

Appendix A - Global Reporting Initiative (GRI) Metrics

Category	Topic	Key Performance Metric Name	FY 2019	FY 2020	FY 2021
102	General Disclosures	Total number of Board of Director Members	9	5	7
102	General Disclosures	Total number of Female Board of Director Members	1	0	1
102	General Disclosures	Total number of Minority Board of Director Members	1	0	1
102	General Disclosures	Total Number of Employees	10,009	9,989	10,192
102	General Disclosures	Winning Performance Payout (%)	1.16	1.37	1.42
102	General Disclosures	Total Owned Summer Net Capability at the end of year (MW) ⁷	33,727	32,750	32,433
102	General Disclosures	Owned Coal Summer Net Capability at the end of year (MW)	7,886	6,915	6,580
102	General Disclosures	Owned Natural Gas Summer Net Capability at the end of year (MW) ⁷	12,509	12,509	12,183
102	General Disclosures	Owned Nuclear Summer Net Capability at the end of year (MW)	7,922	7,922	8,275
102	General Disclosures	Owned Petroleum (Diesel) Summer Net Capability at the end of year (MW)	9	9	9
102	General Disclosures	Owned Total Renewable Energy Resources Summer Net Capability at the end of year (MW)	5,401	5,395	5,386
102	General Disclosures	Owned Biomass/Biogas Summer Net Capability at the end of year (MW)	0	0	0
102	General Disclosures	Owned Geothermal Summer Net Capability at the end of year (MW)	0	0	0
102	General Disclosures	Owned Hydroelectric Summer Net Capability at the end of year (MW)	5,400	5,394	5,385
102	General Disclosures	Owned Solar Summer Net Capability at the end of year (MW)	1	1	1
102	General Disclosures	Owned Wind Summer Net Capability at the end of year (MW)	0	0	0
102	General Disclosures	Owned Other Summer Net Capability at the end of year (MW)	0	0	0
102	General Disclosures	Total Owned Net Generation (GWh)	139,129	134,386 ¹⁰	139,300 ¹⁰
102	General Disclosures	Nuclear Generation (GWh)	63,433	64,531 ¹⁰	66,265 ¹⁰
102	General Disclosures	Natural Gas and/or Oil Fired Generation (GWh)	31,704	33,479 ¹⁰	33,290 ¹⁰
102	General Disclosures	Coal-fired Generation (GWh)	27,934	19,732 ¹⁰	23,391 ¹⁰
102	General Disclosures	Hydroelectric Generation (GWh)	16,058	16,644 ¹⁰	16,354 ¹⁰
102	General Disclosures	Petroleum Generation (GWh)	0	0	0
102	General Disclosures	Total Renewable Energy Resources Generation (GWh)	16,058	16,644 ¹⁰	16,354 ¹⁰
102	General Disclosures	Total Purchased Power Generation (GWh)	21,945	19,435 ¹⁰	20,478 ¹⁰
102	General Disclosures	Purchased Power Renewable Generation (GWh)	7,840	7,683 ¹⁰	7,269 ¹⁰
102	General Disclosures	Federal Sustainability Report Disclosure	SR&IP and AEMR	SR&IP and AEMR	SR&IP and AEMR



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102	General Disclosures	Investor Sustainability Report Disclosure	EEI-ESG Industry Template	EEI-ESG Industry Template	EEI-ESG Industry Template
102	General Disclosures	Customer Carbon Accounting Disclosure	Annual Customer Carbon Accounting	Annual Customer Carbon Accounting	Annual Customer Carbon Accounting
201	Economic Performance	Operating Revenues (\$M)	11,318	10,249	10,503
201	Economic Performance	O & M Expense (\$M)	3,090	2,720	2,890
201	Economic Performance	Non-Fuel Delivered Cost of Power (cents/kWh)	3.46	3.20	3.22
201	Economic Performance	Retail Rate (cents/KWh)	9.33	9.14	9.18
201	Economic Performance	Incremental Annual Electricity Savings from EE (MWh)(CY)	32,377	101,138	19,777
201	Economic Performance	Incremental Annual Investment in EE programs \$(CY)	21,406,000	15,660,000	25,386,000
201	Economic Performance	Operating Cash Flow (\$M)	3,720	3,636	3,256
201	Economic Performance	Net Income (\$M)	1,417	1,352	1,512
201	Economic Performance	Total Spend (\$M)	4,467	4,441	5,144
201	Economic Performance	Total Financing Obligations (\$B) ⁸	22.8 ⁸	21.4	20.5
201	Economic Performance	Nuclear Unit Capability Factor (%)	89.80%	90.00%	90.50%
201	Economic Performance	Load Not Served (System Minutes)	3.7	2.7	3.2
201	Economic Performance	Reliability Rating (Transmission System) (%)	99.999%	99.999%	99.999%
201	Economic Performance	Inventory Value—Materials and Supplies Inventory (\$M)	742	770	775
201	Economic Performance	External Nuclear Performance Measures (%)	80.4%	85.1%	91.1%
201	Economic Performance	Total Annual Capital Expenditures (\$M)	1,700 ⁹	1,643 ⁹	1,963⁹
201	Economic Performance	Coal Equivalent Availability Factor (EAF)(%)	65.20%	79.40%	71.60%
201	Economic Performance	Combined Cycle Equivalent Availability Factor (EAF)	78.90%	84.00%	85.30%



Category	Topic	Key Performance Metric Name	FY 2019	FY 2020	FY 2021
201	Economic Performance	Economic Development - Capital Investment in the Valley (\$B)	8.9	8.6	8.8
202	Market Presence	Commercial Retail Electric Customer Count (at end of CY) ⁵	17	17	17
202	Market Presence	Industrial Retail Electric Customer Count (at end of CY) ⁵	43	43	43
202	Market Presence	Residential Retail Electric Customer Count (at end of CY) ⁵	0	0	0
203	Indirect Economic Impacts	Jobs Created or Retained (#)	66,500	67,000	80,900
203	Indirect Economic Impacts	Flood Management: Avoided Flood Damage (\$M)	1,600	1,000	170
204	Procurement Practices	Supplier Diversity: Total Diverse Business Spend (\$M)	395	388.5	365
204	Procurement Practices	Supplier Diversity: Diverse Business Utilization (%)	13.70%	14.20%	10.80%
204	Procurement Practices	Supplier Diversity: Total Small Business Spend (\$M)	766	844	856
204	Procurement Practices	Supplier Diversity: Small Business Utilization (%)	26.60%	32.30%	25.20%
204	Procurement Practices	Supplier Diversity: Total Valley Business Spend (\$B)	2	1.8	1.8
204	Procurement Practices	Valley Spend Utilization (%)	68.80%	65.20%	52.80%
301	Materials	Waste: Coal Combustion Products Beneficially Used (%) (CY)	45%	87%	59%
302	Energy	Performance Contracting - Investment Value (\$M)	4.91	3.3	2.5
302	Energy	Sustainable Buildings Progress (% reduction from baseline: GSF)	22.00%	22.00%	22.30%
302	Energy	Building Energy Intensity Progress (% reduction from FY2003: Btu/GSF) (EO 13834)	64.30%	69.30%	74.80%
302	Energy	Building Renewable Energy Use (% renewable sources) (EO 13834)	18.30%	18.70%	20.20%
303	Water and Effluents	Building Potable Water Intensity Progress (% reduction from FY2007: Gal/GSF) (EO 13834)	36.90%	48.00%	40.60%
303	Water and Effluents	Water Supply: Freshwater Consumption Rate (All Generation) (Billions of Liters/Net MWh)(CY)	6.00E-07	8.00E-07	8.00 E-07
303	Water and Effluents	Water: Total Water Withdrawal-non consumptive (Billions of Liters/Net MWh) (CY)	0.000112	8.23E-05	8.23 E-05
304	Biodiversity	Total Acres of Habitat Protected (# acres)	247,706	247,104	247,098
305	Emissions	Clean Energy (Power from carbon-free sources delivered) (%)	54%	57%	56%
305	Emissions	Scope 1 and 2 GHG Emissions (% reduction from FY 2008)	41.60%	51.00%	58.40%
305	Emissions	Scope 3 GHG Emissions (% reduction from FY 2008) ³	31.97%	54.80%	58.90%



Category	Topic	Key Performance Metric Name	FY 2019	FY 2020	FY 2021
305	Emissions	CLIMATE: TVA CO ₂ Tons from Owned Generation (metric tons) reported in CY	43,090,822	34,237,908	38,436,662
305	Emissions	CLIMATE: TVA Emissions (Owned CO ₂ Tons/GWh)	307	288	303
305	Emissions	CLIMATE: TVA Emissions (Owned CO ₂ Metric Tons/ Net MWh)(CY/FY)	0.31	0.255	0.276
305	Emissions	CLIMATE: Purchased Generation CO ₂ Emissions (metric tons)	13,543,114	6,521,407	7,192,903
305	Emissions	CLIMATE: CO ₂ Emissions rate - System TVA Scope 2 CO ₂ Emissions Rate (Owned and Purchased lbs/MWh) reported in CY	741.66	561.92	637.67
305	Emissions	CLIMATE: Owned and Purchased Generation CO ₂ Emissions (metric tons)	56,633,937	40,759,315	45,630,413
305	Emissions	CLIMATE: Owned and Purchased Generation Emissions (Owned and Purchased CO ₂ Metric Tons/ Net MWh)(CY/FY)	0.352	0.265	0.286
305	Emissions	CLIMATE: TVA CO ₂ e Scope 1 Emissions (metric tons) (CY)	43,696,845	34,762,588	40,374,877
305	Emissions	CLIMATE: TVA CO ₂ e Scope 2 Emissions (metric tons) (CY)	200,153	170,039	142,802
305	Emissions	CLIMATE: TVA CO ₂ e Scope 3 Emissions (metric tons) (CY) ³	73,994.45	66,967	68,467
305	Emissions	Air: TVA SO ₂ Emissions (metric tons) (CY)	26,972	17,082	25,226
305	Emissions	Air: TVA NO _x Emissions (metric tons) (CY)	19,430	12,577	15,210
305	Emissions	Non-Generation Fugitive CO ₂ e Emissions: Sulfur Hexafluoride (metric tons) (CY) ⁶	324,987.9	35,541.2	74,618.9
305	Emissions	Air: TVA Mercury Emissions (kg) (CY)	50.1	17.5	22.3
306	Effluents and Waste	Non-hazardous Municipal Solid Waste Diversion (% diverted / recycled) ²	4.53%	3.90%	2.98%
306	Effluents and Waste	Waste: Low-level radioactive waste disposal rate (ft ³ /MWh) (CY)	0.003367	0.00197	0.002533
306	Effluents and Waste	Waste: Amount of Hazardous Waste Disposed (metric tons) (CY)	93.67	93.13	50.1
307	Environmental Compliance	Compliance: Notice of Violations (NOV)	4	6	1
403	Occupational Health and Safety	Safe Workplace (RIR)	0.46 ¹	0.34 ¹	0.26
403	Occupational Health and Safety	Lost Time Case Rate (OSHA)	0.07	0.1	0.04
403	Occupational Health and Safety	Days Away, Restricted, and Transfer (DART) rate (OSHA)	0.22	0.17	0.11
403	Occupational Health and Safety	Serious Injury Incident Rate (SIIR)	0.07 ¹	0.03	0.03
403	Occupational Health and Safety	Work-related Fatalities	0	0	0
404	Training and Education	Training for Career Advancement (hours/employee)	73.7	64.02	68.65



Category	Topic	Key Performance Metric Name	FY 2019	FY 2020	FY 2021
404	Training and Education	Continuing Education Contributions (\$)	443,789.0	567,714.8	436,764.2
405	Diversity and Equal Opportunity	Military Share of Workforce (%)	18.1%	18.1%	17.9%
405	Diversity and Equal Opportunity	Minority People of Color Share of Workforce (%)	11.8%	11.0%	11.24%
405	Diversity and Equal Opportunity	Women Share of Workforce (%)	20.1%	20.1%	20.37%
411	Rights of Indigenous Peoples	Tribal Engagement	51	36	57
413	Local Communities	Environmental & Community Engagement (# Group activities)	805	307	264
413	Local Communities	Environmental & Community Engagement (# Children participating)	10,325	2615	26,777
413	Local Communities	Annual Tax Equivalent Payments (without FCA) (\$M)	541	528	514
413	Local Communities	Back-to-Business Credit Program (\$)	New for 2020	9,887,500	3,219,298
413	Local Communities	Community Care Fund (\$)	New for 2020	2,563,651	1,771,177
413	Local Communities	Employee Hours Volunteered (Hours)	2550	4400	2,638
413	Local Communities	Stakeholder Survey (%) ⁴	80.0%	78.2%	78.3%
413	Local Communities	Customer Loyalty (%) (VOC Survey Results) ⁴	71.3%	70.7%	70.3%
413	Local Communities	Media Tone (%) (Positive and Neutral) ⁴	89.3%	85.3%	85.7%
414	Supplier Social Assessment	Sustainable Acquisition Progress – Obligations in Dollars containing Statutory Environmental Requirements (% of contract dollars with environmental clauses)	93.7%	89.3%	96.7%

¹ Revised due to reclassifications.

² Does not include construction and demolition waste.

³ These are partial Scope 3 CO2e rates.

⁴ Three-year average, not annual rate.

⁵ Customer count is based on meters in accordance with the definition on Form EIA-861 Annual Electric Power Industry Report.

⁶ 2019 value includes historical emissions that were not previously captured.

⁷ Caledonia Combined Cycle Plant is currently a leased facility operated by TVA.

⁸ See Appendix E for Reconciliation G.

⁹ Construction Expenditures based on Statement Cash Flows.

¹⁰ Beginning in 2021, Raccoon Mountain Pumped-Storage Plant net generation is allocated against each TVA-operated generation facility and purchased power type.