

APPENDIX 6A

EVERGY METRO

**INTEGRATED RESOURCE
ANALYSIS**

INTEGRATED RESOURCE PLAN

4 CSR 240-22.060

APRIL 2021



To comply to the Unanimous Partial Stipulation and Agreement from File No. EO-2020-0263 requiring Alternative Resource Plans (ARP) in the 2021 IRP to be evaluated with and without capacity sales, ARPs modeled in the Integrated Analysis of the 2021 IRP were analyzed with and without the excess capacity sales. The net present value revenue requirement (NPVRR) rankings with capacity sales are provided in Table 1 and NPVRR rankings without capacity sales are provide in Table 2 below.

Table 1: Evergy Metro Alternative Resource Plans with Capacity Sales

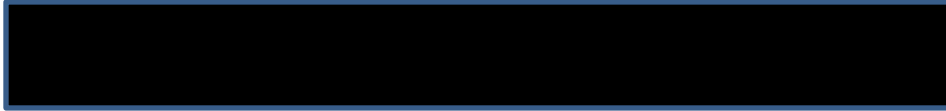
27 EP Expected Value			9 EP EV (High CO ₂)			9 EP EV (Mid CO ₂)			9 EP EV (No CO ₂)		
PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA
MCGDU	18,655	-	MCGBU	20,034	-	MCGDU	18,535	-	MCGDS	17,441	-
MCGCU	18,702	47	MCGCU	20,052	18	MDDCS	18,552	16	MCGCS	17,505	64
MCGBU	18,716	61	MCGDU	20,111	77	MBBCS	18,578	42	MDDCS	17,552	111
MCGCT	18,724	69	MCGCT	20,245	210	MCGCT	18,597	62	MCGDU	17,557	117
MDDCS	18,728	74	MDDCS	20,435	401	MCGCU	18,597	62	MCCCS	17,564	124
MBBCS	18,754	99	MBBCS	20,470	436	MCCCS	18,601	66	MBBCS	17,565	125
MCCCS	18,774	119	MFFCS	20,485	451	MCGDS	18,607	71	MAACA	17,572	131
MCGDS	18,784	129	MAABS	20,491	457	MCGBU	18,616	81	MAACS	17,572	131
MAABS	18,787	132	MCCCS	20,502	467	MAABS	18,621	86	MAABS	17,580	139
MCGCS	18,789	134	MAACS	20,532	498	MAACS	18,624	89	MCGCT	17,584	143
MAACS	18,795	140	MEECS	20,537	503	MCGCS	18,628	93	MCGCU	17,664	224
MFFCS	18,840	186	MCGCS	20,557	523	MFFCS	18,664	129	MCGBU	17,697	256
MAACA	18,855	201	MCGDS	20,660	626	MAACA	18,669	134	MFFCS	17,724	284
MEECS	18,908	253	MAAAS	20,694	660	MEECS	18,725	190	MEECS	17,828	387
MAAAS	19,058	403	MAACA	20,698	663	MAAAS	18,903	367	MAAAS	17,889	448

Table 2: Evergy Metro Alternative Resource Plans without Capacity Sales

27 EP Expected Value			9 EP EV (High CO ₂)			9 EP EV (Mid CO ₂)			9 EP EV (No CO ₂)		
PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA	PLAN	NPVRR	DELTA
MCGDU	18,699	-	MCGBU	20,087	-	MCGDU	18,579	-	MCGDS	17,477	-
MCGCU	18,755	56	MCGCU	20,105	18	MDDCS	18,581	2	MCGCS	17,557	80
MDDCS	18,758	59	MCGDU	20,155	68	MBBCS	18,618	38	MDDCS	17,582	104
MCGBU	18,769	70	MCGCT	20,297	210	MCCCS	18,642	63	MCGDU	17,601	124
MCGCT	18,777	78	MDDCS	20,464	378	MCGDS	18,643	64	MCCCS	17,605	128
MBBCS	18,794	95	MBBCS	20,510	423	MCGCT	18,650	71	MBBCS	17,605	128
MCCCS	18,815	116	MFFCS	20,515	428	MCGCU	18,650	71	MAACA	17,609	131
MCGDS	18,821	122	MAABS	20,536	449	MAACS	18,665	85	MAACS	17,612	135
MAABS	18,831	132	MCCCS	20,542	455	MAABS	18,665	86	MAABS	17,624	147
MAACS	18,836	137	MEECS	20,565	478	MCGBU	18,669	90	MCGCT	17,637	159
MCGCS	18,841	142	MAACS	20,572	485	MCGCS	18,680	101	MCGCU	17,717	240
MFFCS	18,870	171	MCGCS	20,609	522	MFFCS	18,694	115	MCGBU	17,750	273
MAACA	18,892	194	MCGDS	20,696	609	MAACA	18,706	127	MFFCS	17,754	277
MEECS	18,936	237	MAACA	20,735	648	MEECS	18,753	174	MEECS	17,856	378
MAAAS	19,109	410	MAAAS	20,745	658	MAAAS	18,953	374	MAAAS	17,940	463

The volume of capacity sales for each ARP is documented in the capacity forecast tables 77-90 in Volume 6, Integrated Analysis. Sales and purchases in the 2021 IRP are equally priced as shown in Table 3 below, with sales being capped at a 100 MW limit based on likelihood of limited sales due to excess capacity in SPP. The capacity pricing represents pricing based upon prior RFP responses through 2028 then escalated.

Table 3: Capacity Pricing ** Confidential **

A large black rectangular redaction box covers the content of Table 3, which would otherwise contain capacity pricing data.