Comparison of Key Provisions

Case No(s) EU-2008-0413
Date 1-35-2010 Rptr FF

Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MEDA Included?	MEDA Draft (10/19/09) Jed? Rule Reference	Cu Included?	Current IRP Rules Rule Reference	Notes/Comments
Policy Objectives (22,010)	A COLUMN TO SERVICE	The second second	THE RESERVE OF THE PARTY.	A COLUMN TWO IS NOT		B. SAN	Date of the land	
Consider demand-side, renewable and supply-side resources on an equivalent basis	Scope	>	22.010 (2)(A)	>	22.010 (1)(A)	>	22.010 (2)(A)	
Use minimization of PVRR as primary selection criterion	Method	*	22.010 (2)(8)	>	22.010 (1)(8)	>	22.010 (2)(8)	
Specific additional criteria	Method	>	22.010 (2NC)	z		>	22.010 (2)(C)	Staff draft and current rule specify risks of uncertain factors, environmental regulation and rate impacts. MEDA rule includes all but rate impacts in 22.070(2), but does not preclude consideration of rate impacts.
Document process and rationale used to assess trade-offs in selecting preferred plan	Rationale	>	22,010 (2)(C)	z		>	22.010 (2)(C)	Presumed by MEDA rule; already covered in 22.070(3) in MEDA rule and 22.070(10)(B) in Staff draft
"Deficiency" defined to mean non-compliance that is likely to cause the utility to select a different plan as the preferred plan	Review	70-	22.020 (8)	·	22.020 (9)	z		Not defined in current rules. Staff draft refers to satisfaction of 22.010(2)(A)-(C) and indicated that definition is similar to MEDA's. Need to clarify language if this is the case. Goal is to ensure accountability among all parties.
"Concern" defined to mean non-compliance that is not likely to cause the utility to selecte a different plan as the preferred plan	Review	~	22.020 (6)	: <b>&gt;</b> .	22.020 (8)	z	FILED February 4, 2011 Missouri Public Service Commissi	Not defined in current rules. Staff draft refers to satisfaction of 22.010(2)(A)-(C). Need to clarify differences between Staff and MEDA definition. Goal is to ensure accountability among all parties.
"Demand-side rate" definition	Scope	>	22.020 (11)	z		z		Need to clarify definition in conjunction with discussion on Staff's 22.050(4).
"Realistic achievable potential" definition	Scope	>	22.020 (41)	z		z		Definition arose without requirement in current rule. No need to define and potential that this concept may become unnecessary.
"Technical potential" definition	Scope	>	22.020 (50)	z		>	22.020 (54)	Check definition
Total resource cost test definition	Method	>	22.020 (51)	*	22.020 (37)	>	22.020 (55)	
"Utility cost test" definition	Method	>	22,020 (54)	>	22.020 (39)	>	22,020 (58)	MEDA version defines Program Administrator Cost test, which is equivalent and represents the trend in the industry.

Comparison of Key Provisions

Description of Key Provision	Type of	Staff	Staff Draft (10/19/09)	MED.	MEDA Draft (10/19/09)	Cul	Current IRP Rules	Notes/Comments
toad Analysis and Forecasting (22,030)								
Selection of load analysis methods	Method	>	22.030 (1)	>	22.030(4)	z		
Objective of load analysis methods	Method	>	22.030 (1)(A)-(D)	z		z		No need to lay out every conceivable method as the utility will employ methods consistent with the necessary and available data.
End-use load analysis as minimum standard for at Releast residential and small commercial.	Method	>	22.030(5)	z		z		MEDA version indicates end-use load analysis is preferred in 22.030(6)
Historical data base for load analysis	Data	>	22,030(2)	٨	22.030(1)	*	22.030(1)	
Minimum requirements for historical data base	Data	>	22.030(2)(A)-(C)	*	22,030(1)(A) (E)	>	22.030(1)(A)-(C)	
Analysis of number of units	Method	>	22 030(3)	2		>	22.030(2)	Need to understand the value of this to others since the utilities do not derive any value from it.
Analysis of use per unit	Method	*	22:030(4)	Z		٨	22.030(3)	Need to understand the value of this to others since the utilities do not derive any value from it.
Preference for primary data for historical data base and analysis with allowance for use of secondary data if demonstrated to be applicable	Method	>	22.030(4)(8)	5	22.03(46)	z		
Analysis of load profiles	Method	z		>	22.030(2)	>	22.030(4)	
Selecting load forecast models	Method	>	22.030(5)	Z		Z		MEDA version includes a general requirement that the utility describe the models used in 22,030(4)
Preference for end-use forecasting for at least residential and small commercial unless demonstrated to be impractical and inferior to other methods	Method	>	22.030(5)	*	22.030(6)	z		What does Staff expect would satisfy the requirement to demonstrate that end-use methods are not practicable? Utilities are expecting Staff to soften the demonstration requierment from "superior" to "equivalent" or "sufficient".
Requirement for end-use forecasting	Method	z		z		>	22.030(5)(8)28	
Minimum standards for load forecast models	Method	۶	22.030(5)(A)-(C)	z		z		MEDA version includes a general requirement that the utility describe the models used in 22.030(4)
Specifications for load forecasting models	Method	>	22.030(6)	z		z		MEDA version includes a general requirement that the utility describe the models used in 22.030(4)

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Maintain data base of historical values for each		Included?	Kule Reference	Included?	Rule Reference	Included?	Rule Reference	
independent variable of each forecast model and maintain for 10 years	Data	×	22.030(6HC)1	z		z		What value doe sthis add?
Maintain data base of prior 10 years' projectsions of independent variables	Data	>	22.030(6)(C)2	z		z		What value doe sthis add?
Comparison of prior projections of independent variables to actual historical values	Scope	>	22.030(6)(C)2	z		z		What value doe sthis add?
Comparison of prior projections of independent variables to current projections	Scope	۶	22.030(6)(C)2	z		z		What value doe sthis add?
Maintain data base of prior 10 years' forecasts of energy and peak demand	Data	*	22.030(6)(0)3	>	22.030(1)(0)	z		
Comparison of prior energy and demand forecasts to actual historical values	Scope	>	22.030(6)(C)3	z		z		Coosider adding to MEDA rule to show forecast accuracy (state simply demonstrate accuracy of prior forecasting)
Comparison of prior energy and demand forecasts to the current forecast	Scope	٨	22.030(6)(C)3	>	22.030(1)(D)	z		
Base case load forecast by major class	Scope	٨	22.030(7)	*	22.030(3)	>	22,030(5)	
Sensitivity of forecasts to key driver variables	Scope	>	22.030(8)	>	22.030(4)	>	22.030(6)	
High and low load forecasts (normal weather)	Scope	>	22.030(8)(A)	>	22,030(3)	>	22,030(7)	
Sensitivity of peak load forecasts to extreme Reather	Scope	>	22.030(8)(8)	z		z		Extreme weather conditions are generally accounted for in the determination of the planning reserve margin (PRM). Planning resource needs to extreme weather is not reasonable.
Supply Side Analysis (22.040)			STATE OF THE PERSON NAMED IN		THE PERSON NAMED IN		STREET, STREET	の一方に 日本の一方には 日本の
Evaluation of existing technologies	Scope	*	22.040(1)	*	22.040(1)	>	22.040(1)	
Evaluation of new technologies	Scope	>	22.040(1)	>	22.040(1)	>	22:040(1)	
Evaluation of life extension at existing plants	Scope	>	22.040[1]	>	22.040(1)	>	22.040(1)	Also in 22.040(4) in current rule
Evaluation of refurbishment at existing plants	Scope	>	22.040(1)	>	22.040(1)	>	22.040(1)	Also in 22.040(4) in current rule
Evaluation of purchased power	Scope	*	22.040(1)	>	22.040(1)	*	22:040(1)	Also in 22.040(5) in current rule
Evaluation of utility efficiency improvements	Scope	×	22.040(1)	*	22.040(1)	*	22.040(1)	
Evaluation of upgrades to T&D system to reduce losses	Scope	>	22.040(1)	>	22.040(1)	>	22.040(1)	Also in 22,040(7) in current rule (consider adding current rule language to MEDA draft)
Evaluation of renewable technologies	Scope	*	22.040(1)	z		z		Modify MEDA list to include
Evaluation of distributed geneation as a supply	Scope	>	22.040(1)	z		z		Modify MEDA list to include

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Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MED. Included?	MEDA Draft (10/19/09) ed? Rule Reference	Cu Included?	Current IRP Rules 7 Rule Reference	Notes/Comments
Enhancement of emission controls for existing or Rinew plants	Scope	٨	22.040(1)	z		*	22.040(1)	Need an explanation from Staff on what this means apart from the evaluation of probable environmental costs.
Specification of characterization data for supply side resources	Scope	Z		>	22.040(1)(A)-(N)	*	22.040(1)(A)-(L)	Consider modifying MEDA list to exclude the detailed list
Preliminary screening analysis of supply side options	Method	>	22.040(2)	>	22.040(2)	>	22.040(2)	
Cost ranking based on levelized costs.	Method	*	22 040(2)(A)	٨	22 040(2)(A)	*	22.040(2)(A)	
Consideration of probable environmental costs	Scope	>	22.040(2)(B)	>	22.040 2)(8)	>	22.040(2)(B)	
Evaluation of at least two levels of mirigation beyond current requirements	Method	>-	22.940(2)(8)	Z		>	22.040(2)(8)	This is covered by a separate environmental compliance planning process.
identification of candidate supply side options	Cata	*	22.040(2)(C)	*	22,040(2)(C)	>	22.040(2)(C)	
Requirement for wide range of options to be passed to integration analysis	Scope	>	22.040(2)(0)	*	22.040(1)	z		Diversity not explicitly stated in MEDA version (consider adding)
Evaluation of interconnection and other transmission requirements for supply side resources	Scope	>	22.040/3)	>	22.040(1)(M)	>	22.040(3)	Consider adding current rule language to MEDA draft; Staff draft also covers in 22.045(1)
Detailed requirements for transmission Rinterconnection analysis	Method	>	22,040(3)(A)	z		>-	22.040[3][A]-[C]	Staff draft also covers in 22.045(1), the rule specifically indicates a need for "generic" cost data.
Transmission analysis for preferred resource plan R	Scope	Z		z		*	22.040(6)	
Screening of supply side options based on interconnnection considerations	Method	٨	22.040(3)(8)	z		z		If interconnection costs are included in resource costs before screening then there is no need to screen separately on transmission
Development of ranges of values and subjective probabilities for uncertain factors related to supply side resources	Scope	*	22.040(4)	*	22.040(3)	>	22.040(8)	
Specification of uncertain factors for supply side resources	Scope	>	22.040(4)(A)-(F)	>	22.040(3)(A)-(E)	*	22.040(8)(A)-(E)	Current rule has much more detail than Staff draft; MEDA version does not include transmission as a specified uncertain factor, but it is not precluded.
T&D Analysis (22,045 - Staff Draft) Evaluation of T&D network to support resource	Scope	>	22.045(1)	z		>	22.040(3)	Consider adding current 040(3) to
Evaluation of loss-reduction measures	Scope	>	22.045(1)(A)	*	22.040(1)	>	22.040(7)	Consider adding current 040(7) to MEDA version in 22.040

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CORNER OF Scope (1)         Y         22.04511(8)         Y         22.04011(M)         Y         22.04031           N recels for proverer (1)         Scope (1)         Y         22.04511(G)         N         Y         22.04091(F)           N costs be-point those (1)         Meen (1)         Y         22.04512(F)         N         N         7         22.04091(F)           N costs be-point those (1)         Scope (1)         Y         22.045(F)         N         N         N         7         22.04091(F)           N costs be-point those (1)         Scope (1)         Y         22.045(F)         N	Description of Key Provision	Type of Requirement	Staff Draft Included?	Draft (10/19/09) Rule Reference	MEDA Included?	MEDA Draft (10/19/09) led? Rule Reference	Cur Included?	Current IRP Rules Rule Reference	Notes/Comments
R         Scope         Y         22.045[1](C]         N         72.040[3](T)           Scope         Y         22.045[3]         N         N         22.045[3](T)           Scope         Y         22.045[3](T)         N         N         N           Scope         Y         22.045[3](T)         N         N         22.045[1](T)           Scope         Y         22.045[3](T)         Y         22.045[1](T)         Y         22.045[1](T)           Scope         Y         22.045[1](T)         Y         22.045[1](T)         Y         22.045[1](T)           R         Scope         Y         22.045[2](T)         N         Y         22.045[1](T)           R         Scope         Y         22.045[2](T)         N         Y         22.045[1](T)           R         Scope         Y         22.045[2](T)         N         Y         22.045[3](T)           R         Scope         Y         22.050[4](T)         N         Y         22.050[6](T)           R         Scope         Y         22.050[4](T)         N         Y         22.050[6](T)           R         Scope         Y         22.050[6](T)         Y         Z2.050[6](T)     <	Evaluation of interconnection costs for supply-side resources	Scope	٨	22.045(1)(8)	٨	22.040(1)(M)	٨	22.040(3)	Adding current D40(3) to MEDA version will add some detail
Scope   Y   22.045[1](C]   N   N   N   N   N   N   N   N   N	nnection needs for power	9-6	<b>&gt;</b> 77	22.045(1)(C)	z		*	22.040(S)(F)	Isn't this now beyond the scope of individual utilities with the presence of RTO's and open markets?
Scope   Y   22.045[2]   N   N   N		Method	>-	22.045(1)(C)	z		z		Seems to leave a hole here if everyone plans to just their allocted share of costs for facilities needed to support new resources. ("mutually assured construction")
Scope         Y         22.045(3)         N         N           Losas         Y         22.045(3)(7)         N         N           Scope         Y         22.045(3)(1)         Y         22.050(1)           Atthe         Scope         Y         22.050(1)(A)(A)(E)         N         X         22.050(1)(A)(A)(B)(B)           Atthe         Scope         Y         22.050(1)(A)(A)(B)(B)         N         X         22.050(1)(A)(B)(B)           Atthe         Scope         Y         22.050(1)(A)(A)(B)(B)         N         X         22.050(1)(B)(A)(B)(B)           Atthe         Scope         Y         22.050(1)(A)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)(B)	Requirement to estimate avoided T&D cost	Scope	*	22.045(2)	z		z		Staff backing away from specified avoided cost calculation requirements since it is for screening purposes.
Bascope	Requirement to participate in RTO transmission planning process	Scope	>	22:045(3)	z		z		Unnecessary
Scope   Y   22.050(1)   Y   22.050(1)   V   22.050(1)   V	Requirement to provide copies of the RTO expansion plan	Data	>	22.045(3)(C)	z		Z		Is this the appropriate avenue for getting this information?
Scope   Y   22.050(1)   Y   22.050(1)   Y   22.050(1)		20	>	22.045(4)	z		z		Expecting Staff to eliminate this based on October workshop discussion
urces         Scope         Y         22.050(1)         Y         22.050(1)           sattheted         Scope         Y         22.050(1)(A)-(E)         N         Z2.050(1)(A)-(D)           sattheted         Scope         Y         22.050(1)(A)-(E)         N         X         22.050(1)(D)           A scope         Y         22.050(2)         N         Y         22.050(5)           A scope         Y         22.050(2)         N         Y         22.050(5)           A scope         Y         22.050(2)         N         Y         22.050(5)           B scope         Y         22.050(3)         N         Y         22.050(5)           B scope         Y         22.050(3)         N         Y         22.050(6)           B scope         Y         22.050(3)         N         Y         22.050(6)           B scope         Y         22.050(3)(A)         N         Y         22.050(6)(A)           B scope         Y         22.050(6)(B)         Y         22.050(6)(B)         X           B scope         Y         22.050(3)(B)         N         Y         22.050(6)(B)           B scope         Y         X         X         X	Demand Side Analysis (22.050)	The second second	AND DESCRIPTIONS	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN C	The state of the	The state of the s		The state of the s	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSONS AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO PERSON NAMED IN COLUMN TRANSPORT NAMED IN COLUMN TWO PERSON NAMED
ed stathe         X Ccope         Y         Z2.050(1)(A)-(E)         N         Y         Z2.050(1)(A)-(D)           ed sathle         X Scope         Y         Z2.050(1)(A)-(A)         N         Z2.050(1)(B)-(A)         N         Z2.050(1)(B)-(A)-(A)-(A)-(A)-(A)-(A)-(A)-(A)-(A)-(A	Identify potential demand-side resources	Scope	>	22.050(1)	>	22.050(1)	>	22.050(1)	
edd         Scope         Y         22.050(1)(A)4         Y         22.050(1)(D)           R         Scope         Y         22.050(2)         N         Y         22.050(5)           R         Scope         Y         22.050(2)         N         Y         22.050(5)           R         Scope         Y         22.050(2)         N         Y         22.050(5)           R         Scope         Y         22.050(5)         N         Y         22.050(5)           R         Scope         Y         22.050(3)         N         Y         22.050(6)           R         Scope         Y         22.050(3)         N         Y         22.050(6)           R         Scope         Y         22.050(3)         N         Y         22.050(6)           R         Scope         Y         22.050(3)         N         Y         22.050(6)(8)           R         Scope         Y         22.050(6)(8)         Y         22.050(6)(8)           R         Scope         Y         22.050(6)(8)         Y         22.050(6)(8)	Specification of types of demand-side resources	Scope	>	22.050(1)(A)-(E)	z		>	22.050(1)(A)-(D)	Consider adding abbreviated list in MEDA version
R         Scope         Y         22.050(2)         N         Y         22.050(5)           R         Scope         Y         22.050(2)         N         Y         22.050(5)           A         Scope         Y         22.050(2)         N         Y         22.050(5)           A         Scope         Y         22.050(3)         N         Y         22.050(5)           Branch         Scope         Y         22.050(3)         N         Y         22.050(6)           Branch         Scope         Y         22.050(3)(4)         N         Y         22.050(6)(8)           Branch         Scope         Y         22.050(6)(8)         N         X         22.050(6)(8)           Branch         Scope         Y         22.050(6)(8)         Y         22.050(6)(8)	Requirement for consideration of distributed generation, including renewable resources at the point of use	Scope	>	22 050(1)(A)4	>	22.050(3)	>	22.050(1)(0)	
R         Scope         Y         22.050(2)         N         Y         22.050(5)           R         Scope         Y         22.050(2)         N         Y         22.050(5)           h         Scope         Y         22.050(3)         N         Y         22.050(5)           h         Scope         Y         22.050(3)         N         Y         22.050(6)(A)           stend-         Scope         Y         22.050(3)(A)         N         Y         22.050(6)(A)           stend-         Scope         Y         22.050(6)(B)         Y         22.050(6)(B)           major         Scope         Y         22.050(6)(B)         Y         22.050(6)(B)		2 2	*	22.050(2)	z		>	22.050(5)	Consider adding abbreviated version to MEDA rule.
R         Scope         Y         22.050(2)         N         Y         22.050(5)           A         Scope         Y         22.050(2)         N         Y         22.050(5)           Ah         Scope         Y         22.050(3)         N         Y         22.050(6)           Apprint         Scope         Y         22.050(3)(A)         N         X         22.050(6)(A)           Amajor         Scope         Y         22.050(6)(B)         Y         22.050(6)(B)           Amajor         Scope         Y         22.050(6)(B)         Y         22.050(6)(B)		100	*	22.050(2)	z		>	22.050(5)	See above
Scope         Y         22.050(2)         N         Y         22.050(5)           th         Scope         Y         22.050(3)         N         Y         22.050(6)           sprams         Scope         Y         22.050(3)(A)         N         Y         22.050(6)(A)           snend-         Scope         N         22.050(3)(A)         N         Y         22.050(6)(B)           major         Scope         Y         22.050(6)(B)         Y         22.050(6)(B)			٨	22.050(2)	z		*	22.050(5)	See above
Scope         Y         22.050(3)         N         Y         22.050(6)           Scope         Y         22.050(3)(A)         N         X         22.050(6)(A)           Scope         N         X         X         X         X           Scope         N         Y         X         X         X           Scope         Y         X	Requirement for test marketing programs	Scope	*	22.050(2)	z		>	22.050(5)	Consider adding abbreviated version to MEDA rule.
Scope         Y         22.050(3)         N         Y         22.050(6)(A)           Scope         Y         22.050(3)(A)         N         X         22.050(6)(B)           Scope         N         Y         22.050(6)(B)           Scope         Y         22.050(6)(B)	Market segmentation and coverage	Scope	*	22.050(3)	z		*	22.050(6)	Consider adding abbreviated version to MEDA rule.
Scope         Y         22.050(3)(A)         N         N           Scope         N         22.050(3)(B)         N         Y           Scope         Y         22.050(3)(B)         N         Y	Requirement to consider programs for each market segment	Scope	>	22.050(3)	z		*	22.050(6)(A)	Consider adding abbreviated version to MEDA rule.
eview interaction between end-scope N Scope Y 22.050(3)(B) N Y	Requirement for review of other utility programs	Scope	>	22.050(3)(A)	z		Z		
narket segments to cover major Scope Y 22.050(3)(8) N Y	Requirement to review interaction between enduse measures	Scope	z		z		*	22.050(6)(8)	
COSCOLLE CIOSOS	Identification of market segments to cover major customer classes	Scope	>	22.050(3)(8)	z		>	22.050(6)(A)	

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Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MED/ Included?	MEDA Draft (10/19/09) led? Rule Reference	Co Included?	Current IRP Rules Rule Reference	Notes/Comments
Assemble menus of end-use programs for each market segment	Scope	٨	22.050(3)(C)	z		٨	22.050(6)(C)	
Assess technological advancements and impact on ability to implement programs	Scope	>	22.050(3)(0)	z		z		See above
Design a marketing plan and delivery process to present menus of programs to market decision makers	Scope	٨	22.050(3)(E)	z		>	22.050(6)	
Estimate the characteristics needed to assess cost effectiveness of programs	Scope	>	22.050(3)(F)	>	22.050 <mark>(2ME)</mark>	z		
Detailed list of characteristics needed for cost effectiveness determination for programs	Scope	>	22.050(3)(F)1.5	>	22.050(2)(E)1-6	z		MEDA version is less detailed, but generally requires the same information
Description and documentation of methods used and sources and quality of information for programs.	Review	>	22.050[3](G)	z		z		Consider adding general requirement to MEDA version
Development of supply curves for demand-side resources	Scope	z		>	22.050(1)	z		
Use of supply curves to determine cost-effective demand-side resources to be used in development B of alternative resource plans	Method	z		,	22.050(1)	z		
Development of demand-side rates.	Scope	>	22,050(4)	z		>	Staff indicated that this was in the current rule. Specific reference not found.	Staff definition not yet clear may require a full review of utility's existing tariffs and their impact on usage patterns. If this is similar to previous requirements, then rules should be rolled together for consideration of all demand-side resources rather than repeating for different types of resources.
Requirement for review of other utility demand-	Scope	>	22.050(4)(A)	z		z		See above
Identification of market segments to cover major customer classes	Scope	>	22.050(4)(B)	z		z		See above
Assess technological advancements and impact on R ability to implement demand-side rates	Scope	>	22.050(4)(C)	z		z		See above
Estimate the characteristics needed to assess cost effectiveness of demand-side rates	Scope	>	22.050(4)(b)	z		z		See above
Detailed list of characteristics needed for cost effectiveness determination for demand-side rates	Scope	``	22.050(4)(D)1-5	z		z		See above

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Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MEDA Included?	MEDA Draft (10/19/09) led? Rule Reference	Cu Included?	Current IRP Rules ? Rule Reference	Notes/Comments
Description and documentation of methods used and sources and quality of information for demand-side rates	Review	>	22.050(4)(E)	Z		Z		See above
Cost-effectiveness screening of end-use measures	Method	z		z		*	22.050(3)	
Evaluate the cost-effectiveness of demand-side programs and demand-side rates	Scope	>	22.050[5]	>	22.050(2)	>	22.050(7)	
Specified calculation of benefits	Method	>	22.050(5)(A)	z		>	22,050(7)(8)	Not necessary to explain how to calculate benefits.
Requirement for use of avoided cost and description of methods used to determine	Scope	z		>	22.050(2)(C)	>	22.050(2)	
Calculation of avoided capacity cost and running cost	Method	Z		2		>	22.050(2)(C)	
Calculation of avoided demand cost	Method	3-1	22.050/S)(A)1	z		<b>&gt;</b>	22.050(2)(0)	Staff includes T&D - redundant to 22.045(2)? Staff allows for market-based avoided cost. Method should be left to the utility to choose and explain.
Calculation of avoided energy cost	Method	>	22.050/5)(A)2	z		*	22 050(2)(D)	Staff allows for market based avoided cost. Method should be left to the utility to choose and explain.
Calculation of avoided probable environmental costs	Method	٨	22.050(5)(A)3	z		>	22 050(2)(A)	Not necessary to specify
Use of Total Resource Cost Test	Method	٨	22.050(5)(8)	>	22.050(2)(A)	>	22.050(7)(D)	
Specific calculation of TRC	Method	>	22.050(5)(8)1-3	z	Definitions	>	22.050(7)(D)	MEDA version includes definition (as does Staff's version)
Use of Utility Cost Test	Method	>	22.050(5)(C)	>	22.050(2)(8)	*	22.050(7)(C)	Referred to as Program Administrator Test (PAC) in MEDA version
Specific calculation of UCF	Method	>	22.050(5)(C)1-2	Z	Definitions	>	22.050(7)(C)	MEDA version includes definition of equivalent PAC (Staff's version includes definition of UCT)
Cost-benefit determination with TRC and UCT	Method	*	22.050(5)(0)	Z		٨	22.050(7)(E)	No need to specify
Decsription and documentation of methods used for cost effectiveness evaluation and sources and quality of information	Review	*	22.050(5)(E)	z		z		Consider adding general requirement to cover all methods used in demandside analysis in MEDA version.
Identification of candidate demand-side resources	Scope	*	22.050(6)	٨	22.050(2)(E)	>-	22.050(7)(E)	
Bundling of candidate demand-side programs and rates into portfolios	Method	>	22.050(6)(A)	>	22.050(1)	٨	22.050(7)	

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Description of Key Provision	Type of Requirement	Staff Draft Included? F	Draft (10/19/09) Rule Reference	MED# Included?	MEDA Draft (10/19/09) led? Rule Reference	Cu Included?	Current IRP Rules ? Rule Reference	Notes/Comments
Requirement for time-differentiated load impacts required by production simulation model used less, hourly)	Method	>	22.050(5)(8)	>	22.050(2)(0)	>	22.050(8)	
Assessment of uncertainty of demand-side resource options or portfolios	Scope	>	22 050(6)(C)	>	22.070(2)(1)	z		Staff's version indicates that uncertainty is determined by the difference bewtween technical and realistic achievable potential (this is not correct).
Describe general principles to be used in developing evaluation plans for programs	Scope	>	22.050(7)	>	22 070(4)(C)	z		MEDA version covers in 22.070(4)(C)
Requirement to develop demand-side program evaluation plans for filing with IRP compliance filing	Scope	z		Z		>	22.050(9)	
Separate design and administration of demand side resources and load-building programs	Scape	>	22.050(8)	Z		>	22.050(10)	Not necessary to specify.
Identification of program impacts due to RTO rules	Scope	z		>	22.050(2)(G)	z		
Integration Analysis (22.060)		The Party of the P	20日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日日	State of the last	S. Prompter State of		THE RESERVED IN COLUMN TWO IS NOT THE OWNER.	日本の一大学の大学の大学の大学の
General objectives for development of alternative resource plans	Scope	>	22.060(1)	*	22.060(1)	*	22 060(1)	
Specification of performance measures to be used for evaluation of plans	Scope	>	22.060(2)	>	22 060(2)	>	22,060(2)	
Specified list of performance measures to be included	Scope	*	22.060(2)(A)	z		>	22,060(2)	Not necessary to specify.
Use of utility discount rate for PVRR calculations	Method	>	22.060(2)(8)	>	22.060(2)	>	22.060(2)	
Development of atternative resource plans	Scope	>	22.060(3)	>	22.060(1)	>	22.060(3)	
Specified plan for minimal compliance with standards	R Method	>	22.060(3)(A)1	z		z		Specification of specific plans in the rules to cover short-term concerns that could be addressed through Special Contemporary Issues process and/or a "Plan for the Plan" process.
Specified plan using only renewable resources	R Method	>	22.060(3)(A)2	z		z		See above
Specified plan using only demand-side resources	R Method	>	22.060(3)(A)3	z		z		See above
Specified plan using only resources separately mandated	R Method	*	22.060(3)(A)4	z		z		See above
olan which "optimally" complies with all.	R	>	22.050(3)(A)5	z		z		See above
Specified plans determined by Staff through Special Contemporary Issues process	R Method	>	22.060(3)(A)6	z		z		Not necessary to specify if above list is eliminated.

## Missouri Chapter 22 IRP Rules Comparison of Key Provisions

	Type of	Staff Draft	Draft (10/19/09)	MED	MEDA Draft (10/19/09)	Cu	Current IRP Rules	
Description of Key Provision	Requirement	Included?		Included?	Rule Reference	Included?	Rule Reference	Notes/Comments
Specified plans determined by Commission Order R	Method	>	22.060(3)(A)7	z		z		Not necessary to specify if above list is eliminated.
Exclusion of load-building programs from alternative plans	Scope	٨	22.060(3)(8)	z		*	22.060(3)	
include consideration of life extension or retirement of existing plant in alternative plans	Method	>	22.060(3)(C)1	z		z		Covered by list of options in MEDA's 22.040
Include consideration of addition of equipment for environmental compliance in alternative plans	Method	>	22.060(3)(C)2	z		z		Covered in list of options in 22.040 (but need to understand what is meant by this)
Include consideration of current demand-side Reprogram performance in alternative plans	Method	>	22.060/3I/CJ3	z		z		Need to understand what the intent of this provision is. Utilities would certainly consider experience with customer acceptance.
Analysis of alternative resource plans	Scope	*	22.060(4)	×	22.060(3)	*	22.060(4)	
Use base values for uncertain factors to assess plan performance	Scope	>	22.060(4)	z		>	22.060(4)	MEDA version allows flexibility to look at base values or scenarios
Specification of financial ratios to be calcualted	Scope	Z		Z		*	22.060(4)(A)	
Requirement for assumption of annual rate adjustments	Method	>	22.060(4)(8)	z		>	22.060(4)(B)	Consider adding to MEDA version.
Requirement to consider impact of rate changes from plan on future demand	Scope	Z		Z		>	22.060(4)(5)	
valuation of demand-side and supply-side esources on an equivalent basis	Scope	٨	22.060(4)(C)	>	22.010(1)(8)	٨	22.060(4)(0)	
1sk Analysis (22,070 or 22,060 Staff Draft)		日本書		1		ST. THE	District of Part of	おいて 日本
equirement to use formal decision analysis nethods	Method	z		z		٨	22.070(1)	
Construction of decision (or probability) tree	Method	z		z		*	22.070(3)	
inclusion of two chance nodes for load growth uncertainty in decision trees	Method	z		Z		*	22.070(4)	
Assessment of impacts of critical uncertain factors on plan performance	Scope	>	22.060(5)	*	22.070(2)	>	22.070(1)	Staff draft should probably say "uncertain factors" instead of "critical uncertain factors"
ocumentation of probabilities assigned to critical incertain factors.	Scope	>	22.060(5)	٨	22.070(1)	>	22.070(1)	
dentification of critical uncertain factors	Scope	¥	22.060(6)	>	22.070(1)	>	22.070(3)	
pecified list of uncertain factors to be considered	Scope	٨	22.060(6)(A)-(M)	>	22.060(2)(A)-(M)	>	22:070(3)(A)-(L)	
ssignment of probabilitiesto critical uncertain	Scope	>	22.060(7)	>	22.070(1)	>	22.070(1)	

# Missouri Chapter 22 IRP Rules Comparison of Key Provisions

Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MEDA D Included?	MEDA Draft (10/19/09) led? Rule Reference	Lucluded?	Current IRP Rules 7 Rule Reference	Notes/Comments
Computation of cumulative probability distribution of each performance measure	Method	>	22.060(7)	z		>	22.070(5)	Not clearly necessary in all cases, but data should be available to make that determination as part of utility's work papers.
Expected performance based on statistical expectation of the value of each performance measure.	Method	×	22.060(7)(A)	z		>	22.070(5)(A)	Not necessary to specify
Risk for each plan based on dispersion of probability distribution for each performance	Method	>	22.060(7)(8)	z		`>	22.070(5)(8)	Not necessary to specify.
Strategy Selection and Implem. (22.070)	WATER SHIP CONTRACTOR		THE PERSON NAMED IN COLUMN	2000年代	STATE OF THE PARTY			
Preferred plan selection	Scope	X	22.070(1)	*	22.070(3)	>	22.070(6)	
Preferred plan investment in advanced T&D B technologies	Scope	>	12.0XX11(H)	z		z		Is staff removing this consistent with changes to 22,045 on requirements to invest in advanced technologies?
Utilization of maximum amount of demand side Besources	Scope	>	22.07X(1)KC)	z		z		Is this the same as cost-effective resources evaluated on an equivalent basis with supply-side resources? Confusing to have this stated a different way than in the rest of the rules.
Sufficiency of preferred plan under extreme R	Scope	>	22.070(1)(0)	z		z		Covered by uncertainty in development of PRM
Requirement that trend of expected unserved hours under preferred plan not indicate a consistent increase in the need for emergency moorts	Scope	z		z		>	22.070(6)(8)	
Requirement to explicitly model the impact of the preferred plan on future requirements for emergency power	Scope	z		z		>	22.070(7)	
Determination of valid ranges of uncertain factors. Runder which preferred plan is appropriate	Scope	>-:	22.070 <mark>(2)</mark>	z		>	22.070(10)(C)	MEDA rule generally requies consideration of conditions that would after selection of the preferred plan in 22.070(1). It is virtually impossible to determine all combinations of uncertain variables under which a particular plan would still be preferred. Ongoing monitoring of critical uncertainties and their effect on plan selection is preferred. With annual updates and as needed notification requirements this seems to be a low value exercise.

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## Missouri Chapter 22 IRP Rules Comparison of Key Provisions

Description of Key Provision	Requirement	Included? Ru	Rule Reference	Included?	sed? Rule Reference	Included?	7 Rule Reference	Notes/Comments
EVBI analysis requirement	Scope	*	22.070(3)	z		*	22.070(8)	Utilities would generally address this kind of question from the other direction, i.e. what information would help in making a decision, how much would it cost to get it and would it be worth the cost?
Selection of contingency resource plans	Scope	>	22.070(4)	>	(5)(5)(020 22	->-	22 070(10)(0)	Ranking would result in a list of contingency plans in order of preference
Development of process to select contingency plans	Stope	*	22.070(4)(B)	z		z		See above.
Development of process to monitor critical uncertain factors	adoos	*	22.070(6)(6)	>	22.070(5)(0)	>	22.070(10)(E)	
Analysis of load-building programs	Scope	<b>&gt;</b>	22.070(5)	Z		>	22.060(5)	if required, should consider load building programs that provide greater overall energy efficiency and cost effectiveness (e.g. switching from gas to electric appliances)
Implementation plan development	Scope	À	22.070(6)	*	22.070(4)	×	22.070(9)	
List of major implementation plan contents	Scope	>	22.070(G)(A) (F)	>	22:070(4)(A) (E)	>	22.070(9)(A)-(D)	
Development of resource acquisition strategy	Scope	>	22.070(7)	>	22.070(5)	>	22.070(10)	
Formal approval by office of the utility	Scope	*	22.070(7)	*	22.070(5)	*	22.070(10)	MEDA version includes current rule language; Staff draft only says "officer"
Ust of major resource acquisition strategy contents	Scope	>	22.070(7)(A)-{C}	*	22.070(5)(A)-(D)	*	22.070(10)(A)-(E)	
Evaluation plans for demand-side programs (required at time of tariff filing, not IRP filing)	Scope	<b>&gt;</b>	22.070(8)	>	22.070(4HC)	<b>*</b>	22.050(9)	Current rule requires filing with IRP compliance filing. MEDA version indicates need for evaluation strategy.
Evaluation plan requirement for process Revaluation	Scope	>	22.070(8)(A)	z		>	22.050(9)(A)	Not necessary to specify.
Evaluation plan requirement for impact evaluation R	Scope	*	22.070(8)(8)	z		>	22.050(9)(8)	Not necessary to specify.

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Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MEDA Included?	MEDA Draft (10/19/09) ed? Rule Reference	Cr Included?	Current IRP Rules ? Rule Reference	Notes/Comments
Determination of valid ranges of uncertain factors under which a contingency plan is appropriate if it becomes the preferred plan	adoos	>	22.070(91	z		z		MEDA rule generally requies consideration of conditions that would alter selection of the preferred plan in 22.070(1). It is virtually impossible to determine all combinations of uncertain variables under which a particular plan would still be preferred. Ongoing monitoring of critical uncertainties and their effect on plan selection is preferred. With annual updates and as needed notification requirements this seems to be a low value exercise.
Schedule and Filing Requirements (22,080)	The Party of the P	The second second	は 一日 日本	The same of the sa	京の大江中田東の北 北京で	大田 一日 一日	大学 の の の の の の の の の の の の の の の の の の の	では 日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日
Schedule for triennial compliance filing	Review	*	22.080(1)	>	22.080(1)	*	22.080(1) and (3)	
List of major elements required in triennial compliance filing	Scope	٨	22.080(2)	٨	22.080(2)	٨	22.080(1)(A)-(F)	
Comparison of preferred plan to business plan	ecope 8	>-	22.080(2)(8)	z		z		The utility has a "built-in" incentive to ensure it is behaving consistently with its resource acquisition strategy in the form of prudence review. This kind of linkage avoids the kind of requirement considered here, which may cross the line into management of the utility if regular reviews of business plans are contemplated.
Capacity balance spreadsheet	Data	>	22:080(2)(0)	z		z		Separate formats can be suggested to utilities outside the specific rules if it helps with consistency.
List of contents required for executive summary	Review	*	22.080(2)(E)	>	22.080(2)(8)	z		
Requirement to estimate credit rating in preferred plan	Scope	>	22.080(2)(E)SC	>	22.080(2)(8)(6)	Z		
Requirement to specify change in law and regulation needed to address credit rating that is below investment grade for preferred plan	Scope	>	22.080(2)(E)6	z		z		May be acceptable if it is a simple statement of potential roadblock in existing laws or regulations, but should no be a requirement to share legislative strategies.
Annual update workshop	Review	>	22.080(3)	٨	22.080(5)	z		
List of topics to be covered in annual workshop	Review	>	22.080(3)(A)	٨	22.080(5)	z		

Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) ed? Rule Reference	MEDA Included?	MEDA Draft (10/19/09) led? Rule Reference	Curre Included?	Current IRP Rules Rule Reference	Notes/Comments
Annual update report filed no later than 10 days prior to annual update workshop	Review	٨	22.080(3)(8)	Z		z		As needed notification for changes in the plan in 22.080(12) make this redundant. If in the update workshop it is recognized that a change has occurred that triggers a reporting requirement that can be handled at that time.
Summary report of annual update workshop filed. B. within 10 days of annual update workshop.	Review	>	22.080(3)(C)	z		z		See above
Special Contemporary Issues process for Staff to B define emerging issues annually for each utility	Scope	٨	22.080(4)	Z		z		Should be collaborative. Consider combining with a "Plan for the Plan" process in the MEDA version.
Stakeholder group meetings	Review	,	22 080(5)	*	22.080(3)	Z		
Required stakeholder meeting prior to commencement of significant analysis to present. B intended approach	Review	*	22.080(5)(A)	z		z		
Required stakeholder meeting after completion of B pre-analysis and before integration	Keview	>	22.080(5)(B)	z		z		See MEDA alternative below.
Requirement for stakeholders to provide written statement of potential deficiencies or concernsafter pre-integration meeting	Heview	>	22.080(5)(C)	z		z		See MEDA alternative below.
Required filing of draft versions of utility's analysis pursuant to 22.010-22.050 prior to commencing B with integration analysis	Review	z		<b>x</b>	22.080(4)	z		Alternative to Staff version above. This adds accountability for all parties in the process.
60-day review and comment period for Staff and stakeholders following filling of utility's preanablysis work, including identification of potential deficiencies and concerns	Review	z		>	22.080(4)	z		Alternative to Staff version above. This adds accountability for all parties in the process.
Establishment of dockets for triennial filing and annual update reports	Review	>	22.080(6)	>	22.080(6)	>	22.080(4)	
Staff review and comment on triennist filing within 120 days, noting potential deficiencies and concerns	Review	>	22.080(7)	>	22.080(7)	>	22.080(5)	MEDA version give 60 day formal review of pre-integration filing and 90 day review of full filing
Stakeholder review and comment on triennial filing within 120 days, noting potential defliciencies and concerns	Review	×	22.080(8)	>	22.080(8)	>	22.080(6)	MEDA version give 60 day formal review of pre-integration filing and 90 day review of full filing
Requirment for Staff and stakeholder to mark any alleged deficiencies or concerns respecting the utility's pre-integration filing (22.010-22.050) but not identified during the pre-integration review process as "new" with explanation for why it wasn't identified previously	Review	z		>	22.080/9)	z		This adds accountability to the process consistent with definitions of deficiency and concern. Level of detail contemplated may be a discussion point.

Comparison of Key Provisions

Description of Key Provision	Type of Requirement	Staff Included?	Staff Draft (10/19/09) 2d? Rule Reference	MEDA Included?	MEDA Draft (10/19/09) led? Rule Reference	Cur Included?	Current IRP Rules Rule Reference	Notes/Comments
Requirement for supporting evidence of each alleged deficiency or concern consistent with the Edefinition of each		z		٠	22.080(9)	z		see above
Requirement that Staff and stakeholders provide at least one suggested remedy for each deficiency is or concern they identify.	Review	z		<b>&gt;</b>	22.080(9)	z		See above
Requirement that Staff and stakeholders provide workpapers supporting each potential deficiency R and concern identified	Review	z		>	22.080(9)	z		See above
45-day collaboration period between utilities, Staff and stakeholders to resolve deficiencies and concerns with joint filing	Review	>	22.080(9)	>	22.080(10)	>	22.080(8)	
60-day period for utility and others to comment on Staff and stakeholder reviews	Review	×	22.080(10)	*	22 080/11/	>	(57,080(9)	
Provision of utility workpapers	Review	>	22.080(11)	>	32.080(13)	>	22.080(7)	
Notification of inconsistency of utility business plan with preferred plan	Review	*	22.080(12)	z		z		The utility has a "built-in" incentive to ensure it is behaving consistently with its resource acquisition strategy in the form of prudence review. This kind of linkage avoids the kind of requirement considered here, which may cross the line into management of the utility if regular reviews of business plans are contemplated.
Notification of change to preferred plan	Review	>	22.080(12)	z		>	22.080(10)	See MEDA alternative below.
Notification of change to implementation plan B	Review	z		· >	22.080(14)	z		MEDA view is that focus should be on implementation period rather than full planning period (but including implementation steps required for long term resource acquisition)
Notification of impelemntation of contingency R	Review	>	22.080(12)(A)	Z		٨	22.080(10)	Captured in changes to implementation plan above
Selection of an option other than a defined R	Review	>	22.080(12)(8)	z		z		Captured in changes to implementation plan above
Waiwer process	Review	*	22.080(13)	*	22:080(16)	*	22.080(11)	
Provision for PSC to waive Chapter 22 in total	Review	z		>	22.080(16)(8)	z		Specifically prohibited in Staff draft and current rules
Provision for PSC to change filing dates	Review	٨	22.080(14)	٨	22.080(17)	>	22.080(11)	
Comission order elements	Review	>	22.080(15)	>	22.080(12)	>	22.080(12)	
Certification of consistency with preferred plan requierd for any other filed requests	Review	>	22.080(16)	z		z		Staff reviewing range of filings for which this can/should be applicable. Certification is meaningless without acknowledgement

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