Municipal Energy Agency of Nebraska

Clean Energy Plan

Submitted May 24, 2024

to

Colorado Department of Public Health
and Environment Division of Administration

and

Colorado Public Utilities Commission

Plan Revised and Verified by Colorado Department of Public Health and Environment on March 19, 2025.

Introduction

The Municipal Energy Agency of Nebraska (MEAN) is filing this Clean Energy Plan (CEP) as a wholesale power marketer pursuant to § 25-7-105 1(e)(VIII.7)(B), C.R.S. MEAN is a political subdivision of the State of Nebraska supplying wholesale electric power to 61 participant communities in Nebraska, Colorado, Iowa, and Wyoming. Of MEAN's 61 wholesale power participants, 14 are in Colorado. Under the power supply agreements between MEAN and its participants, MEAN provides power and energy to serve the load requirements of each participant community in excess of each community's allocation(s) of firm power and energy from the Western Area Power Administration (WAPA), certain other community resources, and certain local end-use customer-owned renewable resources.

MEAN has a long history of reducing carbon emissions across its entire portfolio and shares Colorado's goal of reducing carbon emissions from electric generation. The 2002 MEAN Wind Project at Kimball was an early effort to increase carbon-free generation in MEAN's resource portfolio and represented the first of many efforts that have led to emissions reductions in MEAN's resource mix. In 2020, the MEAN Board of Directors voted to build on the success of MEAN's emission reduction efforts by establishing a 2050 carbon neutral vision for MEAN's entire resource portfolio. MEAN is committed to achieving its emissions reduction goals and sees the projections reflected in this CEP as an integral part of its emissions reduction strategy.

MEAN's Colorado participants have been at the forefront of MEAN's renewable generation efforts. The data contained in this CEP reflects the progress that has already been made in Colorado since 2005 in achieving MEAN's emission reduction goals. Two of MEAN's Colorado participants, Aspen and Glenwood Springs, were among the first communities in the United States to secure enough electric generation production from renewable resources to meet each City's annual electric usage. By 2030, MEAN expects an 80% reduction in the greenhouse gas emissions caused by MEAN's supply to its Colorado participants compared to 2005 in the aggregate.

2005 Resource Supply and Emissions

MEAN supplied most of its Colorado load utilizing long-term power purchase agreements, an allocation of firm electric service from WAPA-Loveland Area Projects in 2005, and an agreement with Lincoln Electric System (LES) under which MEAN received approximately 18.6MW of firm capacity and associated energy from Laramie River Station Units 2 and 3, supplemented by market transactions. Additionally, in 2005, MEAN owned the MEAN Wind Project at Kimball, which began providing clean wind-generated energy in 2002.

A detailed list of MEAN's resource portfolio and historical emissions in 2005 can be found in the Verification Workbook, appended to this CEP as Attachment 1.

2030 Load Forecast

MEAN utilizes a multi-variate linear regression model to plan for future increases and decreases in load. MEAN uses historical load trends, temperature data, projected population growth, and localized income data to generate a weather-normalized model of future energy consumption

among MEAN participants. Based on current projections, MEAN's load in Colorado is expected to grow from 612,898 MWh to 640,331 MWh by 2030.

2025-2030 Resource Outlook

MEAN currently maintains a partial ownership share in Wygen I and contracts with Black Hills Power, Inc. and Lincoln Electric System under which MEAN receives capacity and energy in the Western Interconnection. MEAN's ownership share in Wygen I is expected to continue, but a smaller proportion of MEAN's capacity from Wygen I will be committed to serving load in Colorado by 2030. A contract with Black Hills Power, Inc. for 15MW of unit contingent capacity from an emitting source is set to expire in 2028. MEAN also anticipates gradually decreasing the share of capacity and energy committed to serving Colorado load from the agreement with Lincoln Electric System (LES) described above.

MEAN has contracts with WAPA for approximately 77MW of generation from WAPA resources, a power purchase agreement with Kimball Wind, LLC under which MEAN purchases all of the output from a 30 MW wind project, a power purchase agreement under which MEAN purchases output associated with 7.6 MW of capacity from the Shavano Falls Hydro Project, and a power purchase agreement with Aspen, CO for 10,946 MWh annually of hydroelectric generation. These power purchase agreements are expected to continue into 2030 without major changes. MEAN expects to purchase more than 74,000 MWh of solar generation under a set of new power purchase agreements by 2030 and is currently exploring additional sources of non-emitting generation and/or reduced emitting generation to serve load in Colorado. MEAN anticipates a generation shortfall for its load in the Western Interconnection as reliance on emitting resources is reduced. The anticipated shortfall will be compensated with market purchases until plans to acquire new generation can be finalized.

A detailed list of MEAN's anticipated resource portfolio and emissions for 2030 can be found in the Verification Workbook, appended to this CEP as Attachment 1.

Attachment 1

CEP Demonstration
No Data Entry on this tab. This tab displays the results of the evaluation.

Safe Harbor Evaluation
No Data Entry on this tab. This tab displays the results of the evaluation.

2005 All Electricity
Owned Assets
Co-owned facilities and units: Report data based on percentage of each facility or unit that is owned by the utility filing the report. If ownership is not correlated to actual energy received and associated emissions, report actual energy and emissions for baseline year assigned to the company filing the CEP. During the verification of the form by the Air Pollution Control Division, all data used to populate the form will be made available for review.
Plant: Report Plant or Unit Name of the asset
Primary Generation Type: Use the picklist to report the primary fuel or resource type for the asset.
Total Heat Input: Report the actual heat input consumed in mmbtu by the unit in 2005 for fuel fired units. Report zero if asset does not combust fuel.
% Heat Input Coal: Report the percentage of total heat input associated with combusting coal to the nearest tenth of a percent.
% Heat Input Natural Gas: Report the percentage of total heat input associated with combusting natural gas to the nearest tenth of a percent.
% Heat Input Fuel Oil: Report the percentage of total heat input associated with combusting fuel oil to the nearest tenth of a percent.
% Heat Input Biomass: Report the percentage of total heat input associated with combusting biomass to the nearest tenth of a percent.
Generation: Report the actual load produced by the unit in Net MWh in 2005.
CO2 Emissions Methodology: Use the picklist to select the method of determining CO2 emissions from the asset. Use the most specific data source available. Picklist is sorted in order of most specific to least specific, followed by zero GHG.
CO2 Total: Report actual CO2 emissions determined by the emission methodology for 2005.

Contract Purchases - Use FERC Form 1 or other relavent publically available data to report 2005 contract purchases.
Counter Party: Report the entity with which the contract is established.
Primary Generation Type: Use the picklist to report the primary fuel or resource type for the asset.
Purchases: Report the actual quantity of energy purchased in Net MWh.
Emission Rate Source: Use the picklist to select the most specific CO2 emission rate source for the contract. Picklist is sorted in order of most specific to least specific, followed by zero GHG.

Market Transactions - Use FERC Form 1 or other relavent publically available data to report 2005 market transactions. During the verification of the form by the Air Pollution Control Division, all data used to populate the form will be made available for review.
Market Name: Report the name each market from which transactions occurred in 2005.
System, Subregion, or Region Identification: Report the location of each market using the picklist. If sales are made into a market and the company system rate is used for emissions calculations, select Company System Rate.
Transactions: Report transactions conducted through each market with positive values indicating purchases and negative values indicating sales. Report separate lines for purchases and sales to each market if historical data is available. If separate purchase and sales data is not available, report net transactions through each market. Report energy in Net MWh.
Emission Rate Source: Use the picklist to select the most specific CO2 emission rate source for the contract. Picklist is sorted in order of most specific to least specific, followed by zero GHG.

Colorado Sales Information - Use FERC Form 1 or other relavent publically available data to report all retail electricity sales and all Colorado wholesale requirements contract sales that occurred in 2005. Report all contracts, including those that are excluded below from the baseline because they were no longer valid as of January 1, 2019 or because the customer intends to file their own CEP. Contact the Air Pollution Control Division with further questions. During the verification of the form by the Air Pollution Control Division, all data used to populate the form will be made available for review.

System Losses and SF6 Leakage - For Colorado system line losses, report all losses and SF6 emissions in the distribution row if data is not calculated separately for transmission and distribution assets.
For transmission and distribution systems that cover multiple states, report the quantity of SF6 emitted from Colorado portion of the system only.

2005 Baseline Adjustment Details - Report all contracts that are excluded from the baseline because they were no longer valid as of January 1, 2019 or because the customer intends to file their own CEP.

2030 All Electricity
Owned Assets
Co-owned facilities and units: Report data based on percentage of each facility or unit that is owned by the utility filing the report and consistent with modeling results submitted for the CEP.
Plant: Report Plant or Unit Name of the asset
Primary Generation Type: Use the picklist to report the primary fuel or resource type for the asset.
Total Heat Input: Report projected heat input for each asset from the CEP resource modeling. Report zero if asset does not combust fuel.
% Heat Input Coal: Report the percentage of total heat input associated with combusting coal to the nearest tenth of a percent.
% Heat Input Natural Gas: Report the percentage of total heat input associated with combusting natural gas to the nearest tenth of a percent.
% Heat Input Fuel Oil: Report the percentage of total heat input associated with combusting fuel oil to the nearest tenth of a percent.
% Heat Input Biomass: Report the percentage of total heat input associated with combusting biomass to the nearest tenth of a percent.
Generation: Report projected load produced by the unit in Net MWh from the resource plan modeling for the CEP.
CO2 Emissions Methodology: Use the picklist to select the method of determining CO2 emissions from the asset. Use the most specific data source available.
Picklist is sorted in order of most specific to least specific, followed by zero GHG.
CO2 Total: Report actual CO2 emissions determined by the emission methodology for 2030.

Contract Purchases - Report contracts that are included in the load forecast used for resoure plan modeling of the CEP.
Counter Party: Report the entity with which the contract is or will be established.
Primary Generation Type: Use the picklist to report the primary fuel or resource type for the asset.
Purchases: Report the projected quantity of energy purchased in Net MWh.
Emission Rate Source: Use the picklist to select the most specific CO2 emission rate source for the contract. Picklist is sorted in order of most specific to least specific, followed by zero GHG.

Market Transactions - Report market transactions that are included in the load forecast used for resoure plan modeling of the CEP.
Market Name: Report the name each market from which transactions are expected to occur in 2030 based on current or expected market participation.
System, Subregion, or Region Identification: Report the location of each market using the picklist.
Transactions: Report transactions projected through each market with positive values indicating purchases and negative values indicating sales. Report separate lines for purchases and sales to each market if modeling data is available. If separate purchase and sales data is not modeled, report net transactions modeled through each market. Report energy in Net MWh.
Emission Rate Source: Use the picklist to select the most specific CO2 emission rate source for the contract. Picklist is sorted in order of most specific to least specific, followed by zero GHG.

Sales Information - Report projected retail and Colorado wholesale contract sales included in the load forecast used in resource plan modeling for the CEP. Report all contracts, including those that the customer intends to file their own CEP.

System Losses and SF6 Leakage - For Colorado system line losses, report anticipated losses and SF6 emissions in the distribution row if data is not calculated separately for transmission and distribution assets.
For transmission and distribution systems that cover multiple states, report the quantity of SF6 emitted from Colorado portion of the system only.

2030 Adjustment Details - Report all contracts that the customer intends to file their own CEP.

Interim Year Summary
This tab is not used for determining acceptability of a CEP, nor any compliance determination with AQCC regulations. It is submitted for information purposes only to inform GHG reduction planning activities.
Report Total Load, Beneficial Electrification Program Load, Total GHG emissions, and Total CO2 emissions for each calendar year based on forecasts submitted with resource planning activities.

Lists and Lookups
If Biomass fuels are used, enter the appropriate emission factors based on fuel type.
For long term contract transactions, enter contract specific emission rates based on all generation assets included under the contract.
For company system rate emission factors, enter the appropriate emission factors for the electricity pool supplied by the company. During the verification of the form by the Air Pollution Control Division, all data used to populate the emission factors will be made available for review.
If additional lines are necessary for contract transactions, they must be added above the line titled "LEAVE BLANK" and data must be entered in alphabetical order in the first column in order for the vlookup function to work properly.

Demonstration for 80% CO2 reduction in Retail + Colorado Wholesale sales pursuant to SB19-236

Step 1: Calculate 2005 CO2 baseline

Baseline	2005
Electricity sales CO2 (short tons)	554,811

Step 2: Calculate 2030 CO2 forecast

Forecast	2030
Electricity sales CO2 (short tons)	108,365

Step 3: Calculate percent CO2 reductions

CO2 Reduction Demonstration	
2005 Baseline CO2	554,811
2030 Projected CO2	108,365
Percent Reduction	80%

Plans that achieve 80% reduction when filed meet the minimum requirement of the statute.

Demonstration of 75% reduction in GHGs from retail sales pursuant to HB19-1261

Step 1: Calculate retail only GHG 2005 baseline

Baseline	2005
Retail electricity sales CO2e (Metric Tons)	505,461

Step 2: Calculate 2030 retail only GHG forecast

Forecast	2030
Retail electricity sales CO2e (Metric Tons)	98,971

Step 3: Calculate percent GHG reductions for retail sales

GHG Reduction Demonstration	
2005 Retail Baseline CO2e	505,461
2030 Retail Forecast CO2e	98,971
Percent Reduction	80%

Plans that achieve 80% reduction when filed meet the minimum initial requirement of the statute.

Approved plan that achieves 75% reduction meets minimum final requirement of the statute to qualify for the safe harbor provisions.

RED FONT: DATA ENTRY **BLACK FONT: Calculated**

2005 All Electricity: Historical Generation and Emissions Data for CEP Baseline

Owned Assets

Plant or Unit	Primary Generation Type	Total Heat Input (MMBtu)	% Heat Input Coal	% Heat Input Natural Gas	% Heat Input Fuel Oil	% Heat Input Biomass	Generation (Net MWh)	CO2 Emissions Methodology	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)	CO2 Intensity (Lb/Net MWh)	GHG Intensity (Metric Ton / Net MWh)
Kimball Wind Project	Wind	0	0.0%	0.0%	0.0%	0.0%	13,858	Zero GHG	0	0	0	0	0	0	0.00
TOTAL HEAT INPUT		**0**			**TOTAL GENERATION**		**13,858**	**TOTAL Emissions**	**0**	**0**	**0**	**0**	**0**	**0**	**0.00**

Contracted Assets

Counter Party	Primary Generation Type	Purchases (MWh)	Emission Rate Source	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
Black Hills Power Inc. (Neil Simpson II)	Coal	111,100	CEMS	2,530	140,523	127,480	37	646	128,163
Black Hills Power Inc. (Wygen I)	Coal	164,762	CEMS	2,935	241,798	219,356	62	67	219,484
Lincoln Electric System (Laramie River Station 2&3)	Coal	218,500	CEMS	2,320	253,429	229,907	64	1,152	231,124
Pinnacle West	Coal	73,900	Market Rate	1,033	38,174	34,631	19	150	34,800
WAPA Allocation	Water	36,138	Zero GHG	0	0	0	0	0	0
WAPA Displacement	Water	85,064	Zero GHG	0	0	0	0	0	0
Xcel Energy	Coal	224,800	System Rate	1,959	220,192	199,755	293	972	201,020
TOTAL CONTRACT PURCHASES		**914,265**		**TOTAL Emissions**	**894,116**	**811,128**	**475**	**2,987**	**814,590**

Market Transactions (Negative for Sales, Positive for Purchases)

Market Name	System, Subregion, or Region Identification	Transactions (MWh)	Emission Rate Source	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
WECC Purchases	WECC	21,193	Market Rate	1,033	10,947	9,931	5	42	9,979
WECC Sales	Company System Rate	(85,616)	System Rate	1,927	(82,491)	(74,835)	(44)	(278)	(75,156)
TOTAL MARKET ENERGY TRANSACTIONS		**(64,423)**		**TOTAL Emissions**	**(71,544)**	**(64,903)**	**(38)**	**(235)**	**(65,177)**

Customer Sales Information

	Net MWh	CO2 Emissions (Metric Tons)	GHG Emissions (Metric Tons CO2e)
Retail Sales	556,589	503,316	505,461
Arkansas River Power Authority	178,801	156,285	156,956
City of Fountian	99,104	86,624	86,996
Total Sales	834,494	746,225	749,413

System Losses and Leakage Information

			SF6 Emissions (Metric Tons CO2e)
Colorado Distribution System Losses			
Colorado Transmission System Losses	29,207		

Generation to Sales/Losses Variance Quick Check:	0.00%

CEP Baseline Emissions Summary

	Short Tons	Metric Tons
CO2 Total Emissions	554,811	503,316
GHG Total Emissions		505,461

These now subtract totals from below to give adjusted 2005 baseline
This now subtracts total from below to give adjusted 2005 baseline

2005 Baseline Adjustment Details

	Net MWh	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
Arkansas River Power Authority	178,801	1,927	172,275	156,285	91	580	156,956
City of Fountain, CO	99,104	1,927	95,487	86,624	51	322	86,996
Total Sales	277,905	Total Emissions	267,761	242,909	142	902	243,953

RED FONT: DATA ENTRY **BLACK FONT: Calculated**

2030 All Electricity: Projected Generation and Emissions Data for CEP Compliance Year

Owned Assets

Plant or Unit	Primary Generation Type	Total Heat Input (MMBtu)	% Heat Input Coal	% Heat Input Natural Gas	% Heat Input Fuel Oil	% Heat Input Biomass	Generation (Net MWh)	CO2 Emissions Methodology	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)	CO2 Intensity (Lb/Net MWh)	GHG Intensity (Metric Ton CO2e / Net MWh)
Wygen I	Coal	88,788	100.0%	0.0%	0.0%	0.0%	6,992	Generator Rate	9,317	8,452	24	42	8,519	2,665	1.22
TOTAL HEAT INPUT		**88,788**			**TOTAL GENERATION**		**6,992**	**TOTAL Emissions**	**9,317**	**8,452**	**24**	**42**	**8,519**	**2,665**	**1.22**

Contracted Assets

Counter Party	Primary Generation Type	Purchases (MWh)	Emission Rate Source	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
Aspen, CO	Water	10,946	Zero GHG	0	0	0	0	0	0
Delta Montrose Electric Association	Water	30,332	Zero GHG	0	0	0	0	0	0
DG Solar	Solar	74,032	Zero GHG	0	0	0	0	0	0
Kimball Wind LLC	Wind	118,087	Zero GHG	0	0	0	0	0	0
Lincoln Electric System (Laramie River Station 2&3)	Coal	49,398	Generator Rate	2,557	63,155	57,294	141	247	57,682
WAPA Allocation	Water	35,501	Zero GHG	0	0	0	0	0	0
WAPA Displacement	Water	180,000	Zero GHG	0	0	0	0	0	0
TOTAL CONTRACT PURCHASES		**498,296**		**TOTAL Emissions**	**63,155**	**57,294**	**141**	**247**	**57,682**

Market Transactions (Negative for Sales, Positive for Purchases)

Market Name	System, Subregion, or Region Identification	Transactions (MWh)	Emission Rate Source	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
SPP Purchases	SPP	12,447	Market Rate	525	3,267	2,964	10	16	2,990
WECC Purchases	WECC	145,000	Market Rate	450	32,625	29,597	74	110	29,781
TOTAL MARKET ENERGY TRANSACTIONS		**157,447**		**TOTAL Emissions**	**35,892**	**32,561**	**84**	**126**	**32,771**

Sales Information

	Net MWh	CO2 Emissions (Metric Tons)	GHG Emissions (Metric Tons CO2e)
Retail Sales	640,331	98,307	98,971
Total Sales	640,331	98,307	98,971

System Losses and Leakage Information

			SF6 Emissions (Metric Tons CO2e)
Colorado Distribution System Losses			
Colorado Transmission System Losses	22,412		

Generation to Sales/Losses Variance Quick Check:	0.00%

Emissions Summary

	Short Tons	Metric Tons CO2e
CO2 Total Emissions	108,365	98,307
GHG Total Emissions		98,971

These now subtract total from below to give adjusted 2030 emissions based on customers who file CEP
This now subtracts total from below to give adjusted 2030 emissions based on customers who file CEP

2030 Adjustment Details

	Net MWh	CO2 Intensity (Lb/MWh)	CO2 Total (Short Tons)	CO2 Total (Metric Tons)	CH4 Total (Metric Tons CO2e)	N2O Total (Metric Tons CO2e)	CO2e Total (Metric Tons)
Excluded Wholesale Contract #1		228	0	0	0	0	0
Total Sales	0	Total Emissions	0	0	0	0	0

Year	CO2 (Short Tons)	Total GHG (Metric Tons CO2e)	Load (Net MWh)	Beneficial Electrification Program Load (Net MWhr)	CO2 Intensity (Lb/Net MWhr)	GHG Intensity (Metric Ton CO2e / Net MWh)
2021					#DIV/0!	#DIV/0!
2022					#DIV/0!	#DIV/0!
2023					#DIV/0!	#DIV/0!
2024					#DIV/0!	#DIV/0!
2025	**325,325**	**296,824**	**640,042**	**0**	**1017**	**0.46**
2026	306,530	279,648	642,696	0	954	0.44
2027	301,136	274,698	647,798	0	930	0.42
2028	230,123	210,046	652,536	0	705	0.32
2029	143,304	130,903	660,146	0	434	0.20

Emission Rate Picklist
CEMS
Generator Rate
Contract Rate
System Rate
Market Rate
Regional Factor
Zero GHG

Emission Rate Picklist is in order from most specific to least specific from carbon emitting sources

Primary Resource Type
Coal
Natural Gas
Fuel Oil
Biomass
Wind
Water
Solar

Constants		
Global Warming Potential, per AR4		Sources
Methane (CH4)	25	GHG Protocol
Nitrous Oxide (N2O)	298	EPA Discussion
Sulfur Hexafluoride (SF6)	22,800	
kg/ton	0.00110231	

2005 GHG Emission Rate Lookup Table				
OWNED GENERATION				
Fuel	CO2 (kg/mmbtu)	CH4 (kg/mmbtu)	N2O (kg/mmbtu)	
Biomass				Editable
Coal	--	0.0110	0.0016	Locked
Fuel Oil	--	0.0030	0.0006	Locked
Natural Gas	--	0.0010	0.0001	Locked
PURCHASED GENERATION				
Energy Source	CO2 (lb/MWh)	CH4 (lb/MWh)	N2O (lb/MWh)	
Black Hills Power Inc. (Neil Sir	2529.66	0.029	0.043	Editable
Black Hills Power Inc. (Wygen	2935.11	0.033	0.003	Editable
Lincoln Electric System (Laran	2319.72	0.026	0.039	Editable
Pinnacle West	1033.12	0.023	0.015	Editable
WAPA Allocation	0	0.000	0.000	Editable
WAPA Displacement	0	0.000	0.000	Editable
Xcel Energy	1959	0.115	0.032	Editable
LEAVE BLANK				
AZNM	1311.05	0.017	0.018	Locked
CAMX	724.12	0.030	0.008	Locked
Company System Rate	1927	0.045	0.024	Editable
ERCT	1324.35	0.019	0.015	Locked
MRO	1823.69	0.028	0.031	Locked
MROW	1821.84	0.028	0.031	Locked
NWPP	902.24	0.019	0.015	Locked
RMPA	1883.08	0.023	0.029	Locked
SPNO	1960.94	0.024	0.032	Locked
SPP	1751.37	0.025	0.026	Locked
SPSO	1658.14	0.025	0.023	Locked
TRE	1324.35	0.019	0.015	Locked
WECC	1033.12	0.023	0.015	Locked

2030 GHG Emission Rate Lookup Table					
OWNED GENERATION					
Fuel	CO2 (kg/mmbtu)	CH4 (kg/mmbtu)	N2O (kg/mmbtu)		
Biomass				Editable	Company enters appropriate factor based on solid, liquid or gasous fuel type
Coal	--	0.0110	0.0016	Locked	
Fuel Oil	--	0.0030	0.0006	Locked	
Natural Gas	--	0.0010	0.0001	Locked	
PURCHASED GENERATION					
Energy Source	CO2 (lb/MWh)	CH4 (lb/MWh)	N2O (lb/MWh)		
Aspen, CO	0	0.000	0.000	Editable	Company enters contract specific values here
Delta Montrose Electric Assoc	0	0.000	0.000	Editable	Company enters contract specific values here
DG Solar	0	0.000	0.000	Editable	Company enters contract specific values here
Kimball Wind LLC	0	0.000	0.000	Editable	Company enters contract specific values here
Lincoln Electric System (Laran	2557	0.252	0.037	Editable	Company enters contract specific values here
WAPA Allocation	0	0.000	0.000	Editable	Company enters contract specific values here
WAPA Displacement	0	0.000	0.000	Editable	Company enters contract specific values here
LEAVE BLANK					
Company System Rate	228.034	0.327	0.048	Editable	
MRO	675	0.060	0.0103	Locked	
SPP	525	0.069	0.0096	Locked	
TRE	540	0.048	0.0058	Locked	
WECC	450	0.045	0.0056	Locked	

CH4 lb/GWh	N20 Lb/GWh
17.45	17.94
30.24	8.08
18.65	15.11
27.94	30.66
28.00	30.71
19.13	14.90
22.88	28.75
23.82	32.09
24.62	25.52
24.98	22.61
18.65	15.11
22.62	14.77

OUTPUT EMISSIONS RATE - eGRID 2005