy. These signatures are included in Section 7 of Volume 7: Resource Acquisition Strategy Selection.

³ 20 CSR 4240-22.080 (2); 20 CSR 4240-22.080 (2)(A)

Volume 8: Stakeholder Engagement

PURPOSE: This rule specifies the requirements for electric utility filings to demonstrate compliance with the provisions of this chapter. The purpose of the compliance review required by this chapter is not commission approval of the substantive findings, determinations, or analyses contained in the filing. The purpose of the compliance review required by this chapter is to determine whether the utility's resource acquisition strategy meets the requirements of Chapter 22. However, if the commission determines that the filing substantially meets these requirements, the commission may further acknowledge that the preferred resource plan or resource acquisition strategy is reasonable in whole or in part at the time of the finding. This rule also establishes a mechanism for the utility to solicit and receive stakeholder input to its resource planning process.

Requirements from 20 CSR 4240-22.080 have been met throughout Volumes 1 - 7. The table below shows the 20 CSR 4240-22.080 requirements met in Volume 8.

Table 8: Volume 8 Rule Requirements according to 20 CSR 4240-22.080

(4)	(5)
(4) (A)	(5) (A)
(4) (B)	
(4) (C)	