

Cloud County, KS (EMDE)

	Process (70%)	Directly Assign (30%)	Total
Sink Zone Upgrade Cost			
Sink Zone Upgrade Cost (< 300 kV)	\$ 1,386,664	\$ 594,284	\$ 1,980,948
Sink Zone Upgrade Cost (>=300 kV)	\$ -	\$ -	\$ -
Sink Zone Upgrade Cost	\$ 1,386,664	\$ 594,284	\$ 1,980,948
Non-Sink Zone Upgrade Cost			
Non-Sink Zone Upgrade Cost (< 300 kV)	\$ 2,312,241	\$ 990,960	\$ 3,303,201
Non-Sink Zone Upgrade Cost (>=300 kV)	\$ 88,248	\$ 37,820	\$ 126,068
Non-Sink Zone Upgrade Cost	\$ 2,400,488	\$ 1,028,781	\$ 3,429,269
Upgrade Total Cost	\$ 3,787,152	\$ 1,623,065	\$ 5,410,217

	Current Process	TDU-Sponsored Process (1)	Compromise Process (1)	OG&E Process (1)	TO Process (1)
Requested Capacity	100	n/a	100	100	100
Wind Multiplier	10%		100%	100%	100%
Net Dependable Capacity	10		100	100	100
Safe Harbor Multiplier	\$ 180,000		\$ 180,000	\$ 180,000	\$ 180,000
Safe Harbor Cost Limit	\$ 1,800,000	\$ 3,787,152	\$ 18,000,000	\$ 18,000,000	\$ 18,000,000
Direct Assignment	\$ 1,987,152	\$ 0	\$ 0	\$ 0	\$ 0
% Rolled Into Rates	47.53%	100.00%	100.00%	100.00%	100.00%

These % apply to all costs for rolling those costs into rates

Current Base Plan Funding Process	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	\$594,000	\$0	\$457,599	\$1,220,638	\$457,599
MW-Mile Amount (67%)	\$1,206,000	\$0	\$929,065	\$2,478,266	\$929,065
Total Rolled Into Rates	\$1,800,000	\$0	\$1,386,664	\$3,698,904	\$1,386,664
Directly-Assigned Amount	\$1,987,152	\$0	\$0	\$0	\$0
	\$ 3,787,152	\$0	\$ 1,386,664	\$ 3,698,904	\$ 1,386,664
Sink Zone Allocation					
Postage Stamped Amount (33%)	-na-	-na-	\$457,599	-na-	\$457,599
MW-Mile Amount (67%)	-na-	-na-	\$929,065	-na-	\$929,065
			\$ 1,386,664		\$ 1,386,664
Non-Sink Zone Allocation					
Postage Stamped Amount	\$0	\$0	\$ 1,200,244	\$0	\$ 1,596,325
Directly-Assigned Amount	\$0	\$0	\$ 1,200,244	\$0	\$ 804,164
Total Amount			\$ 2,400,488		\$ 2,400,488

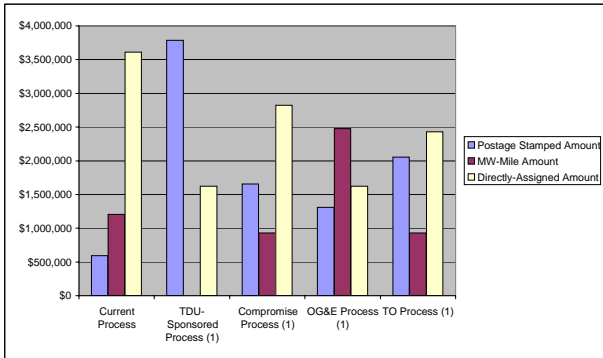
Other Postage Stamp Allocations	All	=> 300 kV
Postage Stamp Amount	\$0	\$3,787,152
		\$88,248
		\$0

Cost Allocation - Without Cost Limit	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount	\$594,000	\$3,787,152	\$1,657,843	\$1,308,886	\$2,053,924
MW-Mile Amount	\$1,206,000	\$0	\$929,065	\$2,478,266	\$929,065
Directly-Assigned Amount	\$1,987,152	\$0	\$1,200,244	\$0	\$804,164
Subtotal	\$3,787,152	\$3,787,152	\$3,787,152	\$3,787,152	\$3,787,152

Application of Cost Limit	Current Process	TDU-Sponsored Process (1)	Compromise Process (1)	OG&E Process (1)	TO Process (1)
Directly-Assigned Amount Limit (Cap)	\$3,787,152	\$3,787,152	\$1,262,384	\$3,787,152	\$3,787,152
Directly-Assigned Amount (Above)	\$1,987,152	\$0	\$1,200,244	\$0	\$804,164
Revised Directly-Assigned Amount	\$1,987,152	\$0	\$1,200,244	\$0	\$804,164
Postage Stamp to Excess	\$0	\$0	\$0	\$0	\$0

Cost Allocation	Current Process	TDU-Sponsored Process (1)	Compromise Process (1)	OG&E Process (1)	TO Process (1)
Postage Stamped Amount	\$594,000	\$3,787,152	\$1,657,843	\$1,308,886	\$2,053,924
MW-Mile Amount	\$1,206,000	\$0	\$929,065	\$2,478,266	\$929,065
Directly-Assigned Amount	\$3,610,217	\$1,623,065	\$2,823,309	\$1,623,065	\$2,427,229
Total Amount	\$5,410,217	\$5,410,217	\$5,410,217	\$5,410,217	\$5,410,217

(1) This Process limits Wind Generation to 20%. 70 MW available for this Request. 70% (70MW / 100MW) Processed, 30% Directly Assigned



Upgrade Name	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements	Owner	Is Sink Zone Upgrade?	Is Upgrade >= 300 kV?	Sink Zone Upgrade Cost (< 300 kV)	Sink Zone Upgrade Cost (>=300 kV)	Sink Zone Upgrade Cost	Non-Sink Zone Upgrade Cost (< 300 kV)	Non-Sink Zone Upgrade Cost (>=300 kV)	Non-Sink Zone Upgrade Cost
ALLEN 69KV Capacitor	\$ 3,686	\$ 500,000	\$ 12,958	WERE	N	N	\$ -	\$ -	\$ -	\$ 3,686	\$ -	\$ 3,686
ATHENS 69KV Capacitor	\$ 3,686	\$ 500,000	\$ 12,958	WERE	N	N	\$ -	\$ -	\$ -	\$ 3,686	\$ -	\$ 3,686
Craig (542978) Cap Bank Phase 1	\$ 718,200	\$ 3,000,000	\$ 3,070,418	KACP	N	N	\$ -	\$ -	\$ -	\$ 718,200	\$ -	\$ 718,200
Craig (542978) Cap Bank Phase 2	\$ 718,200	\$ 3,000,000	\$ 3,070,418	KACP	N	N	\$ -	\$ -	\$ -	\$ 718,200	\$ -	\$ 718,200
East Manhattan - SW Manhattan 115KV Displacement	\$ 383,150	\$ 427,929	\$ 1,271,044	WERE	N	N	\$ -	\$ -	\$ -	\$ 383,150	\$ -	\$ 383,150
EAST MANHATTAN (EMANHTX) 230/115/18.0KV TRA	\$ 348,363	\$ 397,477	\$ 1,155,644	WERE	N	N	\$ -	\$ -	\$ -	\$ 348,363	\$ -	\$ 348,363
East Manhattan to Mcdowell 230 kV Displacement	\$ 122,444	\$ 128,218	\$ 406,190	WERE	N	N	\$ -	\$ -	\$ -	\$ 122,444	\$ -	\$ 122,444
Hawthorn and W Gardner Cap Banks	\$ 837,899	\$ 3,500,000	\$ 3,582,150	KACP	N	N	\$ -	\$ -	\$ -	\$ 837,899	\$ -	\$ 837,899
JOPLIN 59 - SUB 439 - STATELINE 161KV CKT 1 Disp	\$ 726,684	\$ 769,573	\$ 2,272,722	EMDE	Y	N	\$ 726,684	\$ -	\$ 726,684	\$ -	\$ -	\$ -
JOPLIN 59 - SUB 59 - JOPLIN 26TH ST. 161/69KV TRA	\$ 930,840	\$ 985,777	\$ 2,911,225	EMDE	Y	N	\$ 930,840	\$ -	\$ 930,840	\$ -	\$ -	\$ -
SOUTHWEST - SOUTHWEST DISPOSAL 161KV CKT	\$ 8,285	\$ 246,000	\$ 22,117	SPRM	N	N	\$ -	\$ -	\$ -	\$ 8,285	\$ -	\$ 8,285
SUB 170 - NICHOLS ST. - SUB 80 - MARSHFIELD JCT	\$ 323,424	\$ 323,424	\$ 1,097,278	EMDE	Y	N	\$ 323,424	\$ -	\$ 323,424	\$ -	\$ -	\$ -
TECUMSEH ENERGY CENTER - MIDLAND 115KV CK	\$ 155,602	\$ 257,718	\$ 579,266	WERE	N	N	\$ -	\$ -	\$ -	\$ 155,602	\$ -	\$ 155,602
TIOGA 69KV Capacitor	\$ 3,686	\$ 500,000	\$ 12,958	WERE	N	N	\$ -	\$ -	\$ -	\$ 3,686	\$ -	\$ 3,686
West Gardner 345 kV Tap on Stillwell-Swissvale 345 kV	\$ 126,068	\$ 526,598	\$ 538,961	KACP	N	Y	\$ -	\$ -	\$ -	\$ -	\$ 126,068	\$ 126,068
	\$ 5,410,217	\$ 15,062,715	\$ 20,016,306				\$ 1,980,948	\$ -	\$ 1,980,948	\$ 3,303,201	\$ 126,068	\$ 3,429,269
							\$ 1,980,948	\$ -	\$ 1,980,948	\$ -	\$ -	\$ 3,429,269
									37%			63%

Harper County, OK (AEPM)

Sink Zone Upgrade Cost

Sink Zone Upgrade Cost (< 300 kV)	\$ 334,612
Sink Zone Upgrade Cost (>=300 kV)	\$ -
Sink Zone Upgrade Cost	\$ 334,612

Non-Sink Zone Upgrade Cost

Non-Sink Zone Upgrade Cost (< 300 kV)	\$ 3,877,718
Non-Sink Zone Upgrade Cost (>=300 kV)	\$ -
Non-Sink Zone Upgrade Cost	\$ 3,877,718

Upgrade Total Cost \$ 4,212,330

	Current Process	TDU-Sponsored Process	Compromise Process (1)	OG&E Process	TO Process (1)
Requested Capacity	80	n/a	80	80	80
Wind Multiplier	10%		100%	100%	100%
Net Dependable Capacity	8		80	80	80
Safe Harbor Multiplier	\$ 180,000		\$ 180,000	\$ 180,000	\$ 180,000
Safe Harbor Cost Limit	\$ 1,440,000	\$ 4,212,330	\$ 14,400,000	\$ 14,400,000	\$ 14,400,000
Direct Assignment	\$ 2,772,330	\$ 0	\$ 0	\$ 0	\$ 0
% Rolled Into Rates	34.19%	100.00%	100.00%	100.00%	100.00%

These % apply to all costs for rolling those costs into rates

Current Base Plan Funding Process	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	\$475,200	\$0	\$110,422	\$1,390,069	\$110,422
MW-Mile Amount (67%)	\$964,800	\$0	\$224,190	\$2,822,261	\$224,190
Total Rolled Into Rates	\$1,440,000	\$0	\$334,612	\$4,212,330	\$334,612
Directly-Assigned Amount	\$2,772,330	\$0	\$0	\$0	\$0
	\$ 4,212,330	\$0	\$ 334,612	\$ 4,212,330	\$ 334,612

Sink Zone Allocation	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	-na-	-na-	\$110,422	-na-	\$110,422
MW-Mile Amount (67%)	-na-	-na-	\$224,190	-na-	\$224,190
			\$ 334,612		\$ 334,612

Non-Sink Zone Allocation	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount	\$0	\$0	\$ 1,938,859	\$0	\$ 2,578,682
Directly-Assigned Amount	\$0	\$0	\$ 1,938,859	\$0	\$ 1,299,036
Total Amount			\$3,877,718		\$3,877,718

Other Postage Stamp Allocations	All	=> 300 kV
Postage Stamp Amount	\$0	\$4,212,330

Cost Allocation - Without Cost Limit

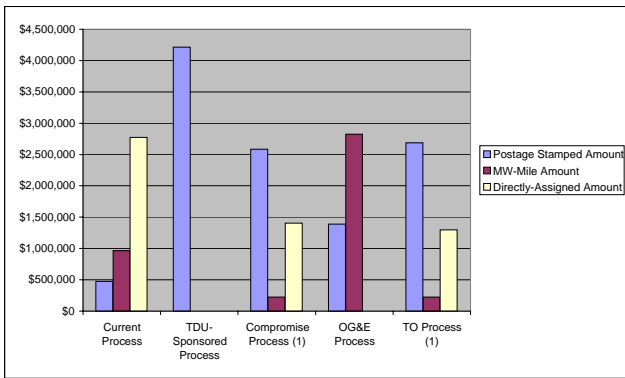
Postage Stamped Amount	\$475,200	\$4,212,330	\$2,049,281	\$1,390,069	\$2,689,104
MW-Mile Amount	\$964,800	\$0	\$224,190	\$2,822,261	\$224,190
Directly-Assigned Amount	\$2,772,330	\$0	\$1,938,859	\$0	\$1,299,036
Subtotal	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330

Application of Cost Limit

Directly-Assigned Amount Limit (Cap)	\$4,212,330	\$4,212,330	\$1,404,110	\$4,212,330	\$4,212,330
Directly-Assigned Amount (Above)	\$2,772,330	\$0	\$1,938,859	\$0	\$1,299,036
Revised Directly-Assigned Amount	\$2,772,330	\$0	\$1,404,110	\$0	\$1,299,036
Postage Stamp to Excess	\$0	\$0	\$534,749	\$0	\$0

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process (1)	OG&E Process	TO Process (1)
Postage Stamped Amount	\$475,200	\$4,212,330	\$2,584,030	\$1,390,069	\$2,689,104
MW-Mile Amount	\$964,800	\$0	\$224,190	\$2,822,261	\$224,190
Directly-Assigned Amount	\$2,772,330	\$0	\$1,404,110	\$0	\$1,299,036
Total Amount	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330

(1) Invalid MW-Mile Allocation since all allocated Amounts would be less than \$100k



Upgrade Name	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements	Owner	Is Sink Zone Upgrade?	Is Upgrade >= 300 kV?	Sink Zone Upgrade Cost (< 300 kV)	Sink Zone Upgrade Cost (>=300 kV)	Sink Zone Upgrade Cost	Non-Sink Zone Upgrade Cost (< 300 kV)	Non-Sink Zone Upgrade Cost (>=300 kV)	Non-Sink Zone Upgrade Cost
36TH & LEWIS - 52ND & DELAWARE TAP 138KV CKT	\$ 15,000	\$ 15,000	\$-	AEPW	Y	N	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ -	\$ -
ALUMAX TAP - BANN 138KV CKT 1	\$ 314,872	\$ 1,000,000	\$ 917,374	AEPW	Y	N	\$ 314,872	\$ -	\$ 314,872	\$ -	\$ -	\$ -
BANN - NW TEXARKANA-BANN T 138KV CKT 1	\$ 4,740	\$ 15,000	\$-	AEPW	Y	N	\$ 4,740	\$ -	\$ 4,740	\$ -	\$ -	\$ -
FT SUPPLY 138/69KV TRANSFORMER CKT 1	\$ 2,000,000	\$ 2,000,000	\$ 4,495,992	WFEC	N	N	\$ -	\$ -	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000
HAMON BUTLER - MOREWOOD 69KV CKT 1	\$ 1,278,730	\$ 3,400,000	\$ 3,038,093	WFEC	N	N	\$ -	\$ -	\$ -	\$ 1,278,730	\$ -	\$ 1,278,730
KNOBHILL (KNOBHIL4) 138/69/13.2KV TRANSFORMER	\$ 598,988	\$ 1,750,000	\$ 2,535,841	OKGE	N	N	\$ -	\$ -	\$ -	\$ 598,988	\$ -	\$ 598,988
	\$ 4,212,330	\$ 8,180,000	\$ 10,987,300				\$ 334,612	\$ -	\$ 334,612	\$ 3,877,718	\$ -	\$ 3,877,718
									\$ 8%			\$ 92%

Finney County, KS (OKGE)

Sink Zone Upgrade Cost	
Sink Zone Upgrade Cost (< 300 kV)	\$ 14,628,753
Sink Zone Upgrade Cost (>=300 kV)	\$ 40,030,707
Sink Zone Upgrade Cost	\$ 54,659,460

Non-Sink Zone Upgrade Cost	
Non-Sink Zone Upgrade Cost (< 300 kV)	\$ 1,842,172
Non-Sink Zone Upgrade Cost (>=300 kV)	\$ 5,182,122
Non-Sink Zone Upgrade Cost	\$ 7,024,294

Upgrade Total Cost \$ 61,683,754

	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Requested Capacity	400	n/a	400	400	400
Wind Multiplier	10%		100%	100%	100%
Net Dependable Capacity	40		400	400	400
Safe Harbor Multiplier	\$ 180,000		\$ 180,000	\$ 180,000	\$ 180,000
Safe Harbor Cost Limit	\$ 7,200,000	\$ 61,683,754	\$ 72,000,000	\$ 72,000,000	\$ 72,000,000
Direct Assignment	\$ 54,483,754	\$ 0	\$ 0	\$ 0	\$ 0
% Rolled Into Rates	11.67%	100.00%	100.00%	100.00%	100.00%

These % apply to all costs for rolling those costs into rates

Current Base Plan Funding Process	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	\$2,376,000	\$0	\$18,037,622	\$5,435,405	\$18,037,622
MW-Mile Amount (67%)	\$4,824,000	\$0	\$36,621,838	\$11,035,520	\$36,621,838
Total Rolled Into Rates	\$7,200,000	\$0	\$54,659,460	\$16,470,925	\$54,659,460
Directly-Assigned Amount	\$54,483,754	\$0	\$0	\$0	\$0
	\$ 61,683,754	\$0	\$ 54,659,460	\$ 16,470,925	\$ 54,659,460

Sink Zone Allocation					
Postage Stamped Amount (33%)	-na-	-na-	\$18,037,622	-na-	\$18,037,622
MW-Mile Amount (67%)	-na-	-na-	\$36,621,838	-na-	\$36,621,838
			\$ 54,659,460		\$ 54,659,460

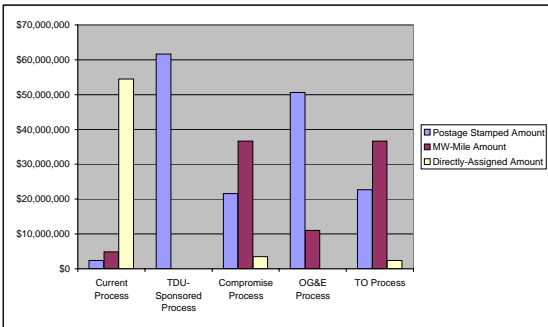
Non-Sink Zone Allocation					
Postage Stamped Amount	\$0	\$0	\$ 3,512,147	\$0	\$ 4,671,156
Directly-Assigned Amount	\$0	\$0	\$ 3,512,147	\$0	\$ 2,353,138
Total Amount			\$7,024,294		\$7,024,294

Other Postage Stamp Allocations		All	=> 300 kV
Postage Stamp Amount	\$0	\$61,683,754	\$45,212,829

Cost Allocation - Without Cost Limit					
Postage Stamped Amount	\$2,376,000	\$61,683,754	\$21,549,769	\$50,648,234	\$22,708,777
MW-Mile Amount	\$4,824,000	\$0	\$36,621,838	\$11,035,520	\$36,621,838
Directly-Assigned Amount	\$54,483,754	\$0	\$3,512,147	\$0	\$2,353,138
Subtotal	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754

Application of Cost Limit					
Directly-Assigned Amount Limit (Cap)	\$61,683,754	\$61,683,754	\$20,561,251	\$61,683,754	\$61,683,754
Directly-Assigned Amount (Above)	\$54,483,754	\$0	\$3,512,147	\$0	\$2,353,138
Revised Directly-Assigned Amount	\$54,483,754	\$0	\$3,512,147	\$0	\$2,353,138
Postage Stamp to Excess	\$0	\$0	\$0	\$0	\$0

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Postage Stamped Amount	\$2,376,000	\$61,683,754	\$21,549,769	\$50,648,234	\$22,708,777
MW-Mile Amount	\$4,824,000	\$0	\$36,621,838	\$11,035,520	\$36,621,838
Directly-Assigned Amount	\$54,483,754	\$0	\$3,512,147	\$0	\$2,353,138
Total Amount	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754



Upgrade Name	Allocated E & C Cost	Total E & C Cost	Total Revenue Requirements	Owner	Is Sink Zone Upgrade?	Is Upgrade >= 300 kV?	Sink Zone Upgrade Cost (< 300 kV)	Sink Zone Upgrade Cost (>=300 kV)	Sink Zone Upgrade Cost	Non-Sink Zone Upgrade Cost (< 300 kV)	Non-Sink Zone Upgrade Cost (>=300 kV)	Non-Sink Zone Upgrade Cost
CIMARRON - NORTHWEST 345KV CKT 1	\$ 8,987	\$ 80,000	\$-	OKGE	Y	Y	\$-	\$ 8,987	\$ 8,987	\$-	\$-	\$-
Cimarron Plant Substation Expansion	\$ 212,136	\$ 2,500,000	\$ 1,129,886	WEPL	N	N	\$-	\$-	\$-	\$ 212,136	\$-	\$ 212,136
FRANKLIN SW - MIDWEST TAP 138KV CKT 1 OKGE	\$ 5,087	\$ 160,575	\$ 34,119	OKGE	Y	N	\$ 5,087	\$-	\$ 5,087	\$-	\$-	\$-
FRANKLIN SW - MIDWEST TAP 138KV CKT 1 WFEC	\$ 3,168	\$ 100,000	\$-	WFEC	N	N	\$-	\$-	\$-	\$ 3,168	\$-	\$ 3,168
GREENSBURG - JUDSON LARGE 115KV CKT 1	\$ 61,893	\$ 153,114	\$ 463,334	WEPL	N	N	\$-	\$-	\$-	\$ 61,893	\$-	\$ 61,893
Hugo - SunnySide 345KV	\$ 2,691,259	\$ 50,000,000	\$ 8,878,921	WFEC	N	Y	\$-	\$-	\$-	\$ 2,691,259	\$ 2,691,259	\$-
HUGO 345/138KV TRANSFORMER CKT 2	\$ 10,944	\$ 2,500,000	\$ 36,001	WFEC	N	N	\$-	\$-	\$-	\$ 10,944	\$-	\$ 10,944
MEDICINE LODGE - SUN CITY 115KV CKT 1	\$ 72,636	\$ 150,000	\$ 487,598	WEPL	N	N	\$-	\$-	\$-	\$ 72,636	\$-	\$ 72,636
MOORELAND - CIMARRON 345KV	\$ 10,432,831	\$ 114,441,767	\$ 65,326,665	OKGE	Y	Y	\$ 10,432,831	\$ 10,432,831	\$-	\$-	\$-	\$-
Mooreland 345/138 kV Transformer CKT 1 Displacement	\$ 25,947	\$ 232,012	\$ 83,049	WFEC	N	N	\$-	\$-	\$-	\$ 25,947	\$-	\$ 25,947
Mooreland 345/138 kV Transformer CKT 2	\$ 559,166	\$ 5,000,000	\$ 1,788,739	WFEC	N	N	\$-	\$-	\$-	\$ 559,166	\$-	\$ 559,166
NORTH CIMARRON WALKMEYER CAPACITOR	\$ 547,360	\$ 4,200,000	\$ 2,753,002	SUNC	N	N	\$-	\$-	\$-	\$ 547,360	\$-	\$ 547,360
Sooner to Rose Hill 345 kV OKGE Expedite	\$-	\$ 27,500,000	\$ 3,947,850	OKGE	Y	Y	\$-	\$-	\$-	\$-	\$-	\$-
Sooner to Rose Hill 345 kV WERE Expedite	\$-	\$ 27,500,000	\$ 2,717,542	WERE	N	Y	\$-	\$-	\$-	\$-	\$-	\$-
SOONER - WOODRING 345KV CKT 1	\$ 4,563	\$ 400,000	\$ 28,572	OKGE	Y	Y	\$ 4,563	\$ 4,563	\$-	\$-	\$-	\$-
Spanaville - Mooreland 345 kV SUNC Displacement	\$ 1,875,169	\$ 4,654,872	\$ 8,544,714	SUNC	N	Y	\$-	\$-	\$-	\$ 1,875,169	\$ 1,875,169	\$-
Spanaville - Mooreland 345 kV WFEC Displacement	\$ 542,090	\$ 1,345,670	\$ 1,735,084	WFEC	N	Y	\$-	\$-	\$-	\$ 542,090	\$ 542,090	\$-
WOODRING - MOORELAND 345KV	\$ 705,855	\$ 93,558,233	\$ 4,419,812	OKGE	Y	Y	\$ 705,855	\$ 705,855	\$-	\$-	\$-	\$-
WOODRING (WOODRING2) 345/138/113.8KV TRANSFORMER CKT 1	\$ 248,685	\$ 6,500,000	\$ 1,557,177	OKGE	Y	N	\$ 248,685	\$-	\$ 248,685	\$-	\$-	\$-
ARKOMIA - FT SMITHHW 161KV CKT 1	\$ 2,508,731	\$ 2,900,000	\$ 10,881,849	OKGE	Y	N	\$ 2,508,731	\$-	\$ 2,508,731	\$-	\$-	\$-
CIMARRON - NORTHWEST 345KV CKT 1	\$ 13,982	\$ 90,000	\$-	OKGE	Y	Y	\$ 13,982	\$ 13,982	\$-	\$-	\$-	\$-
FAIRMONT TAP - WOODRING 138KV CKT 1	\$ 336,602	\$ 850,000	\$ 2,020,852	OKGE	Y	N	\$ 336,602	\$-	\$ 336,602	\$-	\$-	\$-
Hugo - SunnySide 345KV	\$ 61,117	\$ 50,000,000	\$ 139,671	WFEC	N	Y	\$-	\$-	\$-	\$ 61,117	\$ 61,117	\$-
KINZE - MCELROY 138KV CKT 1	\$ 219,797	\$ 600,000	\$ 1,019,921	WFEC	N	Y	\$ 219,797	\$-	\$ 219,797	\$-	\$-	\$-
MILLER - WHITE EAGLE 138KV CKT 1	\$ 103,727	\$ 300,500	\$ 481,329	OKGE	Y	N	\$ 103,727	\$-	\$ 103,727	\$-	\$-	\$-
MOORELAND - CIMARRON 345KV	\$ 13,159,321	\$ 114,441,767	\$ 59,818,252	OKGE	Y	Y	\$ 13,159,321	\$ 13,159,321	\$-	\$-	\$-	\$-
Mooreland 345/138 kV Transformer CKT 1 Displacement	\$ 15,473	\$ 232,012	\$ 41,017	WFEC	N	N	\$-	\$-	\$-	\$ 15,473	\$-	\$ 15,473
Mooreland 345/138 kV Transformer CKT 2	\$ 333,449	\$ 5,000,000	\$ 883,926	WFEC	N	N	\$-	\$-	\$-	\$ 333,449	\$-	\$ 333,449
MUSKOGEE - PECAN CREEK 345KV CKT 1	\$ 71,516	\$ 100,000	\$-	OKGE	Y	Y	\$ 71,516	\$ 71,516	\$-	\$-	\$-	\$-
NORTHWEST (NORTHWEST2) 345/138/113.8KV TRANSFORMER CKT 2	\$ 5,286,285	\$ 9,000,000	\$ 15,381,631	OKGE	Y	N	\$ 5,286,285	\$-	\$ 5,286,285	\$-	\$-	\$-
SOONER - WOODRING 345KV CKT 1	\$ 165,917	\$ 400,000	\$ 754,208	OKGE	Y	Y	\$ 165,917	\$ 165,917	\$-	\$-	\$-	\$-
SOONER (SOONERS) 345/138/113.8KV TRANSFORMER CKT 2	\$ 2,117,289	\$ 5,500,000	\$ 9,109,693	OKGE	Y	N	\$ 2,117,289	\$-	\$ 2,117,289	\$-	\$-	\$-
Spanaville - Mooreland 345 kV SUNC Displacement	\$ 17,444	\$ 4,654,872	\$ 62,702	SUNC	N	Y	\$-	\$-	\$-	\$ 17,444	\$ 17,444	\$-
Spanaville - Mooreland 345 kV WFEC Displacement	\$ 5,043	\$ 1,345,670	\$ 13,368	WFEC	N	Y	\$-	\$-	\$-	\$ 5,043	\$ 5,043	\$-
SUNNYSIDE 345/138KV TRANSFORMER CKT 2	\$ 1,247,266	\$ 5,000,000	\$ 6,104,537	OKGE	Y	N	\$ 1,247,266	\$-	\$ 1,247,266	\$-	\$-	\$-
WAIKOMIS TAP - WOODRING 138KV CKT 1	\$ 407,546	\$ 1,500,000	\$ 2,446,778	OKGE	Y	N	\$ 407,546	\$-	\$ 407,546	\$-	\$-	\$-
WOODRING - MOORELAND 345KV	\$ 15,467,735	\$ 93,558,233	\$ 70,311,643	OKGE	Y	Y	\$ 15,467,735	\$ 15,467,735	\$-	\$-	\$-	\$-
WOODRING (WOODRING2) 345/138/113.8KV TRANSFORMER CKT 2	\$ 2,147,738	\$ 6,500,000	\$ 9,762,967	OKGE	Y	N	\$ 2,147,738	\$ 2,147,738	\$-	\$-	\$-	\$-
Total	\$ 61,683,754	\$ 642,958,797	\$ 293,167,441				\$ 14,628,753	\$ 40,030,707	\$ 54,659,460	\$ 1,842,172	\$ 5,182,122	\$ 7,024,294
									89%			\$ 7,024,294

Non-Sink Concentration

Sink Zone Upgrade Cost	
Sink Zone Upgrade Cost (< 300 kV)	\$ 2,500,000
Sink Zone Upgrade Cost (>=300 kV)	\$ 7,500,000
Sink Zone Upgrade Cost	<u>\$ 10,000,000</u>

Non-Sink Zone Upgrade Cost	
Non-Sink Zone Upgrade Cost (< 300 kV)	\$ 25,000,000
Non-Sink Zone Upgrade Cost (>=300 kV)	\$ 65,000,000
Non-Sink Zone Upgrade Cost	<u>\$ 90,000,000</u>

Upgrade Total Cost \$ 100,000,000

	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Requested Capacity	500	n/a	500	500	500
Wind Multiplier	10%		100%	100%	100%
Net Dependable Capacity	50		500	500	500
Safe Harbor Multiplier	\$ 180,000		\$ 180,000	\$ 180,000	\$ 180,000
Safe Harbor Cost Limit	\$ 9,000,000	\$100,000,000	\$ 90,000,000	\$ 90,000,000	\$ 90,000,000
Direct Assignment	\$91,000,000	\$0	\$10,000,000	\$10,000,000	\$10,000,000
% Rolled Into Rates	9.00%	100.00%	90.00%	90.00%	90.00%

These % apply to all costs for rolling those costs into rates

Current Base Plan Funding Process	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	\$2,970,000	\$0	\$2,970,000	\$8,167,500	\$2,970,000
MW-Mile Amount (67%)	\$6,030,000	\$0	\$6,030,000	\$16,582,500	\$6,030,000
Total Rolled Into Rates	\$9,000,000	\$0	\$9,000,000	\$24,750,000	\$9,000,000
Directly-Assigned Amount	\$91,000,000	\$0	\$10,000,000	\$10,000,000	\$10,000,000
	<u>\$ 100,000,000</u>	<u>\$0</u>	<u>\$ 19,000,000</u>	<u>\$ 34,750,000</u>	<u>\$ 19,000,000</u>

Sink Zone Allocation	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount (33%)	-na-	-na-	\$2,970,000	-na-	\$2,970,000
MW-Mile Amount (67%)	-na-	-na-	\$6,030,000	-na-	\$6,030,000
			\$ 9,000,000		\$ 9,000,000

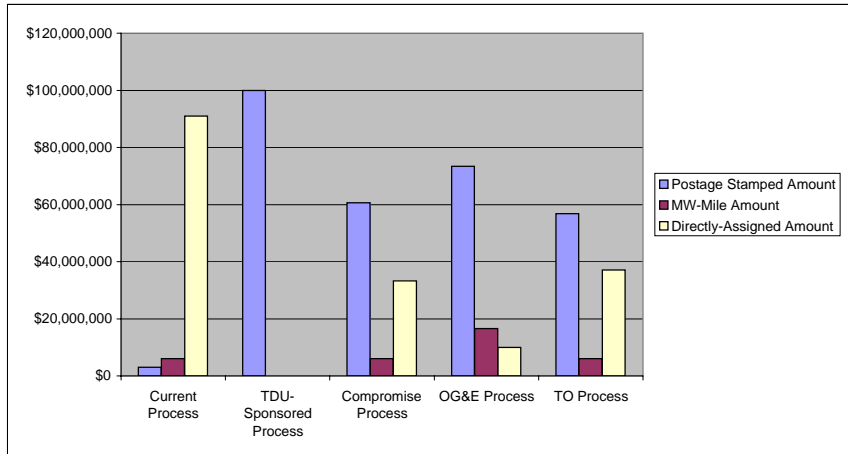
Non-Sink Zone Allocation	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount	\$0	\$0	\$40,500,000	\$0	\$53,865,000
Directly-Assigned Amount	\$0	\$0	\$40,500,000	\$0	\$27,135,000
Total Amount			\$81,000,000		\$81,000,000

Other Postage Stamp Allocations	All	=> 300 kV
Postage Stamp Amount	\$0	\$100,000,000
		\$0
		\$65,250,000
		\$0

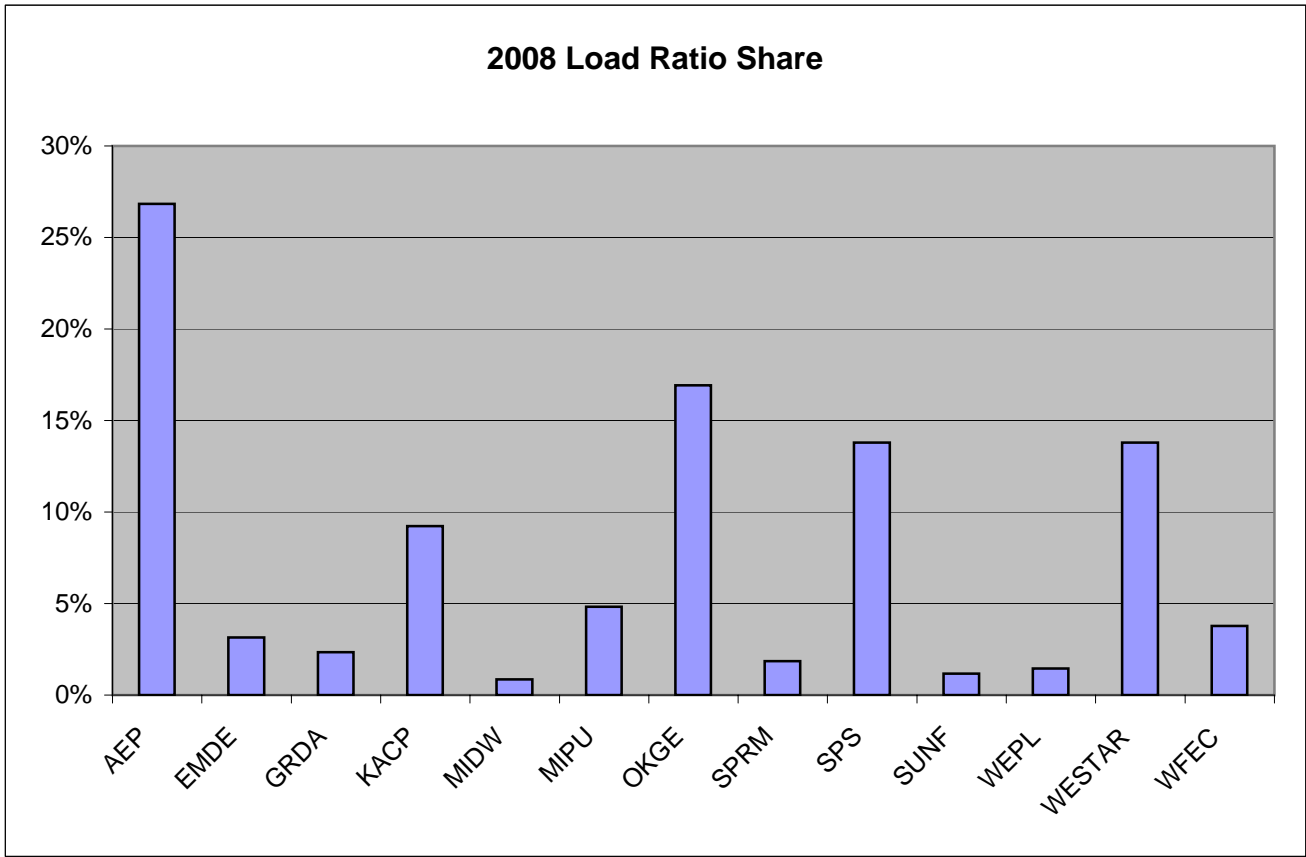
Cost Allocation - Without Cost Limit	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Postage Stamped Amount	\$2,970,000	\$100,000,000	\$43,470,000	\$73,417,500	\$56,835,000
MW-Mile Amount	\$6,030,000	\$0	\$6,030,000	\$16,582,500	\$6,030,000
Directly-Assigned Amount	\$91,000,000	\$0	\$50,500,000	\$10,000,000	\$37,135,000
Subtotal	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>

Application of Cost Limit	Safe Harbor	None	Sink Zone	Below 300 kV	Sink Zone
Directly-Assigned Amount Limit (Cap)	\$100,000,000	\$100,000,000	\$33,333,333	\$100,000,000	\$100,000,000
Directly-Assigned Amount (Above)	\$91,000,000	\$0	\$50,500,000	\$10,000,000	\$37,135,000
Revised Directly-Assigned Amount	\$91,000,000	\$0	\$33,333,333	\$10,000,000	\$37,135,000
Postage Stamp to Excess	\$0	\$0	\$17,166,667	\$0	\$0

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Postage Stamped Amount	\$2,970,000	\$100,000,000	\$60,636,667	\$73,417,500	\$56,835,000
MW-Mile Amount	\$6,030,000	\$0	\$6,030,000	\$16,582,500	\$6,030,000
Directly-Assigned Amount	\$91,000,000	\$0	\$33,333,333	\$10,000,000	\$37,135,000
Total Amount	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>	<u>\$100,000,000</u>



2008 Load Ratio Share	
AEP	27%
EMDE	3%
GRDA	2%
KACP	9%
MIDW	1%
MIPU	5%
OKGE	17%
SPRM	2%
SPS	14%
SUNF	1%
WEPL	1%
WESTAR	14%
WFEC	4%
TOTAL	100%





**Helping our members work together
to keep the lights on...
today & in the future**



Wind Plant Cost Allocation Alternatives
Revised Presentation

Cost Allocation Working Group

April 17, 2008

Presentation Overview

- **Terminology used to express Cost Allocation Processes consistently**
- **Overview of each Process**
- **Sample Calculations**
- **Summary**

Terminology used in this Presentation

- **Sink Zone – Transmission Service Requestor's Zone**
- **Non-Sink Zone – Any Zone other than the Sink Zone**
- **Directly-Assigned Amount – Cost assigned to the Transmission Service Requestor to construct Direct Assignment Facilities**

Wind Plant Cost Allocation Alternatives

- **Current Process**
- **TDU-Sponsored Process**
- **Compromise Process**
- **OG&E Process**
- **TO Process**

Current Process

- **Base Plan Funding Calculation**
 - **At least 5 year commitment to Designated Resource or no Base Plan Funding allowed**
 - **No more than 125% of Transmission Customer's Projected System Peak Responsibility or no Base Plan Funding allowed**
 - **Safe Harbor Cost Limit is \$180,000 * lesser of:**
 - **Planned Maximum Net Dependable Capacity (10% of Nameplate capacity for Wind resources), or**
 - **Requested Capacity**

Current Process - continued

- **Assigned Upgrade Cost in excess of Base Plan Funding is Directly Assigned to Requestor**
- **For wind plants can result in significant Directly-Assigned Cost to Requestor**
- **Directly-Assigned Cost may be for upgrades outside of Sink Zone**

TDU-Sponsored Process

- **Upgrade cost associated with wind plant Designated Resources are collected through a region-wide Postage Stamp rate**
- **Limited to 20% of peak load due to operational concerns**

Compromise Process

- **Non-Sink Zone Upgrades are removed from the Existing Process**
- **Non-Sink Zone Upgrades are allocated:**
 - **50% Postage Stamped**
 - **50% Directly-Assigned**

Compromise Process - continued

- **Sink-Zone Upgrades are allocated using the 1/3 – 2/3 methodology using Requested Capacity**
- **Directly-Assigned Cost capped at 1/3 of the total upgrade cost**
- **Limited to 20% of peak load due to operational concerns**

OG&E Process

- Upgrades are allocated using the 1/3 – 2/3 methodology Requested Capacity
- All Transmission **Facility** Upgrades ≥ 300 kV are Postage Stamped
 - Transformers ≥ 300 kV on low side
 - Circuit Breakers ≥ 300 kV
 - Ring Bus ≥ 300 kV
 - Transformers ≤ 300 kV on low side (excluded)
- Limited to 20% of peak load due to operational concerns

TO Process

- Sink Zone upgrades are allocated using 1/3 – 2/3 methodology Requested Capacity or “amount of generation under contract”
- Non-Sink Zone Upgrades are allocated:
 - 66.5% Postage Stamped
 - 33.5% Directly-Assigned

TO Process - continued

- **Directly-Assigned Amounts are eligible for Attachment Z credits**
- **Limited to 20% of name plate capacity for Base Plan Funding consideration**

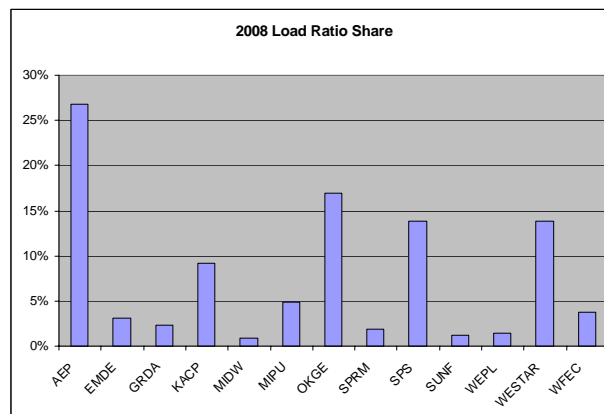
Sample Calculations

- **Cloud County, KS Wind Plant (EMDE)**
 - 100 MW Actual Request
 - Upgrades: 37% in Sink Zone, 63% in Non-Sink Zone
 - 20% Wind Plant limit applies to this Request
- **Harper County, OK Wind Plant (AEPM)**
 - 80 MW Actual Request
 - Upgrades: 8% in Sink Zone, 92% in Non-Sink Zone

Sample Calculations – continued

- **Finney County, KS Wind Plant (OKGE)**
 - 400 MW Example based on data from Actual Requests combined into a single Wind Plant
 - Upgrades: 89% in Sink Zone, 11% in Non-Sink Zone
- **Wind Plant with Non-Sink Zone Upgrade concentration**
 - 500 MW Wind Plant
 - \$100 M Upgrade Cost
 - Upgrades: 10% in Sink Zone, 90% in Non-Sink Zone

Load Ratio Share – Postage Stamp Allocation

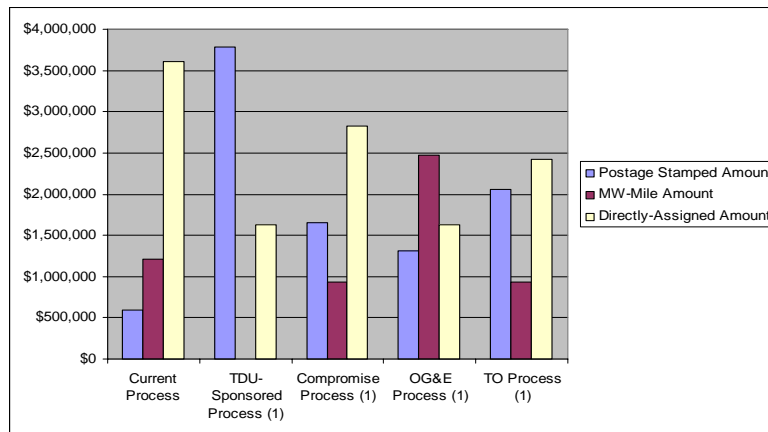


Cloud County, KS (EMDE)

Cost Allocation	Current Process	TDU-Sponsored Process (1)	Compromise Process (1)	OG&E Process (1)	TO Process (1)
Postage Stamped Amount	\$594,000	\$3,787,152	\$1,657,843	\$1,308,886	\$2,053,924
MW-Mile Amount	\$1,206,000	\$0	\$929,065	\$2,478,266	\$929,065
Directly-Assigned Amount	\$3,610,217	\$1,623,065	\$2,823,309	\$1,623,065	\$2,427,229
Total Amount	\$5,410,217	\$5,410,217	\$5,410,217	\$5,410,217	\$5,410,217

(1) This Process limits Wind Generation to 20%. 70 MW available for this Request. 70% (70MW / 100MW) Processed, 30% Directly Assigned

Cloud County, KS (EMDE)



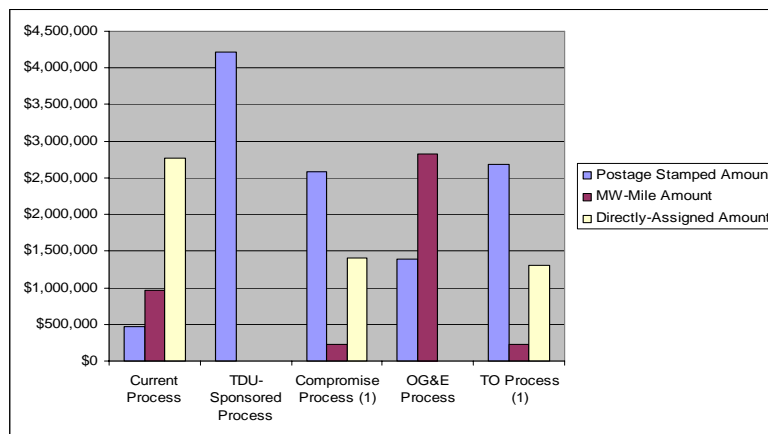
(1) This Process limits Wind Generation to 20%. 70 MW available for this Request. 70% (70MW / 100MW) Processed, 30% Directly Assigned

Harper County, OK (AEPM)

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process (1)	OG&E Process	TO Process (1)
Postage Stamped Amount	\$475,200	\$4,212,330	\$2,584,030	\$1,390,069	\$2,689,104
MW-Mile Amount	\$964,800		\$224,190	\$2,822,261	\$224,190
Directly-Assigned Amount	\$2,772,330		\$1,404,110	\$0	\$1,299,036
Total Amount	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330	\$4,212,330

(1) Invalid MW-Mile Allocation since all allocated Amounts would be less than \$100k

Harper County, OK (AEPM)

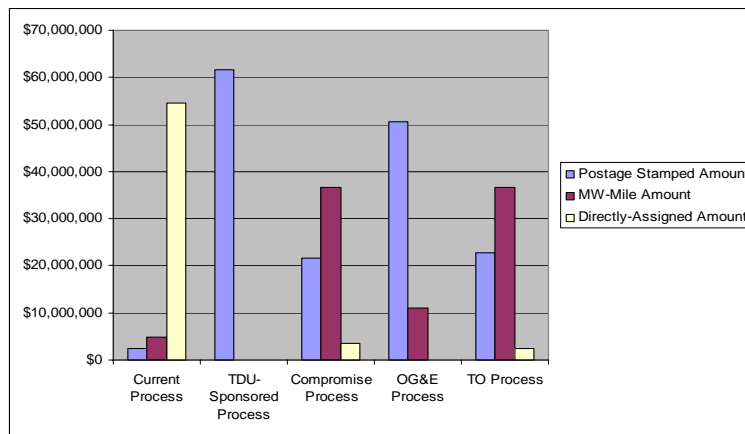


(1) Invalid MW-Mile Allocation since all allocated Amounts would be less than \$100k

Finney County, KS (OKGE)

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Postage Stamped Amount	\$2,376,000	\$61,683,754	\$21,549,769	\$50,648,234	\$22,708,777
MW-Mile Amount	\$4,824,000		\$36,621,838	\$11,035,520	\$36,621,838
Directly-Assigned Amount	\$54,483,754		\$3,512,147	\$0	\$2,353,138
Total Amount	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754	\$61,683,754

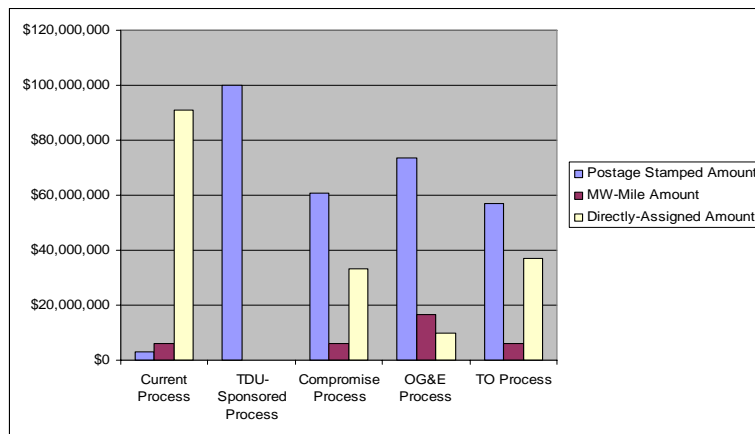
Finney County, KS (OKGE)



Wind Plant with Non-Sink Zone Upgrade concentration

Cost Allocation	Current Process	TDU-Sponsored Process	Compromise Process	OG&E Process	TO Process
Postage Stamped Amount	\$ 2,970,000	\$100,000,000	\$ 60,636,667	\$ 73,417,500	\$ 56,835,000
MW-Mile Amount	\$ 6,030,000		\$ 6,030,000	\$ 16,582,500	\$ 6,030,000
Directly-Assigned Amount	\$ 91,000,000		\$ 33,333,333	\$ 10,000,000	\$ 37,135,000
Total Amount	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000	\$100,000,000

Wind Plant with Non-Sink Zone Upgrade concentration



Summary

- **The wind resources must be delivered into the SPP footprint for these Cost Allocation methodologies to be applicable**
- **The purpose of this policy change is to protect customers in the wind plant source zone from significant cost exposure from the application of the MW-Mile analysis in the Non-Sink Zone**
- **Aggregate Study results are required to determine Cost Allocation by any of these processes.**
- **These results are unique and cannot be directly compared to other results without repeating the Cost Allocation processes using Aggregate Study results**
- **All proposed Cost Allocation processes reduced the Directly-Assigned Amounts compared to the Existing Process for the examples shown**

Summary - continued

- **These revised Cost Allocation processes are also designed to minimize or reduce cost to customers with wind resources to make the cost for wind resources more comparable to other types of generation**
- **Since the proposed processes reduce Directly-Assigned Amounts, they all increase the amounts allocated elsewhere**
- **The 20% Wind Generation cap is a place holder until better data is provided (e.g. the GE wind integration study planned to be presented to the MOPC)**
- **Documentation requirements and procedures for all “capped” values need to be fully defined**



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